IUL School of Social Sciences and Humanities

Department of Social and Organizational Psychology

Navigating Social Class in Childhood: Development of Intergroup Relations and Self-Categorization

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Thesis specially presented for the fulfillment of the degree of

Doctor in Psychology

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[1] See Appendix A with some of the outcomes of this learning process about Science Communication. These materials served the specific purpose of presenting the work in the schools.

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Abstract

By adopting a developmental social identity approach, this thesis aims to investigate how 6- to 12-year-old children perceive their position in the social class intergroup context, considering the interplay between contextual and motivational variables that may lead children to self-categorize as a poor child, or not.

Given that self-categorization depends upon the knowledge of the social categories at stake, we first examined how children understand the social class intergroup context. Chapter 2 reports a study using Reverse Correlation Task (*N*=112) showing 6-year-olds' mental representation of the poor already conveying a negative image of this category. Chapters 3 and 4 report a mixed-methods study (*N*=107) about children's stereotypes, attitudes and behaviours towards poor children, and the development of the causal attributions for poverty. Results show children's perceptions of poor children as living in extreme poverty conditions, attributing external causes for child poverty. The development of social class self-categorization was examined in Chapter 5, that reports a correlational study (*N*=532) suggesting that children explicitly and implicitly self-categorize as non-poor, the less so with age. Children's lower SES is associated to implicit-explicit self-categorization as poor. Chapter 6 shows experimentally (*N*=321) that youngers' implicit self-categorization with the non-poor was amplified under conditions of social identity threat. Older children that implicitly self-categorized as poor self-distance from the stigmatizing group by showing less inclusion of the poor. In Chapter 7, the main insights and implications of this work for future studies are discussed. The implications of our findings for policy making were approached.

Keywords: social class, children, self-categorization, implicit and explicit, social identity threat

PsycINFO Codes: 3000 – Social Psychology
3020 – Group & Interpersonal Processes
2800 – Developmental Psychology
2840 – Psychosocial & Personality Development

Resumo

Adoptando uma perspetiva desenvolvimental da identidade social, o objetivo desta tese é investigar a percepção do posicionamento segundo a classe social em crianças dos 6 aos 12 anos, considerando a interação entre variáveis contextuais e motivacionais que conduzem, ou não, à auto-categorização como pobres.

Dada a sua importância no estudo da auto-categorização, primeiramente analisámos o conhecimento do contexto intergrupal segundo a classe social na infância. No Capítulo 2, um estudo sob o paradigma de *Reverse Correlation Task* (*N*=112) sugere que com 6 anos já existe uma representação mental negativa dos pobres. Nos Capítulos 3 e 4, um estudo de métodos mistos (*N*=107) sobre os estereótipos, atitudes e comportamentos face às crianças pobres e o desenvolvimento das atribuições causais da pobreza infantil, mostra que estas são percebidas como vivendo em condições de extrema pobreza, atribuindo à pobreza infantil e causas externas. No Capítulo 5, o desenvolvimento da auto-categorização segundo a classe social é investigado num estudo correlacional (*N*=532), sugerindo que as crianças se auto-categorizam como não-pobres explícita e implicitamente, diminuindo com a idade. Um menor nível socioeconómico está associado à auto-categorização implícita-explícita como pobre. O Capítulo 6 mostra experimentalmente (*N*=321) que, nas crianças mais novas, a auto-categorização implícita como não pobre foi amplificada sob condições de ameaça à identidade social. Crianças mais velhas que se auto-categorizaram implicitamente como pobres distanciaram-se do grupo estigmatizante, mostrando menos inclusão dos pobres. No Capítulo 7 são discutidas as principais ideias e implicações deste trabalho para estudos futuros e para o desenho de intervenções.

Palavras-chave: classe social, crianças, auto-categorização, implícita e explícita, ameaça à identidade social

Codificação PsycINFO: 3000 – Psicologia Social
3020 – Processos de Grupo e Interpessoais
2800 – Psicologia do Desenvolvimento
2840 – Desenvolvimento Psicossocial e da Personalidade

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GENERAL INTRODUCTION

Imagine that you are a parent of a three-year-old child who is fond of Mickey Mouse. You offered him a nice Mickey Mouse plush. One day, he takes his Mickey Mouse to school. As soon as he enters the room, all his classmates run to him and hug him. Him and his Mickey Mouse. First you are delighted; then, you start asking yourself "do they love my son or Mickey?" What if you could not afford that plush? What about those children whose families cannot afford fancy toys? Now, imagine that in the middle of your thoughts, you notice one kid, whose family's financial issues you are aware of, leaning against the wall, alone, just looking at Mickey Mouse and your son. Apparently, this child is just like any other child in the classroom; but could it be that he feels different than others? From what age are children aware of their own socioeconomic conditions? How do they perceive themselves regarding these issues? And how do they deal with socioeconomic differences? These are some of the questions that we investigate in this thesis.

> *If self-categorization is comparative, inherently variable, fluid, and context dependent, then the inference is that the self is not a relatively fixed mental structure but the expression of a dynamic process of social judgment. (…) We should not think of self-perception or self-definition as the activation of preformed, already stored self-concepts (whose meaning is defined prior to their activation) but as flexible, constructive process of judgment and meaningful inference in which varying self-categories are created to fit the perceiver's relationship to social reality. The varying self-concepts represent the individual in terms of his or her changing social contextual properties.* (Turner, Oakes, Haslam, & McGarty, 1994, pp. 458)

Relevance, aims and overview of the present thesis

Reducing worldwide poverty and fighting against inequalities are two of the most important challenges set forth by supranational organizations and have been a focus of recent public policies. In 2015, the world leaders assumed the goal of "ending poverty in all its forms everywhere" as the first goal of the 2030 Agenda for Sustainable Development, as well as "reducing inequalities within and among countries" (United Nations, 2015, pp. 14). Poverty also affects people living in high-income countries, and the sustainable development objectives are also at the heart of the most advanced countries' policies. The Organization for Economic Co-operation and Development (OECD) and the European Union (EU) have also

established goals towards reducing poverty in their country members. Importantly, the reduction of poverty and social exclusion is one of the five headline targets of the Europe 2020 strategy, aiming to take out at least 20 million people from the risk of poverty or social exclusion by 2020 (European Union, 2018). Comparing the various age groups, children are the group most affected by poverty, and recent data shows that 24.9% of children living in the European Union (EU) are at-risk-of poverty and social exclusion (Eurostat, 2019). Child poverty remains a matter of social justice as it undermines the principle of equal opportunities advocated by the United Nations Convention on the Rights of the Child (United Nations, 1989).

Despite the recent decrease in the number of children living at-risk-of poverty and social exclusion in the EU, the prevalence of children whose families live with financial problems remains high (for further details, see Chapter 1). Directly or indirectly, children inevitably contact with this reality in their schools and neighbourhoods, leading to the development of a set of beliefs and attitudes about children living in poverty. In fact, poverty goes beyond economic and material deprivation experiences, and its manifestations include social discrimination and exclusion (Lott, 2002; Ridge, 2002; United Nations, 2019). Congruently, some studies conducted in impoverished areas in developed countries (e.g., United Kingdom, Netherlands) have shown that low-income children do feel excluded from activities and social networks due to the clothes they wear and because they and their families are viewed as undesirable (Crowley & Vulliamy, 2007).

Notwithstanding its social importance, literature on the development of intergroup inclusion and exclusion based on social class[2] has been overlooked by social-developmental psychology. Traditionally, social-developmental psychologists have focused on intergroup contexts that draw on social categories such as gender, race or age. Just recently, a growing body of research has started examining how intergroup relations are informed by children's knowledge of categories related to social class (Hazelbaker & Mistry, 2018).

This evidence shows that children's conceptions of socioeconomic related constructs (e.g., poverty and wealth) evolve with age, as children's reasoning becomes more complex and elaborated (Enesco & Navarro, 2003; Woods, Kurtz-Costes, & Rowley, 2005, Amar,

[2] In this thesis we adopt the concept of social class taking the perspective of social psychology of social class but acknowledging the historical and sociological definitions of the social class concept (Kraus & Stephen, 2012; Liu et al, 2004; Lott, 2012; Moya & Fiske, 2017). For a more detailed review and implications for the terminology used in the present thesis, see Chapter 1.

Llanos, González, Agamez, Peña, & Romero, 2015). However, studies suggest that children are aware of the 'poor' social category in their pre-school years (Leahy, 1981; Ramsey, 1991; Rauscher, Friedline, & Banerjee, 2017), showing preference for wealthier groups over poor ones (Horwitz, Shutts, & Olson, 2014). Children aged 3- to 5-years base their categorization of social class related groups on physical and visible cues (e.g., clothes) and with age begin to express and hold more negative stereotypes of and attitudes towards poor people (Sigelman, 2012; Shutts, Brey, Dornbusch, Slywotzky, & Olson, 2016; Woods et al., 2005).

Overall, this research suggests that, from early on, children are able to categorize people into social class related groups based on a set of attributes, which then sets the ground for children's beliefs and evaluations of the different groups to develop further. Accordingly, the social identity approach (Tajfel & Turner, 1979; Turner et al., 1987) contends that social-categorization, that is, the process of classifying people into social-categories, is a fundamental process whereby people make sense of their social world (Tajfel & Turner, 1979). Importantly, in the course of this process of organizing the world into social categories, individuals also face the challenge of categorizing themselves into these social groups (*self-categorization*), and that shape the way they relate to their groups or to others (Tajfel & Turner, 1979; Turner et al., 1987).

Social Identity Development Theory (SIDT; Nesdale, 2004) also considers that self-categorization has a crucial role on intergroup relations in general and social identity processes in particular. The stages of the development of prejudice defined by this theory highlight this importance. Hence, according to this theory, children become aware of socially salient and visible group memberships (e.g., race, gender, age) at age 3, and around the age of 4-5 years high status children are very likely to exhibit ingroup preference, as long as self-categorization has been established. Later on, after the age of 7, outgroup prejudice may start to develop, provided that ingroup identification is strong and/or the outgroup threats the ingroup (Nesdale, 2004). This theory also contends that, from early on, children are sensitive to the relative status of their social group and are motivated to achieve a positive self-identity, showing preference for higher- rather than lower-status groups (Nesdale & Flesser, 2001). However, this has been tested only with ethnic and artificial groups where the inclusion/exclusion features for group membership are rather visible, salient and clear-cut. In contrast, in the social class intergroup context the divide line between categories can be perceived as less clear-cut, giving children more room to self-categorize as poor or non-poor. Therefore, a socio-developmental intergroup perspective on social class intergroup relations requires a deep understanding of the more specific process of social class self-categorization.

However, to the best of our knowledge, the process of social class self-categorization has been overlooked in the social-developmental literature. Therefore, in this thesis we aim to investigate the development of children's social class self-categorization taking a developmental social identity approach (Social Identity Theory: SIT, Tajfel & Turner, 1979; Social Identity Development Theory: SIDT, Nesdale, 1999, 2004; Self-Categorization Theory: SCT, Turner, Hogg, Oakes, Reicher, & Wetherell, 1987).

To illuminate this unexplored area, the central purpose of the present thesis is to further our understanding of how children perceive themselves as to their position in the social class intergroup context. Furthermore, we want to investigate the extent to which self-categorization can be shaped by aspects of their social situation. Our research draws on two main assumptions from the developmental social identity approach. First, according to self-categorization theory (SCT; Turner et al., 1987; Turner et al., 1994), self-categorization into "us" and "them" is described as a dynamic and fluid process, sensitive to both the immediate comparative context, dependent on the knowledge about the category, and deeply connected to experiences and expectations of the individual (Turner et al., 1987). Secondly, according to Social Identity Theory (SIT; Tajfel & Turner, 1979) and Social Identity Development Theory (SIDT; Nesdale, 1999, 2004), individuals are motivated to achieve and maintain a positive sense of themselves, aiming to increase self-worth and self-esteem. Individuals and groups strive for social distinctiveness and can use different strategies to satisfy this motive, which depend on the structural elements of the intergroup context. Importantly to this thesis, in intergroup contexts that involve more permeable group boundaries, as we assume to be the case for social class intergroup contexts, individual mobility to a higher status group might be the preferred identity management strategy (Ellemers, 1993; Nesdale & Flesser, 2001; Tajfel & Turner, 1979). Therefore, the examination of social class self-categorization was approached considering the interplay between the contextual and motivational variables that may lead children to self-categorize as a poor child, or not.

In our examination of children's position in terms of social class within a developmental social identity approach, we focused on two aspects of particular relevance. Firstly, motivated for the little evidence available regarding children's perceptions about other children living in conditions of poverty, we examined children's stereotypes, attitudes and behaviours towards the poor, more specifically towards poor children (Chapters 2 and 3), and explored what is the development of the causal attributions for poverty in childhood (Chapter 4). These first studies were crucial to inform the following studies about social class self-categorization, that is known to be dependent upon the knowledge about the category

and deeply connected to experiences and expectations of the individual (Turner et al., 1987). Secondly, we investigated the influence of objective socioeconomic status on the development of children's social class self-categorization (Chapter 5). Moreover, we examined the influence of contextual social identity threats in children's social class self-categorization and in children's behaviour towards poor children (Chapter 6).

In Chapter 1 we present the theoretical background of the present thesis and it is organized in three major sections. The goal of this section is to provide an overview on the social class construct in the literature, and how it is used in the present work. Thus, in this section we will review the most relevant sociological paradigms about social class alongside the current perspective about social class in social psychology. This chapter offers an integrative discussion of the different paradigms, stating the implications for this thesis. In the second section, child poverty is defined and, based on secondary data (e.g., Eurostat), it is illustrated by discussing the prevalence of child poverty in Portugal and in the European Union, in both relative and absolute terms. Within this section, we contextualize this social problem, but also reflect on the complexity of the phenomenon, mirrored in the different indicators used by official institutions. Moreover, and to contextualize the emotional and social challenges that low social class children are faced with, we finish the section by reviewing some of the major consequences (social and cognitive) for children that grow up in poverty. In the last section of this theoretical chapter, we will review the social-psychological theories that contribute to a better understanding of social class as intergroup phenomena, and more specifically how it might take shape in childhood. As such, Social Identity Theory and Social Categorization Theory will be assessed, followed by a review of two socio-developmental theories, Social Development Identity Theory (SDT; Nesdale, 1999, 2004) and Social Reasoning Developmental Model (SRD; Killen & Rutland, 2011; Rutland, Killen, & Abrams, 2010). Lastly, in light of these theoretical perspectives, the existing literature in the social class domain in childhood will be presented.

In Chapter 2, we present an empirical study that examines the development of children's intergroup representations of the poor. Literature shows that children reproduce the negative stereotypes that adults hold about the social category of the poor (Cozarelli et al., 2001; Lindqvist, Björklund, & Bäckström, 2017; Durante & Fiske, 2017; Amar et al., 2015; Rauscher et al., 2017; Sarti, Schalkers, & Dedding, 2015). However, it is unknown if children express this negativity to conform to the normative discourse about this social group, or if such perceptions have been internalized by children and can therefore be found at an implicit level. Thus, to address this issue we conducted a study with children aged 6- to 13-years,

using the Reverse Correlation Task, an implicit measure that allows to access children's social biases at the perceptual level (Dotsch, Wigboldus, Langner, & van Knippenberg, 2008; Dotsch & Todorov, 2012). The Reverse Correlation Task allowed to identify the visual representations of the social category of poor as seen by children from three age groups (6-7 years-old, 8- to 10-years-old and 11- to 13-years-old). Through an evaluation of these images by independent judges, the valence of these images was assessed.

Previous research has mainly focused on understanding children's beliefs about poor adults (e.g., Sigelman, 2012; Mistry, Brown, White, Chow, & Gille-O'Neel, 2015). However, to better understand children's intergroup relations within contexts where socioeconomic asymmetries exist (e.g., schools), it is fundamental to know what are children's perceptions specifically about poor children. In Chapters 3 and 4 we address this issue presenting the results of a mixed-methods study conducted with 107 children aged from 6 to 12 years, from two urban schools with different socioeconomic status profile (lower SES setting and middle-to-higher SES setting). In Chapter 3, we investigate the development of the stereotypes about, attitudes and behaviours towards poor children, and to what extent these perceptions might be influenced by children's objective socioeconomic status (SES). Qualitative data was collected by means of semi-structured interviews. Children were asked open-questions about poor children in general (e.g., descriptions, routines), perceptions of non-poor children's behaviour towards poor children, self-reported behaviour towards poor children and affective attitude towards poor children. Throughout the interview, children were also asked to make drawings of a poor child, a non-poor child and themselves. After that, two quantitative measures of stereotypes and attitudes were applied. Participants' responses and drawings were categorized and quantified through content analysis. The results of this study allow identifying and characterizing the different profiles of children's perceptions about children in poverty. Using the categorical variables associated with the perceptions regarding the place of living, food habits, clothing, emotions and daily routine, a Multiple Correspondence Analysis followed by a Cluster Analysis was performed to identify if children's perceptions are organized in different profiles. The results were discussed from a social identity perspective, reflecting about the interplay between the stereotypes, attitudes and behaviours towards poor children. Moreover, this study highlights the importance of social class self-categorization as a way for children to distance themselves from this stigmatizing social category.

In Chapter 4 we explore the development of causal attributions for child poverty and the solutions for poverty identified by children. Children were asked about their perception about the causes for poverty in childhood – categorized as *individualistic*, *societal*, and

fatalistic (e.g., Cozzarelli et al., 2001) – and about their perceptions about the solutions to end child poverty. In this chapter, we analysed the relationship between causal attributions and children's perceptions of solutions to the elimination of child poverty. The results are discussed in terms of its consequences in the perpetuation of social inequalities.

Taken together, these two chapters focus on understanding children's beliefs about poverty in childhood, extending previous literature on children's perceptions of poverty and wealth (e.g., Leahy, 1983; Sigelman, 2012). In addition, this comprehensive study contributes to a deeper understanding of children's knowledge of the social class intergroup setting across childhood. Moreover, the gathered evidence on how children describe and explain the social class related groups was crucial in the designing of the studies presented in the following chapters and that focus on children's social class self-categorization.

In Chapter 5 we investigate the influence of the objective socioeconomic status on the development of children's social class self-categorization. Previous research, focusing solely on explicit and direct measures of social class self-categorization, suggests that regardless their age, children do not self-categorize as poor (e.g., Rauscher et al., 2017; Sarti et al., 2015). Thus, to investigate if children adapt their social class self-categorization as a strategy to achieve a positive social identity (Tajfel & Turner, 2979; Nesdale & Flesser, 2001), we explored children's development of explicit and implicit self-categorization. To this end we conducted a study with a sample of 532 children from middle-to-higher and lower SES aged 6 to 12 years, measuring implicit and explicit social class self-categorization. The results were analysed comparing three age groups (6-7 vs. 9-10 vs. 11-12 years old) and taking into account children's objective SES (lower vs. middle-to-higher SES). The relationship between implicit and explicit measures is also examined. Results are discussed in terms of the underlying processes behind social class self-categorization as a possible strategy to cope with a disadvantaged group membership (Walter, Jetten, Parsell, & Dingle, 2015).

In Chapter 6 we aim to extend the previous chapter by investigating the underlying process of children's self-distancing from the poor category. In this chapter we investigated if specific social contexts that may render membership in the poor category as aversive would influence children's explicit and implicit social class self-categorization and children's behaviour towards poor children. Therefore, we explored the effect of two types of threat, namely *categorization threat* (concern of being categorized as a poor child) and *acceptance threat* (potential lack of acceptance that poor children experience or their exclusion from a valued group; Branscombe, Ellemers, Spears, & Doosje, 1999). To examine this question we conducted an experimental study with 321 children aged 9 to 12 years testing the interplay

between the two social identity threats on social class self-categorization (implicit and explicit). While taking into account children's implicit self-categorization, in this study we also tested the effect of these threats on children's behaviour towards poor children.

Finally, in Chapter 7 we summarize and discuss the main findings of the empirical work presented in this thesis, discussing the theoretical contributions for the social developmental intergroup research based on socioeconomic inequalities. Here, we address the limitations of the studies and suggest future directions to investigate the social development of inclusion and exclusion of social class related social categories. Moreover, we present the implications of this work for interventions aiming to prejudice reduction in childhood.

CHAPTER ONE

Concepts, contextualization and developmental social identity perspective on social class in childhood

The different shades of the social class concept

Sociological perspective of social class: the permanent debate

Social stratification has been widely studied in sociological research since its inception, grounded in the more classical accounts of class analysis (Marx & Engels, 1848/2007; Weber, 1922/1978), but also proposing new insights or developing new theories on class analysis (Bourdieu, 1979/2010). With an historical shift from classes centered on labour relations, to the distinction of classes based on cultural life styles, currently there is still a vast and controversial debate in this field of research (Bihagen & Lambert, 2018; Bottero, 2004; Pakulski & Waters, 2008; Vogt, 2018).

Marx's theory of social class and class structure (Marx & Engels, 1848/2007) is recognized as being one of the major perspectives on class stratification, focusing on the conflict existent between classes. For Marx, classes were defined by the work and labour relations between those who control the means of production and property (the bourgeoisie), and those who produce the goods in society (the proletariat). As such, work was the centre of class divisions: being wealthy was not enough to belong to the upper class of a capitalist society, but instead engaging in the system of labour exploitation of the wage-workers was.

Adding to Marx's analysis of class, Weber (1922/1978) discusses social stratification not only based in the division of classes, but also on status (*Stände*[3]) of the groups or communities. Weberian literature describes classes as referring to a class of individuals sharing the same interests over means of production, assets and material resources. As status, it is defined as a style of life, education and occupation. For Weber, "every status society lives by conventions, which regulate the style of life, and hence creates economically irrational consumption patterns and fetters the free market through monopolistic appropriations and by curbing the individual's earning power" (Weber, 1922/1978, p. 307). By introducing status as a new laddering system, Weber provided a vision of classes fraction that was not only based on material resources, but also on symbolic and social aspects of people's lives, and thereby brought the concept of prestige into the class analysis.

[3] The German term *Stände* is translated as "Status" in most of Weber's translations. Although, there is a specific German word "Status" which was not used by Weber to define the key concept of his class analysis theory, maybe because it does not traduce the historical content of "Stand" as the feudal divisions in society (Waters & Waters, 2010). However, to follow the most common translation, in this chapter, we will use Status to refer to this concept.

However, class analysis paradigms have been changing in the last century, taking out the centrality of labour in the distinction between classes (Manstead, 2018; Vogt, 2018). Theoretically, this move in the analysis of social stratification has been influenced by Pierre Bourdieu's work (Savage et al., 2013). Although agreeing with Weber's work on the importance of the status order as linked to specific styles of life, Bourdieu rejected that this concept was distinct from class (Bourdieu, 1979/2010). Accordingly, Bourdieu conceives a model of class that is rooted in the interplay between economic, social and cultural capital, instead of being singularly related to employment disparities (Bourdieu, 1979/2010; Savage et al., 2013). Economic capital is related to economic resources and wealth, whereas social capital is linked to individuals' relationships and networks of social support. To cultural capital Bourdieu refers as the effective distinction between social classes as social classes are related to individual's skills and cultural and social knowledge. Acquired and developed through class socialization or cultural consumption (e.g., books, music, museums), individuals are differentiated by their knowledge and skills. According to Bourdieu, cultural capital confers social status and power to individuals via the adoption of different life styles and tastes (Bourdieu, 1979/2010).

In reaction to Bourdieu's lack of distinction between class and status, Chan and Goldthorpe (e.g., 2004, 2007) engaged in clarifying the strict distinction between the Weberian perspective of class and status. The authors argue that the two concepts should be seen as independent and empirically operationalized in different ways. Thereby, the distinct effects of class and status on the different areas of social life (e.g., employment, cultural consumption) should be analysed. Nevertheless, the debate continues and in opposition to their perspective, other authors claim and show that the two concepts cannot be disentangled through the measures used by Chan and Goldthorpe (Bihagen & Lambert, 2018; Flemmen, Jarness, & Rosenlund, 2017). In a recent application of Bourdieu's theory to a large sample of survey respondents, Savage and colleagues (2013) mapped contemporary class divisions in the UK by combining measures of economic, social and cultural capital. In this study, using an inductive class schema based on individuals' wealth, social networks and cultural tastes, a seven-class model of the contemporary Britain emerged: *elite*, *established middle class*, *technical middle class*, *new affluent workers*, *traditional working class*, *emergent service workers* and *precariat*. The distinction between these different emerging classes goes beyond economic circumstances, showing also a marked differentiation in the size of individual's networks (social capital) and engagement with different types of cultural consumption and tastes (cultural capital). Interestingly, the closest class to the older vision of social structure,

the traditional working class was composed only by 14% of the population. The new class divisions conveyed by this analysis suggests that the conventional class systems no longer apply to the present UK population (Manstead, 2018; Savage et al., 2013).

Along with these discussions between the different rationales about social class theorizing, a more stringent perspective also emerged. Within a post-class analysis perspective, Pakulski and Waters advocate '*the death of class*', arguing that class societies, especially as defined by Marx's and Weber's perspectives, are historical entities. For them, the term *class* should no longer be used (Pakulski, 2005; Pakulski & Waters, 2008). The authors do not question the existence of inequalities and conflicts in contemporary societies, however they do believe that societies are no longer organized along class lines. The authors defend a status-conventional society, where the stratification emerges from the cultural sphere (*culturalism*), with de adoption of specific patterns of consumption, preferences and values. However, individual's behaviour and tastes are unpredictable and independent of the stratification (*automatization*), as they are self-oriented in pursue of symbolic attachments that allow identities to advance to aspired meanings. Therefore, these conventional statuses are fluid, fragile and unstable (*fragmentation*) and permanently regenerating the value of the symbolic dimensions (*resignification*).

Summing up, since its inception, sociology has been treating social class analysis and social stratification systems with incessant debates. In the centre of this discussion are the importance of and the relation between material and symbolic resources, or economical and cultural resources, as well as the methodological challenges carried by the distinction of these concepts. The multidimensionality of the dividing aspects in societies has played a role in the way social class has been defined throughout history, definitions that navigate through different focus, considering more the classical or recent theories. With a newer generation of analysts that present a more comprehensive meaning of social class in terms of classed identities and personal life experiences, the concept appears not to be death, and it is still widely used (Atkinson, 2017; Reay, 2011).

Social Psychological perspective of Social class

Compared to the field of sociology, social class has received much less attention within the psychological field (see APA Task Force, 2007). Nonetheless, in the past few years, there has been a growing interest in social class issues among researchers in psychology.

Social psychology has defined social class as a system of stratification that ranks individuals based on their access to material, social and cultural resources, which combined represent one's socioeconomic status (Durante & Fiske, 2017; Moya & Fiske, 2017). Social class is understood as shaping people's customs and preferences, but also people's lives by determining the environment individuals live (and grow) in, such as schools, neighbourhoods, organizations or cultural spaces (Kraus & Stephens, 2012; Lott, 2012).

With a generalized recognition of the importance of social class and socioeconomic status (SES) in the study and practice of psychology (APA Task Force, 2007), some lines of research have emerged in the field. Some of them address the relation between SES and health (e.g., Adler et al., 1994; Adler & Ostrove, 1999), brain development (Merz, Wiltshire, & Noble, 2018; Noble et al., 2015) or academic achievement (Brooks-Gunn & Duncan, 1997), as we present later in this chapter with regard to the impact of socioeconomic status on children's development. However, the concepts of social class and socioeconomic status are often used interchangeably in psychological research (for an example, see APA Task Force, 2007), which might contribute to confusion as to what is being measured and discussed. Actually, much of the literature within this field focused on socioeconomic status as measured by income, educational attainment and occupation (called objective social class), and/or on subjective social class (Kraus & Stephens, 2012), that is the perceived position of the self within a social class context. However, according to Lott (2012), the term *class* goes beyond socioeconomic status, bringing the concept of power to the forefront. Therefore, the inclusion of symbolic status markers (e.g., conveyed in the clothes, residence or activities) is considered crucial in the understanding of the effect of social class membership on people's lives. According to Liu and colleagues (2004; Liu, 2001) social class is distinct from socioeconomic status because the former requires individual's awareness of his or her place in the economic hierarchy. Class-consciousness and awareness brings sense of belonging to a group of similar individuals, and consequently may lead to classism, vital when discussing social class (Liu, Ali, Soleck, Hopps, & Pickett Jr., 2004). Unlike social class, to these authors, socioeconomic status does not require awareness of group belongingness, and it is used as an individual's descriptor of economic experiences (Liu et al., 2004).

More recently, Kraus and colleagues (2012) proposed the social cognitive perspective on social class, informed by the labour perspective on social class (Marx & Engels, 1848/2007), health psychology perspective on social class (e.g., Adler et al., 1994) and cultural perspective on social class (Bourdieu, 1979/2010). This model focuses on the importance of social class and socioeconomic status in experiences, beliefs and behaviours of

the various social class groups (for a review see, Kraus & Stephens, 2012). According to the authors, social class is rooted in individuals' experiences of different levels of material resources (wealth, education, work) and, precisely, in the self-construal of individuals' place in a class rank, in relation to others (Kraus, Piff, Mendoza-Denton, Rheinschmidt, & Keltner, 2012). This perspective considers that social class membership and related living contexts produce a set of predictable social cognitive tendencies. To the authors, perceptions of their own and others social class rank are crucial psychological mechanisms in the experience of social class (Kraus, Tan, & Tannenbaum, 2013). Social class membership and related living contexts is seen as producing a set of predictable social cognitive tendencies that guide patterns of thought, feeling, and action related to individuals' self-concept, social perceptions and interpersonal relations that are shared by people in the same social and economic conditions (Kraus et al., 2012).

Integration and implications for this thesis: A note on terminology

The current review demonstrates the complexity of the concept of social class and the challenge of studying it given its many alternative definitions. Most of the psychological literature on social class abandons the classical concept of Marxist theory, which conceived social class as related to one's relation in the means of production (Marx & Engels, 1848/2007). Instead, this literature adopts Bourdieu's perspective, which considers social class as related to economic, social and cultural resources (Moya & Fiske, 2017; Kraus & Stephens, 2012; Manstead, 2018). In fact, taking into account the current reduction or absence of the traditional occupations associated with the increasing complexity of work relations, the more classical sociological standpoints are difficult to maintain (DiMaggio, 2012; Manstead, 2018). Nevertheless, we acknowledge that the use of the social class concept to divide people only taking into consideration the more objective socioeconomic attributes may be misleading by disregarding the historical origins of this social stratification system and of the concept in itself.

Cognizant of the historical definitions of the social class concept, but following the recent trends of sociological class analysis (Reay, 2011), in the present work we adopt the mainstream perspective of social psychology of social class (Kraus & Stephens, 2012; Liu et al., 2004; Lott, 2012; Moya & Fiske, 2017). Therefore, social class is understood as a multidimensional concept that encompasses symbolic aspects of people's life in complement to material resources. Important to our work, the adopted understanding of social class takes necessarily into account individual's understanding about his or her own position in the

comparative social class context, vis-à-vis others (Kraus et al., 2012; Kraus et al., 2013). According to this perspective, social class shapes individuals self-conceptions: the social experiences related to individuals' material resources or their established relationships, give rise to culture-specific selves, communicated through different social class symbols (e.g., clothes) and patterns of behaviour (e.g., communication styles; Stephens, Markus, & Phillips, 2014). By sending and receiving information about their social class background, individuals develop a sense of their rank in the society, or within a specific group or context (Kraus et al., 2013).

In the present work, in the exposition and discussion of our empirical findings, the term socioeconomic status will be used to characterize participants in terms of their objective income, used as demographic variables. The term social class will be used when presenting findings about the participants' self-categorization regarding social class. By specifically defining and enlightening about the terminology we use across this work, we pretend to contribute to a more clarified and unified field of social class analysis within the field of social psychology.

Child poverty in numbers and challenges of growing up as poor

While developed countries widely agree on poverty reduction as basic goal for their policies, there is little agreement on the definition of poverty (Darvas, 2019; Laderchi, Saith, & Stewart, 2003; Weziak-Bialowoska, 2016). Poverty is a complex phenomenon and has different definitions, including contrasting concepts like *absolute* and *relative poverty*. The conventional definition of poverty refers to the condition where individuals lack sufficient financial resources to live at a standard considered comfortable in society (Poor, n.d.). This lay concept evokes a relative definition of poverty, that is, the definition of poverty that takes into account the individual (or household) living conditions in relation to the prevailing living standards in the society in which the individual (or household) lives, and it is adjusted over time according to economic changes. In contrast, absolute poverty is defined in relation to absolute standards concerning individuals' basic needs.

The different configurations of poverty inform the indicators used to measure poverty. There is a widespread debate about which indicators should be considered in order to develop and monitor the policies against poverty. Authors claim that the frequently used social indicators may be misleading, especially those that only consider consumption and income (Darvas, 2019; Weziak-Bialowolska, 2016; Weziak-Bialowolska & Dijkstra, 2014). This can

be even more problematic when focusing on child poverty, for which other related but different indicators might be particularly relevant, such as access to food, housing, education, and health. Thus, when exploring child poverty, a multidimensional approach should be used (Abdu & Delamonica, 2018).

With the general goal of monitoring poverty and social inclusion development, Eurostat periodically collects data through a self-report survey (European Union Statistics on Income and Living Conditions – EU-SILC) providing comparable results among European countries. A multi-dimensional index is used, namely the *rate of people at-risk-of-poverty and social exclusion*, which refers to those who experience at least one of the following three situations: 1) income poverty, measured through the index of at-risk-of poverty rate and defined as the share of persons with an equivalised disposable income below the risk-of-poverty threshold, which is set at 60 % of the national median equivalised disposable income (after social transfers)[4]; 2) living conditions below acceptable standards, given by the severe material deprivation index that measures the percentage of people that experience at least 4 out of 9 deprivation items (e.g., unable to pay rent/mortgage or utility bills on time, unable to eat meat, fish or a protein equivalent every second day); or 3) unemployment restrictions, corresponding to very low work intensity, below 20%.

Although this indicator is not specifically tailored to children, it encapsulates important aspects that are known to determine a child's well-being, and therefore their situation in terms of poverty (Bastos & Machado, 2018). Reinforcing the importance of measuring poverty using a multidimensional approach, Eurostat use this comprehensive indicator to monitor the reduction of poverty as a goal of the European 2020 headline. Next, we present the trend lines of children at-risk-of-poverty and social exclusion in Portugal and the EU. In addition, we also present the decomposed data about the *relative* indicator of poverty (at-risk-of poverty rate) and the *absolute* one (severe material deprivation).

[4] Child poverty rate as measured by OECD (2018b) is defined by the percentage of children aged less than 18 year-old with an equivalised household disposable income (i.e., an income after taxes and transfers adjusted for household size) below the poverty threshold, set at 50% of the median disposable income in each country. The most recent statistics, reporting data from 2016, indicate that the child poverty rate in the OECD countries was of 13.4%, and 15.5% in Portugal. In the last fifteen years, the highest value of child poverty rate reached was 18.3%, in 2013 and 2014 (OECDa).

Child poverty indicators in Portugal and European Union

The most recent data shows that 22.4% of people living in the European Union (EU) are at-risk-of poverty and social exclusion (Eurostat, 2019). In the last ten years, Portugal is shortening its difference with the EU average, with data showing that 23.3% of people living in Portugal is in this situation. Looking more in depth to the differences between the various age groups, children are the group more affected by these economic hardships. The more recent data show that in Portugal 24.2% of children are in risk of poverty and social exclusion, lower but very close to the EU average of the same indicator (24.9%). As can be seen in Figure 1, it is notorious that in the last 10 years the percentage of children living in this vulnerable condition decreased, especially in Portugal where it reached higher values between 2012 and 2016, a period when Portugal was going through a financial crisis.

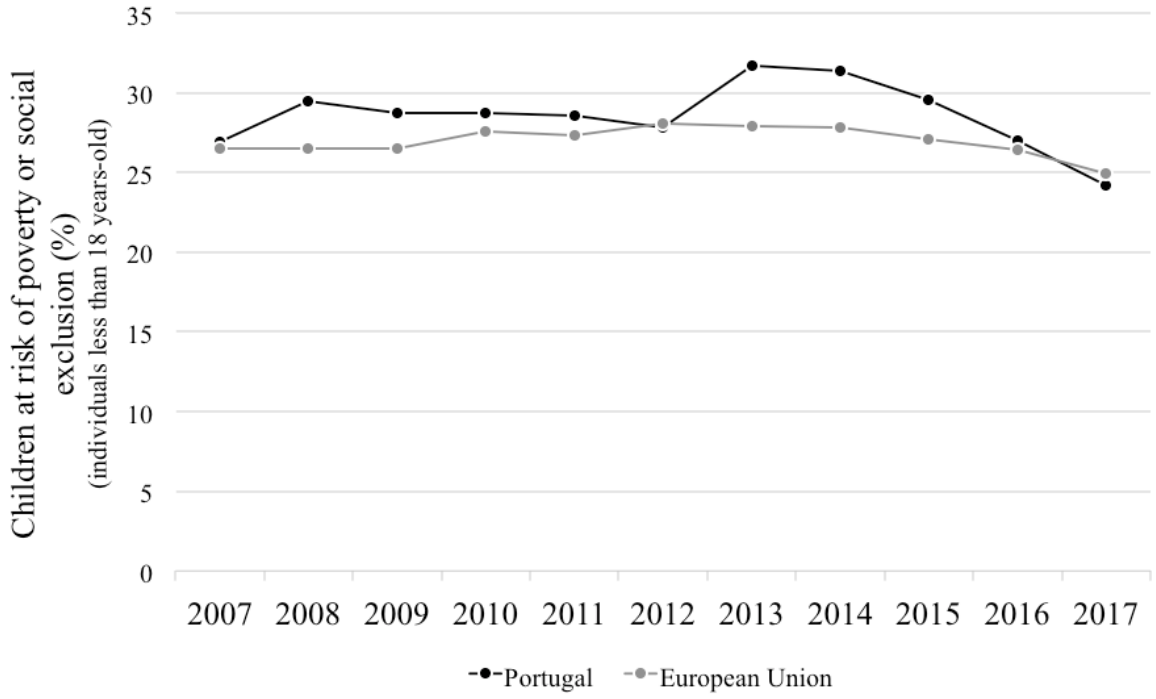


Figure 1. Evolution of children at-risk-of poverty and social exclusion rate (individuals less than 18 years-old) in the period of 2007-2017, in Portugal and in the European Union.

Regarding the income poverty in Portugal and in the EU, the indicator measuring the at-risk-of poverty rate, that is, the share of persons with an equivalised disposable income below the risk-of-poverty threshold, can be analysed in detail in Figure 2. It presents the evolution of this indicator in the last ten years, for the age group of individuals with 0-17 years-old. The most recent data show that Portugal (20.7%) has an at-risk-of poverty rate

above the European average (20.2%), although reaching a very proximal value in the last years.

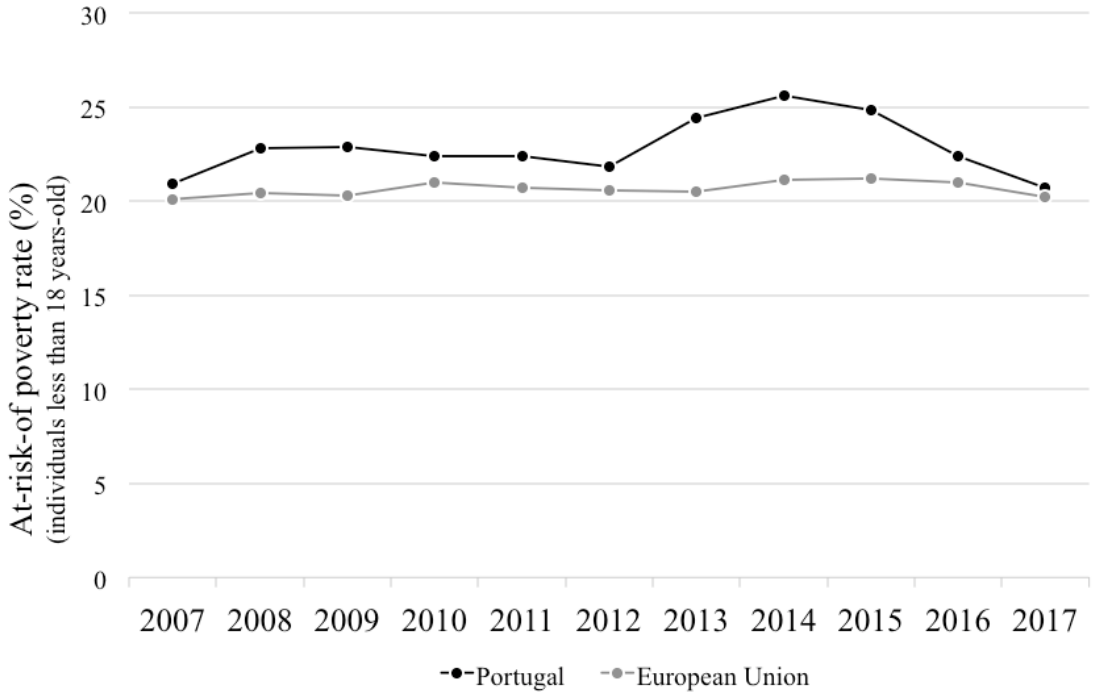


Figure 2. Evolution of At-risk-of poverty rate among individuals less than 18 years-old in the period of 2007-2017, in Portugal and in the European Union.

Regarding poverty related to the living standards of children, severe material deprivation rate measures the percentage of people, or children, whose living conditions are constrained by a lack of resources, namely, that they experience at least 4 out of 9 deprivation items, that is, they cannot afford 1) to pay rent/mortgage or utility bills on time, 2) to keep home adequately warm, 3) to face unexpected expenses, 4) to eat meat, fish or a protein equivalent every second day, 5) a one week holiday away from home, 6) a car, 7) a washing machine, 8) a colour TV, or 9) a telephone (including mobile phone). Looking to this indicator and to its evolution in the last ten years (Figure 3), it is the indicator with a major decrease. Since the peak of the Portuguese financial crisis, when the major effects were felt by people living in the country (2013), the percentage of severely materially deprived children decreased about 50%, and the last data shows that 7.4% of the children living in Portugal still live in the harsh conditions (Eurostat, 2019).

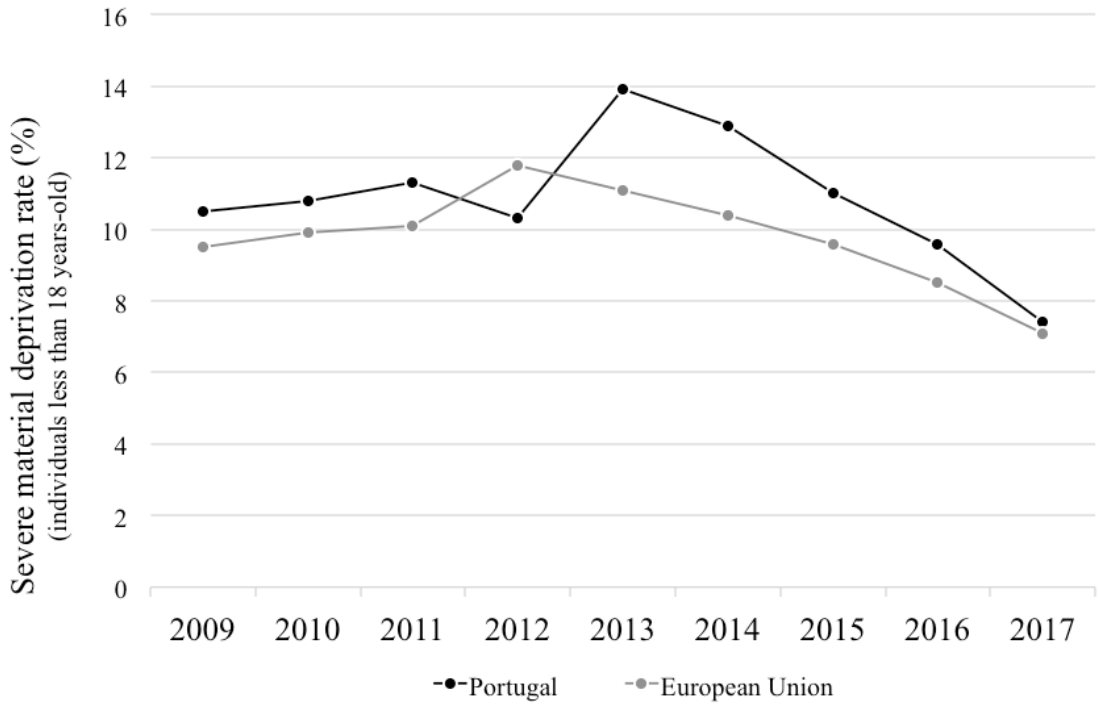


Figure 3. Evolution of severe material deprivation rate among individuals less than 18 years-old in the period of 2009-2017, in Portugal and in the European Union.

In sum, in the last ten years, child poverty, as measured by the different indicators, is decreasing in Europe and in Portugal. In the specific case of Portugal, the economic and financial crisis that occurred during 2010-2014 has affected the families' standard of living, with natural implications for the increasing of poverty rates. This is evident by looking to the higher child poverty rates in both indicators for the years of 2013 and 2014. However, despite the strong decrease in the last years, there are still a significant number of children at risk of poverty and social exclusion.

Interestingly, looking to the two independent indicators presented in this section, *at-risk-of-poverty rate* and *severe material deprivation rate*, we can conclude that overall the decrease in the absolute poverty rate is stronger than on the indicator measuring relative child poverty, that also assumes greater values. As metioned above, relative poverty rate is based on the comparison between individuals' living conditions and the prevailing living standards in the society in which the individual is. Therefore, we may raise the question about the evolution of inequality within the country and whether the gap between rich an poor people is still growing or stabilized in Portugal, even after the financial crisis. The importance of this question is related to the existent evidence showing that in contexts where the gap between rich and poor is larger, low-income children may experience the negative psychological and

physical outcomes of being materially deprived exacerbated (Odgers, 2015; Odgers & Adler, 2018; Wilkinson & Pickett, 2009). More specifically, and important for this thesis, some research suggests that income inequalities may increase children's awareness of socioeconomic and status differences in their comparative context. In turn, this awareness of the polarization in the intergroup context may influence children's perceptions of their own lower social status increasing the internalization of negative stereotypes about their group (Odgers & Adler, 2018). In fact, there are differences in the types of psychological consequences derived from the deprivation of children's basic needs because of lacking financial conditions to assure them, and the consequences derived from the awareness that one is not able to achieve the income or lifestyle enjoyed by the rest of society. The former will be specifically presented in the next section, and the latter will be approached and covered throughout this thesis.

Children in poverty: everyday challenges and its consequences

Children living in low socioeconomic environments face daily challenges that, together, may hinder children from low-income families from reaching the same achievements that more privileged children reach. Literature shows that children growing up in poverty have to deal with a cumulative number of stressors, rather than a singular one (Evans, 2004; Evans & English, 2002). In a study comparing low and middle-SES children, Evans and English (2002) showed that poor children were exposed not only to a greater number of physical (e.g., crowding, substandard housing) and psychosocial stressors (e.g., family turmoil, community violence), but also in a higher intensity than middle-income children. Importantly, the exposure to cumulative daily stressors has been suggested to explain the relation between poverty and socio-emotional, physical and cognitive outcomes (Almeida, Neupert, Banks, & Serido, 2005; Evans & English, 2002; Jensen, 2009). In the analysis of the more afflicting risks to children's health, three levels can be considered (Yoshikawa, Aber, & Beardslee, 2012): individual factors (e.g., children stress, nutritional intake), relational factors (e.g., quality of family and peer relationships) and institutional factors (e.g., neighbourhoods, school).

Consequences of growing up poor begin from pre-natal infancy with poor pregnant women facing the risk of perinatal complications, like intrauterine growth retardation or low birth weight, both of them having long-term effects during childhood (Brooks-Gunn, Klebanov, & Duncan, 1996). *Individual* factors are precisely related to explanations at the child level, like their levels of stress or their nutrition intake. Studies with children from 4 to

18 years-old show a negative association of socioeconomic status and the levels of cortisol, used as the biological measure of chronic stress (Vaghri et al., 2013; Vliegenthart et al. 2016). These studies suggest that chronic stress may mediate the relation between socioeconomic status and adverse childhood health. Moreover, high levels of cortisol are associated to increased risk of cardiovascular diseases and overweight (Manenschijn et al., 2013), so it is startling that such young children already present this elevated cortisol levels.

In what regards the *relational* factors, children from low SES are more likely that their middle SES counterparts to face daily emotional and social challenges in their home environments and in the relations established with their family. Within a complex array of stressors, domestic violence, separation or divorce, family evictions and forced mobility (Evans & English, 2002) can be included. The family turmoil that children may face everyday can be aggravated by their own experience of harsher relationships with their closest family. Several studies show that as socioeconomic status declines, parents or caregivers have harsher behaviours with their children (e.g., corporal punishments), possibly because they are often overworked and overstressed (Gershoff, 2002). Family relations inside poor families are often fragile (Ahnert, Pinquart, & Lamb, 2006), lacking warmth, sensitivity and responsiveness (Evans, 2004). In effect, the insecure relations established with their closest family have adverse consequences in children's life, such anxiety (Colonessi, Draijer, & Stams, 2011) and later anti-social behaviour (Sousa et al., 2011). Moreover children with insecure parent child relations may show difficulty in establishing rewarding friendships with peers (Szewczyk-Sokolowski, Bost, & Wainwright, 2005). A recent meta-analysis (Groh et al., 2014) provide evidence that early insecure attachments undermine children's social competence to relate with their peers (e.g., ability to make friends, empathy, play behaviour, likability), enduring till adolescence.

Institutional factors also affect the health of low SES children. Low-income families are more likely to lack the standard housing conditions (e.g., overcrowded or physically deteriorated houses; Rollings, Wells, Evans, Bednarz, & Yang, 2017) or to live in unsafe neighborhoods (e.g., high criminality, greater traffic volume or less playground safety; Ferguson, Cassells, MacAllister, & Evans, 2013; Sarti, Schalkers, & Dedding, 2014). Substandard housing may lead children to show respiratory health problems and childhood injuries (Matte & Jacobs, 2000). As to neighbourhoods' lack of safety, the simple heavier traffic on narrower streets can put a pedestrian child in risk (Evans, 2004). Furthermore, the higher incidence of crime exposure in their home neighbourhoods may undermine children's

feelings of their own safety, affecting in turn their academic performance (Schwartz & Gorman, 2003).

There is evidence that children living in low socioeconomic conditions are at greater risk of lower academic achievement, presenting higher tardy rates, grade repetition, absenteeism, school dropouts or lower grades (Brooks-Gunn & Duncan, 1997). The individual, relational and institutional factors described above may contribute to this lower school attainment, but more possible contributors exist. Related to the family contexts where children are in, evidence shows that low SES children experience considerably less cognitive stimulation from their family than well-off children do. This is expressed in the lesser number of books at home (Kumanyika & Grier, 2006) or by the lower number of reading aloud activities with their parents (Coley, 2002), as compared to wealthier children. With important consequences in academic achievement (Benner, Boyle, & Sadler, 2016; Smith, Brooks-Gunn, & Klebanov, 1997), low SES parents are more likely to disregard their children's school life and to have lower expectations on their educational attainments, compared to middle-SES counterparts (Cheadle & Amato, 2011; Davis-Kean, 2005). Recent research has shed light on the relation between children socioeconomic status and brain development, and how this development affects children's academic achievement. These studies demonstrate that growing up in poor conditions is related to structural differences in several brain areas, prominently showing a reduced grey matter on the temporal and frontal lobe in socioeconomic disadvantaged children (Merz el al., 2018; Noble et al., 2015). These brain regions are responsible for language skills and executive functioning (memory, attention, planning, reflection), essential skills to academic achievement. In fact, Hair and colleagues (Hair, Hanson, Wolfe, & Pollak, 2015) have demonstrated that structural brain development mediates the influence of poverty in children's academic outcomes.

Cross-national research consistently shows that socioeconomic status have an insidious effect on children's well-being (Bradshaw, Keung, Rees, & Goswami, 2011; Sarriera et al., 2015; Gross-Manos, 2017), and the more children face material deprivations, the lower their subjective wellbeing. Although, according to a study by Pickett & Wilkinson (2007) within rich countries, child wellbeing was not associated with the average income of the country. These results suggests that child wellbeing may depend more in the reduction of country inequalities that in the country economic growth. The more unequal countries are, the more the economic distance between low-income and high-income children. With the aggravating of social class divisions, children may engage in harmful social comparisons among their peers. Moreover, children's well-being is affected by their havings and having-

nots, but the subsequent social exclusion that children face has a larger effect in explaining children's subjective well-being (Gross-Manos, 2017).

As shown above, the lives of low SES children may be a continuous struggle with substantial risk factors that they have to face daily. These risks are multifaceted, interwoven, and overlaid. The emergence of one problem is most of the times consequence of another one, that by his turn precipitate another one, with deleterious outcome effects in children's lives (Atzaba-Poria, Pike, & Deater-Deckard, 2004; Jensen, 2009).

Social class and intergroup relations in childhood: A developmental social identity perspective

Social class has been in the centre of recent research and social psychologists have been examining its impact at the individual-level, specifically focusing on how objective and subjective social class rank shapes individual patterns of thought, feeling, and action (Kraus, Piff, & Keltner, 2009, 2011). Research with adults shows that people's social class, which is more than a structural factor related to individuals' material conditions, influences the way individuals construe and interpret the world (Kraus et al., 2009), the way people relate to others (Fiske & Markus, 2012) or behave towards others in need (Piff, Kraus, Coté, Cheng, & Keltner, 2010). According to this literature, social class shapes individuals self-concepts in the sense that, the different social experiences that individuals face either related to their material resources or to the relationships established, gives rise to culture-specific selves and patterns of behaviour (Stephens et al., 2014). To the authors, home, school and the workplace are important contexts that foster these different self-conceptions (Stephens et al., 2014) reflected in culture-specific signs (e.g., communication, cultural practices) that may serve as cues for others' judgments of people's social class ranking (Becker, Kraus, & Rheinschimidt-Same, 2017; Kraus & Keltner, 2009; Oh, Shafir, & Todorov, 2018). Thus, this literature opens up the possibility that the social class divides may lead to the development of prejudiced attitudes and discriminatory behaviours towards individuals whose lower social class is reflected in their habits (Manstead, 2018). In this respect, a small body of research has looked at social class from an intergroup perspective, focusing on the stereotypes and attitudes towards different social class groups (e.g., Cozzarelli, Wilkinson, & Tagler, 2001; Horwitz & Dovidio, 2017; Mistry, Brown, White, Chow, & Gillen- O'Neel, 2015), and its impact on individual's behaviour (Tagler & Cozzarelli, 2013).

Overall, what do people think and feel about others based on their membership in a different social category (e.g., gender or ethnicity), and how and why people respond to them, is the basis for research on intergroup relations (Hogg & Levine, 2010). The most common intergroup contexts studied so far are related to race or ethnicity, religion groups, age, gender, sexual orientation, physical or mental disability, nationality, among others (see meta-analysis in the field, e.g., Davies, Tropp, Aron, Pettigrew, & Wright, 2011; Jetten, Spears, & Postmes, 2004; Pettigrew & Tropp, 2006; Riek, Mania, & Gaertner, 2006). Nevertheless, extending research on intergroup relations from these well-established intergroup contexts to inform social class intergroup relations should warrant caution.

Similar to other intergroup contexts, social class divides are embedded in asymmetric power and status relations between the groups. However, in addition to this clear unequal status positions, the social class intergroup context faces specific constraints (e.g., distinctness) that may influence intergroup dynamics. In order to shed light on these specificities and to frame our theoretical accounts, we will approach social class intergroup context from a Social Identity Theory (SIT; Tajfel & Turner, 1979) and Self-Categorization Theory (SCT; Turner, Hogg, Oakes, Reicher, Wetherell, 1987) perspective. These two theories, although distinct, are complementary in explaining how social identity processes inform social behaviour (Turner, 1999). For the purposes of the present chapter, we will review the key theoretical assumptions of SIT and SCT, followed by a review of two socio-developmental theories built upon a social identity perspective, Social Development Identity Theory (SDT; Nesdale, 1999, 2004) and Social Reasoning Developmental Model (SRD; Killen & Rutland, 2011; Rutland, Killen, & Abrams, 2010). These approaches were selected given that they contribute to a better understanding of social class as intergroup phenomena, and more specifically how it might take shape in childhood. At the end of the present chapter, a review is presented of the existing literature that addresses social class in childhood in light of these theoretical perspectives.

Social Identity Theory

Social Identity Theory (SIT; Tajfel & Turner, 1979) aims to understand how intergroup perceptions (e.g., stereotypes, attitudes) and behaviours are influenced by the interplay between personal and social identities. According to SIT, social identity represents "the part of an individual's self-concept which derives from his knowledge of his membership of a social group (or groups) together with the value and emotional significance attached to that membership" (Tajfel, 1978, p. 63). SIT also posits that social identity takes

shape in the interaction between three important processes: *social categorization*, *social-comparison* and *social identification*.

Aiming to make sense of the world and to understand the intergroup context in which they are in, individuals establish the relevant groups by grouping others, and themselves, into social categories in a meaningful way for them (Tajfel & Turner, 1979). Importantly, this cognitive process of social-categorization not only allows systematizing the social world but also defining the individual's place in society. Thus, as soon as people see themselves as part of a specific group, and given that they self-identify with that group, that specific membership acts as a guide for action and a reference for the self. In line with a functional perspective of the social category system that conceives social categorization as a useful and vital process in normal social functioning (van Knippenberg & Dijksterhuis, 2000), as soon as individuals sort people into groups, they tend to perceive the members of the same social group as similar within the group. In turn, the differences between the groups are exaggerated. Hence, members of the same group are perceived through the lens of the group prototype, that is, of the set of attributes the most exemplary member of that social group holds, and that comes to represent or stand for that category. Moreover, there is accumulated evidence that the simple process of assignment of individuals to groups, with special emphasis on the positioning of the self in one of the groups, is enough to trigger intergroup bias, in the form of ingroup favouritism and/or prejudiced attitudes towards a relevant outgroup (Billig & Tajfel, 1973; Tajfel & Turner, 1979; for a review, Dunham, 2018; Otten, 2016).

A large body of research in the social psychological domain focusing on intergroup bias (Dovidio, Hewstone, Glick, & Esses, 2010) shows that individuals can develop this bias in various manners. In particular, bias encompasses three different types of intergroup orientations that include stereotypes, prejudice and discrimination (Dovidio & Gaertner, 2010; Dovidio et al., 2010; Stangor, 2009). *Stereotypes* were first defined by Lippmann (1922) as what comes to mind when thinking about a specific group. Current definitions consider that stereotypes are general beliefs about the groups or its members, such as traits, attributes or group characteristics (e.g., how people look, dress, speak, behave, feel). *Prejudice* is conceptualized as an attitude that reflects a general evaluation of a social group, that typically encompasses a dislike towards the outgroup or a greater liking towards the ingroup. Both of these processes can be captured at different dimensions of analysis, and the literature distinguishes between explicit and implicit stereotypes and attitudes. Explicit stereotypes and explicit prejudice, measured through self-reports, are typified as conscious

and (strategically) controllable. Nevertheless, given that both stereotypes and prejudice formation occur at the intraindividual level, the extent to which people are aware of these beliefs and attitudes may vary (Dovidio et al., 2010). In contrast, implicit stereotypes and attitudes, measured through a range of indirect measures (e.g., involving response latency tasks), are unintentional and might be automatically activated without individuals' awareness (Greenwald & Banaji, 1995; for a review see, Maass, Castelli, & Arcuri, 2000). *Discrimination* is defined as a biased behaviour as it relates to differential treatment of individuals on the basis of their group membership. It may involve negative behaviours or a less positive response to the outgroup member than to the ingroup member in equivalent situations (Dovidio et al., 2010).

According to SIT (Tajfel & Turner, 1979), individuals are motivated to engage in comparisons between their own group and others' groups in terms of their social value and status. It is the *social comparison* perspective that links social categorization with social identity (Turner, 1978) because in this social comparison process, individuals are focused on the establishment of positive ingroup distinctiveness and social identity. That means, that individuals are motivated to achieve or to maintain a positive image of themselves and of the groups to which they belong. Therefore, if the intergroup comparison leads to a favourable evaluation of the ingroup in relation to a relevant outgroup, the membership of that group will confer a positive social identity. Conversely, if the intergroup comparison leads to an unfavourable image of the ingroup in relation to the outgroup, the membership of that group will confer a negative or unsatisfactory social identity. When a positive evaluation of the group is not possible, individuals are motivated to strive for a positive social identity via alternative identity management strategies, namely individual mobility, social creativity and social competition (Bettencourt, Charlton, Dorr, & Hume, 2001; Ellemers, 1993; Tajfel & Turner, 1979). These strategies are dependent on the structural context in which individuals are in, namely the permeability of the group boundaries, legitimacy and stability of the status relations between the groups (Ellemers, van Knippenberg, & Wilke, 1990). When group boundaries are perceived as permeable, individuals may engage in *individual mobility*. This individual strategy consists in a dissociation from the group in order to pursue an improvement of the individual social identity, rather than the ingroup social identity. On the opposite, *social creativity* is likely to occur when the group boundaries are perceived as impermeable and status relations between groups are perceived as relatively stable. In these situations, individuals engage in social creative behaviours in order to increase their positive distinctiveness, namely by comparing the groups on a different dimension or choosing an

alternative outgroup to compare with. Lastly, low-status ingroup members will engage in *social competition* when group boundaries are perceived as impermeable and the group status as relatively unstable and illegitimate. Here, ingroup members will seek positive distinctiveness by engaging in direct competition with the outgroup, in the form of ingroup favouritism or collective action.

According to the social identity approach, as group members try to achieve or maintain ingroup distinctiveness they may experience different forms of identity threat. A threat to identity may occur when, in the face of intergroup comparisons, the social identity and evaluation processes are, for some reason, unable to provide distinctiveness and positive self-esteem (Branscombe, Ellemers, Spears, & Doosje, 1999; Breakwell, 1986). Branscombe and colleagues' (1999) threat taxonomy offers a classification of situations in which different identity concerns arise. The four classes of social identity threat can be distinguished as: 1) *categorization threat*, 2) *distinctiveness threat*, 3) *threats to the value of social identity*, and 4) *acceptance threat*. The responses to each of these social identity threats are dependent on the level of identification of the individual with that particular social group. *Categorization threat* is related to the concern of being categorized as member of a group against one's will, either because individuals do not identify with that particular group, the categorization is inappropriate for the context, or it is a devalued group that does not uplift individuals self-esteem. Resistance to the categorization is more likely to happen when the membership category is perceived as irrelevant or illegitimate, and more so among socially devalued or stigmatized groups. Low-identifiers are more resistant to such unwanted categorizations and there is evidence that low-identifiers tend to pursue a positive social identity by distancing themselves from the ascribed categorization when its salience is enhanced (Spears, Doosje, & Ellemers, 1997) or engage in disidentification and discrediting of the ingroup (Ellemers, Van Dyck, Hinkle, & Jacobs, 2000; Noel, Wann, & Branscombe, 1995).

Distinctiveness threat refers to the lack of a distinctive social identity from other comparison groups. This kind of threat stems from the SIT's assumption that part of our self-esteem is derived from our positive social comparisons with other groups, resulting in a positive social identity. Thus, once groups engage in social comparisons with other similar groups, social identity distinctiveness could be under threat. This threat is particularly likely for high identifiers for whom that particular group identity is more important. High identifiers will try to differentiate themselves from these groups on complementary comparative dimensions. Instead, low-identifiers prefer to self-categorize at a superordinate level in order to achieve a more positive social identity.

The *threat to the value of social identity* occurs when the group value is undermined, leading group members to evoke ingroup favouritism and/or outgroup derogation as a mean to protect that particular social identity. Value threats may originate directly from outgroups, through intergroup comparisons (e.g., the ingroup shows poor performance), or from past events associated with the group. To cope with this type of threat different strategies may arise, depending on whether it is competence or morality that is undermined, and also on the level of ingroup identification.

Acceptance threat takes place when individuals face the event of not being accepted or included in a group of which they consider themselves as members. In this case, individuals who are not recognized as members of a certain group will display favourable attitudes and prototypical behaviour towards the preferred group. Moreover, individuals that sought for admiration and acceptance within the ingroup, may also engage in public derogation of the outgroup members in order to improve their situation in the group.

In recent years, studies about the *queen-bee phenomenon* have provided evidence showing that, as a result of gender bias and social identity threats in the work setting, successful women in male-dominated work contexts adapt to the masculine culture and self-distance from other women in order to pursue individual goals as a result (Derks, van Laar, & Ellemers, 2016; Derks, van Laar, Ellemers, & Raghoe, 2015; Ellemers, Van Den Heuvel, De Gilder, Maass, & Bonvini, 2004). Importantly, evidence of this phenomenon among members of other stigmatized groups has also been found (e.g., homosexuals, see Bishop, Kiss, Morrison, Specht, & Rushe, 2014; ethnic groups, see Cohen & Garcia, 2005; Steele & Aronson, 1995; Steinberg, Dornbusch, & Brown, 1992). Research has shown that there are various possible responses individuals may choose to self-distance from a devalued group. One of them may be to describe themselves in less stereotypical ways, or to hide their actual membership and "pass" as members of the more valued group, engaging in individual mobility (Cadinu, Galdi, & Maass, 2013; Newheiser & Barreto, 2014). Another may be to display discriminatory behaviours against the devalued group. In effect, a study with African American participants under threat showed that individuals not only distanced from the group in their self-descriptions (Steele & Aronson, 1995), but also sat further away from the ingroup peer who they believed to have discredited their social identity (Cohen & Garcia, 2005). At last, another possible response may be to endorse negative attitudes towards their ingroup or to not support (or even oppose) actions addressing inequalities, which may serve to legitimize the current hierarchies (Ellemers et al., 2004).

In sum, social identity theory constitutes one of the major contributions to the field of social psychology, and a large body of evidence has contributed to several extensions of this classical theory. Despite that most of the SIT empirical findings concern adults' samples, SIT assumptions were also examined with children, findings that were formalized in the Social Identity Development Theory presented below in more detail.

Self-Categorization Theory

Self-categorization Theory (SCT; Turner et al., 1987) constitutes a development of SIT (Tajfel & Turner, 1979) as it sought to elaborate and examine in more detail how the social categorization process, namely categorization of oneself, creates a sense of identity and, therefore, the basis of group behaviour. Within SCT, self-categorization is defined as the "cognitive groupings of oneself and some class of stimuli as the same (identical, similar, equivalent, interchangeable, and so on) in contrast to some other class of stimuli" (Turner et al., 1987, p. 44).

SCT contends that the self may be categorized at three levels of abstraction: a) the *superordinate level* of self-categorization, namely as human being, defining the human identity; b) the *intermediate level* of categorization, as ingroup or outgroup, based on social similarities and differences between individuals that allow the distinction between social groups, defining the social identity; and c) the *subordinate level* of personal self-categorizations based on intragroup differences, differentiating the self and the other group members, and defining the personal identity. This system of self-categorization allows the definition of the self both as an individual and as a social group member, proposing that individuals have a range of identities that may integrate the self, depending on the social context (Turner et al., 1987).

Given this range of possible identities available to the individual, an important factor to the activation on a specific social identity is the salience of social categorizations, dependent on the context the individual is in, which may turn one category, but not others, salient. Specifically, the salience of a specific identity is dependent upon the particular social comparisons available in any given context (Oakes, Haslam, & Turner, 1994). SCT proposes that the psychological salience of a particular group membership is a function of the interaction between *accessibility* of a certain self-category and *fit* between the category attributes and the real stimulus (Oakes, 1987; Turner, Oakes, Haslam, & McGarty, 1994; Voci, 2006). Relative accessibility, also termed *perceiver readineness*, reflects the individual's past experience, present motives, values and expectations, and it is influenced by

the social identification with the group, its centrality and value. The concept of fit concerns two aspects, *comparative fit* and *normative fit*. Comparative fit is defined by the meta-contrast principal, that is, that the categorization of the self in a specific group depends on both the similarities between the self and members of the ingroup, and the differences between the self and members of the outgroup(s). Normative fit refers to the extent to which the stereotypical expectations of the self about the category (e.g., traits, behaviours) align to the actual content of the social stimulus situation (e.g., a target person). These theoretical assumptions contribute to the self-categorization process granting its dynamism and context-dependency, built in comparative relations of similarities and differences within a given context.

Importantly, one of the core tenets of SCT is that as soon as individuals categorize the self in terms of a specific social group they see themselves more in terms of that social group to which they are members, rather than as an individual, process that is called *depersonalization* (or *self-stereotyping*). Moreover, when individuals self-stereotype, they assign to themselves the prototypical stereotypes, attitudes and behaviours that define the group (Abrams & Hogg, 1990) and behave conforming to the norms of the group (Hogg & Reid, 2006). Motivated by reaching a positive self-esteem, and through depersonalization, as soon as individuals' self-categorize as being members of a specific group, they engage in ingroup favouritism, perceived ingroup cohesion and intragroup cooperation (Turner et al., 1987; Voci, 2006).

Social Identity Development Theory

The Social Identity Development Theory (SIDT; Nesdale, 1999, 2004) accounts for the development of intergroup attitudes in childhood, drawing upon SIT (Tajfel & Turner, 1979) and SCT (Turner et al., 1987). SIDT has been tested with ethnic and artificial groups (e.g., Bigler, Jones, & Lobliner, 1997; Nesdale, Durkin, Maass, & Griffiths, 2005; Nesdale & Flesser, 2001), and describes the development of children's intergroup attitudes, namely ethnic biases, according to four consecutive social-developmental phases. The first phase, *undifferentiated phase*, occurs with children before the age of 2-3 years. Typically, in this phase children do not selectively differentiate people based on social categories, as ethnic and racial cues are not yet salient at this age. In this stage, children increasingly become more selective and acquire a rudimentary sense of social categories such as gender or age, beginning to respond differentially according to social cues. Regarding ethnicity, it is only around 3 or 4 years of age, in the *ethnic awareness phase*, that children begin to be accurate

in identifying and distinguishing people in terms of basic ethnic cues, such as skin colour hues. This awareness is facilitated and shaped by adult's expression of positive or negative evaluations about the groups. An important milestone at this phase is child's *ethnic self-identification*, that is, the realization of being a member of a particular group. This key acquisition guides children to the next developmental phase. One major consequence of this new understanding of the position of the self is an increased focus and attention to the ingroup. Thus, consistent with SIT and SCT, in the *ethnic preference phase*, children at the age of 5-6 years begin to show preference for their own group. According to SIDT, ethnic self-categorization instigates ingroup favouritism, but not necessarily outgroup prejudice responses. It is only in the course of the following two years that this ingroup preference is consolidated alongside children's increasing knowledge about ethnic stereotypes, particularly around the 8 or 9 years of age. The fourth phase, *ethnic prejudice*, might initiate around the age of 7-8 years, but not necessarily so in every child. Prejudice within SIDT means that outgroup members are disliked, and the emergence of such negative attitudes depends on several factors: ethnic constancy (i.e., knowing that ethnicity is immutable, and does not change over time), ingroup social identification, perceived outgroup threat, and ingroup norms prescribing the exclusion of the outgroup.

According to SIDT, social norms are defined as "the attitudes, beliefs, and behaviours considered appropriate to be displayed by the members of a particular group" (Nesdale, 2011, p. 602). SIDT contends that children are motivated to follow the group norms in order to guarantee their acceptance in the group they (want to) belong to. In support of this assumption, several experiments drawing on SIDT, showed that children that identity with a specific group follow the ingroup norms of inclusion or exclusion (Nesdale & Dalton, 2011; Nesdale, Durkin, Maass, Kiesner, & Griffiths, 2008; Nesdale, Maass, Durkin, & Griffiths, 2005). An example is a study conducted with 7-9 year-old children in a simulation group paradigm where ingroup norms (inclusion vs. exclusion) and intergroup threat were manipulated (Nesdale, Maass, Durkin, & Griffiths, 2005). As expected, the results showed that 7 year-old participants liked the outgroup in the presence of an inclusion group norm (yet, not as much as the ingroup), but disliked the outgroup in the presence of an exclusion ingroup norm. Participants aged 9 years expressed a negative outgroup evaluation only in the presence of an exclusion norm and high intergroup threat. Moreover, studies on bullying as an intergroup behaviour, show that children who perceive a pro-bullying norm are more likely to engage in bullying behaviours than children who perceive an anti-bullying norm (for a review, see Jones, Livingstone & Manstead, 2017; Nesdale, Durkin, Maass, Kiesner, &

Griffiths, 2008). Importantly, in the development of intergroup attitudes, children's feelings of acceptance to the group to which they identify with is important to their self-esteem and state of anxiety (Nesdale & Lambert, 2007, 2008; Nesdale & Pelyhe, 2009). Consistently, research shows that children who feel their position in a desirable group at risk, are motivated to strengthen their own acceptability to the group by contributing to the status of the ingroup. Hence, children in this vulnerable situation typically display stronger ingroup bias, outgroup negativity and compliance with ingroup norms (Nesdale, 2011).

Of particular relevance to the present work, according to SIDT children's awareness of being a member of a particular group, that is, children's self-categorization as member of a social group, is crucial to the development of children's attitudes and behaviours in the specific intergroup context. Actually, all of the phases and processes presented above are dependent upon self-categorization. Although this developmental theory regards the importance of this process, just a few studies examined the development of self-categorization in childhood, supporting self-categorization assumptions in the course of development. Drawing upon SCT, specifically on the self-stereotyping process, Bennett and Sani conducted a series of studies focusing on the development of 5- to 10-year-old children's stereotyping of the self in group-relevant ways, using the gender categories (for a review, see Bennett & Sani, 2008c). These studies show that 5 year-old children already perceive themselves more similar to same-sex peers when the gender had been made salient, in relation to when it had not (Bennett & Sani, 2008a). Moreover, when the gender was made salient, 5 year-old children already stereotype themselves in terms of the attributes usually associated with their gender (e.g., kindness for girls, bravery for boys; Bennett & Sani, 2008a). Together, these studies provide evidence that young children already have the capacity for gender self-stereotyping. In another set of studies within more social categories (age, family and gender) and using different methodologies, such as confusion of the self with the ingroup and appearance of self- and group-reference effects, the authors obtained the same findings and confirmed that children already at the age of 5-years are able to integrate relevant ingroups as part of the self-concept, reflecting the genuine identification with these significant social groups (Bennett & Sani, 2008b). Looking in more detail to SIT and SCT's contributions to the understanding of the development of children's racial, ethnic and national attitudes, in their revision Barrett and Davis (2008) concluded that, consistently with SCT (Turner et al., 1987), the content of children's stereotypes of racial ingroups and outgroups are sensitive to the specific comparative context in which they are constructed. Consistent with this hypothesis, in a study exploring the development of national prejudice in 6- to 16-

year-old British children, Rutland (1999) showed that the national ingroup favouritism only developed after the age of 10, approximately at the same time as self-stereotyping occurred. National prejudice was clearly evident among 14- to 16-year-olds, yet at 12 years of age there were some signs of the presence of outgroup prejudice. Importantly, this prejudice was only shown towards Germans, reflecting the collective memory prevalent in British society that perceive and depict Germans in an unsympathetic manner (Barrett & Short, 1992). Overall, these results confirm the importance of children's understanding of the social or ideological significance of their group identity, confirming that the development of intergroup differentiation and self-stereotyping was bounded both by the perceived appropriateness and meaning of the categorization within the involving comparative context.

Social Reasoning Developmental Model

The Social Reasoning Developmental model (SRD; Killen & Rutland, 2011; Rutland, Killen, & Abrams, 2010) is an integrative theoretical model that draws upon the Social Domain Theory (Turiel, 1983) and Social Identity Theory (Tajfel & Turner, 1979) that is intended to map out a new social-cognitive developmental approach on prejudice.

Many studies about intergroup relations in childhood have focused on the negative aspects of group identity (e.g., ingroup biases, prejudice), with children showing preference for their own group, ultimately leading to the development of outgroup dislike and prejudice. Accordingly, SRD model holds that in several contexts these group affiliations may indeed drive children to engage in unfair behaviours (Killen, Elenbaas, & Rutland, 2015). Nevertheless, studies drawing on SRD model also show that children's awareness and knowledge about groups and intergroup relations can promote fairness in childhood, rather impede it (Ellenbaas & Killen, 2017; Mulvey, Hitti, Rutland, Abrams, & Killen, 2014). This model emphasizes that throughout their development, when judging groups or making social decisions, children and adolescents navigate between moral concerns, concerns about group functioning and the motivation to be accepted in a social group which children identify with (Rutland et al., 2010). In particular, SRD considers that children ponder their beliefs about fairness, justice and equality along with the concerns about group identity and norms. According to this model, the interplay between these concerns is crucial in children's social decisions about intergroup social inclusion or exclusion and resource allocation.

To explain children's reasoning development, SRD is founded upon three main premises (Killen, Elenbaas, Rizzo, & Rutland, 2017). Firstly, SRD considers that children are influenced by their group membership and their identification with that group, when judging

groups or its individual members, and when reasoning about social exclusion or resource allocation. Secondly, children's judgments and reasoning are grounded on their moral, social and psychological knowledge. At last, individuals' judgments and reasoning develops from childhood to adolescence: younger children are more focused on the generic norms of fairness and justice, and older children and adolescents are more concerned with group-specific norms. As such, with age, there is an increasing prioritizing of group specific norms, in both moral and social domains.

Research drawing in the SRD gives substantial empirical evidence supporting this theoretical model. Research with children aged 5- to 11 years examined children's judgements about ingroup and outgroup members who either conformed or were deviant of a moral principle of fairness (Abrams, Rutland, Ferrell, & Pelletier, 2008). The results showed that children favoured ingroup members over outgroup members but, importantly, they also favoured members who behaved fairly over morally deviants, regardless their group membership (Abrams et al., 2008). In another study (Rutland, Hitti, Mulvey, Abrams, & Killen, 2015) about children's evaluation of ingroup deviants, results showed that children not always prefer an ingroup member over an outgroup member. In this study, the results showed that children favoured a deviant member from the outgroup that conformed to the generic norm of the group in relation to an ingroup deviant member, as the later might constitute a menace to group's social identity (Rutland et al., 2015). Another study showed that children and adolescents were concerned with conforming to group norms in order to achieve a positive group identity (Killen, Rutland, Abrams, Mulvey, & Hitti, 2013). In the case of this study, results showed that children's dislike for the ingroup deviants depended on the type of norms that were being challenged. Deviance from a social convention group norm (dress code) was viewed more negatively than deviance from a moral norm about unequal allocation of resources. Importantly, these studies revealed developmental changes in the use of reasoning based on group loyalty, rather that group functioning, to justify children's disapproval of ingroup deviants. Accordingly, with age participants revealed an increasing understanding and sensitivity about group dynamics and groups norms, using them to inform their own evaluations of the deviant members of the group (Killen et al., 2013; Rutland et al., 2015).

Importantly, consistent with this increasing understanding of intergroup dynamics, with age children increasingly reason about the consequences of challenging group norms for member's group acceptance and support (Elenbaas & Killen, 2016). In line with this idea, a study with children from 9- to 14-years-old revealed that children's and adolescents' support

of members who challenged ingroup norms about aggressive behaviours decreased with age (Mulvey & Killen, 2016). In addition, this study found that although children recognized the importance of challenging aggressive group norms, they also acknowledged the pressure to demonstrate loyalty to the group through norm conforming behaviour (Mulvey and Killen, 2016). Yet, and as shown before, although children recognize the importance of following the norms of the group, they acknowledge that there are contexts in which challenging these norms is legitimate and acceptable because they violate a generic norm of fairness (Mulvey, Hitti, Rutland, Abrams, & Killen, 2014; Mulvey & Killen, 2016; Mulvey & Killen, 2017).

This idea is evident in a set of studies examining SRD model's tenets in the specific context of resource allocation decisions. In this context, previous research shows that 9- to -13 year-old children favoured a member of the ingroup who challenged a specific group norm of inequality distribution of resources. In this study, children and adolescents prioritize fairness in their equal allocation of resources rather than group loyalty (Mulvey et al., 2014). However, consistent with other literature about social exclusion reasoning, children were more positive towards the members who challenged a group inequality norm than adolescents did. Hence, this study asserts that also in resource allocation reasoning, youngers focused more on equality principles, whereas adolescents consider the potential benefits of unequal resource distributions to the group (Mulvey et al., 2014). Another study also revealed that 10-11 year-olds rectified inequalities through resource allocation, and did so regardless of whether the disadvantageous group was their ingroup or an outgroup (Elenbaas, Rizzo, Cooley & Killen, 2016). Coherent with this overall prioritization of fairness principles, and particularly focusing in allocation of resources between recipients depicted as rich and poor, Rizzo and Killen (2016) found that while children aged 3-4 years-old allocated resources equally, older children from 5-8 years-old were more equitative in their distributions, giving more resources to the poor recipient than to the rich. Together, these studies reflect a strong norm that prescribes the rectification of resource inequalities in childhood, by increasingly recognizing the importance to guarantee a fair access to goods (Elenbaas et al., 2016; Rizzo & Killen, 2016).

Implications for the social class intergroup domain

Research focusing on the social class domain from an intergroup perspective in childhood, by focusing on the stereotypes and attitudes towards different social class groups and its impact on children's behaviour, has been overlooked by developmental social psychology. However, when adopting a developmental social identity approach some of the

key processes occurring in other intergroup domains may inform how children understand this intergroup domain on the interplay between their beliefs, attitudes and constructed social class identities. In this section, in light of the theoretical perspectives presented above, we review the existing literature that addresses social class in childhood.

In regard to social class as a social category that can account for individuals' intergroup relations, research with adults has consistently identified the prevalence of a negative stereotype about the poor. These stereotype portraits individuals perceived as poor as lazy, addicted to alcohol or drugs, weak, incompetent and less intelligent (Cozzarelli, Wilkinson, & Tagler, 2001; Durante & Fiske, 2017; Lindqvist, Björklund, & Bäckström, 2017). Alongside, studies addressing explicit and implicit social class attitudes show an implicit preference for the "rich" over the "poor" (Cunningham, Nezlek, & Banaji, 2004), although an explicit negativity towards the upper class is also present (Zhou & Wang, 2007). In a similar vein, a study by Horwitz and Dovidio (2017) using the IAT and adding the "middle-class" group to the "rich" and "poor" found that respondents implicitly favoured the "upper-class" over the "middle-class", and implicitly favour the "middle-class" over the "poor". Importantly, evidence shows that individuals holding more explicit positive attitudes towards low SES individuals tend to be more supportive of public policies against poverty and are more committed to helping the poor (Bullock, Williams, & Limbert, 2003; Tagler & Cozzarelli, 2013).

Research on children's perceptions about poor adults or the broader concepts of *poverty* or *wealth* has found that, similarly to other salient social categories (e.g., age, sex or ethnicity; see Nesdale, 2004), children become aware of the differences between *rich* and *poor* between the ages of 3 and 5 and are able to categorize people into social class related groups. Children social class categorization is based on observable and material symbolic characteristics, like clothes or other material goods (Leahy, 1981; Ramsey, 1991; Rauscher, Friedline, & Banerjee, 2017). Children aged 5 to 7 begin to reproduce adults' negative representations that depict poor as sad, lonely and dirty, as well as lacking food, education, work and purchasing means (Amar, Llanos, González, Agamez, Peña, & Romero, 2015; Rauscher et al., 2017; Sarti, Schalkers, & Dedding, 2015). In contrast, wealthy families are perceived in a more positive way, namely as happy, awesome, and fun (Rauscher et al., 2017).

In regards to the development of these beliefs, literature shows that as children grow older, beliefs about poverty become more elaborated and detailed (Amar et al., 2015; Enesco & Navarro, 2003; Woods, Kurtz-Costes, & Rowley, 2005). Children in late childhood

express stereotypic beliefs about the poor that are similar to those found among adult populations (Cozzarelli et al., 2001; Mistry, Brown, White, Chow, and Gillen-O'Neel, 2015). Using a trait-stereotyping measure, Mistry and colleagues asked 10-12 year-old children to indicate, using a five point scale, how many people from three social class groups (*poor*, *middle class*, *rich*) exhibit six negative (e.g., lazy) and six positive (e.g., good) attributes. The results showed that children endorse fewer positive attributes and more negative ones to the poor compared to the middle class or rich groups (Mistry et al., 2015). Alongside this findings, but focusing on attitudes, there is also evidence that children in the pre-school years show a preference for wealthier groups than poor ones (Horwitz, Shutts, & Olson, 2014; Shutts, Brey, Dornbusch, Slywotzky, & Olson, 2016). Interestingly, despite these negative beliefs and attitudes, research show that children are willing to share more with poor than with wealthy individuals (Paulus, 2014). Previous studies about children's decisions in inequality situations have consistently shown that from very early in age children are willing to rectify inequalities between individuals through allocation of more items to the one with fewer resources (Li, Spitzer, & Olson, 2014; Rizzo & Killen, 2016). Nevertheless, there is also evidence that despite this motivation for minimization of inequalities through resource allocation, children explicitly prefer to be friend of the child with more resources (Shaw & Olson, 2013; Li et al., 2014).

Importantly to understand group bias within devalued groups, studies focusing on the influence of the participants' objective socioeconomic status in their stereotypes about and attitudes towards the poor show results coherent with research in other stigmatized identities. This research in other intergroup contexts show that children are sensitive to the social status of the groups and from early on are likely to internalize groups' status inequalities, influencing their intergroup attitudes (Bigler, Brown, & Markell, 2001; Dunham, Baron, & Banaji, 2007, 2008; Vala, Lima, & Lopes, 2004; Correia, Vala, & Aguiar, 2007). These studies show that children belonging to high-status groups, novel or real social groups (e.g., ethnic), rated the ingroup more positively than the outgroup (Bigler et al., 2001), whereas low-status minority group members showed equivalent attitudes or identification towards the ingroup and higher status outgroup (Dunham et al., 1997). Evidence suggests that children are sensitive to their relative position in the social hierarchy and strategically use social categorization to cope with their low status position (Alexandre, Waldzus, & Monteiro, 2007; Feddes, Monteiro, & Justo, 2014). Accordingly, Mistry and colleagues (2015) found that children reporting lower social status were more likely to endorse negative attributes to the poor, than their counterparts with perceived middle social status. To the authors, this finding

may reflect lower SES children's motivation to distance themselves from those with lower status than themselves (Mistry et al., 2015).

According to the developmental social identity approach, social class self-categorization should constitute a key aspect in children's social class identity development and intergroup relations in this intergroup domain (Nesdale, 2004; Tajfel & Turner, 1979; Turner et al., 1987). The few studies that have focused on children's social class self-categorization suggest that children do not self-categorize as poor (Amar et al., 2015; Hakorvita & Kallio, 2015; Rauscher et al., 2017; Sarti et al., 2015). Rauscher and colleagues (2017) found that 5-6 years-old North American children are aware of social inequalities, however their self-positioning on the social class ladder was unrelated to their objective socioeconomic status. Consistently, Amar et al. (2015) found that, in Colombia, higher SES 4- to 7-year-olds were more likely to self-categorize in line with their objective SES than their lower SES counterparts. Focusing on older 10- to 15-year-old Finish children and adolescents, Hakorvirta and Kallio (2015) found that they self-categorized as middle-class independently of their family's economic conditions. In a similar vein, but in an ethnographic and participatory action research conducted with 8- to 14-years-olds living in impoverished areas in the Netherlands, Sarti and colleagues (2015) found that children never acknowledged to be poor or to live in a context of poverty (Sarti et al., 2015). Still in another study with middle to upper middle-class 10- to 12-year-old children, Mistry and colleagues (2015) found an association between objective (i.e., household income) and subjective social status, but participants positioned themselves above the mean point of the ladder. Taken together, these results suggest children from higher status integrate knowledge from their objective socioeconomic conditions, turning them relatively aware of where they stand in relation to others regarding their family economic resources.

Within a social identity approach, children's non-identification with the lower-status social category should not be taken at face value, and requires further examination. The evidence presented above requires some theoretical considerations in what regards children's social class self-categorization in light of the specificities of the social class intergroup context. First, given the widespread negative images about the poor, being from lower income contexts is likely to elicit a negative social identity or social stigma (Croizet & Claire, 1998; Johnson, Richeson, & Finkel, 2011; Spencer & Castano, 2007; Walter, Jetten, Parsell, & Dingle, 2015). Importantly, in line with the social comparison process, this negative self-evaluation may lead lower social class individuals to hold negative feelings consistent with a threatened social identity (Branscombe, Ellemers, Spears, & Doosje, 1999). Different sources

of identity threat can be considered (e.g., categorization threat, value to the social identity threat) driving individuals to the derogation and self-distance from the undervalued group, and admiration for the more valued group (Nesdale, 2011).

Secondly, social class self-categorization may be characterized by greater flexibility compared to self-categorization in other intergroup contexts (e.g., ethnicity, gender). Unlike other social groups, when people try to identify and categorize people in terms of their social class they do not necessarily have any phenotypic or other external cues to rely on. In addition, the social class signals (e.g., communication, cultural practices) which people could use to rank others' social class are highly concealable (e.g., Becker, Kraus, & Rheinschimidt-Same, 2017; Kraus & Keltner, 2009). Thus, people may categorize others based on social class external markers such as clothes, technology goods, and interests. However, these signals are dependent on the consumption practices, characterized by a generalized access to material goods and juxtaposition of different class markers that brings fuzziness and fluidity to the social class intergroup context (DiMaggio, 2012). Importantly, this potential fluidity and higher subjectivity as to where the intergroup boundaries are may have consequences for how people perceive themselves in this intergroup context, when social comparison occurs. More specifically, the fuzziness of the context hinders a clear-cut distinction between social class related groups, and increases the complexity of social class identities (Ostrove & Long, 2007; Ellemers, 1993; Tajfel & Turner, 1979).

From a developmental social identity perspective (Nesdale, 2004, Nesdale & Flesser, 2001; Tajfel & Turner, 1979; Turner et al., 1987), the experience of a stigmatizing and threatening social identity together with the fuzziness of the social categories boundaries might have relevant implications for children's social identity management strategies. Specifically, in the social class intergroup context, children might engage in individual mobility strategies (i.e., dissociation from the devalued group, by moving from one group to another) so as to achieve a positive sense of themselves (Ellemers, 1993; Tajfel & Turner, 1979). Accordingly, one of the main hypothesis that the present thesis aims to test is if children's social class self-categorization constitutes an identity management process, where the motivation to conceal a negative social identity should be considered.

Consistent with SIDT, research on other social categories provides evidence that children are likely to engage in identity management under a threatening social identity. More specifically, studies on racial and ethnic self-categorization have systematically shown that a significant proportion of children from stigmatized groups do not self-categorize in what their ingroup is according to the shared social standard, despite showing the ability to

adequately categorize other lower status group members. In their seminal study, Clark & Clark (1947) found that nearly two thirds of 3-year-old Black children self-categorized as White, and only around the age of 7 did this percentage dropped significantly. Interestingly, in an intergroup context where the fuzziness of the group boundaries is likely increased by the higher number of groups involved, namely including 'Mulatto', 'White' and 'Black' categories, a 'whitening' effect was observed among children aged 5 to 12 years. Specifically, a significant percentage of children categorized by the researchers as Black actually self-categorized as Mulatto, and children categorized as Mulatto self-categorized as White (França & Monteiro, 2002; Máximo, Camino, Nunes, & Lins, 2012; Silva, Pereira, & Camino, 2002).

The present thesis

By adopting a developmental social identity perspective (Nesdale, 2004; Tajfel & Turner, 1979; Turner et al., 1987), the present thesis aims to further the knowledge within the social-development research about intergroup relations based on social class. The process of social class self-categorization has been overlooked in the literature, namely the influence of social identity concerns in the way children position themselves in the social class intergroup context. Given the importance of self-categorization in the development of the intergroup dynamics, the major research question of this thesis is how children perceive themselves in terms of their own position in this fuzzy and fluid intergroup context. Following SCT's assumptions (Turner et al., 1987), more specifically about the influence of the context in shaping the way people self-categorize as belonging to different social groups, we also investigate in what extent this self-positioning can be affected by the social context where children are in (Turner et al., 1987; Branscombe et al. 1999). More specifically, the present thesis aims to test is if children's social class self-categorization constitutes an identity management process, where the motivation to conceal a negative social identity will be considered.

To address this hypothesis, we will assess self-categorization at the explicit and implicit level. Actually, another limitation of the existing research on children's social class self-categorization is that, so far, it has been limited to explicit self-report measures. Implicit measures, in comparison with explicit ones, allow capturing spontaneous and difficult to control associations (Baron & Banaji, 2009; Nosek, Greenwald & Banaji, 2007) where responses are less prone to self-presentational influences. Therefore, assessing self-

categorization at both levels allow to investigate if children's social class self-categorization is motivated by social mobility concerns to achieve a more positive social identity (Dunham et al., 2007; Tajfel & Turner, 1979).

Importantly, the existent literature on the social class domain focus on children's perception of poor adults or the broader concepts of *poverty* or *wealth*, rather then focusing on their beliefs and attitudes about other children that live in lower socioeconomic status conditions. The complexity and fuzziness of this intergroup context and its related categories demands the understanding of its meanings and perceptions to children (Ostrove & Cole, 2003; Rutland, 1999; Turner et al, 1987). Therefore, prior to understanding how children self-categorize according to their social class, another goal of this thesis is to explore what are the beliefs, stereotypes and attitudes about social class related categories in childhood.

The following empirical chapters are based on manuscripts of independent articles designed to be published in scientific journals. These chapters can therefore be read independently and in any order[5]. Following these five empirical chapters, Chapter 7 offers an integrated discussion of the main contributions and an outlines our perspective about the directions that research on the intergroup relations regarding social class in childhood should take.

[5] For the same reason, the empirical chapters presented in this thesis may contain some parts that are redundant with the theoretical introduction of the thesis, and also between the different introduction sections of each chapter.

CHAPTER TWO

The face of poverty: Mental representation of the poor in childhood

Abstract[6]

Previous research has demonstrated that from early age children are aware of the inequalities between the groups' social status. Previous research shows that children explicitly express negative stereotypes of poor people and that this negativity increases with age. However, it is unknown to what extent such perceptions of poor individuals have been internalized by children and are present at an implicit level. In this study we address this issue by examining the development of mental representations of poor people with children aged from 6 to 13 years (N=112) using an implicit measure, the Reverse Correlation Task. The results support the hypothesis that the image of the poor as created by children was rated more negatively than the image of the non-poor. Although no developmental effects were found, this study confirms that from the age of 6 onward, children have already internalized the negative valence of the social category of the poor. Implications for research on social development of intergroup inclusion and exclusion based on social class are discussed.

Keywords: poverty, children, reverse correlation task, stereotyped attitudes

[6] The study presented in this chapter was conducted in collaboration with Kinga Bierwiaczonek in the context of a co-tutory of a group of students in the course Advanced Research Methods in Psychology in the Master in Social and Organizational Psychology.

Introduction

When thinking about how a poor person looks like, it is likely that a set of attributes might pop up in our mind. Although poverty is a complex social problem, the stereotypes it evokes do not seem to reflect such complexity; they tend to be simply negative.

Research on the stereotypes about the poor were conducted cross-culturally and they identify that this social group is commonly perceived as lazy, addicted to alcohol or drugs, weak, stupid, dirty, incompetent and less intelligent (Cozzarelli, Wilkinson, & Tagler, 2001; Lindqvist, Björklund, & Bäckström, 2017; Durante & Fiske, 2017). Adults are more likely to explicitly endorse negative stereotypes of the poor than positive stereotypes, while the opposite happens in regard to the middle class (Cozzarelli et al., 2001).

Recent studies show that this negativity associated to the poor is also captured in more subtle and implicit measures of stereotypes about poor (Bjornsdottir & Rule, 2017; Oh et al., 2018). In this sense, Oh and colleagues (2018) conducted a collection of social perception studies testing whether subtle social class cues such as richer or poorer upper-body clothing influenced competence judgments. The results showed that same faces were consistently evaluated as more competent when presented as "richer" than when presented as "poorer", even when participants were advised to ignore the cues (Oh, Shafir, & Todorov, 2018). In another series of studies (Bjornsdottir & Rule, 2017) participants categorized face images excluding neck, hair, or adornments but representing actual low and high-income people. The results showed that people can correctly categorize faces of rich and poor targets using minimal facial cues (e.g., the mouth) and mobilizing a variety of stereotypes related to social class related categories, like attractiveness and positivity (Bjornsdottir & Rule, 2017). Summing up, these studies using implicit measures suggest that the unfavourable portrait of this social category is deep-seated in adulthood. But are these negative stereotypes already deeply established in childhood? When do children internalize these negative stereotypes?

Answer to these questions is of major social importance given that the maintenance of these social class stereotypes fuels the stigmatization of poor people and thus reinforces and sustains the perpetuation of social inequalities (Durante & Fiske, 2017). In order to disrupt these lingering negative stereotypes, knowledge about the period of life in which social class stereotypes emerge is crucial to inform social interventions aiming to change the negative conceptions of poor people in children. However there is not much research about the onset and development of the perceptions of the poor in childhood. In the present study, we examined the development of children's intergroup representations of the poor using the Reverse Correlation Task (Dotsch, Wigboldus, Langner, & van Knippenberg, 2008; Dotsch

& Todorov, 2012), an implicit measure that allows to access children's social biases at the perceptual level.

Stereotypes of the Poor in childhood

The study of social class in developmental social psychology has been approached only recently. The field has traditionally focused on investigating children's social cognition toward social categories such as gender, race or age. In recent years, however, a growing body of research has started examining how children's knowledge of categories related to social class is informed by intergroup dynamics (Hazelbaker & Mistry, 2018).

With age, children are actively involved in learning about the stereotypes of the different social categories, while they are also constructing their own set of beliefs about social groups (Bigler & Liben, 2006; Martin, Ruble, & Szkrybalo, 2002). Knowledge about these groups might come from different socialization sources like parents (ethnic groups: Sinclair, Dunn, & Lowery, 2005; gender: Halpern & Perry-Jenkins, 2015), school (novel groups: Patterson & Bigler, 2006), books (social class: Chafel, Fitzgibbon, Cutter, & Burke-Weiner, 1997) or social media (social class: Clawson & Trice, 2000). Specifically about poor individuals, analyses of children's picture books reflect a stereotypical portrait of the poor social category (Chafel et al., 1997; Hill & Darragh, 2016), showing a biased representation of poor, through the use of negative descriptions of this group (e.g., bad smell, scary) and illustrations depicting them with torn and unclean clothes (Kim & Wee, 2018). According to the literature, children picture books mirror the dominant attributions that blame the poor for their situation (Kelley, Rosenberg, & Botelho, 2005; Kim & Wee, 2018), supporting the idea that poor people are the ones that should bootstrap themselves out of their own economic situation (Kelley, Rosenberg, & Botelho, 2005).

The existing research about social class perceptions in childhood confirms these negative representations about the poor in childhood. Literature shows that children are aware of the social category of the poor already in pre-school years (Leahy, 1981; Ramsey, 1991; Rauscher, Friedline, & Banerjee, 2017), and that social class categorization is based on physical and visible cues (e.g., clothes). Children's conceptions of socioeconomic related constructs (e.g., poverty and wealth) evolve with age, as children's reasoning becomes more complex and elaborated (Enesco & Navarro, 2003; Woods, Kurtz-Costes, & Rowley, 2005, Amar, Llanos, González, Agamez, Peña, & Romero, 2015). Already at the age of 6, children begin to reproduce the adult stereotypes of the poor, perceiving them as sad, lonely, uneducated and with low purchasing power (Amar et al., 2015; Rauscher et al., 2017; Sarti,

Schalkers, & Dedding, 2015). Children aged 8-10 years start to attribute individual traits to low-wealth individuals, perceiving them as less competent, effortful or perseverant when compared to a high-wealth individual (Enesco & Navarro, 2003; Leahy, 1983; Sigelman, 2012; Shutts, Brey, Dornbusch, Slywotzky, & Olson, 2016). These negative perceptions seem to become increasingly prevalent and strong with age (Sigelman, 2012). In a study with children aged 10-12 years, Mistry and colleagues (2015) found the same adult pattern (Cozzarelli et al., 2001), with the poor being rated higher on negative attributes and lower in positive attributes than other social class groups (Mistry, Brown, White, Chow, & Gillen-O'Neel, 2015).

In summary, this research shows that children are aware of social class differences and show more negative stereotypes of and attitudes towards poor people than towards wealthy people. Overall, children from early age reproduce the negative stereotypes present in the adult discourse. Although the above-cited findings are important and informative, these studies only used self-reported measures of stereotypes, capturing the stereotypes that follow the normative standards of expression of stereotypes about the poor. Yet, the increasing expression of negative stereotypes with age (Sigelman, 2012), and the expression of negative beliefs about the poor by adults (Durante & Fiske, 2017), suggest that this intergroup setting relies on a specific normative context, different from other intergroup contexts where an anti-prejudice norm is prevalent (Fitzroy & Rutland, 2010; Monteiro, França, & Rodrigues, 2009; Rutland, Cameron, Milne, & McGeorge, 2005). One possible explanation may be the attribution of responsibility to the poor for their own economic condition (Bullock, 1999; Cozzarelli et al. 2001), that may lead the various socialization sources to convey more overt and explicit negative stereotypes towards this group (Kende & McGarty, 2018).

Knowing that children's knowledge about social class groups complexifies with age (Leahy, 1981), such an overt communication of negativity toward the poor may have two possible consequences for children. First, younger children may express negative stereotypes of the poor just to follow and conform to the prevailing normative discourse about that group, but without really having internalized them; or second, these negative beliefs heard from adults may already start being internalized since an early age. It is an empirical question which of these processes takes place. In the current study, internalization is understood as a social-developmental process by which individuals progressively integrate beliefs, attitudes or norms into a coherent sense of self, building a subjective personal sense of ownership (Grolnik, Deci, & Ryan, 1997; Kelman, 1958, 1961).

In his seminal work, Allport (1954) suggested that in the initial stage of the formation of children's attitudes toward other groups, that he named *pregeneralized learning of prejudice*, children express general beliefs about social groups as learned from meaningful adults and peers, but without a deep consolidation of those beliefs. At this stage, children "are aware of group differences, though not yet clear concerning all the relevant clues" (Allport, 1954, p. 307) and they tend to behave differently toward different social groups simply to conform to the normative context. After this stage, and in a continuous process of integration and organization of all the information about the groups and the cultural and social norms, a child's attitudes change to "gradually form coherent units within his personality, and become integrated into its very texture" (Allport, 1954, p. 312). This idea calls for clarifying from what age and to what extent negative perceptions of the poor are internalized in childhood.

Explicit and implicit stereotyping: The use of the Reverse Correlation Task with children

Previous research with children has used both explicit and implicit measures to access children's perceptions and evaluations of social groups (for a review, see Raabe & Beelmann, 2011). These two types of measures differ in the extent to which participants are given the possibility to deliberate and exert control upon their responses. While answers to explicit measurement can be controllable, intended and direct, implicit responses lack intention and have reduced controllability and awareness of the origins of a response (Nosek, 2007). As such, implicit measures of attitudes are less prone to socially desirable responses (Gawronski, LeBel, & Peters, 2007) and more adequate to assess children's degree of internalization of socially shared stereotypes and attitudes (e.g., Baron, Schmader, Cvencek, & Meltzoff, 2014; Dunham, Baron, & Banaji, 2008).

The Reverse Correlation Task (RCT; Dotsch et al., 2008; Dotsch & Todorov, 2012) is an indirect and implicit way to access individuals' mental representations of social categories. This method was previously used to assess visual representations of ethno-cultural minority outgroups (Dotsch et al., 2008), and intergroup phenomena such as stereotyping (Imhoff, Woelki, Hanke, & Dotsch, 2013), prejudice (Dotsch, Wigboldu, & Knippenberg, 2011) or ingroup projection (Imhoff, Dotsch, Bianchi, Banse, & Wigboldus, 2011). Importantly, studies show a divergence between the mental representations as assessed by the RCT procedure and evidence coming from self-reported explicit measures (Dunham, Srinivasan, Dotsch, & Barner, 2013; Imhoff et al., 2011). In RCT studies, participants are presented with a large set of randomly generated variations of one single base face, with superimposed

random noise (usually 300-700 trials). In each trial, they are asked to choose, within a pair of faces, the one that look more like members of a certain social group. The chosen faces for the overall sample of participants are then merged into one composite face representing the social group of interest (Dotsch et al., 2008; Brinkman, Todorov, & Dotsch, 2017).

To the best of our knowledge, RCT has been used only once with children, more specifically in one study focusing on intergroup attitudes towards religious or caste groups in India (Dunham et al., 2014). In this study, children from Grade 3 to 11 were asked to categorize 340 pairs of stimuli, in either Hindu or Muslim (religion RCT) or as Brahim or Dalit (caste RCT). Overall, independent raters rated the higher-status caste group (Brahim) composite faces (created by the Brahim and Dalit) as warmer and more competent that the lower status caste group (Dalit), and independently of the source child's actual caste. On the contrary, the lower-status religion group (Muslim) showed an ingroup preference as strong as the higher-status group (Hindus) has shown. Furthermore, age differences were found in the explicit measures (with an increasing tendency to explicitly reject negative stereotypes), but not in the implicit measures. The authors concluded that RCT was useful to study the existing bias in the perception of intergroup differences, even in the case where there are no specific phenotypic characteristics that distinguish the groups (Dunham et al., 2014).

Specifically in the domain of social class, a single recent study with adult participants used RCT to investigate the relationship between mental representations of welfare recipients and attitudes toward welfare policies. In this study, the RCT produced faces of welfare recipients were evaluated as looking more African American, lazy, incompetent and inhuman than the image of a non-welfare recipient. Further, results showed that these faces were related with participant's support for government assistance, by showing a lower support to the welfare recipient face than to the non-welfare recipient face (Brown-Iannuzzi, Dotsch, Cooley, & Payne, 2017).

The present study

In the present study, we examined the development of mental representations of the poor in children aged 6- to 13-years using a RCT. To adapt the measure for application with children, we reduced the length of the application by using 50 randomized trials (Bierwiaczonek, Waldzus, & van der Zee, 2019). To validate this novel application of the short RCT with children, a pilot study was conducted using gender as the intergroup context, as it is a more salient and noticeable social category for children (for a review, see Kinzler, Shutts, & Correll, 2010; Shutts, 2015), and also a well-established social category in the

social developmental literature. This innovative application of RCT with children will provide important insights into internalized perceptions of the poor in childhood. Moreover, it will contribute to the development of a child friendly procedure that enables researchers to access implicit knowledge on social groups in childhood.

For this study, our primary hypotheses are that, overall, children's mental representations about poor and non-poor individuals would differ in their valence (H1). Therefore, we expected that the composite image of the poor would be evaluated more negatively compared to the composite image of the non-poor. In addition, we also hypothesized that the mental representation of the poor would change with age (H2). More specifically, we expected that, when comparing the composite images of the poor created by the different age groups, the composite image of the poor created by older children would be evaluated more negatively than the composite image of the poor created by younger children, consistent with a process of increasing internalization of the social negative image of the poor.

Pilot Study: Mental Representations of Gender

Because the short RCT had never been used with children before, we considered that the method should be first tested with a social category that there is extensive research on, which is not the case for social class. Previous research indicates that gender is one of the most salient social categories in childhood and children's inferences based on gender are the ones that develop the earliest (for a review, see Kinzler, Shutts, & Correll, 2010; Shutts, 2015). Children are able to distinguish male and female faces and voices from the first year of life (Quinn, Yahr, Kuhn, Slater, & Pascalis, 2002) and base their friendships choices on gender, by preferring same-sex friendships already in kindergarten (for a comprehensive review, see Ruble, Martin, & Berenbaum, 2006). Moreover, a meta-analytic review on the development of gender stereotypes suggested that gender stereotypes are well developed by the end of pre-school years (Signorella, Bigler, & Liben, 1993).

Therefore, we opted to conduct a first pilot study testing the short RCT with the category of gender. Specifically, we looked at mental representations of females in children aged 6- to 13-years.

Method

The reverse correlation task (RCT; Dotsch et al., 2008) consists of two phases: the classification image (CI) generation phase and the CI evaluation phase. In this procedure section we describe both phases separately.

Phase I – CI generation

Sample and Procedure. A convenience sample of 20 Portuguese children aged from 6 to 13 (M = 9.00; SD = 2.49; 55.5% female) participated in this online study[7]. The questionnaire was in Portuguese. The first part of the questionnaire consisted of a parent consent form and sociodemographic questions, answered by children's parents. Only after that consent, children's responses were collected. To facilitate children's answers, parents were given instructions to answer the survey on a tablet or a smartphone, enabling children to use the touch screen in their responses.

The short RCT procedure (Bierwiaczonek et al., 2019) was followed in this study. The regular procedure developed by Dotsch and colleagues (2008) includes 300-770 trials (Dotsch & Todorov, 2012; Dotsch et al., 2008; Dunham et al. 2014; Brown-Iannuzzi et al., 2017). The short procedure consists of 50 trials, randomly presented from a pool of 300 trials, and it was developed for online use or with samples with short attention span such as children. Each stimulus consists of a base face, in our case a morphed composite of Portuguese male faces (see Figure 4; Mike, 2003; Project 'the Face of Tomorrow'; previously used in RCT studies, e.g., Imhoff et al., 2011), to which random visual noise is added. In each trial, two stimulus face images are presented side by side to the participant; one consists of the base face with the original noise pattern, and the other of the base face with the negative of the same noise pattern (for technical details, see Dotsch et al., 2008; Dotsch & Todorov, 2012). Participants are instructed to indicate which of the two images they consider more typical of a social category; in our case, children were instructed to choose from the two stimulus faces the face that looked more like a female face to them. To motivate children's compliance to the task, RCT was presented as a game including three identical "levels"; after

[7] Although convenience sampling has several limitations, such as lack of representativeness and generalizability (Bornstein, Jager, & Putnick, 2013), in this specific study we considered that they are not problematic. First, because our aim in this pilot study is merely a methodological validation of the procedure in terms of children's comprehension. Secondly, the distinction between male and female genders is generally internalized at the target age, as above reviewed.

each “level” an animated GIF image was displayed along with a message encouraging children to play the next level.

The final Classification Image (CI) corresponding with a woman was generated by merging all the chosen images from the total sample of participants. For comparison, we also merged the unselected images to produce a CI corresponding with a male. These two CIs were evaluated in Phase II (see Figure 4). This procedure used R package *rcicr* 0.3.0 (Dotsch, 2015).

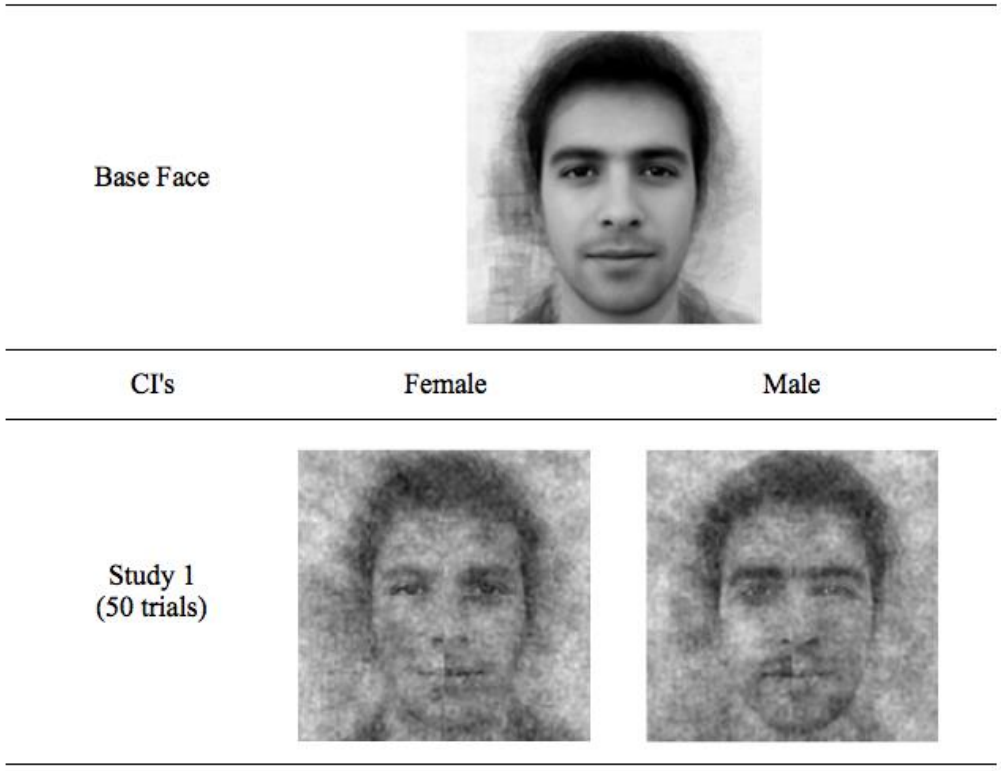


Figure 4. Base face without random noise (top). Female and Male classifications images generated in the pilot study (bottom).

Phase II - CI evaluation

Sample and Procedure. In the second phase of the study, the CIs obtained in Phase I were evaluated by an independent sample of adult raters, unrelated to RCT target population, in an English-language online survey. The sample was recruited via Amazon Mechanical Turk. To minimize false responses, we eliminated all the MTurk surveys that were filled in less than 90 seconds. The final sample was composed by 42 American raters (26.2% female, M_{age} = 33.6; SD_{age} = 9.23).

Both CIs were presented to the raters in randomized order, side by side, and participants answered to one question: "Which one do you think is more feminine?".

Results and Discussion

Almost all raters (92.9%; *n*=39) indicated the female CI produced by children in the CI generation phase as looking more like a female. Even with a small sample of 20 children, and with just 50 trials in the CI generation phase, RCT produced reliable results for a highly salient social category of gender and has proven adequate for our purpose in this pilot study. Moreover, children did not present any difficulty on answering the Reverse Correlation Task, therefore no modifications were needed for the main study of this paper.

Study 1 – Mental Representation of Poor

This study constitutes the main study of this chapter and aims to investigate what is the mental representation of a poor individual for children aged 6 to 13 years.

Method

The same RCT procedure as in the pilot study was completed (Dotsch et al., 2008; Bierwiaczonek et al., 2019). Again, the study consisted of two phases presented separately in the following sections: the CI generation phase and the CI evaluation phase.

Phase I - CI generation

Sample and Procedure. Children were reached through their parents in an online sampling procedure via social media (e.g., Facebook). Internet and Facebook pages of the project were created ('Projeto Rosto'[8]) containing information about the project and link for the online survey. One hundred and twelve children aged 6 to 13 years (M = 9.10; SD = 2.35; 54.9% female) participated in the study, divided into three age groups: 6-7 years (*n*=38), 8-10 years (*n*=38) and 11-13 years (*n*=36). Socioeconomic status of the sample was determined using the Family Affluence Scale III (Hartley, Levin, & Currie, 2015; Torsheim et al., 2016) that measures children's material affluence based on the reported number of items that children possess (e.g., number of computers, having dishwasher at home, holidays abroad in the last year). For the present sample, the Family Affluence Scale ranged from three to 11, and the mean average of the scale was above the midpoint of the scale (M=7.13, SD=1.98; *t*

[8] Portuguese for 'Face Project'.

(111) = 3.397, p = .001), suggesting that the participants were mostly from middle-to-higher SES backgrounds. There were no statistical differences on SES between age groups.

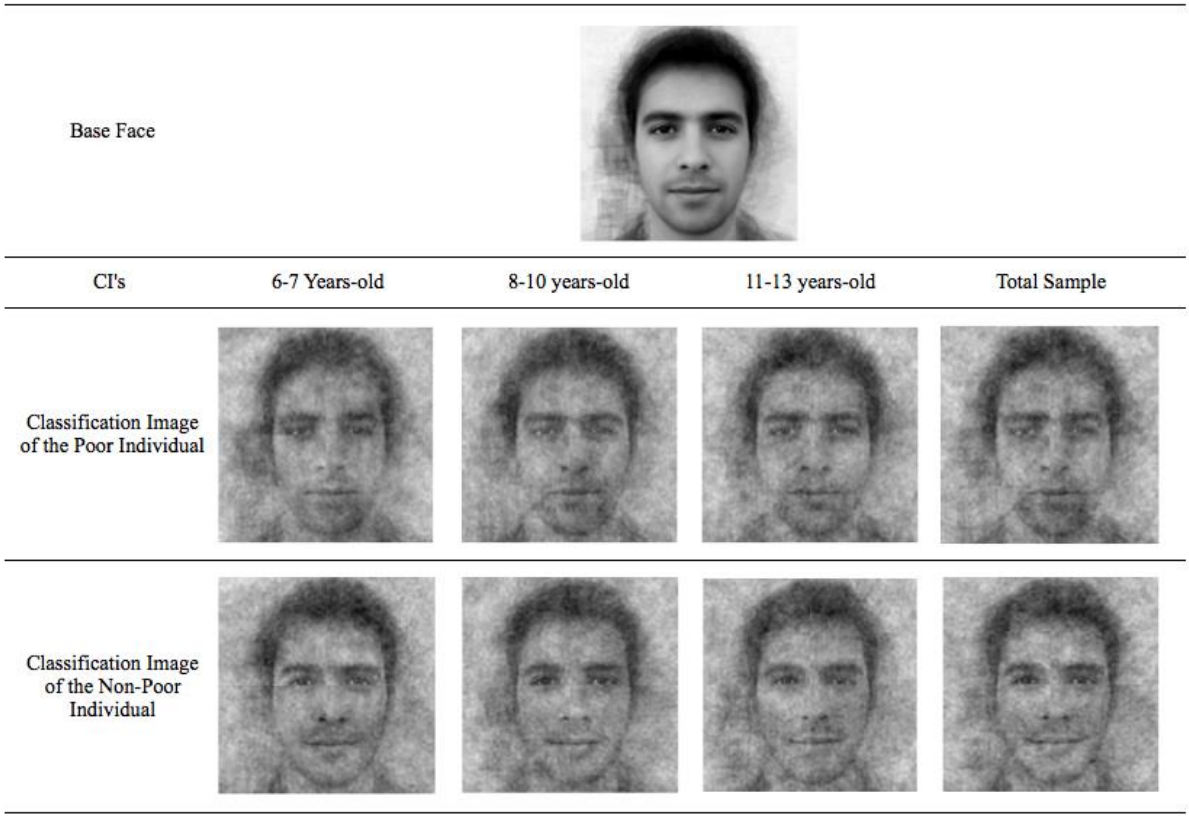


Figure 5. Base face without random noise (top). Classification images of the poor and non-poor per age group in Study 1 (row 2 and 3).

The same procedure as in the pilot study was followed and, identically, the first part of the questionnaire was the parent consent form and socio-demographic questions, answered by children's parents. Different to the pilot study, in the CI-generation children were instructed to choose the face that looked more like a poor person to them, from the two side by side stimulus face images presented. From this phase, visualizations of children's mental representations of poor individuals and non-poor individuals were generated within each age group and to the total sample of participants. The final CIs corresponding with the poor were generated by merging all the chosen images from each age group of the participants and for the total sample. For comparison, superimposing the unselected images generated the final CIs of the non-poor. In total, eight CIs were generated (2 per age group and 2 for the total sample) and later evaluated in Phase II (see Figure 5). This procedure used R *rcicr* package 0.3.0 (Dotsch, 2015).

Phase II – CI evaluation

Sample and Procedure. In the second phase of the study, the CIs obtained in Phase I were evaluated by an independent sample of adult raters, unrelated to RCT target population, in an online survey. This sample was recruited via Amazon's Mechanical Turk. To minimize false responses, we eliminated all the MTurk surveys that were filled in less than two minutes. The final sample was composed by 50 American raters (38% female, M_{age} = 33.9; SD_{age} = 10.62).

The eight final CIs were presented to the raters in randomized order and there was no information that the CIs represented poor or non-poor faces as seen by children. In a within subject design, participants were requested to rate each CI on eight continuous bipolar scales from 1-10 (using sliders) for semantic differentials (e.g., lazy-hardworking; unhappy-happy, dirty-clean; see Figure 6 for all the adjectives). These eight pairs of bipolar adjectives were theoretically derived as tapping into stereotypes of the poor and the wealthy, as identified in previous studies with adults and children (e.g., Cozzarelli et al., 2001; Rausher et al., 2017; Sigelman, 2012; Brown-Iannuzzi et al., 2017). At the end, the three CIs of the poor of each age group were presented together, side by side in random order. Participants answered to four questions representing scenarios where they had to choose one of the images to: 'Go to the cinema or a party with'; 'Be your co-worker'; 'Be your next-door neighbour', 'Which person you would never want to meet in a dark empty street at night' (Bierwiaczonek et al., 2019).

The CIs of the mental representation of the poor and the non-poor for the overall sample were subjected to separate repeated measures analyses of variance for each bipolar adjective, further presented in the results section. Eight exploratory factor analyses (EFA) were conducted separately for the ratings on each of the eight CIs [9]. For each EFA just one factor was extracted, suggesting that the scale measures one theoretical construct that may reflect the negative vs. positive valence of the adjectives. We calculated composite scores by averaging the scores of all the variables for each CIs (Cronbach's α range for the eight CIs generated and evaluated: 0.92 − 0.96). For these composite scores, repeated measures of analyses of variance were conducted with target (Poor vs. Non-Poor) as within-subjects factor and age groups (6-7 y.o. vs. 8-10 y.o. vs. 11-13 y.o.) as between-subjects factor.

[9] Exploratory factor analyses were conducted using principal axis factoring and direct oblimin rotation.

Results

In order to investigate whether the ratings of the poor CI differed from the ratings of the non-poor CI, we compared CI ratings produced by the total sample of children by conducting separate repeated measure ANOVAs for each bipolar adjective. These results are presented in . As predicted by our primary hypothesis for this study, raters evaluated the non-poor CI significantly more positively than the poor CI for all the bipolar adjectives. That is, the poor CI was evaluate as more lazy, stupid, hostile, unhappy, unlucky, unlikeable, dirty and incapable, than the non-poor CI (Figure 6).

To investigate the development of the mental representations of the poor across childhood, we used composite scores resulting from ratings of CIs produced by specific age groups. These were included in a repeated measure ANOVA with two factors: Target (Poor vs Non-Poor) and Age (6-7 y.o. vs 8-10 y.o. vs 11-13 y.o.). The results for this analysis show a main effect of Target (F (1,49) = 59.009, $p < .001$, $\eta^2 = .40$). This effect indicates that across the images produced by all age groups, the non-poor CIs were rated more positively (M= 7.63, SD=1.32) than the poor CIs (M= 5.81, SD=1.56). There was no effect of age (F (2,98) = 1.629, p = 0.201) and no interaction effect (F (2,98) = 1.122, p = .330). To check in more detail the differences between the poor CIs for each age group, ratings on individual adjectives were analysed in a series of repeated measure ANOVAs. The results showed that only the ratings on adjective Hostile-Gentle significantly differed between the three CIs from the three age groups (F (2, 98) = 4.344, p = .016, $\eta^2 = .08$). The image produced by children aged 8-10 (middle childhood), was evaluated as more hostile (M = 5.14, SD = 2.07), than the image produced by the youngest (M = 5.80, SD = 2.12; p = .012) and by the oldest (M = 5.86, SD = 1.99; p = .01) children.

Lastly, we used the chi-squared test to check for differences in frequencies of choosing each CI in the four forced-choice questions (Table 1). One more time, there was no evidence of developmental changes in the images produced by the different age groups as no significant differences among them were found at any of the four forced questions.

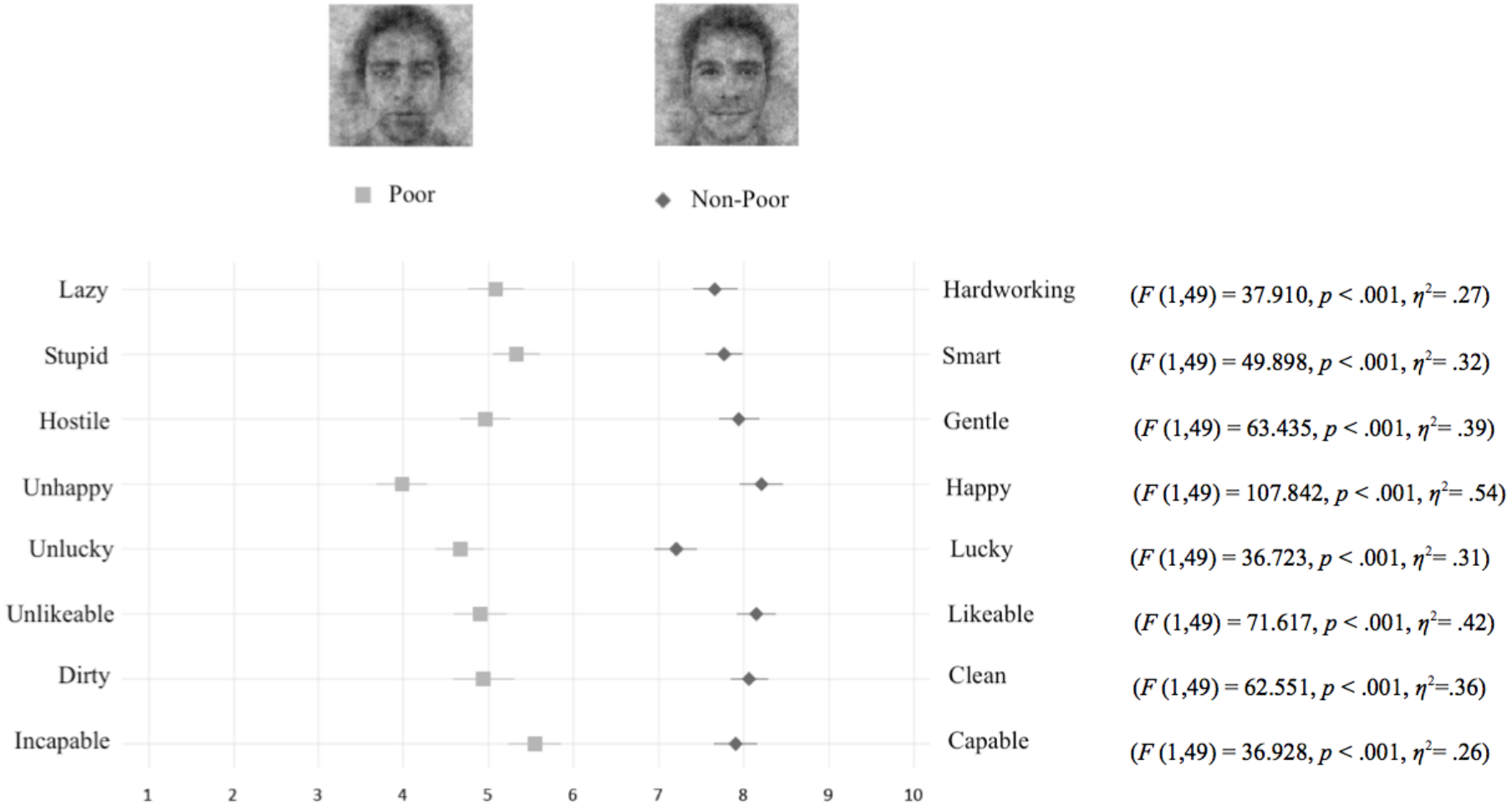


Figure 6. Mean ratings of the CIs for the overall sample in Study 1 and results of repeated measures ANOVA. Error bars represent 95% confidence intervals.

Table 1

Absolute and relative frequencies of choosing each age group Poor Classification Images, and respective Chi-Square analysis

	Poor Classification Image						
	6-7 y.o		8-10 y.o.		11-13 y.o.		Chi-Square
	n	%	*n*	%	*n*	%	
Cinema/Party	20	40	16	32	14	28	χ^2 (2) = 1.12, *p* = .57
Work	18	36	15	30	17	34	χ^2 (2) = 0.28, *p* = .87
Neighbor	20	40	15	30	15	30	χ^2 (2) = 1.00, *p* = .61
Dark street	14	28	23	46	13	26	χ^2 (2) = 3.64, *p* = .16

Discussion

The primary purpose of this study was to shed light into the development of the stereotypes of the poor in childhood, by investigating from what age and to what extent the negative perceptions about the poor found in previous studies, both with adults (Cozzarelli et al., 2001; Lindqvist et al., 2017; Durante & Fiske, 2017) and children (Enesco & Navarro, 2003; Leahy, 1983; Sigelman, 2012; Shutts et al., 2016), are internalized in childhood. Thereby, using the RCT paradigm with children aged 6 to 13 years, this study examined the development of mental representations of the poor. This is the first study to use the Reverse Correlation Task with such young children, contributing this way to the understanding of children's representations about social class related categories. Moreover, the short Reverse Correlation Task (Bierwiaczonek et al., 2019) proved to be a practical and sensitive way to collect implicit information on children's knowledge of social groups.

The results supported our primary hypothesis that children's mental representations about poor and non-poor individuals would differ in their valence (H1). Namely, children from 6 to 13 years old hold a more negative visual representation of the poor than the non-poor. The poor and non-poor CIs produced by 6- to 13-year-olds were presented to an

independent and target-blind sample of raters. Consistently across all the evaluated traits, the poor CIs were rated more negatively (e.g., more lazy, more stupid, more incapable), and the non-poor CIs more positively (e.g., more hardworking, more friendly, more clean). These results supporting our hypothesis are consistent with previous research on the early emergence of negative stereotypes and attitudes towards poor individuals (e.g., Sigelman, 2012; Amar et al., 2015), and similar to research conducted with adults (Oh et al., 2018; Bjornsdottir & Rule, 2017; Durante & Fiske, 2017). Moreover, because of the implicit nature of RCT, this study suggests that this biased stereotype is internalized in children as soon as they are 6 years old.

Contrary to our expectations, the results of this study do not show any evidence of developmental changes in mental representations of the poor across the different age groups (H2). This result may be explained by the generalized negative image of this stigmatized category that children hold. Although previous research shows that with age children explain and understand poverty in a more complex way (Amar et al. 2015), it seems that the implicit and automatic beliefs that children mobilize are the primary unfavourable views of the poor. In fact, the indirect nature of the RCT makes it comparable to other research using implicit measures of attitudes. Congruently with the present results, previous research shows that the implicit attitudes towards ethnic, racial or national groups in childhood are generally stable across ages, despite age-related changes toward egalitarianism at an explicit level (Baron & Banaji, 2006; Raabe & Beelman, 2011). Future research should inspect if the origins of prejudiced mental representation of the poor emerge earlier in age, since the primary distinctions and concepts of socioeconomic constructs seem to emerge in preschool years (Leahy, 1981; Ramsey, 1991; Rauscher et al., 2017).

When interpreting the results, it is important to have into consideration some caveats of this study. The first limitation is the limited number of children that answered to the RCT in each age group. The elevated number of trials in a full RCT (usually 300-700) does not require a big sample size because the composite image is created from all the images chosen by the participants. However, when reducing the number of trials to 50, the number of participants might need to be higher to produce a clear CI. Upcoming research using the short Reverse Correlation Task should inspect if enlarging the sample would be enough to enhance the quality and sensitivity of the CIs.

Another limitation regards the socioeconomic background of our sample, as participants were mainly from middle to upper-middle socioeconomic status. In this respect, according to Dunham and colleagues (2014), ingroup CIs produced by children tend to show

greater positivity than outgroup CIs. Thus the perceived socioeconomic status of the participants could explain the results, since children could have perceived the poor more negatively just because they were an outgroup. However, we do not consider this explanation as plausible, since previous studies showed that the stigma related to poverty is generally perceived by school-age children. Nevertheless, future studies should take into account the socioeconomic status of the participants as a moderator when examining mental representations of the poor.

Future research using RCT with children should also take into consideration adding to the procedure the ratings of the classification images by an independent sample of same-age children. Although previous RCT studies with adults and children also asked an independent sample of adults with different characteristics of the sample from the CI generation to rate this images (Dunham et al., 2013; Brown-Iannuzzi et al. 2017), it is possible that children would rate the created images differently than adults, possible seeing some features of the faces that adults cannot capture.

The potential of the innovative use of this methodology with children opens new avenues for future work. Future studies should consider the inclusion of explicit and implicit measures of attitudes towards poor (Dunham et al., 2014) in order to provide convergence and comparability within different measures of attitudes and Reverse Correlation Task. Future studies could also test the relation between this mental representations and prejudiced attitudes towards poor in childhood (Brown-Iannuzzi et al., 2017). Moreover, to understand what facial features (e.g., eyes, mouth) or beliefs (e.g., happiness, attractiveness) drove children's choices during the RCT, future studies should also probe children's reasoning when choosing the faces that most represented the poor.

The current study highlights the internalization of social class stereotypes and attitudes from early in age. While focusing on the implicit attitudes towards poor adults, our study shows that from 6-year-old children already hold a negative representation of this social category. These results raise the question whether these negative attitudes towards the poor are also generalized to the perceptions children have of same-age peers from socioeconomically disadvantaged families. Existent evidence supports this idea, by showing that children from low-income families are likely to be victims of poverty related bullying by their peers, especially in more affluent areas (Hooper, Gorin, Cabral, & Dyson, 2007; Sarti, Schalkers, & Dedding, 2015). To deep our understanding of the dynamics of intergroup inclusion and exclusion based on social class in childhood, children's explicit and implicit beliefs about poor children, instead of poor adults, should be investigated. The findings of

this study emphasize the importance of embracing intergroup context related to social class in the research field of the social development of intergroup inclusion and exclusion.

CHAPTER THREE

‘Tell me who are the poor children?’: The development of stereotypes, attitudes and behaviours towards children living in poverty

Abstract

Previous research has mainly focused on understanding children's beliefs about poor adults. Of major importance to the research on the development of intergroup relations regarding social class related categories, this study focuses on the development of the stereotypes, attitudes and behaviours specifically towards children living in poverty. Using a mixed methods approach, this study was conducted with children aged from 6 to 12 years. Participants' responses were categorized and quantified through content analysis. A multiple correspondence analysis was performed to identify children's beliefs about poor children, followed by a cluster analysis to classify participants according to their endorsed representation. Three clusters were identified, varying in the degree of perceived severity of poor children's living conditions. More than half of the participants think that poor children live in extreme poverty. Children perceive that help-giving is the normative behaviour towards poor children, although with increasing age children also perceive the existence of negative behaviours (e.g., make fun, exclude, disregard). School socioeconomic context influences personal intended behaviour towards poor children, although these are overall positive behaviours (e.g., help, play). Results are discussed from a social identity perspective, concluding both avoidance of self- or close-other- categorization as poor and notion of an anti-discrimination norm in place. This knowledge is important to understand how children perceive and deal with social inequalities in school environments, as well as to know the perception of discrimination of this group in school.

Keywords: poor children, child development, stereotypes, attitudes, behaviours

Introduction

Recent data shows that about 13.4% of the children living in the OECD countries are considered poor, that is, they live in a household where the disposable income is less than 50% of the national median (OECD, 2018a, 2018b). Regardless of being considered as developed countries, this number shows that despite all the efforts to eradicate poverty (European Union, 2018), child poverty rate remains high in some high-income countries (e.g., Portugal, Greece, Italy, Spain). Data shows that about 20.7% of children in the European Union countries are at-risk-of poverty (Eurostat, 2019) and, looking to a more objective indicator, 7.4% of the children are in severe material deprivation, lacking at least four of nine defined material items (Eurostat, 2019). These numbers gives voice to the significant prevalence of child poverty in contemporary societies.

Irrespective of their own economic situation, children contact and grow up within these economic inequalities in schools, developing their set of beliefs and attitudes about the group of children that lives in conditions of poverty. Indeed, studies conducted in impoverished areas in some of these developed countries (e.g., United Kingdom, Netherlands), show that low-income children report that they are excluded from activities and social networks due to their clothes and because how they and their families are viewed (Crowley & Vulliamy, 2007). These studies reveal that children living in poverty are likely to be victims of poverty-related bullying at school, particularly in more affluent areas (Hooper. Gorin, Cabral, & Dyson, 2007; Sarti, Schalkers, & Dedding, 2015).

Research on intergroup inclusion and exclusion in childhood has focused mainly on gender or ethnic groups (for a review, see Killen & Rutland, 2011) and research on children's beliefs and understanding about social class related categories is scarce (Hazelbaker & Mistry, 2018). Social categorization and stereotyping is central to the understanding of intergroup relations and social exclusion and its development (Tajfel & Turner, 1979). In the present study, we aim to investigate children's stereotypes, attitudes and behaviours towards social class, more specifically regarding the social category of poor children. Moreover, we aim to understand the role of social-economic status in shaping the development of stereotypes and prejudice toward the group of poor children in childhood.

Research with adults conducted across different countries identifies a consistent set of characteristics that form the stereotype about the poor, where its group members are perceived as *lazy*, *addicted to alcohol* or *drugs*, *weak*, *incompetent* and *less intelligent* (Cozzarelli, Wilkinson, & Tagler, 2001; Lindqvist, Björklund, & Bäckström, 2017; Durante

& Fiske, 2017). Some studies have addressed children's perceptions about poor adults or the broader concepts of socioeconomic concepts, poverty or wealth showing that, as children grow older, beliefs about these topics become more elaborated and detailed (Amar, Llanos, González, Agamez, Peña, & Romero, 2015; Enesco & Navarro, 2003). These studies reveal that, similarly to other salient social categories (e.g., age, sex or ethnicity; see Nesdale, 2004), between the ages of 3 and 5 children are already aware of the differences between rich and poor, based on observable and material symbolic elements, like clothes or other material goods (Leahy, 1981; Ramsey, 1991; Rauscher, Friedline, & Banerjee, 2017). Children aged 5 to 7 often attribute positive emotions or traits to wealthy families (e.g., happy, awesome, fun; Rauscher et al., 2017); in contrast, poor people are perceived as being sad, lonely and dirty, as lacking food, education, work and purchasing power (Amar et al., 2015; Rauscher et al., 2017; Sarti et al., 2015).

There is evidence that perceptions about wealth have an important effect on children's beliefs, evaluations, and preferences about individuals and social groups (Horwitz, Shutts, & Olson, 2014). Children aged 4-5 prefer wealthier groups to poor ones (Horwitz et al., 2014), and around 6-years-old perceive a rich man as more competent than a poor man, alongside less favourable attitudes towards poor people (Sigelman, 2012; Shutts, Brey, Dornbusch, Slywotzky, & Olson, 2016). Interestingly, there is also evidence that being lower SES does not seem to reduce children's tendency to endorse pro-wealth attitudes (Mistry, Brown, White, Chow, & Gillen-O'Neel, 2015; Shutts et al., 2016; Horwitz, et al., 2014).

Research suggests that negative stereotypes towards poor adults emerge in late childhood (Woods et al. 2005; Sigelman, 2013). Leahy (1981) poses that, with age, there is a tendency to explain the differences between rich and poor people based on individual personality dissimilarities. Children aged 8-10 years-old consider characteristics like effort, perseverance, and intellectual and social skills as determinants of the low social-economic status of poor individuals (Leahy, 1983; Sigelman, 2012; Enesco & Navarro, 2003). In a study using a trait-stereotyping measure, Mistry and colleagues (2015) asked 10-12 y.o. children to indicate in a five point scale, how many people from three social class groups (poor, middle class, rich) exhibited six negative (e.g., lazy) and six positive (e.g., good) attributes (Mistry et al., 2015). The authors concluded that children from 10-12 y.o. endorsed fewer positive attributes and more negative ones to the poor than they did about either the middle class or the rich.

Although children endorse negative attitudes towards this social group, studies about children's decisions in inequality situations have consistently shown that from very early in age children are willing to rectify inequalities between individuals through allocation of more items to the one with fewer resources (Li, Spitzer, & Olson, 2014), and sharing more with poor than with wealthy individuals (Paulus, 2014). In a study where children could benefit from the resource allocation, children aged 10-11 years reject unequal allocations that favour themselves or the ingroup over an unknown partner or the outgroup (Blake & McAuliffe, 2011; Elenbaas, Rizzo, Cooley, & Killen, 2016). There is also evidence that despite children's minimization of inequalities through resource allocation, children explicitly prefer the child with more resources (e.g., prefer to be friend; Shaw & Olson, 2013; Li et al., 2014).

The research presented so far within the domain of social class, is coherent with research with other stigmatized social categories, showing that children are sensitive to the social status of the groups and from early on are likely to internalize groups' status inequalities, influencing their intergroup attitudes (Bigler, Brown, & Markell, 2001; Dunham, Baron, & Banaji, 2007; Vala, Lima, & Lopes, 2004; Correia, Vala, & Aguiar, 2007). These studies show that children belonging to high-status groups, novel or real social groups (e.g., ethnic), rated the ingroup more positively than the outgroup (Bigler et al., 2001), whereas low-status minority group members showed equivalent attitudes or identification towards the ingroup and higher status outgroup (Dunham et al., 1997). In multi-group situations where another low-status minority group is introduced to the context of evaluation (Alexandre, Waldzus, & Monteiro, 2007; Feddes, Monteiro, & Justo, 2014), minority children presented a preference for their ingroup when comparing themselves to the other low status group. This result suggests that children are sensitive to their relative position in the social hierarchy and strategically use social categorization to cope with their low status position (Alexandre et al., 2007; Feddes et al., 2014).

Consistent with the internalization of social inequalities, in a study within the social class context, Mistry and colleagues (2015) found that children with lower perceived social status endorsed more negative attributes to the poor social category than their counterparts with perceived middle social status. According to the authors, this is likely to reflect lower SES children's motivation to manage their threatened social identity by distancing themselves from those with relative lower status (Mistry et al., 2015). Compatible with this idea, an ethnographic and participatory action research with 8- to 14-year-old low-income Dutch children documented a taboo about poverty (Sarti et al., 2015). In this study, the

perspectives about poverty changed after further discussions by including less extreme forms of poverty and recognizing that it might even exist in their neighbourhood. Even though, children never considered themselves to be poor or to live in a context of poverty (Sarti et al., 2015).

The scant research on children's beliefs about social class related categories suggests that children's conceptions of poverty evolve with age (e.g., Enesco & Navarro, 2003). Literature consistently shows that children endorse negative stereotypes and attitudes towards poor adults (e.g., Sigelman, 2012, Mistry et al. 2015), and that it might be related with children's SES. Regarding behaviour, literature focuses on resource allocation in unequal contexts, showing that children seem to avoid inequalities by allocating more resources to the needed, although maintaining their preference on more resourceful individuals. To the best of our knowledge there are no studies focusing on what are children's perceptions regarding other children living in conditions of poverty, and to what extent these perceptions might be influenced by children's SES and evolve with age. We believe that assuming that children's perceptions about poor adults are the same as those about children is inappropriate. As such, to better understand children's intergroup relations within contexts where SES asymmetries exist, it is fundamental to know what children's perceptions specifically about poor children are.

The present study

The present study investigates children's stereotypes, attitudes and behaviours regarding the poor children social category, and explores the role of children's age and socioeconomic context. Given that previous research suggest that children's perception of poverty is restricted in viewing poor as, for example, sad, lonely and dirty, to deepen the understanding of the dynamics of intergroup inclusion and exclusion based on social class in childhood, primarily, it is very important to understand what are children's stereotypes and attitudes towards other children that live under this condition. Moreover, research also suggests that these perceptions evolve with age (e.g., Rauscher et al., 2017). As such, we aim to understand if this also happens when they reflect about child poverty. Finally, we want to understand if children's stereotypes about poor children influence their behaviours towards poor children, their attitudes and their willing to engage with a poor child.

Using a mixed methods approach, this study will draw on qualitative and quantitative data to describe children's stereotypes, attitudes and behaviours towards poor children, and

will use Multiple Correspondence Analysis to explore if children's beliefs can be organized into distinct profiles and, later, to understand the influence of these different perceptions on children's attitudes and intended behaviours towards poor children.

Method

Sample

One hundred and seven 6- to 12-years-old children (*M* = 9.10; *SD* = 2.19; 58 female) were interviewed in two public schools located in the Lisbon Metropolitan Area. Children were grouped in three age groups: 6-7 years-old (*N* = 35; *M* = 6.20; *SD* = 0.87), 9-10 years-old (*N* = 36; *M* = 9.42; *SD* = 0.50), and 11-12 years-old (*N* = 36; *M* = 11.50; *SD* = 0.56). Most participants were Portuguese-White (76.4 %) and 23.6% were Portuguese-Black.

Participants' objective SES was determined based on their eligibility for free or reduced price meals, which is based on their family income and support from the Portuguese welfare system. Specifically, 36.4% (*n* = 39) of the participants in our sample were from lower SES families, and the remaining 63.6% (*n* = 68) were from middle-to-higher SES families. The participating schools differed on their SES profile of the participating schools. Two distinct schools were selected based on the percentage of children from lower SES families. One school (*N* = 49; 46%) served a socioeconomic disadvantaged population with 67% of children from a lower SES family (*n* = 33). The second school (*N* = 58; 54%) served a middle-to-high socioeconomic context where the percentage of children from lower SES families was 10% (*n* = 6).

Procedure and measures

This study applied a mixed methods design by collecting data with a qualitative and quantitative nature to access stereotypes, attitudes and behaviours of poor children in a more direct or indirect way. Qualitative data was collected by conducting semi-structured interviews where children were asked a set of open-questions and, throughout the interview, to make drawings in one single white-paper sheet of a *poor child*, a *non-poor child* and *themselves* (Bar-Tal, 1996) [10]. Each draw was asked to be made in five minutes and choosing

[10] The act of being interviewed by a strange adult may be a novel and intimidating experience to children. However, children of all ages are used to express themselves through drawings. Therefore, the main goal to ask drawings was to enhance children's thinking and to

only one out of twelve crayons. After the open-questions, to measure stereotypes and attitudes in a more direct way, two quantitative measures were applied.

First, children were thanked by taking part in the interview and asked whether they ever heard about poor people or poor children; at this point no other information about the social group was introduced. Then, the interview was divided in five main parts (Appendix B), as following:

1) *Children drawing of a poor child and open-questions about their descriptions of a poor child* ("How do you think a poor child is?"; "What do they wear?"; "Where do they live?"; "What do they eat?"; ""How do you think a poor child normally feels?") *and their everyday life* ("What does a poor child during the day?"; "Do you think she goes to school?");

2) *Children drawing a non-poor child and open-questions about perceptions of non-poor children behaviour towards poor children* ("What do you think non-poor children do when they are with a poor child?") *and affective attitude towards non-poor children* ("Do you like non-poor children?");

3) *Children drawing of themselves and open-questions about self-reported present/future behaviour towards poor children* ("What would/do you do when you are with a poor child?") and *affective attitude towards poor children* ("Do you like poor children?").

4) *Measure of Attitudes towards engaging with a poor child*. This measure is composed by three items measuring children's attitudes towards engaging with a poor child in three different social interactions: being next to a poor child, play with a poor child or have poor children in their class. These three items were combined in a unique measure of attitudes towards contact with poor children, showing a good internal consistency reliability ($\alpha = .72$).

5) An adaptation of the *Multi-response Racial Attitude Measure* (MRA; Doyle & Aboud, 1995; Aboud, 2003; Rutland, Cameron, Milne, & McGeorge, 2005). Two sets of 20 cards each with an adjective, 10 with positive valence (e.g., friendly, good, happy, intelligent) and 10 with negative valence (e.g., unlucky, stupid, ugly, violent) were presented to children. In addition, three identical boxes were open on the table, one with no label and the other two labelled as 'poor child' and 'non poor child' (Aboud, 2003; Rutland *et al.*, 2005). As the interviewer stated each adjective, with a brief example (e.g., Friendly - likes to play with the

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stimulate them to talk and to share their beliefs about the social category of poor child (Bar-Tal, 1996; Raggl & Schratz, 2004). Moreover, the request to draw a child identified by a group label activates children's knowledge of the group, and what is actually depicted is likely to be what is more salient regarding that social category (Racheli & Tova, 2011; Teichman & Zafrir, 2003).

other boys/girls), the child had to put the respective card on the box belonging to the *poor children* if he considered that they had such a characteristic, in the *non-poor children* box if he thought they had such a characteristic, in both boxes in the case he thought they were both like that or in the unlabelled box if he thought neither was like that. To begin the task, as an example, three characteristics were used without any positive or negative connotation (e.g., like to watch television). The adjectives used were present in previous studies on the distinction between rich and poor people (Sigelman, 2012) and on studies on the domain of racial prejudice (Aboud, 2003).

The analysis of this adapted attitude measure was conducted in three ways. First, we found relevant to use this measure as a form of supporting and comparing with the qualitative results about the stereotypes of poor children. As such, each trait assessed by the participants, positive and negative, for each social group under evaluation, both *poor* and *non-poor*, was analysed individually allowing to understand specifically which traits were most attributed to one and the other group and the differences between them. Secondly, to obtain a detailed evaluation of the two groups, in terms of valence and number of traits attributed to each target, we computed four variables, 1) total of positive traits; 2) total of negative traits; 3) total of traits attributed to the *poor* target, and 4) total of traits attributed to the *non-poor* target children. Moreover, and following the regular analysis conducted with this measurement, an evaluation index was created between the two-evaluation targets, which allows measuring the attitude towards the social group of poor children. This index was obtained by, firstly, calculating the number of positive and negative traits for each target group, *poor* and *non-poor children*. Then, the difference between the evaluations of the *non-poor children* group (number of positive traits - number of negative traits) and the evaluations of the *poor children* group (number of positive traits - number of negative traits). As such, positive values indicate a more favourable relative evaluation of the *non-poor children*, and negative values a more favourable relative evaluation of the *poor children*. In this way, an index of -10 corresponds to a stereotype that is completely favourable to the *poor children* and an index of +10 that is completely favourable to the *non-poor children*. This index is mentioned, in subsequent analyses, by *intergroup evaluation* and is conducted as a way of measuring intergroup attitudes.

Children, whose parents gave their written consent, were individually interviewed in an isolated room of the school and only in the presence of a researcher. The interview lasted

an average of 30 minutes and were recorded in audio format and later fully transcribed by the first author.

Data Analysis Strategy and Quality Criteria

The main goal of mixing methods research is to promote a more in-depth understanding of social phenomena by linking and integrating data derived from different methods (Creswell & Plano Clark, 2007). Data analysis of this study was carried out in a combined way between qualitative and quantitative data given the mixed nature of the work. The data from the different sources of information- interviews, draws and quantitative measures, where integrated and putted into relation with each other (Fielding, 2012).

In order to address the transferability and confirmability of the present research (Guba & Lincoln, 1982; Shenton, 2004), a detailed description of the sampling, data collection and analysis procedures is provided. All the methodological options were taken upon established methods and after examination of previous research (Shenton, 2004). Moreover, throughout the content analysis of the interviews, the researcher followed the principle of analysing negative or deviant cases, by searching and discussing elements that emerged on the data and that contradicted or that singled out from the rest of the content body (Guba & Lincoln, 1982; Shenton, 2004).

In a first instance, the analysis of children's discourse was performed through the content analysis of interviews (Vala, 2005; Flick, 2005), with the support of the software Atlas.Ti. The dimensions and categories under analysis were developed *a priori*, and the interview and coding was built over them, being them: 1) stereotypes of the poor child (place of living, clothes, food habits, feeling and daily activities), 2) affective attitude towards non-poor children and poor children, 3) behaviours towards poor children (perception of others' behaviours and intended personal behaviour) and 4) comparison of the self and the poor child (spontaneous references). The subcategories of each category in the analysis were developed *a posteriori*, emerging from the reading and examination of the content of the interviews. First, the units of text (sentences, paragraphs or excerpts of text) were selected and systematically coded according to the key idea they transmitted. Codes or categories were mutually exclusive so one unit of text belonged just to one of the defined categories/sub-categories. As such, the content analysis resulted in 1427 codes, grouped in 50 different sub-categories and 10 categories. In the results section, we opted to present and interpret only the categories where the frequencies of observations were greater than 10 units of text,

representing at least 10% of the responses (Duarte & Lima, 2005; Graça, Oliveira, & Calheiros, 2015).

To guarantee the reliability and validity of the results, the category system was evaluated based on the reliability between coders (Cohen, 1968), and an external coder to the research team was requested to analyse 25%-30% of the coding for each category. The reliability indexes (Cohen's K) for each of the systems of categories associated with each dimension suggested high reliability (Cohen's kappa ranging from .83 to 1, $p < .001$).

The drawings were analysed in order to support the interpretation of the child's responses about the poor child[11]. Each drawing was coded regarding the content of the depicted figures. Namely, the attributes that distinguish the poor child, the attributed emotion by analysing the facial expression of the poor child, clothing used by the poor child and other artefacts, and colour used for the drawings (Bar-Tal, 1996; Teichman & Zafrir, 2003). Furthermore, an analysis comparing children's self-portrait and the drawing of the poor child was made, in order to explore in a more indirect and spontaneous way how children perceive themselves in terms of their own socioeconomic condition. The content analysis of children's drawings was also subject to inter-coder reliability analysis and an external coder to the research team was requested to analyse 25-30% of the coding for each dimension analysed in the drawings (Cohen's kappa ranging from .74 to 1, $p < .001$).

Qualitative data from the discourse and children's drawings was *quantitized* (Sandelowski, Volls, & Knafl, 2009), that is, qualitative data was converted into quantitative form, in order not only to assist on pattern recognition and analysis of differences between the groups under analysis, but also to enable the merging with the quantitative data sets to study the relationships between the variables across the different sources (Sandelowski et al., 2009). With this in mind, each sub-category was transformed into binary variables, where participants' answers were coded according to the presence or absence of each sub-category. The results presented aim to describe this variables comparing the three age groups considered (6-7 years old, 9-10 years old and 11-12 years old), also considering the SES context of the school where they were surveyed (lower contextual SES and middle-to-higher contextual SES) and their own SES (lower personal SES and middle-to-higher personal SES).

[11] The drawings were mainly used to support the conduction of the interviews and in this paper only the drawings depicting the poor child will be analysed, regarding the objectives of the present research. However, some comparisons will be made with the non-poor child drawing and self-portrait only for contrasting purposes.

However, qualitative data, that is, transcriptions and excerpts of children's discourses, will also be presented to illustrate the underlying ideas of the quantitative analysis presented.

To explore the interrelationships between the multiple categorical variables, after the content analysis, a multiple correspondence analysis (MCA) was conducted (Greenacre, 2007; Carvalho, 2008). MCA allows the projection of the categories of the multiple variables (in the case of this study, the presence and absence of the representations of child poverty) in a low dimensional space, usually in a bi-dimensional graph, allowing the visualization of the pattern of association between variables and categories. Ultimately, MCA permits to identify the configuration of different groups of children according to their stereotypes about the poor children that was later validated with a hierarchical cluster analysis (HCA; Hair, Ralph, Ronald, & William, 2010). MCA standardized object scores were used as input variables and a k-means algorithm was implemented (Oliveira, Esteves, & Carvalho, 2015; Graça, Oliveira, & Calheiros, 2015; Bernardes, Silva, Carvalho, Costa, & Pereira, 2014). All statistical analyses were conducted using IBM SPSS Statistics (version 25).

Results

This study explored how stereotypes about, attitudes and behaviours towards poor children evolve with age and how socioeconomic status influences this development. Furthermore, this study addresses the interrelationships between these three main topics, by conducting a Multiple Correspondence Analysis. To better respond to these objectives, the results section is organized in subsections.

We begin to present the stereotypes about poor children with the presentation of the results of the open-questions and the detailed results of the trait-stereotyping measure (MRA; Doyle & Aboud, 1995; Aboud, 2003; Rutland *et al*., 2005). Next, attitudes towards poor children, measured through the open-questions and with the analyses of the adapted *Multi-response Racial Attitude Measure*, specifically, the created variables in terms of valence and target of the evaluation (MRA; Doyle & Aboud, 1995; Aboud, 2003; Rutland *et al*., 2005) will be presented. Afterwards, behaviours towards poor children will be presented, joining once again the responses to the questions regarding the perceived peers' behaviours and the intended personal behaviour towards poor children. Attitudes towards contact with poor children will also be presented in this sub-section, followed by the sub-section presenting our

analysis about the perception of the self in this intergroup domain. At last, the Multiple Correspondence Analysis combined with Cluster Analysis will be presented.

Stereotypes about the poor children

The spontaneous representation of a poor child was accessed through their drawing of a poor child followed by a question asking "What do you think a poor child is?". When children faced difficulties or constrains in verbalizing their opinion, they were asked to describe their drawing. The content analysis of this question resulted in a total of 30 sub-categories (303 units of text).

In this analysis, it is relevant to notice the characteristics that emerge the most on the discourse of the participants. In Table 2 we present the sub-categories of this category. As can be seen, the clothing of the poor children is a salient feature for almost half of the children interviewed (44%; *n*=47), followed by food habits (37%; *n*=40) and the place they live (31%; *n*=33) as key characteristics when thinking about the group of poor children.

Table 2

What do you think a poor child is?: Absolute and relative frequencies of the categories and sub-categories of the spontaneous discourse about poor children

Categories	Sub-categories	*n*	% (*N*=107)
	Improper clothing and shoes	47	44%
	Hungry	40	37%
What do you think	Homeless	33	31%
a poor child is?	No money	32	30%
(spontaneous description)	Feel sad	31	29%
	Are alone	16	15%
	Beggars	14	13%

The drawings of a poor child were also very representative of this description given that, when analysing the key aspects that distinguish the poor child drawing, comparing with the non-poor child, the most prominent aspects were the depicted clothes being with no clothes or damaged and torn clothes (50.5%, *n*=52) and the sad expression on poor children's faces (60.7%, *n*=65). Moreover, the act of begging in the streets was also one more aspect depicted in in the drawings that distinguish the poor child from the others (21.5%, *n*=23).

Still regarding children's drawings, another indirect measure for the valence of their representation is related to the colour used to depict the poor child, being the dark colours more related with negativity (Bar-Tal, 1996):

> "I chose the brown because it is a colour ... well, as he is poor he does not have many colours, the clothes are dirty and that's it". (12 years-old, middle personal SES, middle-to-higher SES school)

Results show that 61.7% (*n*=66) use dark colours (e.g., black, brown) to illustrate the poor children, while only 25.2% (*n*=27) and 32.1% (*n*=34) used those colours to illustrate the non-poor child or themselves, respectively. A McNemar test reveal us that this differences between the colours used to do the poor child drawing from the ones used to draw the non-poor child and the self-portrait are significant (always $p < .001$).[12] Moreover, this greater use of dark colours to represent poor children increases with age (χ^2 (2) = 13.781, $p = .001$), but is not influenced by personal SES (χ^2 (1) = 0.001, $p = .982$) or school SES (χ^2 (1) = 0.239, $p = .625$).[13]

A correlation between the number of different responses given by children and their age indicates that with age the number of responses given in this first description of a poor child increases (r (107) = .326, $p = .001$), suggesting that when children get older they begin to better understand the phenomenon, diversifying and detailing the image they have of this social group. Following the assessment of the spontaneous knowledge about the group of poor children, children answered to a structured interview where those general representations were deepen. For so, the dimension of the stereotypes about poor children consists of five main categories: representation of the poor children concerning their clothing, food habits and place of living, their feelings and the daily activities of poor children. In Table 3 are presented the sub-categories for the categories of this dimension.

[12] A McNemar test show that the colour children use to draw themselves and the non-poor child do not vary significantly ($p = .143$).

[13] The colours used in children's drawings of the non-poor child is not influenced by age, personal SES or school SES (always $p > .144$). The colours used in children's drawings of themselves is not influenced by personal SES or school SES (always $p > .223$), but children use darker colours with increasing age (χ^2 (2) = 6.995, $p = .030$).

Table 3

Stereotypes about the poor children: Absolute and relative frequencies of the presence of the sub-categories in the participant's discourse, and Chi-Square Tests by Age, SES_p and SES_c[14]

Categories	**Sub-categories**	***n***	**% (*N*=107)**	**By age χ^2**	**By SES_p χ^2**	**By SES_c χ^2**
What do poor children wear?	Torn clothes	55	51.4%	13.866**	1.499	0.721
	Less or no clothes	31	29.0%	2.632	0.096	0.595
	Normal clothes	24	22.4%	19.082***	2.453	0.874
What do poor children eat?	Nothing to eat	61	57.0%	2.455	5.288*	0.034
	Scarce food	30	28.0%	0.035	2.564	0.048
Where do poor children live?	House	30	28.0%	2.339	6.291*	2.898
	Streets	69	64.5%	3.982	5.055*	3.067†
How do poor children feel?	Feeling bad or sad	87	81.3%	15.905***	0.777	2.000
	Feeling good or happy	18	16.8%	8.030*	0.091	0.831
	Feeling alone	11	10.3%	6.111*	0.429	0.001
What do poor children do during the day?	Begging for food/money or looking for food/clothes	69	64.5%	5.667†	2.735	0.006
	Play or be with friends	21	19.6%	6.631*	1.568	0.636
	Walk around	11	10.3%	2.214	0.001	0.003
	School[15]	25	23.4%	2.817	5.360*	2.003

Note: † $p < .10$; * $p < .05$; ** $p < .01$; *** $p < .001$

[14] The content analysis resulted in dichotomous sub-categories, capturing the presence or absence of that perception in the discourse of the participant. In this table, we can find only the frequencies of the presence.

[15] The frequencies of the sub-category of "School" presented on this table regards the forced question whether participants thought that poor children attend school or not. In the question about the daily routine of poor children only 9.3% (*n*=10) of the participants.

What do poor children wear?. When asked about 'What do poor children wear?', most of the children point out that poor children wear damaged, old or torn clothes (51.4%, *n*=55; Table 4, example *a*) or that they have nothing to wear (29%, *n*=31; Table 4, example *b*). There are still two in ten children that consider that children use normal clothes (22.4%, *n*=24; Table 4, example *c*). The way children wear is present in children's speech, but also very visible in the illustrations made by the children, where half of the children draw a poor child with torn clothes, no shoes or even naked (50.5%, *n*=52; see Figure 7).

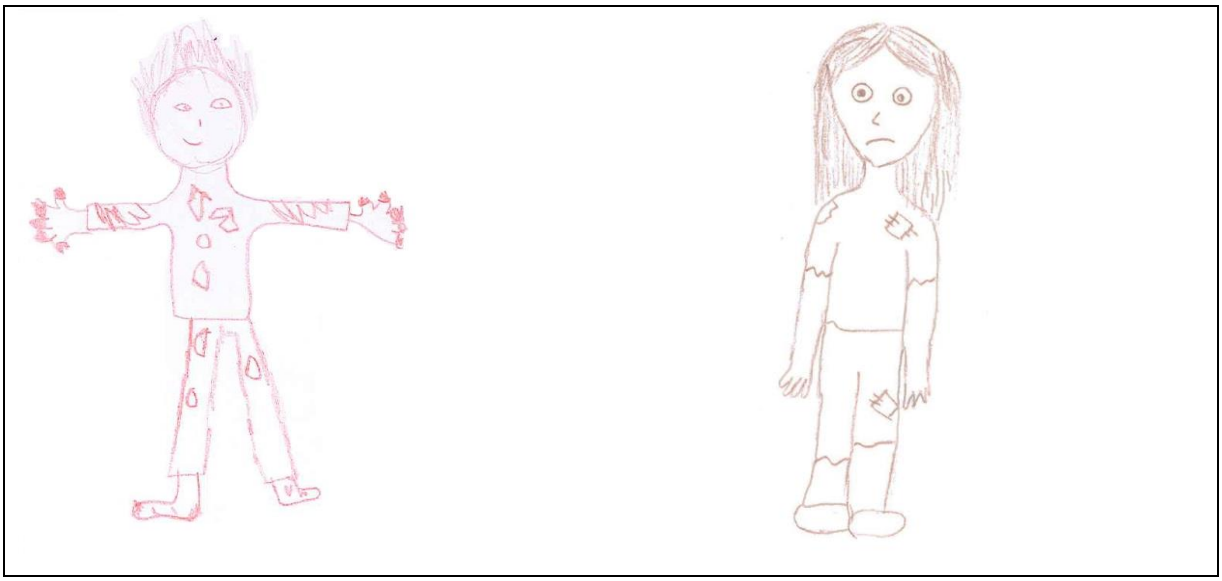


Figure 7. Two drawings of a poor child using torn clothes (respectively: 11 y.o., lower SES_p, lower SES_c and 12 y.o., middle-to-higher SES_p, middle-to-higher SES_c participants)

This representation of poor children clothing evolves with age. As children grow older they perceive that the poor children dress more torn clothes (χ^2 (2) = 13.866, $p < .001$) than normal ones (χ^2 (2) = 19.082, $p < .001$). In fact, 31% (*n*=11) of children aged 6-7 years think that poor children use torn clothes, whereas 67% (*n*=16) think that they wear normal clothes. On the contrary, among children aged 9-10 years, 75% (*n*=27) thinks that poor children wear torn clothes and only 4.2% (*n*=1) thinks the opposite. Older children have more differentiated perceptions: 29.2 % (*n*=7) think that poor children dress normally and 47.2% (*n*=17) dress damaged clothes[16].

[16] The sub-category of "Less or no clothes" did not differ between age groups (χ^2 (2) = 2.632, $p = .268$)

Regarding the drawings made by children, this difference between age groups is also evident (χ^2 (2) = 18.306, p < .001). Younger children draw a poor child with torn clothes or without clothes in a less extent than the expected count (20.6%) and older children, aged 11-12, represent this characteristic in their drawing more than the expected count (67.6%).

This representation is independent of personal SES (Normal clothes: χ^2 (1) = 2.453, p = .117; Torn clothes: χ^2 (1) = 1.499, p = .221; Less or no clothes: χ^2 (1) = 0.096, p = .756 and Drawings: χ^2 (1) = 0.006, p = .940) and contextual school SES (Normal clothes: χ^2 (1) = 0.874, p = .350; Torn clothes: χ^2 (1) = 0.721, p = .396; Less or no clothes: χ^2 (1) = 0.595, p = .440 and Drawings: χ^2 (1) = 0.468, p = .494).

Table 4

Stereotypes about the poor children: Examples of codes for each category and sub-category of the dimension

Category: *What do poor children wear?*			
	Sub-Category	**Codes**	**Participant**
(a)	Torn clothes	"He has sneakers but the sneakers are already torn and damaged, but his mother could not buy others. (...) The t-shirt was already torn and all dirty. The shorts were shortening and ripping apart as time went on. And they're tight."	12 y.o.; middle-to-higher SESp; middle-to-higher SESc
(b)	Less or no clothes	"She has a little cape just to not get cold."	6 y.o., middle-to-higher SES_p, lower SES_c
(c)	Normal clothes	"I: What does this poor child wear? C: Usually wears blouse, pants and tennis shoes. I: And how are the shirt and pants? C: Blue, yellow and green. I: And how are the clothes, can you describe me? C: With sleeves, short pants and the tennis is closed."	6 y.o., middle-to-higher SES_p, lower SES_c

Category: *What do poor children eat?*			
	Sub-Category	**Codes**	**Participant**
(d)	Scarce food	"Something she gets, someone give her money and she'll see if she can buy something with that money or not. If not, she does not eat anything."	10 y.o., lower SES_p, lower SES_c
(e)	Nothing to eat	"She is very hungry. There is no food in her house."	11 y.o., lower SES_p, lower SES_c
(f)	Nothing to eat	"As they are poor they only drink dirty water with bugs and this (drawing) is dirty water with bugs."	6 y.o., middle-to-higher SES_p, lower SES_c
Category: *What do poor children live?*			
	Sub-Category	**Codes**	**Participant**
(g)	Streets	"He's lying down under the newspaper because he has no blankets or anything. That's why he always uses the newspaper."	10 y.o., middle-to-higher SES_p, lower SES_c
(h)	Streets	"C (about the drawing): This is supposed to be a shed. Wooden stick. This is the front of the shed. And here the inside of the shed. I: What is inside the shed? C: Just wood, to make of bed, and old clothes."	9 y.o., middle-to-higher SES_p, middle-to-higher SES_c
(i)	Streets	"The poor child lives in the middle of the dump and has a blanket as a bed, on the top of the trash. This is kind of a dustbin."	9 y.o., middle-to-higher SES_p, middle-to-higher SES_c
(j)	House	"He lives in a house, but the house has the roof broken."	6 y.o., lower SES_p, lower SES_c
Category: *How do poor children feel?*			
	Sub-Category	**Codes**	**Participant**
(k)	Feeling bad or sad	"I think a poor child is a child who has no happiness."	10 y.o., lower SES_p, lower SES_c
(l)	Feeling bad	"She was going to eat, but then she saw that she	6 y.o., middle-to-

	or sad	had no food. Then she was sad."	higher SES_p, lower SES_c
(m)	Feeling bad or sad	"(A poor child) usually walks with the hunchback tilted. And he walks around feeling sad and defeated because life is running so bad for him."	11 y.o., middle-to-higher SES_p, middle-to-higher SES_c
(n)	Feeling good or happy	"He is happy because she has a ball to play."	9 y.o., middle-to-higher SES_p, lower SES_c
(o)	Alone	"She feels alone because normally children make more friends at school, so she does not have many friends she can be with."	10 y.o, middle-to-higher SES_p, middle-to-higher SES_c
	Category: *What do poor children do during the day?*		
	Sub-Category	**Codes**	**Participant**
(p)	Begging for food/money or looking for food/clothes	"She asks for food, she gets dressed. Then she will walk for money and then ask for more food for lunch. Then she goes back to the street where she sleeps and then asks for more food and then goes to sleep."	6 y.o., middle-to-higher SES_p, middle-to-higher SES_c
(q)	Play or be with friends	"He goes to the street and he can play with other children."	12 y.o., middle-to-higher SES_p , middle-to-higher SES_c
(r)	Walk around	"Sometimes he walks around, nothing more."	6 y.o., middle-to-higher SES_p, lower SES_c
(s)	School	"I think poor children do not have the money to attend school, because school is expensive whether it is public or not."	9 y.o., middle-to-higher SES_p, middle-to-higher SES_c
(t)	School	"He goes to school but he often misses. And when he doesn't want to come, he doesn't come. I think he doesn't like coming to school."	9 y.o., lower SES_p, lower SES_c

(u)	School	"But school says that education comes from home and because they do not have much opportunity to have much education, because the parents only think about money to survive, the child will not be able to join the group very well and... Yes, join the group and the class, and have conversations, not quite normal conversations ... but being able to sympathize with the teachers."	11 y.o., middle-to-higher SES_p , middle-to-higher SES_c

What do poor children eat?. When asked about 'What do poor children eat?', the results are very clear showing that almost every participant thinks that poor children have severe issues concerning food habits. More specifically, just 8% (*n*=9) of the participants consider that poor children eat normally[17] while the majority of the participants think that poor children have very scarce food (28%, *n*=30; see Table 4, example *d*) or have nothing to eat (57%, *n*=61), just eating what they find or what someone give to them (see Table 4, example *e*). Among these children that state that poor children have nothing to eat, some of the discourses reflect on the quality of the food that they eat referred as being unhealthy, taken from the trash or even dirty and with vermin, with one in four children stating that (see Table 4, example *f*).

This perception of food insecurity is generalized to all the interviewed children, although regarding personal SES, there are differences between lower and middle-to-higher SES children on their opinion about the food habits of poor children. More specifically, among those that consider poor children have nothing to eat, the more extreme situation, 74% are from middle-to-higher SES and only 26% from lower SES (χ^2 (1) = 5.288, p = .021). Contrasting, but although the differences are not statistically significant (χ^2 (1) = 2.564, p = .109), there is a greater percentage of children from lower SES in relation to middle-to-higher SES having the less extreme perception about food consumption, by just referring that children have scarce food. This representation does not differ across age groups (Nothing to eat: χ^2 (2) = 2.455, p = .293; Scarce Food: χ^2 (2) = 0.035, p = .983) and it is also independent

[17] Although important in the understanding of the problematic under study, this sub-category is not going to be analysed and interpreted further due to the little representation in the sample. For the same reason, this frequency is not present in Table 3.

of school SES (Nothing to eat: χ^2 (1) = 0.034, p = .853; Scarce Food: χ^2 (1) = 0.048, p = .826).

Where do poor children live?. Children were asked about 'Where do poor children live?' and the majority of the participants referred that poor children live on the street (65%, n=69). Among children that have this image of poor children, most of the participants abstractly refer the street as the place of living (see Table 4, example *g*), although some children specify the exact place (e.g., under the bridge, next to the garbage) where poor children improperly live (see Table 4, examples *h* and *i*).

With a different perception of where the poor child lives, 28% (n=30) of the participants think that poor children have a home. Although children consider that possibility, some of them also state the bad conditions of the house where poor children normally inhabit (see Table 4, example *j*).

The representation about the place of living of poor children varies according to the personal SES of the participants (Streets: χ^2 (1) = 5.055, p = .025; Houses: χ^2 (1) = 6.291, p = .012). While middle-to-higher SES children consider mostly that poor children is homeless (75%; n=50), the perception of lower SES children divides between the two representations of poor children living in houses (44%; n=16) or living on the streets (53%; n=19). The perceptions regarding the place where poor children live does not vary with age (Streets: χ^2 (2) = 3.982, p = .137; Houses: χ^2 (2) = 2.339, p = .310) nor with school SES (Streets: χ^2 (1) = 3.067, p = .080; Houses: χ^2 (1) = 2.898, p = .089).

How do poor children feel?. The feelings of poor children are a very relevant category when it comes to the images of poor children in childhood. The frequent presence of this sub-category when accessing children's spontaneous images about poor children markedly illustrates its importance. Indeed, as previously noted, 3 out of 10 children interviewed reported spontaneously that poor children are sad. However, this question was additionally addressed to all participants and when asked directly about how poor children felt, the vast majority (81%, n=87) reported that they felt bad or sad (see Table 4, examples *k to m).*

This image is not only present in the discourse of the participants, but also the drawings made by children are well representative of the perception of these negative feelings on the part of the poor children, where the majority of the participants draw a poor child with a sad smile (50.5 %, n=54) or even crying (10.3%, n=11; Figure 8).

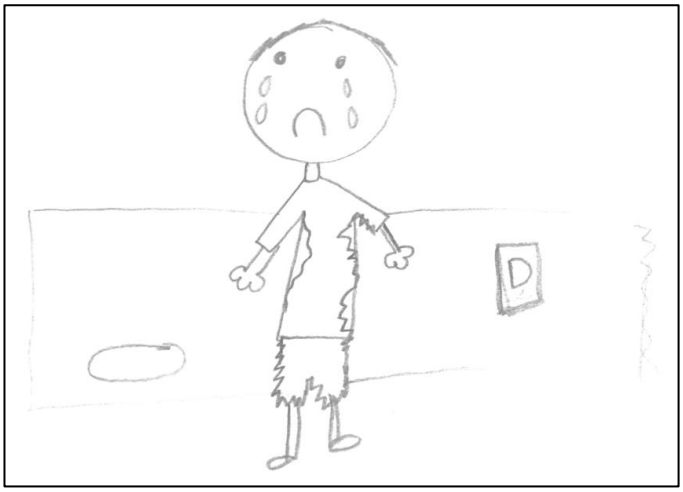


Figure 8. Drawing of a poor child crying (9 y.o., middle-to-higher SES_p, middle-to-higher SES_c)

Still, 16.8% (*n*=18) of respondents indicate that these poor children feel happy in their discourses (see Table 4, example *n*). In the drawings, 31.8% of the children draw poor children with a happy smile or with a neutral expression.

Despite that, regardless their age, children perceive that poor children are sad more than happy, these perceptions of poor children's feelings differ with age[18] (Sad: χ^2 (2) = 15.905, p < .001; Happy: χ^2 (2) = 8.030, p = .018). As such, younger children, more than older children, think that poor children feel better and are happier, with 31% (*n*=11) of the youngest referring that[19]. Almost all children aged 9-10 years old (94%, *n*=34) or 11-12 years old (89%, *n*=32) report that poor children feel bad or are unhappy[20].

Besides the feelings of sadness and happiness, 10% of respondents indicate that poor children feel alone, most often with reference to parental or friends absence (see Table 4, example *o*). This perception of loneliness is only present in the speech of the children above 9 years-old (χ^2 (2) = 6.111, p = .047).

What do poor children do during the day?. Poor children's daily life, namely, what do children do each day, was in some extent given spontaneously by children when referring

[18] No differences were found in the distribution of these sub-categories by personal and contextual school SES (always p > .157).

[19] The sub-category "Feeling good and happy" is reported by 11% of children aged 9-10 years and 8% of children aged 11-12 years.

[20] The sub-category "Feeling bad or unhappy" is reported by 60% of children aged 6-7.

to poor children as the ones that are begging on the street, looking for something to eat and dress, as it was presented above. The more specific question about what do children do in their daily routine is consistent with this first approach to the natural representation of poor children with 65% (*n*=69; see Table 4, example *p*) of the participants considering that children spend their day asking for money and food or looking for clothes, help or a place to stay. This representation is present by the majority of children in each age group, although the differences between age groups are marginally significant (χ^2 (2) = 5.667, *p* = .059), showing that this representation is marginally more present in the discourse of children above 9 years-old (9-10 y.o.: 78%, *n*=28; 11-12 y.o.: 71%, *n*=24) than in the discourse of the youngest (52%, *n*=17). This perception does not vary with socioeconomic status (χ^2 (1) = 2.735, *p* = .098 and χ^2 (1) = 0.006, *p* = .938, for personal and school SES respectively).

Children's drawings are also very demonstrative of the salience of this representation as 21.5% (*n*=23) draw a poor child that was begging on the street, as Figure 9 illustrates. Regarding the drawings, again the representation of poor children as beggars does not depend on the personal (χ^2 (1) = 1.358, *p* = .244) or school SES (χ^2 (1) = 1.431, *p* = .232). Although, considering the differences in age groups, children aged 9-10 years are the ones that mostly represent poor children asking for money or food in their drawings (36.1%; χ^2 (2) = 7.157, *p* = .028).

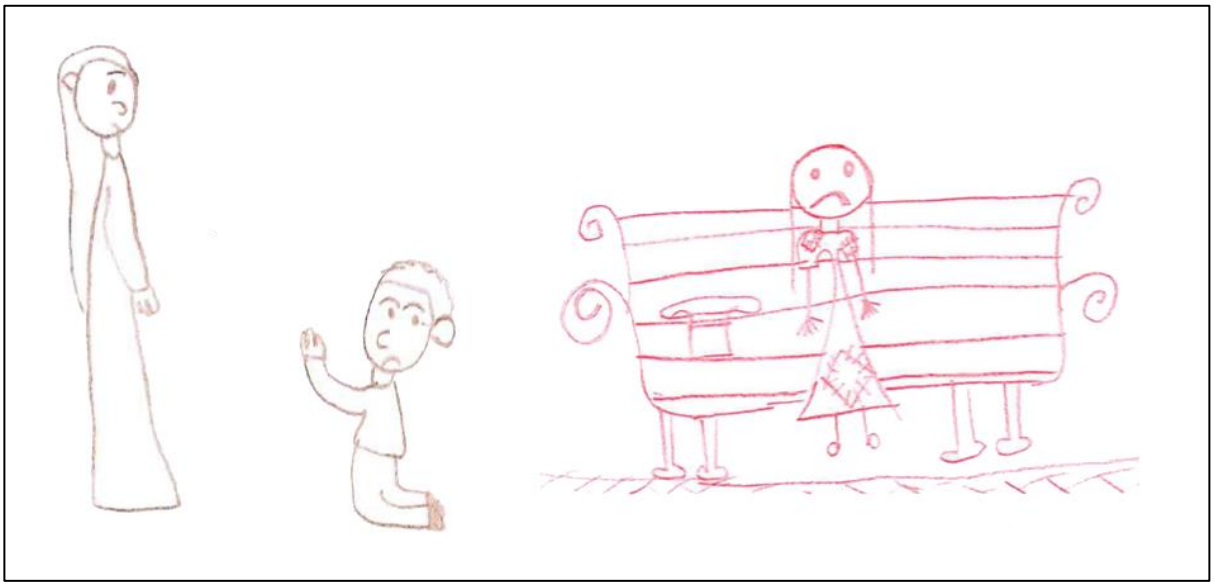


Figure 9. Two participants' drawings of poor children begging on the street (respectively: 9 y.o., lower SES_p, lower SES_c and 12 y.o., middle-to-higher SES_p, middle-to-higher SES_c participants)

Besides that, 19.6% (*n*=21) of the participants referred that during their day poor children played or stayed with their friends (*n*=17; see Table 4, example *q*), specially the youngest participants (χ^2 (2) = 6.631, p = .036). Walking around the city in the streets was something that children also mentioned as being an activity done by poor children (10.3%; *n*=11) during their day (see Table 4, example *r).* School attendance is referred by 10% (*n*=10) of the participants when speaking about poor children's daily routine, but in order to access the perception of all the participants regarding school attendance of the poor children, for those that did not refer that spontaneously, children were asked directly whether the poor child attended school or not. To this question, 68% (*n*=73) of respondents answered that poor children did not go to school, 23% (*n*=25) reported that they did and 6% (*n*=6) reported that some attend school and some do not. Children from lower SES mention largely that poor children attend school (38%) than middle-to-higher SES children do (16%; χ^2 (2) = 6.428, p = .040). Children pointed out different reasons for such nonattendance, like the lack of money to go to school or the absence of parents to organize things (see Table 4, example *s*). Furthermore, children mentioning that children go to school also pointed some references to the adaptation of poor children in school, by making reference to their relations with peers, and some exclusion that they face, and also their own behaviour in relation with the school system and teachers (see Table 4, examples *t* and *u*).

Stetereotype traits. In order to support and combine the results from the open questions about the poor children, we explored in detail the traits specifically attributed to each target group, non-poor children and poor children. For such, each trait adapted from the *Multi-response Racial Attitude Measure* (Doyle & Aboud, 1995) was individually analysed.

A test for comparing proportions for each trait assigned to each group of children allows to conclude that there are some traits that participants associate more to one group of children than another. In Table 5 we can find the list of adjectives and the respective proportions of affirmative answers for each of the evaluated groups, as well as the value and significance of the McNemar Test respectively. Thus, it is noteworthy that in the positive traits poor children by comparison with those who are not poor are considered less happy, less intelligent, less healthy, less lucky and less hard working. These children are still considered more unlucky, more ugly, dirtier and sadder than children who are not poor. Yet, it should also be noted that the participants felt that children who are not poor are more unfriendly, bad, stupid, rude and lazy than poor children target group.

Table 5

Comparison between the percentages of positive and negative traits attributed to the poor children and the non-poor children groups

	Non-poor children	Poor children	McNemar Test (χ^2)
Positive traits			
Friend	84%	86%	0.42
Funny	82%	77%	0.46
Good	76%	73%	0.09
Happy	97%	35%	51.75***
Hard worker	81%	53%	12.29***
Healthy	86%	39%	33.75***
Intelligent	90%	38%	36.38***
Lucky	86%	22%	53.16***
Nice	81%	69%	2.63
Responsible	69%	76%	0.77
Negative traits			
Bad	41%	18%	10.02***
Dirty	7%	82%	63.01***
Lazy	52%	20%	14.75***
Rude	43%	22%	6.94***
Sad	11%	80%	57.09***
Stupid	43%	15%	13.8***
Ugly	15%	56%	29.25***
Unfriendly	42%	19%	8.82***
Unlucky	16%	78%	48.35***
Violent	33%	19%	3.84*

Note: * $p < .05$; ** $p < .01$; *** $p < .001$

In order to verify if there is a change in the representations of the poor children along childhood, the attributions of the traits to this social group were compared by age group through the calculation of Chi-Square. Results show that, for some traits, there is variation across age, as can be seen in Table 6. With regard to positive traits, children after 9-10 years

begin to attribute these traits to the poor child in a larger extent. On the contrary, with the exception of the 'dirty' trait, mainly younger participants attribute the negative traits that differ by age ('rude, lazy' and violent '). These results point to more negative beliefs about the poor children in the age group of younger children.

Table 6

Positive and negative traits attributed to the poor children that changed along childhood

	6-7 y.o.	9-10 y.o.	11-12 y.o.	χ^2
Positive traits				
Friend	68%	100%	91%	14.491**
Good	56%	83%	79%	6.876*
Funny	63%	77%	91%	7.678*
Responsible	60%	87%	82%	7.841*
Nice	50%	77%	79%	7.910*
Negative traits				
Rude	41%	10%	15%	10.081**
Lazy	34%	10%	15%	6.653*
Dirty	66%	97%	85%	10.564**
Violent	31%	3%	21%	8.038*

Note: * $p < .05$; ** $p < .01$; *** $p < .001$

Regarding SES, chi-square analysis show differences in the attribution of the positive traits Happy, Intelligent and Lucky according to the personal SES of the participants. For these traits, lower personal SES children always attribute more positive traits than middle-to-higher SES children. Still regarding positive traits by school SES, it was only found differences in the attribution of the trait Happy (Table 7). Regarding the negative traits, differences were found in the traits Rude, Sad and Violent. Lower SES children attribute more the trait rude and violent to poor children than middle-to-higher SES children. Children attending schools from middle-to-higher SES attribute more the traits sad than children from lower SES schools, children attending schools from lower SES attribute more the traits rude than children from middle-to-higher SES schools (Table 7).

Table 7

Positive and negative traits attributed to the poor children that changed across different personal and contextual SES

	Lower SES_p	Middle-to-higher SES_p	By SES_p χ^2	Lower SES_c	Middle-to-higher SES_c	By SES_c χ^2
Positive traits						
Happy	52%	27%	5.698*	51%	25%	7.288**
Inteligent	52%	30%	4.214*	49%	30%	3.527†
Lucky	33%	16%	3.863*	28%	18%	1.540
Negative traits						
Rude	33%	16%	3.863**	33%	14%	5.046*
Sad	84%	73%	1.773	67%	90%	7.588**
Violent	30%	13%	4.406*	21%	18%	0.134

Note: † $p < .10$; * $p < .05$; ** $p < .001$

Attitudes towards poor children

Affective attitude towards poor children. Children were asked if they liked or not poor children and non-poor children. For both open questions, responses were given freely and coded in three possible categories: No, More a less[21] and Yes.

Table 8 presents the frequencies of the answers to these questions. The results seem to indicate that participants tend to like more the non-poor child (86% do like non-poor children and 69% do like poor children) and have a more intermediate position on referring to liking poor children (24%). We conducted a non-parametric marginal homogeneity test, and the results show that these differences are in fact marginally significant ($p = .052$).

[21] The category of 'More a less' includes the responses that children gave indicating that they liked poor/non-poor children 'more a less', that 'it depended' or when children answered 'don't know'.

Table 8

Absolute and relative frequencies of the answers for the questions "Do you like poor children?" and "Do you like non-poor children?"

		n	% (N=107)	By age χ^2	By SES_p χ^2	By SES_c χ^2
Do you like poor children?	No	7	7%			
	More a less	24	24%	4.994	10.034*	0.229
	Yes	68	69%			
Do you like non-poor children?	No	6	6%			
	More a less	7	7%	5.447	0.464	2.261
	Yes	81	86%			

Note: $^{*}p < .01$

Children's affection for non-poor children is not influenced by age (χ^2 (4) = 5.447, p = .244), objective SES (χ^2 (2) = 0.464, p = .793) or contextual SES (χ^2 (2) = 2.261, p = .323). Regarding the poor child, while age (χ^2 (4) = 4.994, p = .228) and contextual SES (χ^2 (4) = 0.229, p = .892) do not influence their liking or not of the poor child, objective SES (χ^2 (2) = 10.034, p = .007) does. In this sense, 77.1% of lower SES children and 64.1% of middle-to-higher SES answer that they like poor children. Although, above the expected count, 33% of middle-to-higher SES participants like poor children more a less, while only 9% of lower SES children give this response, below the expected count. Moreover, besides the fact that very few children (*n*=7, 7%) say that do not like poor children, lower SES children gave this is answer in more extent (*n*=5) than middle-to-higher SES children (*n*=2).

Explicit Attitudes towards poor children. In general, regarding the overall Intergroup Evaluation Index children from 6 to 12 years old hold more favourable attitudes towards the non-poor than towards the poor children (M = 3.72; SD = 6.63), given the positive score ($t_{\text{against 0}}$ (95) = 5.499, p < .001, d = 0.56).

In order to understand the development of the explicit attitude of the participants towards the social class related categories, a Mixed ANOVA was conducted to examine differences regarding the degree to which children attribute positive and negative traits to children who are Poor and Non-poor. This analysis included two within-subject factors: Target group (poor and non-poor) and Valence of the trait (positive and negative); and three

between-subject factors, Age (6-7 years-old vs 9-10 years-old vs 11-12 years-old), Contextual SES school (lower SES vs middle-to-higher SES) and Personal SES (lower SES vs middle-to-higher SES)[22].

A main effect of target (F (1, 87) = 10.137, p = .002, η^2= .05) was found, showing that participants attributed more traits to children who are not poor (M=5.56; SE=0.12) than to poor children (M=5.03; SE=0.14)[23]. It was also found a main effect of valence (F (1, 87) = 116.978, p < .001, η^2= .49), meaning that overall children attribute more positive traits (M=6.24; SE=0.66) than negative traits (M=6.24; SE=0.66). These two main effects were qualified by a significant interaction between target and valence (F(1, 87) = 23.473, p < .001, η^2= .17). Overall participants attribute more positive traits to non-poor (M=8.33; SD=2.32) than to poor children (M=5.68; SD=2.80; F (1, 90) = 27.411, p < .001, η_p^2= .240), whereas they attribute more negative traits to poor (M=4.08; SD=2.28) than to non-poor children (M=3.02; SD=2.40; F (1, 90) = 11.137, p = .001, η_p^2=.113).

This interaction is further qualified by age, as a three-way interaction was found between target, valence and age (F (2, 87) = 4.823, p = .001, η^2= .08), as can be seen in Figure 10. Across age groups, participants attribute more positive traits than negative traits to non-poor children (for 6-7 y.o. children: M=8.78, SD=2.03 vs M=2.34, SD=2.36; F (1, 87) = 88.925, p < .001, η_p^2= .55; for 9-10 y.o. children: M=8.16, SD=2.73 vs M=3.73, SD=2.26; F (1, 87) = 20.214, p < .001, η_p^2= .19; for 11-12 y.o. children: M=8.06, SD=2.19 vs M=3.03, SD=2.43; F (1, 87) = 51.951, p < .001, η_p^2= .37). Regarding the trait attribution to poor children, 6-7-year-old children attribute the same number of positive and negative traits

[22] The ANOVA model excluded all second- and third-order terms including the interaction between contextual and personal SES. Moreover, sum of squares Type IV was chosen due to the existence of missing values.

[23] An interaction between target and personal SES was found (F (1, 87) = 8.744, p = .004, η^2 = .04). This interaction was qualified by a three-way interaction between target, age and personal SES (F (1, 87) = 3.902, p = 0.024, η^2= .04) was found. We found differences regarding the extent to which children aged 9-10 years from low or middle personal SES attribute traits to poor and non-poor children. In this age group, children from middle-to-higher SES attribute more traits to the non-poor child (M=6.29; SE=0.39) than to the poor child (M=3.99; SE=0.46; F (1, 87) = 17.582, p < .001, η_p^2= .168). On the contrary, we find a marginally significant difference in children aged 9-10 years from lower SES, as they attribute on average more traits to the poor child (M=6.24; SE=0.66) than to the non-poor child (M=4.76; SE=0.56; F (1, 87) = 3.609, p = .061, η_p^2= .04). The number of traits attributed by 9-10 year-olds for the non-poor, are marginally significantly different across SES (F (1, 87) = 3.301, p = .073, η_p^2= .04), whereas lower SES children attribute more traits to the poor that middle-to-higher SES children (F (1, 87) = 5.142, p = .026, η_p^2= .06).

(*M*=5.19, *SD*=3.53 vs *M*=4.44, *SD*=2.90; *F* (1, 87) = 0.323, *p* = .571), while the two older age groups attribute more positive than negative traits to poor children (for 9-10 y.o. children: *M*=5.73, *SD*=2.39 vs. *M*=3.90, *SD*=1.54; *F* (1, 87) = 6.385, *p* = .013, η_p^2=.07; and for 11-12 y.o. children*: M*=6.08, *SD*=2.31 vs. *M*=3.91, *SD*=2.21; *F* (1, 87) = 8.536, *p* = .004, η_p^2= .09). The results also show that only 6-7-year-olds attribute significantly more negative traits to the poor children than to the non-poor children (*F* (1,87) = 18.463, *p* < .001, η_p^2 = .175). Moreover, the youngest and the oldest age groups, attribute significantly more positive traits to the non-poor children than to the poor child target (*F* (1, 87) = 29.038, *p* < .001, η_p^2 = .25 and *F* (1, 87) = 7.214, *p* = .009, η_p^2 = .08, respectively). In terms of age, we only found a significant difference between the number of positive and negative traits attributed to the poor child category by 6-7 and 9-10 year-olds (*p* = .009 and *p* = .025)

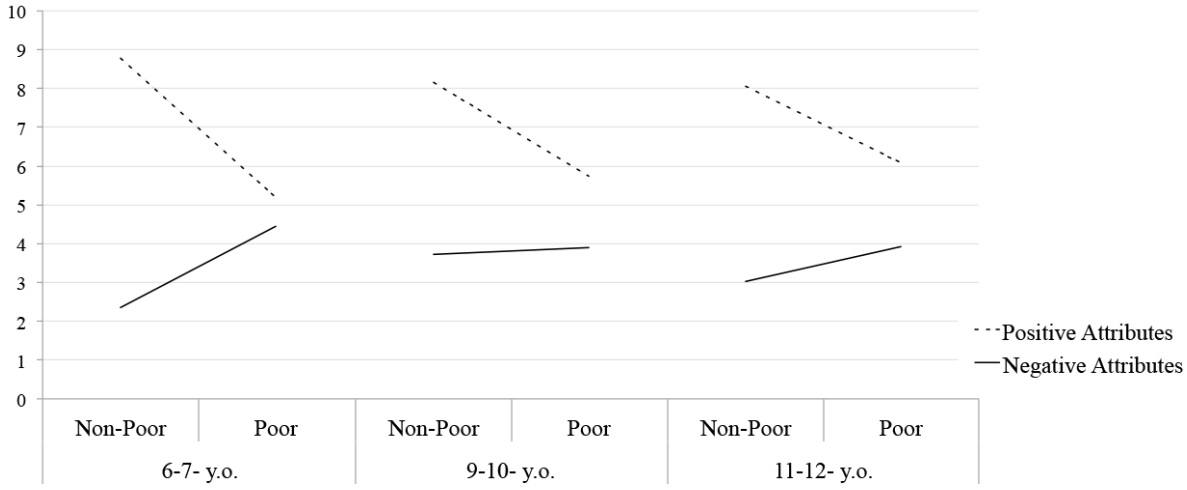


Figure 10. Negative and Positive traits assigned to the poor and non-poor child, by age group

It was also found a second three-way interaction between Target, Valence and School SES (*F* (1, 87) = 7.456, *p* = .008, η^2 = .06). As Figure 11 illustrates, it is the middle SES school where participants make more positive attributions to the non-poor than to the poor (*M*=9.05, *SD*=1.87 vs. *M*=5.26, *SD*=2.70; *F* (1, 87) = 19.025, *p* < .001, η_p^2= .18), and make more negative attributions to the poor than to the non-poor (*M*=4.17, *SD*=2.24 vs. *M*=2.49, *SD*=2.35; *F* (1, 87) = 18.860, *p* < .001, η_p^2= .18). Children from middle SES schools do not differ in their attributions of negative and positive traits to the poor children (*F* (1, 87) = 1.671, *p* = .200, η_p^2= .02), while children from lower SES school attribute more positive than negative traits to the poor children (*M*=6.28, *SD*=2.86 vs. *M*=3.95, *SD*=2.37; *F* (1, 87) = 7.893, *p* = .006, η_p^2= .08). From both school SES, participants attribute significantly more

positive traits than negative ones to the non-poor (Lower SES school: F (1, 87) = 18.946, p < .001, η_p^2= .18 and Middle SES school: F (1, 87) = 86.731, p < .001, η_p^2= .50) and to the poor. Children from the lower SES school attribute to the two targets the same amount of negative and positive traits (always p > .112). [24]

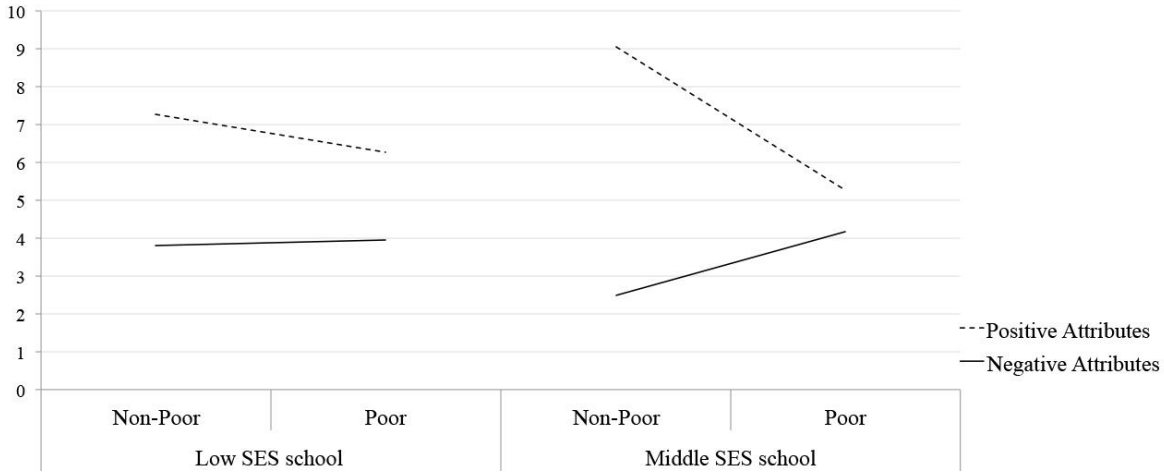


Figure 11. Negative and Positive traits attributed the poor and non-poor child, by school SES

Behaviours towards poor children

Perceived and personal intended behaviour towards poor children. The way poor children are treated was accessed through different perspectives. On the one hand, children were asked regarding how other children treated poor children. On the other hand, they were also asked about how they personally acted, or imagined they would act, in the presence of a poor child. Absolute and relative frequencies of each of the sub-categories of these two dimensions are presented in Table 9 and excerpts from children's discourse are presented in Table 10.

[24] Intergroup evaluation index was subjected to a between subjects analysis of variance, including three between-subject Age (6-7 years-old vs. 9-10 years-old vs. 11-12 years-old), Contextual SES school (lower SES vs. middle-to-higher -SES) and Personal SES (lower SES vs. middle-to-higher SES). A marginal main effect of age (F (2, 85) = 2.912, p = .060, η^2=.04) and a main effect of contextual SES (F (1, 85) = 9.721, p = .002, η^2=.07) were found. Comparing to older children (9-10 years-old, M=2.60, SD=6.49; 11-12 years-old, M=2.85, SD=5.92), the youngest (6-7 years-old; M=5.69; SD=7.19) show a greater intergroup bias favouring the non-poor in relation to older children (always p < .038). Children from schools with middle-to-higher -SES background (M=5.47, SD=6.29) show a greater bias towards non-poor than children from lower SES schools (M=1.15, SD=6.34; p < .001). No main effect of personal SES or interactions were found.

The most common perceived behaviour towards poor children is helping behaviour (62%; *n*=63), for example, giving food, money or clothes (see Table 10, example *a*). These type of behaviour is independent of age ($\chi^2(2) = 0.581$, $p = .748$) and of personal SES ($\chi^2(1) = 2.617$, $p = .106$). However, when considering the school context that children attend, we find that children attending schools of higher SES perceive helping behaviours in a greater extent (69%) than children from lower SES schools (47%; $\chi^2(1) = 5.322$, $p = .021$).

Table 9

How are poor children treated by other children and by you?: Absolute and relative frequencies

Dimension	**Categ.**	**Sub-categories**	***n***	**% (*N*=107)**	**By age χ^2**	**By SES_p χ^2**	**By SES_c χ^2**
Perception of others behaviour	Positive	Help	63	62%	0.581	2.617	5.321*
		Play	36	35%	1.190	1.761	0.040
		Friendship	17	17%	4.964†	0.012	0.898
	Negative	Mistreat or making fun	48	47%	17.053***	0.369	≈0.000
		Contempt and indifference	37	36%	12.385**	0.394	0.629
Personal intended behaviour	Positive	Help	67	68%	5.340†	9.491**	5.193*
		Friendship - Play	27	28%	3.914	2.134	4.288*
		Friendship - Closeness	17	17%	6.751*	0.195	0.898
	Negative	Indifference[25]	6	6%	3.105	0.027	0.045

Note: † $p < .10$; * $p < .05$; ** $p < .01$; *** $p < .001$

[25] Although with an absolute frequency lower than ten, and contrary of the explanation in the methods section, we opted to present this category to demonstrate the lack of negative personal behaviours towards poor children in the discourse of the participants.

Table 10

Behaviour towards poor children: Examples of codes for the sub-categories of intended behaviours and personal behaviours towards poor children

Category: Perception of others behaviour			
	Sub-Category	**Codes**	**Participant**
(a)	Help	"They try to help him, in school and at home. They could help their parents, borrowing clothes and stuff like that."	11 y.o., middle-to-higher SES_p, middle-to-higher SES_c
(b)	Play	"They play, jump, hop, roll on the floor and do gymnastics."	6 y.o., middle-to-higher SES_p, lower SES_c
(c)	Friendship	"(…) and even if the others excluded her she was not going to do that, she would always be with her. To support her in whatever she needed."	12 y.o., middle-to-higher SES_p, middle SES_c
(d)	Mistreat or make fun	"They may feel bad, because their schoolmates don't play with them and because they have few friends."	11 y.o., middle-to-higher SES_p, middle-to-higher SES_c
(e)	Mistreat or make fun	"Because there are people that say 'Oh, that one is poor', and they don't play with him. And there are others that say that they smell bad and stuff like that."	10 y.o., lower SES_p, lower SES_c
(f)	Contempt or indifference	"I guess they do not mind them when they pass for them in the street, or if they see him distressed on the floor they do not help."	9 y.o., middle-to-higher SES_p, middle-to-higher SES_c
Category: Personal intended behaviour			
	Sub-Category	**Codes**	**Participant**
(g)	Help	"(*about the drawing*) I am giving money and the rest of my snack. My mother always divides my sandwiches in case I do not want half. So I'm giving that half to the poor boy."	9 y.o., middle-to-higher SES_p, middle-to-higher SES_c

(h)	Friendship-Close	"I would try to amuse her. If she has a bad time I want to amuse her and show her that although she is poor, she can have a lot of fun also."	11 y.o., lower SES_p, lower SES_c
(i)	Friendship-Play	"We played the swords, played rackets, played in the street and drank juice."	9 y.o., middle-to-higher SES_p, middle-to-higher SES_c
(j)	Indifference	"[When you see a poor child, what do you usually do?] I don't know. I do not mind them at all."	9 y.o., lower SES_p, lower SES_c

Other positive behaviours that children mentioned were playing with (35%; *n*=36; see Table 10, example *b*) or being friends of a poor child (17%; *n*=17; see Table 10, example *c*). These two perceptions do not evolve with age ($\chi^2(2)=1.190$, $p = .552$ and $\chi^2(2)=4.964$, $p = .084$, respectively), nor with personal SES ($\chi^2(1)=1.761$, $p = 0.185$ and $\chi^2(1)=0.012$, $p = .914$, respectively), and contextual SES ($\chi^2(1)=0.040$, $p = 0.842$ and $\chi^2(1)=0.898$, $p = .343$, respectively).

Contrastingly, almost half of the participants consider that poor children are victims of negative behaviours from non-poor children, like being mistreated or ridiculed (47%; *n*=48). Participants perceive that poor children can be a target of exclusion in schools and some participants, while making reference of the presence of children in school, mention poor children inclusion or exclusion by their peers (see Table 10, examples *d* and *e*). Other negative behaviour present in children's discourse is indifference (36%, *n*=37; see Table 10, example *f*).

Perception of negative behaviours increase with age, as with age children's perception that other children make fun of poor children increases ($\chi^2(2)=17.053$, $p < .001$) and also increases the perception that other children despise, ignore or exclude poor children ($\chi^2(2)=12.385$, $p = .002$). This type of behaviour is perceived equally among children from different personal SES ($\chi^2(1)=0.369$, $p = .543$ and $\chi^2(1)=0.394$, $p = .530$, for mistreating and contempt behaviour respectively) and different school's SES ($\chi^2(1)=17.053$, $p < .001$ and $\chi^2(1)=0.000$, $p = .994$, for mistreating and contempt behaviour respectively).

When reflecting about their own behaviour, the participants almost ever refer to positive behaviours towards poor children (see Table 9), with only 6% of children stating they react with indifference towards this group of children (see Table 10, example *j*).

Inversely, 68% of the participants mention that they help or would help poor children, by giving money, food or clothes (see Table 10, example *g*). Yet, other positive behaviours that instigate more proximity among actors, for example, playing or close friendship are referred by fewer participants (28% and 17%, respectively; see Table 10, example *h* and *i*).

Analysing the differences between the groups according to participants' personal SES, results show that among children from middle-to-higher personal SES, there are more children showing intention for helping poor children (74%; $\chi^2(1) = 9.491$, $p = .002$) than among those from lower SES (44%). In the same way, children from middle-to-higher SES school (63%) show more intention for helping poor children ($\chi^2(1) = 5.193$, $p = .023$) than those from the lower SES context (37%). On the contrary, children from lower SES school (63%) show more intention for playing with poor children ($\chi^2(1) = 4.288$, $p = .038$) than those from middle-to-higher SES context (37%).[26]

Some of the participants also used the drawings to express their will in interacting with poor children, namely, drawing their self-portrait acting on helping them. Figure 12 is very representative of what many of the participants reported when reflecting other's behaviour and their own behaviour. In this representation, in black colour we find the poor child begging on the street with someone helping him, then in blue the participant draw a non-poor children teasing with the poor child, and lastly, in yellow, the participant draw himself having a defensive and protective behaviour towards the poor child (by asking the non-poor to shut up).

[26] There are no differences among children from personal middle-to-higher SES or lower SES ($\chi^2(1)=2.134$, $p = .144$)



Figure 12. Drawing of an interaction between a poor child, a non-poor child and the participant (9 years-old, middle-to-higher personal SES, middle-to-higher SES school).

Attitudes towards engaging in contact with poor children. In order to analyse if children's age and SES influenced children's attitudes towards engaging with poor children, an analysis of variance was conducted with the three between subject variables: Age (6-7 years-old vs 9-10 years-old vs 11-12 years-old), Contextual SES school (lower SES school vs. middle-to-higher SES school) and Personal SES (lower SES vs. middle-to-higher SES)[27]. A main effect of age (F (2, 97) = 3.809, p = .026, η^2 = .07) was found showing that with age children's attitudes towards engaging with poor children increased. Follow-up pairwise comparison indicate that children aged 11-12 years consider most favourably the possibility to engage in contact with poor children (M = 4.25, SD = .60) than the other age groups (6-7 y.o. children: M=3.61, SD=1.21; p = .003; 9-10 y.o. children: M = 3.79, SD= 0.71, p = .03). The attitudes about engaging with poor children of children aged 9-10 y.o. did not differed from the youngest (p = .410). No main effect of contextual SES (F (1, 97) = 0.002, p = .961, η^2 < .01), personal SES (F (1, 97) = 1.238, p = .269, η^2 = .01), interaction between age and

[27] The model did not include the two-way interaction between contextual and personal SES and the three-way interaction between the three variables.

contextual SES (F (2, 97) = 1.007, p = .369, $\eta^2 = .02$) and interaction between age and personal SES (F (2, 97) = 0.205, p = .815, $\eta^2 < .01$) was found.

Comparison of the self-portrait with the poor-portrait

In order to explore how children perceive themselves in terms of their own economic situation, children's self-portraits were analysed in comparison to the poor child drawings. However, in this study this was only an exploratory objective and there was no addressed question to understand whether participants thought of themselves regarding the social class categories of poor or non-poor children.

As a source of information regarding this differentiation between the self and the poor children, children's drawings were analysed comparing the drawing of the poor child with the drawings of themselves. In this sense, and as reported in a previous section, regarding the colours used for both drawings we can observe that children do the self-portrait in a lighter colour (67.3%, n=72) than in poor children's drawings (38.3%, n=41; $p < .001$). The use of brighter or darker colours in their self-portraits differs with age (χ^2 (2) = 6.995, p = .030), in the sense that children above 9 years-old draw themselves in darker colours (around 40% of children in both groups) than the younger children (14.7%, n=5, draw themselves in dark colours). However, the use of the brighter or darker colours in their self-portrait is not related to their objective SES (χ^2(1) = 1.488, p = .223) and school SES (χ^2(1) = 0.027, p = .868).

Moreover, when comparing the facial expression of poor children's drawing and the self-portraits, an only child that draw himself with a sad expression, a case that will be further presented in more detail (Figure 14). The majority of the participants draw themselves with a happy expression (83.2%, n=89) and some of them with a neutral expression (12.1%, n=13). The distribution of answers on the normal and happy expressions across personal SES (χ^2 (2) = 3.703, p = .157), school SES (χ^2 (2) = 1.518, p = .468) and age (χ^2 (4) = 2.768, p = .597) is not significant.

Analysing in depth the two drawings, the poor child and the self-portrait, we can conclude that 15% (n=16) of the participants did make a major difference between the two, by drawing themselves with a lot of toys or a lot of food, or with more artefacts like necklaces or branded named clothes, or inside a home, while the poor is lying on the street. In this differentiation represented through the drawings, there were no differences regarding

age, objective and school SES (always $p > .562$). Drawings in Figure 13 are an example of this spontaneous distance between the self and the non-poor[28].

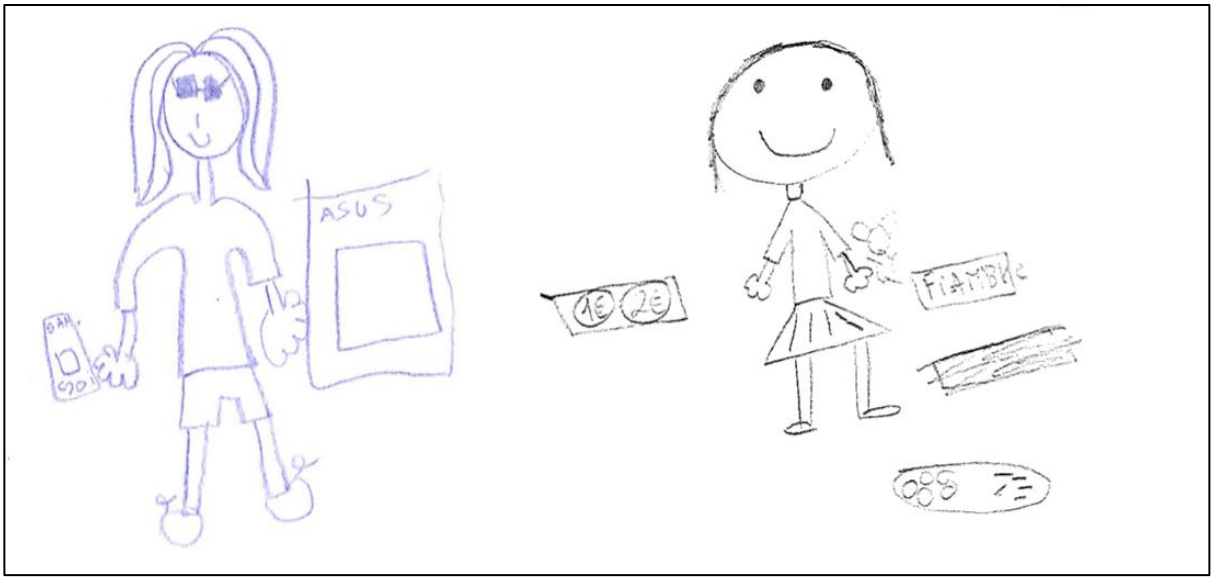


Figure 13. Two drawings of the self (respectively: 11 y.o., middle-to-higher SES_p, lower SES_c and 11 y.o., middle-to-higher SES_p, lower SES_c participants).

Although we did not ask children explicitly about the perception of their own economic situation, comparisons of themselves in relation to poor children were introduced in the discourse of some participants (23%; *n*=25). However, the majority of children did not describe their own economic situation during the interview. For those children who referred to that, they referred to themselves by stating that poor children are just like themselves (12%, *n*=4; see Table 11, example *a*) but most of the self-references found in the discourse of children were, on the contrary, to notice that they were different from poor child: 76% (*n*=19) of the participants who made self-references stated that poor children had fewer economic possibilities than themselves (see Table 11, examples *b* to *d*).

[28] The contrasting figure of the poor child drawing of the same participant of black coloured figure in Figure 13 is presented in Figure 8.

Table 11

Comparison with the self: Examples of codes for each sub-category

Category: Comparison with the self			
	Sub-Category	**Codes**	**Participant**
(a)	Poor children equal than me/us	"That they are normal, just like us."	9 years-old, lower SES_p, lower SES_c
(b)	Me/us better than poor children	"They can live in houses, but they are not like ours so organized and confortable... their houses are like little huts that they build."	12 years-old, middle-to-higher SES_p, middle-to-higher SES_c
(c)	Me/us better than poor children	"So, I can say that I live a little above average because what I have, a lot of people does not have. For example, here at school I think there are many people who do not have half or one third of what I have."	11 years-old, middle-to-higher SES_p, lower SES_c
(d)	Me/us better than poor children	"(*Before drawing the self-portrait, pointing to the non-poor drawing*) I'm just like this one, and I do not even have to draw me ... I'm not saying I'm as rich as this, but I also have the conditions to live."	6 years-old, lower SES_p, lower SES_c

In a unique interview, an 11 year-old child, spontaneously referenced as being from a low SES background, which singled out from our pattern of results and constitutes a negative case in our data analysis. Immediately after starting the interview, he reported that he was a poor child. From that moment, this participant draw himself, as can be seen in Figure 14. Then, this specific interview was about their experience about being a poor child, following an alternative interview script (Appendix C).

As can be seen in this self-portrait, this participant depicted himself in school, but crying and thinking in having money. The main reason pointed by this participants, was his experience of being discriminated by his peers:

"They keep saying 'oh, Chinese pants'. They throw papers, saying 'what crap of pants are these?, you bought them at the Chinese store' and so on ... (...) Everyone says that, but some are really playing with me and others don't. They say that just to provoke me."

The description of this participant own situation reveals that he consider himself poor because he lacks money, receives the maximum economic support from school. He mentions his family lack of money to buy food, even sometimes missing breakfast because of his family economic hardship. When reflecting about his peers, and how he felted others treatment, it was evident the presence of behaviours like being mocked or lacking many true friends:

"I do, I do like them. But they make fun of me, many from my class and not only from my class. (...) I just have two or three friends who don't do that."

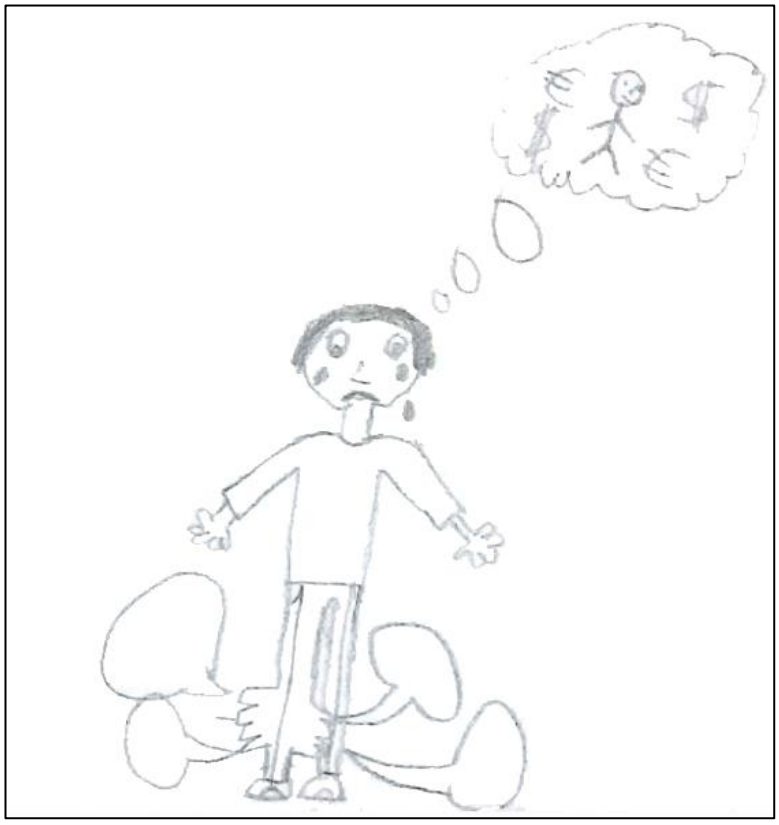


Figure 14. Self-Portrait of a child that self-categorized as a poor child (11 y.o., lower SES_p, lower SES_c)

Multiple Correspondence Analysis and Clustering of individuals according to their representation of poor children

In order to identify and characterize the different profiles of children's perceptions about children in poverty, a multiple correspondence analysis (MCA) and a cluster analysis (HCA and K-Means) were performed using the categorical variables associated with the perceptions regarding the place of living, food habits, clothing, emotions and daily routine (see Table 3)[29].

The MCA revealed two relevant dimensions accounting for 51.4% of the total variance (34.9% for the 1st dimension and 16.5% for the 2nd dimension). The interpretation of each dimension is based on the discrimination measures of each variable for both selected dimensions, which are presented in Table 12. Both dimensions discriminate the degree in which children think of poor children in a more or less extreme way. However, dimension one discriminates the perceptions regarding the daily life of poor children either regarding where they live, what they do during the day and also regarding what they normally eat. The second dimension differentiates the perceptions that children have regarding the personal image and feelings, much related to their emotional expression also captured in the drawings of the participants. The variable 'Scarce Food' discriminates in both dimensions, and although it discriminate more in dimension 2, it makes more sense to consider and interpret its association in dimension 1.

[29] The following variables were excluded from the present model of MCA: Clothing: 'No clothes or less clothes'; Feelings: 'Alone'; Daily life: 'Walk around'. The discrimination measures of the previous variables were inferior to the inertia of both dimensions, not adding substantive value to the analysis.

Table 12

Discrimination measures and contributions of active variables

Active Variables	Dimension 1		Dimension 2	
	Discrimination	Contribution (%)	Discrimination	Contribution (%)
Where do poor children live?:				
House	**0.613**	14.91	0.078	4.02
Streets	**0.693**	16.86	0.051	2.63
What do poor children wear?:				
Normal clothes	0.233	5.67	**0.248**	12.77
Torn clothes	0.064	1.56	**0.393**	20.24
What do poor children eat?:				
Scarce food	0.239	5.82	**0.352**	18.13
Nothing to eat	**0.519**	12.63	0.147	7.57
How do poor children feel?:				
Sad	0.297	7.23	**0.297**	15.29
Happy	0.182	4.43	**0.338**	17.40
What do poor children do during the day?:				
Begging on the streets	**0.478**	11.63	0.019	0.98
Play with friends	**0.347**	8.44	0.006	0.31
Go to school	**0.444**	10.80	0.014	0.72
Total	4.11	100.00	1.942	100.00
Inertia	0.374		0.177	

Note: Values in bold are above inertia for each dimension.

The intersection of the coordinates for each category of the active variables in both dimensions allows the configuration of a topological representation, which is provided in Figure 15. Results from this topological configuration allow us to identify three distinctive profiles, confirmed from a posteriori hierarchical cluster analysis with the resulting standardizing object scores from the MCA analysis. The three clusters were finally yielded from a k-means cluster analysis and are also presented in the topological configuration in Figure 15. The frequencies of the categories under analysis for each of the clusters are presented in Table 13.

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The cluster representing the beliefs of the majority of the participants (Cluster 1: 57%; *n*=61) was entitled 'Extreme poverty cluster'. Overall, the participants in this cluster are the ones that have a more severe vision of the conditions in which poor children live. As can be seen in the second and third quadrants, we can find the associations between the categories more connected to extreme poverty in relation to their daily habits and personal image. Children in the 'Extreme poverty cluster' believe that poor children live on the streets (93.4%), beg for food or money during the day (88.5%) instead of going to school (4.9%) or playing with friends (93.4%), and have nothing to eat (85.2%), associated to an image of the poor children as using torn clothes (50.8%) and feeling sad (93.4%).

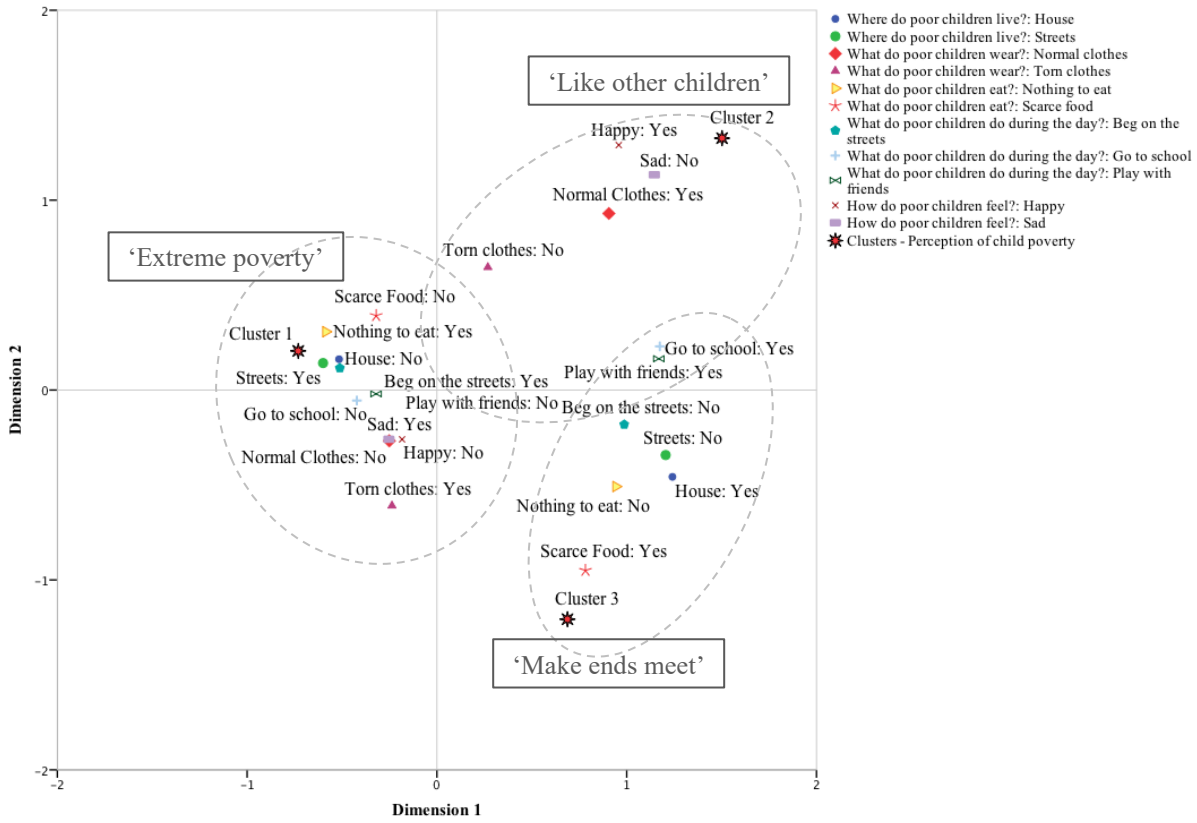


Figure 15. Topological configuration of children's perceptions of child poverty and typology (clusters) of individuals.

In contrast, a cluster of participants that represent poor children in the exact opposite way also emerged, displayed in the fourth quadrant and being constituted for the smaller number of participants (Cluster 2: 15.9%; *n*=17). Adopting the discourse of the interviewed

children, this cluster was named ‘Like other children’ and children in this cluster represent the poor child in a less extreme way. These participants regard poor children as happy (70.6%), as using normal clothes (76.5%), going to school (70.6%), living in houses (58.8%) and playing with friends (52.9%), instead of begging in the streets (23.5%).

Finally, with a more in-between position, a cluster emerged with children representing the poor as children that ‘Make ends meet’ (Cluster 3: 27.1%; *n*=29). For these participants, poor children’s food habits are the most distinctive and they consider that poor children have scarce food (79.3%), instead of nothing to eat (17.2%). Moreover, they represent poor children as living in houses (65.5%) but using torn clothes (82.8%) and being sad (89.7%).

Figure 16 presents the projection of the sociodemographic variables (age, personal and school SES) in the bidimensional graph where the emerging clusters are also represented. This projection demonstrates that, although the cluster representing poor children in extreme situation holds the majority of the participants, children aged 6-7 years-old associate more with the cluster that consider poor children ‘like other children’. As can be seen in Table 13, clusters are indeed different in their composition regarding children’s age ($\chi^2(4)=10.218$, p = .037). The cluster ‘Like other children’, with a less extreme child poverty representation, is mostly constituted by younger children, aged 6-7 years (64.7%). Cluster one, with the more extreme view of child poverty, has 3 in 4 children aged above 9 years (75.4%).

Regarding the socioeconomic variables, either personal or contextual, this variable does not contribute to characterize the profiles of children created. As displayed in Figure 16 and in Table 13, there are no differences in the composition of the clusters regarding objective personal SES (χ^2 (2) = 1.871, p= .392) and school SES (χ^2 (2) = 3.029, p= .220).

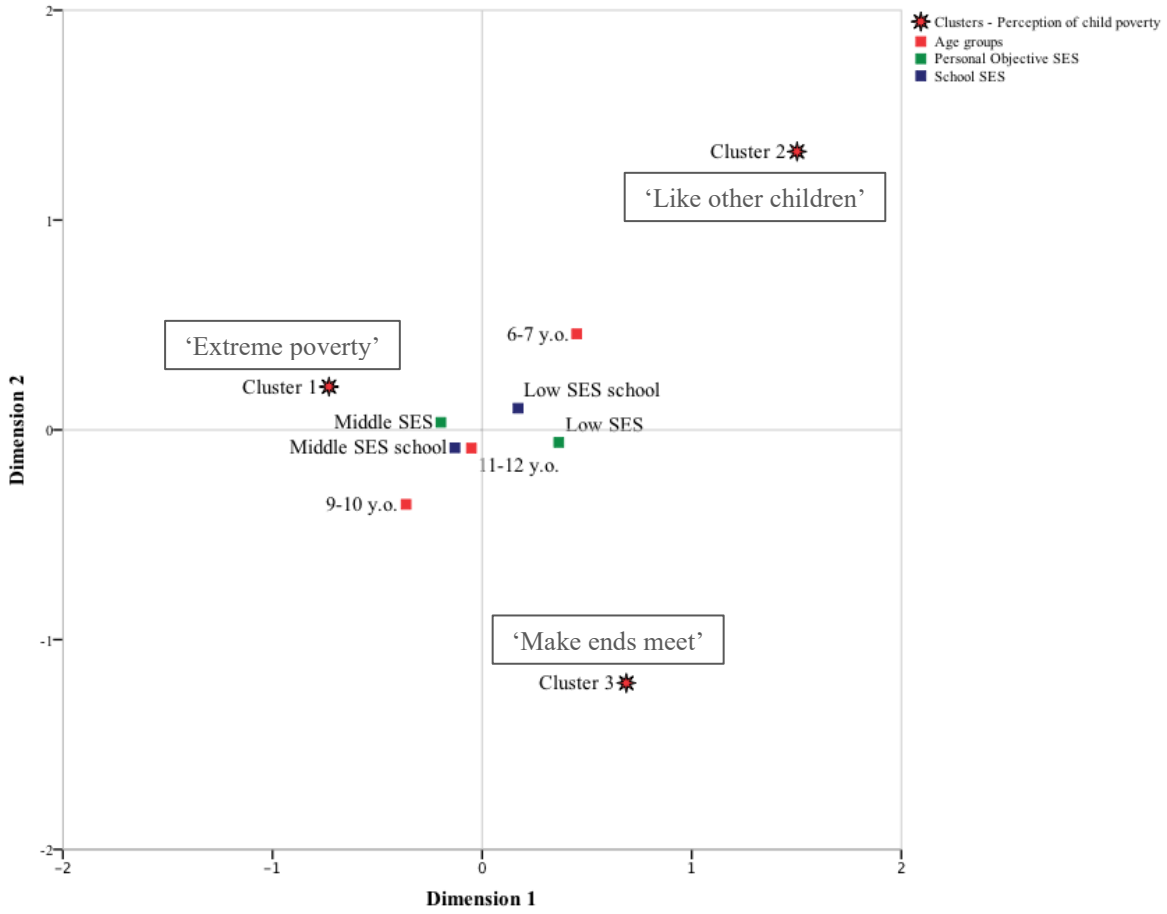


Figure 16. Association between sociodemographic variables and clusters of children's with different of representations of children living in poverty.

Table 13

Absolute and relative frequencies for the categories of the active variables and demographic variables for each cluster

Variables		Categories	Cluster 1 'Extreme poverty' (*n* = 61 , 57.0%)		Cluster 2 'Like other children' (*n* = 17 , 15.9%)		Cluster 3 'Make ends meet' (*n* = 29 , 27.1%)		χ^2
			n	%	*n*	%	*n*	%	
Where do poor children live?:	House	Yes	1	1.6	10	**58.8**	19	**65.5**	50.487**
		No	58	**95.1**	6	35.3	9	31.0	
	Streets	Yes	57	**93.4**	4	23.5	8	27.6	54.855**
		No	2	3.3	12	**70.6**	20	**69.0**	
What do poor children wear?:	Normal clothes	Yes	7	11.5	13	**76.5**	4	13.8	33.985**
		No	54	**88.5**	4	23.5	25	**86.2**	
	Torn clothes	Yes	31	50.8	0	0.0	24	**82.8**	29.404**
		No	30	49.2	17	**100.0**	5	17.2	
What do poor children wear?:	Scarce food	Yes	3	4.9	4	23.5	23	**79.3**	49.851**
		No	53	**86.9**	11	**64.7**	6	20.7	
	Nothing to eat	Yes	52	**85.2**	4	23.5	5	17.2	54.664**
		No	4	6.6	11	**64.7**	24	**82.8**	
How do poor children feel?:	Happy	Yes	5	8.2	12	**70.6**	1	3.4	42.072**
		No	56	**91.8**	5	29.4	28	**96.6**	
	Sad	Yes	57	**93.4**	4	23.5	26	**89.7**	44.582**
		No	4	6.6	13	**76.5**	3	10.3	

What do poor children do during the day?:	Begging on the streets	Yes	54	**88.5**	4	23.5	11	37.9	35.536**
		No	6	9.8	12	**70.6**	16	**55.2**	
	Play with friends	Yes	3	4.9	9	52.9	9	31.0	24.218**
		No	57	**93.4**	7	41.2	18	**62.1**	
	Go to school	Yes	3	4.9	12	**70.6**	10	34.5	38.824**
		No	55	**90.2**	3	17.6	15	**51.7**	
Demographics	Age	6-7 y.o.	15	24.6	11	64.7	9	31.0	10.218*
		9-10 y.o.	24	39.3	2	11.8	10	34.5	
		11-12 y.o.	22	36.1	4	23.5	10	34.5	
	Personal SES	Lower SES	42	68.9	9	52.9	17	58.6	1.871
		Middle-to-higher SES	19	31.1	8	47.1	12	41.4	
	School SES	Lower SES	25	41.0	11	64.7	13	44.8	3.029
		Middle-to-higher SES	36	59.0	6	35.3	16	55.2	

* $p < .05$; ** $p < .001$

Note: Values in bold indicates the majority of the responses for each cluster in the respective variable.

Another aim of this study was to explore how children's representations about poor children influence their attitudes and their intended behaviours towards poor children. For so, the relation between the three profiles of children, affective attitudes, intergroup evaluation index, the intended behaviours towards poor children, attitudes towards contact with poor children was analysed through the use of supplementary variables in the MCA (see Figure 17) and through statistic tests analysis (Table 14). In order to integrate the unexpected topic that was raised by the content analysis, we also analysed if there were differences in the colours used to draw the poor child and the self, depending on the profiles of representation of child poverty (also presented in Figure 17 and Table 14).

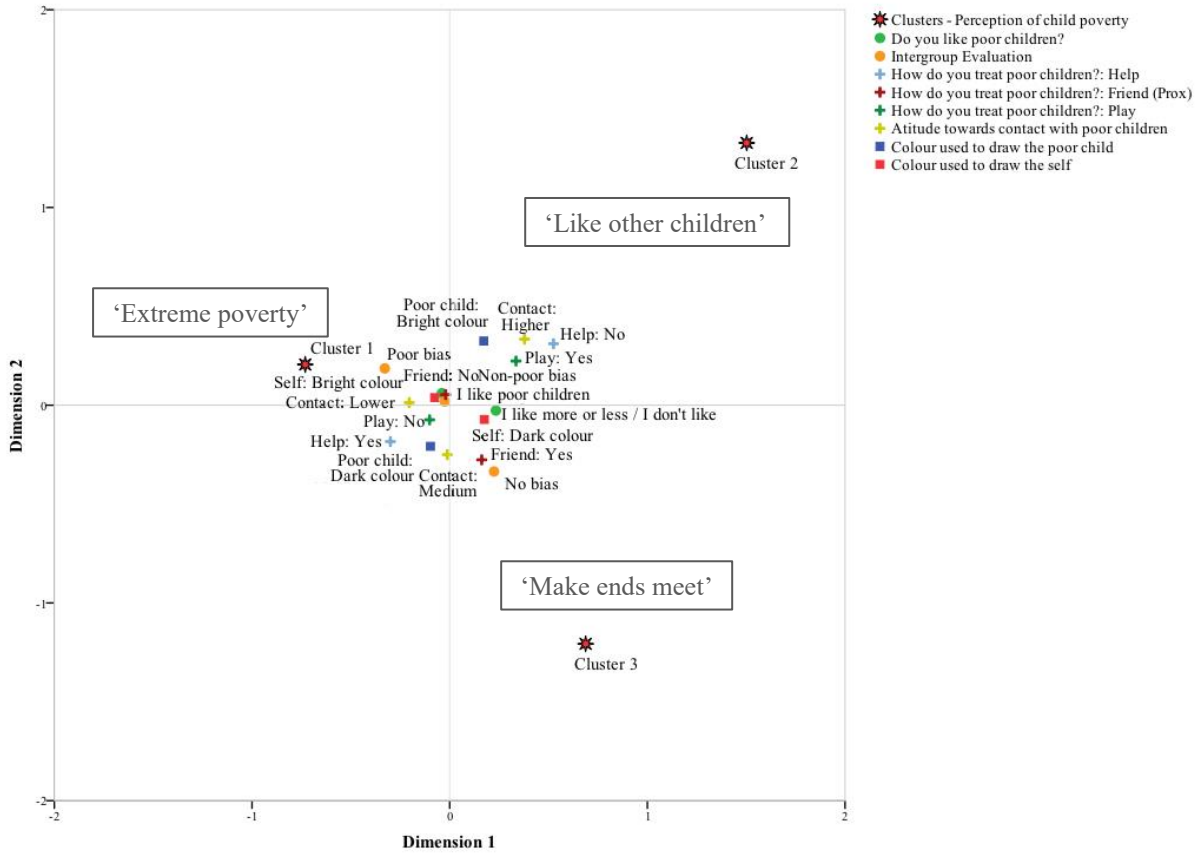


Figure 17. Association between attitudinal and behavioural variables and clusters of children's with different of representations of children living in poverty.

Generally, taking into account that the points of the categories of the supplementary variables are all very close to each other and some of them to the origin, it suggests that there is no differentiation of these different categories with respect to the profile of representations

of poverty in childhood, and these variables should all be equally distributed among the various groups formed.

Although, some variables may differentiate the groups. While attitudes towards poor children does not differ across the three profiles of representations (affective attitudes: $\chi^2(4)=6.357$, $p=.174$; intergroup evaluation index: F (2, 93) = 0.740, p = .480, $\eta_p^2 = .02$), behavioural intentions and attitudes towards contact do differ (F (2, 103) = 4.659, p = .012, $\eta_p^2 = .08$). It is in fact the participants with the less extreme representation of poor children that have the more favourable attitude towards engaging in contact with them (M=4.38, SD=0.66), that is significantly greater than the attitude of the cluster of children with the more extreme view (M=3.68, SD=0.97; p = .013) and marginally greater than the intermediate cluster (M=4.01, SD=0.80; p = .094). There was no statistically significant difference between clusters two and three (p = .172). Moreover, results also show that the more children perceive child poverty as extreme the more they intend to help poor children ($\chi^2(2)=18.955$, $p < .001$). Cluster representing poor children in a more extreme way, are the ones that mostly intend to help poor children (75.4%), followed by the cluster that think poor children as the ones that 'make ends meet' (62.1%). Within the representation 'Like other children', very few children show intention of helping poor children (17.6%). Although the differences in the distribution of the intention to play with poor children are not statistically significant ($\chi^2(2)=2.806$, $p=.246$), we can observe in Table 14 that cluster two is the one that shows more intention to play with poor children (41.2%). There are no significant differences between clusters regarding their intention to be friend with a poor child ($\chi^2(2)=4.075$, $p=.130$). Moreover, the use of colours to draw the poor children and the self-portrait do not vary significantly according to the representation children hold about poor children.

Table 14

Absolute and relative frequencies for the variables related to intended behaviours, affective attitudes towards poor children and colour used in the drawings of the poor children and the self for each cluster. Means and Standard Deviation for intergroup evaluation and attitudes towards contact with poor children.

Variables		Categories	Cluster 1 'Extreme poverty' (*n* = 61, 57%)		Cluster 2 'Like other children' (*n* = 17, 15.9%)		Cluster 3 'Make ends meet' (*n* = 29, 27.1%)		χ^2
			n	**%**	***n***	**%**	***n***	**%**	
How do you treat poor children?:	Help	Yes	46	**75.4**	3	17.6	18	**62.1**	18.955**
		No	15	24.6	14	**82.4**	11	37.9	
	Play	Yes	13	21.3	7	41.2	7	24.1	2.806
		No	48	78.7	10	58.8	22	75.9	
	Friend	Yes	7	11.5	2	11.8	8	27.6	4.075
		No	54	88.5	15	88.2	21	72.4	
Do you like poor children?		Yes	41	71.9	12	80	15	55.6	6.357
		More a less	14	24.6	1	6.7	9	24.2	
		No	2	3.5	2	13.3	3	11.1	
Colour – Drawing of the poor child		Dark	35	57.4	4	30.8	16	61.5	3.672
		Bright	26	42.6	9	69.2	10	38.5	
Colour – Drawing of the self		Dark	11	18.3	3	23.1	9	34.6	2.697
		Bright	49	81.7	10	76.9	17	65.4	
Variables			***M***	***SD***	***M***	***SD***	***M***	***SD***	***F***
Intergroup Evaluation Index			3.14	6.43	5.46	8.14	4.21	6.30	0.74
Attitude towards contact			3.68	0.97	4.38	0.66	4.01	0.80	4.659*

Note: * $p < 0.05$; ** $p < 0.01$

Discussion

Previous research has mainly focused on understanding children's beliefs about poor adults. The present work gives a significant contribution to research on the development of intergroup relations based on social class related categories by accessing 6- to 12-year-old children's representations particularly towards poor children. Specifically, this study explored the development of the stereotypes, attitudes and behaviours towards poor children, and the influence of socioeconomic status in this development. Following a mixed methods approach, our study aimed to see if children's negative representations of poor, found in previous studies, extended to the group of poor children. Moreover, by studying the interrelationships between these three main concepts, we aimed to investigate the influence of the perceptions about poor children on children's attitudes and intended behaviours towards poor children.

From the content analysis of children's discourse and analysis of their drawings, the results show that the majority of the participants hold negative stereotypes of this group of poor children and perceive them as deprived of the essential goods such as clothes, house or food. Along with this destitution of living standards, poor children are also characterized as being sad and alone, and begging in the streets for money or food. The use of darker colours to draw the poor child was also representative of the unfavourable image that children hold about the poor children. A detailed analysis of the traits used in the adaptation of the *Multi-response Racial Attitude Measure* (Doyle & Aboud, 1995) allowed seeing that poor children are considered as more sad, less intelligent, less healthy, less hard working, more unlucky, more ugly and dirtier compared to non-poor children. Overall, these results suggest that the stereotypes that children hold about poor children are similar to those that they hold about adults living in poverty, as children also describe poor children as being sad, lonely, dirty and lacking food (Amar et al., 2015; Rauscher et al., 2017; Sarti et al., 2015). However, lower SES children seem to have a less negative representation regarding some aspects of the daily life of poor children (e.g., place of living, eating habits and routines). In relation to middle SES children, lower SES children mentioned to greater extent that poor children attended school, lived in houses instead of living in the street and have something to eat, instead of nothing to eat and attribute more positive traits (e.g., happy, intelligent).

In order to identify different profiles of children's perceptions about children in poverty, we performed a Multiple Correspondence Analysis and Cluster analysis combining the perceptions regarding the place of living, food habits, clothing, emotions and daily routine. Three groups of children emerged from this analysis, differing in their representation

of the poor children in more or less severe material deprivation. A cluster entitled ‘Extreme poverty cluster’ represents the beliefs of the majority of the participants, whose stereotypes are predominantly negative, with a representation shaped by images of extreme living conditions (e.g., homeless children) and with a reality far from their own (e.g., beggars). One in each four children represents poor children in less extreme way, but still in a fragile situation (e.g., scarce food, live in houses) forming the cluster entitled ‘make ends meet’. The third and smallest cluster consists of children that believe poor children are just ‘like other children’, for example, go to school, live in houses and play with friends. These three clusters are not differentiated by participant’s personal or contextual socioeconomic status, but the results show that younger children (6-7 years-old) associate more with the cluster that considers poor children ‘like other children’. This finding about is consistent with previous research that suggested that negative stereotypes towards this group only emerges later in childhood (Woods et al., 2005). In fact, our results indicate that perceptions of the social category of poor children change with age. As children get older, they spontaneously describe a poor child in a more comprehensive and detailed way than younger children, what is consistent with the literature about the development of the knowledge about socioeconomic concepts (Enesco & Navarro, 2003). Interestingly, older children give a more negative spontaneous description of the poor, compared to when they are asked to assign positive and negative traits to a poor and non-poor child. While in the open description the poor child is described by older children as using torn clothes, sad, alone, and a beggar, when asked more directly to attribute positive and negative traits to the poor, with age there is an increase in positive traits (e.g., friend, nice, responsible) and decrease in negative traits (e.g., rude, lazy, dirty).

Regarding attitudes towards poor children, overall children showed preference for the wealthier group represented by the non-poor child. An interaction between target (poor vs. non-poor) and valence of the traits (positive vs. negative) was found. Children attributed fewer positive traits to the poor than to the non-poor children, and more negative traits to the poor than to the non-poor children. This interaction between target and valence of the attributes was qualified by children’s socioeconomic context. Participants from lower SES schools showed a more egalitarian evaluation between targets, coherent with literature in other intergroup contexts where lower-status children are likely to show egalitarian attitudes toward the ingroup and outgroup (e.g., Dunham el al, 1997). Notwithstanding, comparing with an identical study by Mistry and colleagues (2015), our results are just partially

convergent with these authors. Mistry and colleagues (2015) found that 10-12 year-old children endorsed more positive attributes about the rich and the middle class than they did about the poor, and more negative attributes about the poor than they did about the middle class. However, contrary to our findings, children with lower perceived subjective social-status (SSS) attributed more negative traits to the poor than higher SSS. This divergent finding may be related to the variable used to measure social status. In our case, we used an objective socioeconomic variable, whereas Mistry and colleagues (2015) used a subjective measure of social-status, suggesting that in the latter children were motivated in their answer by their self-perception within this intergroup context, more precisely, by their willingness to detach themselves from the stigmatized group of poor children (Mistry et al., 2015), as supported by the authors.

In terms of the development of the attitudes with age, when measured through a trait attribution task, we found that younger children show a greater bias towards non-poor children compared to their older counterparts, due to their higher attribution of positive traits to the non-poor and higher attribution of negative traits to the poor, compared to the other age groups. We believe that this result may be related to the development of children's perception and saliency of the social norms (Rodrigues, Rutland & Collins, 2016; Rodrigues, Monteiro & Rutland, 2012). Studies that investigate the role of social norms in explaining children's intergroup attitudes in a racial intergroup context show that children from 6 to 11 years-old are aware of the existence of two conflicting norms, the ingroup loyalty norm and the anti-discrimination norm. Although, studies show that for children aged 6-7 years old the ingroup loyalty is the dominant norm and only after 9 years-old children activate the anti-racist norm affecting their evaluation of the racial groups (Rodrigues, Monteiro, & Rutland, 2010) and their behaviour (Monteiro, França, & Rodrigues, 2009). These results may explain our findings, in which the intergroup bias of the youngest participants is due to the attribution of more positive traits to what they perceive to be the ingroup, and with children aged above 9 years showing less bias towards the non-poor children category.

Regarding behaviours towards poor children, the findings show that across age children hold the expectation that helping behaviour is the most prevalent behaviour among their peers towards poor children. However, with increasing age, children state that poor children are also victims of negative behaviours, like teasing, making fun or act with indifference and contempt. In contrast, when children are asked to report their own behaviour, only very few said they would act with indifference, and the majority states that

they would help (by giving food, clothes or money), be friends with or play. The salience and prevalence of the helping behaviour is consistent with studies about the rectification of resource inequalities. This literature has consistently shown that children are likely to rectify inequalities by allocating more resources to those in need (Elenbaas et al., 2016; Blake & McAuliffe, 2011; Li et al., 2014; Paulus, 2014,; Rizzo & Kille, 2016). One possible explanation consistent with the data is that there might be a higher salience of the social norm of helping the poor children among higher status children. This may be related to socialization processes in contexts where 'helping the poor' is a highly valued conduct, with more regular school campaigns and family mobilization to participate in those campaigns (e.g., food banks). Indeed, the middle-to-higher SES school children were the ones that also mentioned helping the poor children as the normative behaviour among their peers and their own intended behaviour, in relation to the lower SES school children. Contrasting, despite that more relational behaviours with the poor children are not so mentioned by children in our study, interestingly, we found that children from lower SES schools are more likely to engage in a closer relationship with poor children, reporting more that they would play with poor children, than children from the middle-to-higher SES schools.

Interestingly, the present study shows that children's representations about poor children are related to their intended personal behaviour and attitudes towards engaging in contact with poor children. By exploring the interrelationship between the stereotypes about, attitudes and behaviours towards poor children, we found that children holding a more extreme image of poor children (as living in severe deprivation) are the ones that, while intending to help this social group, are less favourable towards actual contact with the group. On the contrary, children holding an image of a poor child similar to other children, are the ones who want to play with them rather than helping, and hold more positive attitudes towards engaging with poor children.

In relation to the way children perceive themselves in the social class intergroup context, our results show that, most of the children that spontaneously commented on their socioeconomic position, emphasized the differences they maintained in relation to this group, describing themselves with more resources, and using brighter colours to draw themselves and conveying positive emotions in the self-portrait. Only one child from the overall sample stood out by self-categorizing as a poor child, describing negative experiences deriving from his SES positioning. However, the fact that in some aspects (e.g., living conditions, daily habits) lower SES children hold a less negative representation of the poor children in respect

to middle-to-higher SES children, suggest that lower SES children may relate their own experiences of deprivation to the topic of poverty in childhood, by showing a less extreme representation of poverty in some aspects.

The present work is a comprehensive study that explores the various facets of attitudes, allowing to better understand children's knowledge and thoughts about poor children, their feelings towards poor children and their intended behaviour towards them. A key strength of this study is the use of mixed methods to converge and complement qualitative and quantitative information, maximizing the impact of both methods. On the one hand, the qualitative assessment of children's knowledge about this social group through open questions and drawing was beneficial to explore the more spontaneous information that children had towards poor children. Moreover, through the analysis of the drawings, we assessed more indirectly the information that children had about the social groups and about themselves. On the other hand, the quantitative measures allowed supporting the analysis of the content of children's discourses in a more systematic way, and comparing this information with developmental research within other intergroup contexts.

However, some limitations can be pointed out to this study. At the time this study was conducted, Portugal was in the middle of a financial crisis and conversations about poverty, unemployment, lacking money were common. The keyword 'crisis' was on everyone's lips, inevitably reaching children from very young age. Despite this, we do not think that this has influenced children's speeches about this social group, as they predominantly represented them in a more distant way. But, it is possible that children were more aware of the social desirability of showing willingness to help those in need and to not show negative attitudes towards them. Two ideas follow from this. First, as the current study mainly collected explicit information about this group, being only the drawings and the colours used the more indirect measures, we think it would be important in future studies to investigate attitudes towards poor children in a more implicit level (e.g., Dunham, Baron, & Banaji, 2008). Second, we believe that having a direct measure of behaviour directed to social inclusion and exclusion behaviours would be of major importance. In our opinion it is of the upmost importance understand in a more systematic way how children regard having more close relationships with poor children, as stimulating only help-giving behaviours contributes to maintain the outbreak of status inequalities, by leaving poor children in a permanent, and threatening, low status position (Nadler, 2002; Nadler, Harpaz-Gorodeisky, & Ben-David, 2009).

Finally, we did not include measures to identify children's self-categorization in the social class intergroup context. However, we consider that our results highlight the centrality of this issue to further investigate about the development of intergroup relations regarding social class related categories. First, many children were motivated to show their distinctiveness in relation to the stigmatized category of poor children, by their speeches or drawings. Second, from the overall sample, with half of the children from low socioeconomic environments, only one child identified as being a poor child. As such, this work raises some questions about how social class self-categorization might express children's management of a stigmatized social identity. Future studies should broaden the research and explore how socioeconomic status may influence the development of social class self-categorization.

In sum, this study corroborates that the class based attitudes and stereotyping that are prevalent in the adults world have their origins in childhood and that they are directed to poor children too. Children from low-income families are at greater risk of poor physical and mental health, lower academic achievement, low self-esteem (e.g., Evans, Li, & Whipple, 2004; Hair, Hanson, Wolfe, & Pollak, 2015), but living in a threatening school environment where peers discriminate them based on their fewer resources, make them to be in a double disadvantage (Odgers, 2015). Literature on the development of intergroup inclusion and exclusion has overlooked the importance of social class categorizations and a closer examination of the basic processes of intergroup relations in this intergroup context is needed.

CHAPTER FOUR

"Will they weather the storm?": Development of the causal attributions and perceived solutions to poverty in childhood

This chapter is based on the paper: Costa, L.P., Rodrigues, R.B., & Waldzus, S. (in press). "É cada um para o que nasce?": Desenvolvimento das atribuições causais da pobreza infantil na infância e soluções percebidas para a pobreza. *Psicologia*. [Special issue *In Memoriam* of Prof. Maria Benedita Monteiro]

Abstract

This study investigates the development of causal attributions for child poverty in childhood, the role of socioeconomic status in these attributions, and the solutions for poverty identified by children. Children aged 6 to 12 years were interviewed (N = 107). The results show the prevalence of external attributions to the causes for poverty, namely through fatalistic (e.g., luck) and social (e.g., unemployment) explanations. This study also identifies two types of children's beliefs about solutions for poverty: solutions that consider the poor child as agent of change and solutions that do not. Mediation analyses show that indicating solutions that require the action of the poor child increases with age, via an increase in the belief that poverty is caused by social factors. The results are discussed in terms of socio-cognitive development and the consequences of causal attributions for child poverty in the perpetuation of social inequalities.

Keywords: children, causal attributions for poverty, child poverty, solutions to poverty

Introduction

Recent data indicate that about 24.9% of children in the European Union countries are at-risk-of poverty and social exclusion (Eurostat, 2017). Despite all the efforts to eradicate poverty, just recently it starts decreasing (Eurostat, 2019). However, child poverty rate remains high in some high-income countries (e.g., Portugal, Greece, Italy, Spain). Poor individuals not only experience economic and material deprivation, but also very often are involved in processes of stigmatization and social exclusion (Lott, 2002; Ridge, 2002). The consequences of social stigmatization are manifold, leading to processes of internalization of stigma, accompanied by the rejection of the stigmatized and low-self-esteem identities (França & Monteiro, 2002). Several studies indicate that children living in poverty are victims of bullying because of their economic situation (Crowley & Vulliamy, 2007), particularly when living in more affluent areas (Hooper, Gorin, Cabral, & Dyson, 2007). There is also evidence that, in marginalized neighbourhoods, the perception of discrimination of children based on the economic situation is associated with lower levels of subjective well-being, compromises their school integration and security perception (Bradshaw, Jay, McNamara, Stevenson, & Muldoon, 2016).

Coincident with the development of the knowledge about other salient social categories, like age, sex or ethnic group (Nesdale, 2004), the awareness of social class related categories emerges between 3 and 5 year-old. With this age, children are already aware of the differences between rich and poor, based on observable and material symbolic elements, like clothes or other material goods (Leahy, 1981; Ramsey, 1991). A study conducted with Portuguese White, Black and Roma children aged 6-8 years and 9-12 years, evaluated the subjective social status of each group (Feddes, Monteiro, & Justo, 2014). Results confirm that children from 6-8 years-old already recognize the social status asymmetries present in our society (Vala, Lima, & Lopes, 2004; Correia, Vala, & Aguiar, 2007). In this case, Roma children are perceived as the ones from the lower social status and the ones who are target of less favourable attitudes from their White and Black peers. The study further shows the centrality of the subjective status, as a mediating factor of the age variations registered in the social preferences and in the trait attribution to the different groups. It is worth noting that recent statistics show that, in Europe, an average of 80% of the Roma community lives at risk of poverty (FRA, 2018), and there may actually be several factors that converge to more negative attitudes toward this group.

An important variable in the stigmatization process of the poor concerns the explanations that individuals mobilize while analysing the phenomenon of poverty, this is,

the causal attributions for poverty. The study of these causal attributions has received some attention in the social sciences, in particular with the adult population, given the existent evidence that these attributions are associated with attitudes and behaviours toward the poor (Bullock, 1999; Cozzarelli, Wilkinson, & Tagler, 2001; Tagler & Cozzarelli, 2013).

Literature identifies three types of causal attributions to poverty, namely individualistic, societal or structural, and fatalistic (Bullock, 1999; Cozzarelli et al., 2001). In *individualistic* attributions the cause of the poverty situation is internal, namely, the behaviour of the individual (e.g., poor choices, incompetence, laziness). In contrast, in *structural* attributions, the explanation for the situation recognizes the role of social factors, external to the individual, such as structural unemployment, unequal opportunities, among others. Finally, in *fatalistic* attributions, poverty is explained as a result of fate, of events or accidents unrelated to the individual or to society itself (e.g., illness, misfortune).

Several studies have shown that, in adults, the individualistic causal attributions for poverty are accompanied by less favourable attitudes toward policies of support and fight against poverty (e.g., Weiner et al., 2011). In line with these results, other studies also show that individualistic attributions to the poor are associated with negative stereotypes of this social group, described as "lazy", "dirty", "weak", or "unmotivated" (Bullock, 1999; Cozzarelli et al., 2001). With children, there is evidence that the development of essentialist beliefs about certain members of the group has an immediate negative impact on the behaviour towards them, particularly in tasks of resource allocation (Rhodes, Leslie, Saunders, Dunham & Cimpian, 2018; Rizzo, Elenbaas & Vanderbilt, 2018).

The research on causal attributions to poverty has been conducted almost exclusively with adults, although it is relevant to question how this process is expressed in childhood, especially given the evidence that children at the age of 6 show less favourable attitudes towards the poor, and negative stereotypes at age 10 and 11 (Woods, Kurtz-Costes, & Rowley, 2005, 2005; Sigelman, 2013).

The literature on the cognitive development of causal attribution in childhood, focusing on domains other than poverty, has analysed the expression of two types of attributions in an attempt to explain the individuals' behaviour, differing in the locus of causality: one that signals the role of external entities to the individual, and the other that highlights the importance of internal factors to the individual. In this literature, the evidence suggests that between the age of 4 and 6, children are not only able to perform attributions to factors external to the individual, for example, to the context (Ruble, Feldman, Higgins, & Karlovac, 1979), but also show a bias that favours these external explanations in detriment of

the individualists (Higgins & Bryant, 1982; Miller & Aloise, 1989). It is later in childhood that the shift from external and situational explanations to internal attributions occurs. According to Rholes and Ruble (1984), children under the age of 8 have difficulty in explaining the behaviours of those that surround them from stable and individual traits. Accordingly, another study shows that the spontaneous explanation of behaviours from the individuals' traits only happens around the ages of 9 and 10, and that children aged 5 to 6 years support their assessment in the valence associated to the target, that is, good/bad (Alvarez, Ruble, & Bolger, 2001).

In the specific domain of poverty and the perceptions of poor people, the results are in line with the precedence of external versus internal attributions. According to Sigelman (2013), a large proportion of children aged 6 were unable to attribute causes to poverty, but when they did, the majority attributed social causes, namely lack of a (good) job, and this perception increased with age. Leahy (1981) argues that with age there is a tendency for the explanations of the difference between "rich" and "poor" to widen to the consideration of individual differences in the personality domain. Effectively, it is only between 8 and 10 years of age that children begin to consider characteristics such as effort, perseverance and social or intellectual skills when talking about poor people (Leahy, 1983; Sigelman, 2012). Yet, Enesco & Navarro (2003) point out that only from the age of 8 do children become aware that jobs are not all the same and that there are some more important, more difficult or more necessary than others, so that the people who perform these jobs should be better paid; even if at 10 years old they associate qualities such as effort, persistence and personal demand to obtaining a good job.

However, in contrast to these results, more recent studies (Hussak & Cimpian, 2015, 2018) show that from the age of 4 children justify social inequalities referring to the attributes inherent to individuals, showing evidence that this implicit tendency to explain phenomena based on aspects inherent to individuals decreases with age (Cimpian & Steinberg, 2014).

In terms of socio-cognitive development, social perspective taking, this is, acquiring the capacity to understand situations, thoughts and intentions of other individuals (Carlo, 2006), is essential to the advancement of explanations for this social phenomenon. Literature in this area shows that social perspective increases with age (Miller & Aloise-Young, 2018) and also increases in relation to the child's social experience (Abrams, Rutland, Pelletier, & Ferrell, 2009). Thus, this growing capacity to understand the other and the different situations they are in, allows for the contextualization of the problem in question and allows the children to consider other causes, external to the individual, to explain the phenomenon of

poverty. This is in line with studies focusing on the causal attributions for childhood poverty, which show that, in terms of prevalence, the most mentioned causal attribution is the one that signals the role of external social factors. For example, with 4 to 7-year-old Colombian children, Amar and colleagues (2015) found explanations for poverty to be more prevalent based on factors such as the lack of material resources or social support. Following the same trend, with a sample of Finish children aged 11 to 15, Hakorvita & Kallio (2016), while noting the presence of individualistic attributions to poverty (e.g., poor financial management, laziness, illicit consumption, etc.) found that most children identify causes of social order (e.g., unemployment, low wages, etc.).

With regard to solutions for poverty, literature is scarce on this subject. Chafel & Neitzel (2005) asked 8-year-old children what would have to happen to no longer exist poor people. The results indicate that most children (48%) mention philanthropic efforts to help the poor, 20% mention that social changes are necessary, 11% that the poor themselves need to act, and 8% that some miracle could happen. However, this study did not analyse the correlation of these solutions with the perceptions of the causes of poverty. With relevance in the investigation of this relationship, the studies of Hussak and Cimpian (2015, 2018) also show that the internalization of the individuals' behaviour is a predictor in the perception of inequalities as just and legitimate, supporting the status quo (Hussak & Cimpian, 2015). Moreover, children between 4 and 7 years old tend to adopt more conservative perspectives of acceptance of current policies and traditions when social phenomena are explained by conditions inherent to the individuals: children who explained social inequalities based on internal aspects of the individual perceived these inequalities as acceptable and that nothing should be done to fight them (Hussak & Cimpian, 2018).

The studies above mentioned address children's perception of poverty in general, not focusing on child poverty, and tend to not set the causal attributions in the context of socio-cognitive development in childhood. In addition, there is very little literature on the solutions that children identify as necessary for poverty eradication. Thus, the present study aims to analyse the development of the causal attributions for child poverty in children between 6 and 12 years old, and the role of the socioeconomic status in this process. Furthermore, it intends to identify the solutions that children propose for poverty and whether they relate to causal attributions.

Although literature presents contradicting results, there is some evidence to support the hypothesis that the expression of external attributions tends to precede the expression of individualistic attributions, and that their relative prevalence may increase with age as a result

of a growing process of socialization in a school and family context regarding the poverty problem. This way, it is also expected that the number and diversity of the causes attributed to poverty by each child increase with age. With regards to the individualist causal attributions, literature is markedly contradictory; it suggests, on one hand, that their occurrence could take place in the final stages of childhood, and because of the inability of children to assign dispositional traits at an earlier stage (e.g., Miller & Aloise, 1989); on the other hand, it admits that the expression of these attributions is, in fact, more precocious, diminishing their relative importance with age (Cimpian & Steinberg, 2014). We also admit that the decrease in individualistic attributions translates into a phenomenon of inhibition or concealment of its expression. In fact, a large number of studies conducted in Portugal have systematically shown that although children recognize at the age of 6 the anti-normative expression of prejudice (racial), the proper management of behaviour according to the context takes place later at around 9 to 10 years old (Rodrigues, Rutland, & Collins, 2016; Monteiro, França, & Rodrigues, 2009; França & Monteiro, 2013; Rodrigues, Monteiro, & Rutland, 2012).

Regarding the socioeconomic status of the participants, literature does not clarify its possible role in shaping perceptions of the causes of poverty. However, it is possible to admit that, as a result of greater contact with the problem of poverty, children with a lower SES can present a greater number and diversification of causes for child poverty.

Finally, in relation to the development of children's perceptions of solutions for the eradication of child poverty throughout childhood and the role of causal attributions in this process, the study adopts an essentially exploratory approach, considering the lack of literature on this subject. Notwithstanding, based on the results of Hussak and Cimpian (2018), which showed an association between the expression of conservative protopolytic attitudes and the expression of causes inherent to the individuals, in general we can predict that children coordinate the type of solutions for poverty with causal attributions. Thus, one the one hand, we expect that children who mobilize individualistic attributions to explain poverty, present solutions in which the poor child itself should be the agent of change and, on the other hand, children who explain poverty by social factors present solutions for leaving poverty that are external to the child.

Method

Participants

One hundred and seven children aged 6 to 12 years (*M* = 9.10; *SD* = 2.19; 58 female) were interviewed in two public schools located in the Lisbon Metropolitan Area. Children were grouped in three age groups: 6-7 years-old (*N* = 35; *M* = 6.20; *SD* = 0.87), 9-10 years-old (*N* = 36; *M* = 9.42; *SD* = 0.50) and 11-12 years-old (*N* = 36; *M* = 11.50; *SD* = 0.56). Regarding ethnic status, 76.4 % were White and 23.6% Black.

Participants' objective SES was determined based on their eligibility for free or reduced price meals, an individual school indicator that is directly based in family income and in family allowance given by the national social security. Accordingly, 36.4% (*n* = 39) of the participants in our sample were from lower SES families, and the remaining 63.6% (*n* = 68) were from middle-to-higher SES families. The participating schools differed on their SES profile of the participating schools. One of the schools covered a socioeconomic disadvantaged population (*N* = 49; 46%) and the percentage of children with lower SES in this school was 67% (n=33). In the school from a middle-to-higher social economic context (*N* = 58; 54%) the percentage of children with lower SES was 10% (*n*=6).

Children were individually interviewed in a school setting after the written consent of their parents.

Procedure

In order to investigate the development of the causal attributions for child poverty and perceived solutions to poverty in childhood, semi-structured interviews were carried out (Appendix B), in which three essential questions were raised:

1) Perception of children about the causes of poverty - *"What do you think happened to this child so he/she became poor?"*
2) Perception about the persistence of poverty - *"Do you think he/she will be poor forever or he/she will overcome poverty?"*
3) Perceptions about the solutions to end being poor (in the circumstance of answering that poor children can cease to be poor) - "*What has to happen for them to stop being poor?"*

Children were individually interviewed in an isolated room of the school and only in the presence of a researcher. The interview lasted an average of 30 minutes, as this study is

part of a larger study on perceptions of childhood poverty in childhood. The interviews were recorded in audio format and were later fully transcribed by the first author.

Data analysis

The analysis of the data was performed through the content analysis of interviews (Vala, 2005; Flick, 2005), with the support of the software Atlas.Ti. The system of categories and subcategories in the analysis of the attributions of child poverty was developed *a priori*, based on the literature already presented (e.g, Cozzarelli et al. 2001; Bullock, 1999). First, the units of text (sentences, paragraphs or excerpts of text) were selected and systematically coded according to the types of attributions present in the literature. As such, the 191 units of text identified in the child's discourse were grouped into four categories: *fatalistic*, *individualistic*, *structural* and *do not know*. Regarding the second and third questions, on the persistence of child poverty and solutions, the system of categories and subcategories was developed *a posteriori*, through reading, selection and systematic coding according to the key idea they transmitted. The analysis on the persistence of poverty resulted in a coding of 108 units of text into three categories: *they can stop being poor*, *it depends*, *they cannot stop being poor*. In the end, with regards to the number of solutions for child poverty, the 155 units of text were grouped into 20 mutually exclusive subcategories (e.g., *help from others*, *study*) which were later grouped into two categories: *poor child as agent of change* and *poor child not agent of change*. The explanation and in-depth analysis of each of these three dimensions is presented in the results section.

To guarantee the reliability and validity of the results, the categories/subcategories were exhaustedly and exclusively built. The category system was evaluated based on the reliability between coders (Cohen, 1968), and an external coder to the research team was requested to analyse 25%-30% of the coding for each category. The reliability indexes (Cohen's K) for each of the systems of categories associated with each dimension suggested high reliability (poverty attributions: $\kappa = 0.96$, $p < .001$; persistence of poverty: $\kappa = 0.82$, $p < .001$; solutions to child poverty: $\kappa = 0.97$, $p < .001$). The system of subcategories of the dimension solutions for poverty, namely its classification into *poor child as agent of change* and *poor child not agent of change*, was also subject to an inter-judge agreement, also suggesting high reliability levels ($\kappa = 0.87$, $p < .001$).

The analysis of the data allowed for the quantification of the dimensions under analysis, and was later complemented with statistical treatment adequate to the objectives of the work and presented in the results section. In addition to the presence and absence of each

of the categories in children's discourse, variables were created to sum up all of the causes presented by the participant (regardless of the type of causal attribution), a variable with the number of different attributions mentioned by the participant and the total number of solutions presented. Thus, the results presented below aim to describe the phenomenon comparing the three age groups considered (6-7 years old, 9-10 years old and 11-12 years old), also considering the SES context of the school where they were surveyed (lower contextual SES and middle-to-higher contextual SES) and their own SES (lower personal SES and middle-to-higher personal SES).

Results

Causal attributions for child poverty

Children responses to the question about why children became poor were grouped in the categories related to fatalistic causal attributions (57%; *n* = 61), societal (43%; *n* = 46) and individualistic (33%; *n* = 35); it was also created the category "don't know" (14%; *n* = 15), as can be seen in Table 15. In this table, the absolute and relative frequencies of children that mentioned each type of causal attribution, by their age group and school SES. In the total column/row, are presented the total number of children in each age group, each school SES or the total of the all sample that gave each causal attribution.

Hereafter, we show examples of text units referring to each type of causal attribution as they are illustrative of what exactly children thing about the causes of child poverty. Furthermore, we analyse the existence of differences in the prevalence of each causal attributions in children discourse, according to their age, personal SES (SES_p) and school context SES (SES_c).

Table 15

Number of children who mentioned each of the causal attributions for poverty, by age groups and the school SES (absolute and relative frequencies).

Causal Attribution	SES school	6-7 y.o. *n* (%)	9-10 y.o. *n* (%)	11-12 y.o. *n* (%)	Total *n* (%)
Individualistic	Lower SES	7 (39%)	4 (27%)	6 (38%)	17 (35%)
	Middle-to-higher SES	4 (24%)	8 (38%)	6 (30%)	18 (31%)
	Total	11 (31%)	12 (33%)	12 (33%)	35 (33%)
Societal	Lower SES	2 (11%)	5 (33%)	12 (75%)	19 (39%)
	Middle-to-higher SES	2 (12%)	10 (48%)	15 (75%)	27 (47%)
	Total	4 (11%)	15 (42%)	27 (75%)	46 (43%)
Fatalistic	Lower SES	7 (39%)	6 (40%)	9 (56%)	22 (45%)
	Middle-to-higher SES	10 (59%)	16 (76%)	13 (65%)	39 (67%)
	Total	17 (49%)	22 (61%)	22 (61%)	61 (57%)
Don´t know	Lower SES	5 (28%)	4 (27%)	1 (6%)	10 (20%)
	Middle-to-higher SES	3 (18%)	0 (0%)	2 (10%)	5 (9%)
	Total	8 (23%)	4 (11%)	3 (8%)	15 (14%)

Fatalistic Causal Attributions. The majority of the children interviewed attributed to child poverty fatalistic causes (57%; *n*=61), referring to accidents and life events that lead children to that poverty situation, for example, losing of their family or being abandoned by their parents, or because someone had robbed everything that they had. The following examples, respectively, illustrate these explanations.

"C: She is poor because she lost her family." (6 y.o., lower SES_c, lower SES_p).

"C: She is poor because her parents abandoned her, they did not want to know about her at all and they kept all the money she had. Then she became poor, with no one to help her. " (9 y.o., middle-to-higher SES_c, middle-to-higher SES_p)

"C: They (robbers) robbed him of all he had, and now he is poor. "" (9 y.o., lower SES_c, lower SES_p)

Other children refer simply fate or destiny as the main cause of poverty, like this 10 year-old children that consider that poor children are poor because they already born this way:

"C: Maybe their parents had been born poor, and they've never been able to find a way out of poverty in their entire lives." (10 y.o., middle-to-higher SES_c, middle-to-higher SES_p)

The fatalistic causal attribution does not change with children's age (χ^2 (2) = 1.511, p = .470) or with SES_p (χ^2(1) = 0.821, p = .365). However, children that attend the higher SES school refer this type of attributions more frequently (67%) than children from the lower SES school (45%; χ^2 (1) = 5.410, p = .020).

Societal Causal Attributions. The explanation of poverty caused by social factors is also present in the discourse of almost half of the children (43%, n = 46). These causes may be related to the employment situation of these children's parents who either are unemployed or have an inadequate work. In the examples below, we can see the speeches of three children expressing these possible causes, respectively.

"C: For example, parents have jobs and then get fired and make no money. They became unemployed and could not make money to have a house, to pay the expenses, to buy the food, the clothes, and all that things." (9 y.o., middle-to-higher SES_c, middle-to-higher SES_p)

"I: And what do you think that happened to them to became poor?

C: Because maybe life is bad. They have no money because if the parents have been fired they do not have money to give food.

I: They have been fired?

C: They do not have jobs, or they have been fired. They can have jobs, but it is not enough to maintain their families, they don't have an appropriate job." (11 y.o., lower SES_c, lower SES_p)

"C: The family, the parents can work, but may not earn much. And also because of the crisis, they may also have less money." (12 y.o., middle-to-higher SES_c, middle-to-higher SES_p)

The participants also stated the existent social inequalities in society as possible causes or child poverty.

"C: Ever more, they take more money from people. People are normal, then for example those who are richer come and take more and more money from the poor." (9 y.o., lower SES_c, lower SES_p)

According to our predictions, children realize that the locus of responsibility is not properly the children who are in this condition, but rather of their family that is responsible for providing their care at different levels. The following discourse, while framed in societal attributions, illustrates this idea:

"C: I think it's because of this, because parents have to help their children. Because it is the family that has to help the children." (11 y.o., lower SES_c, lower SES_p)

When children get older, they attribute more social causes to child poverty (χ^2 (2) = 29.302, $p < .001$). Among the youngest, aged 6-7 years-old, only 9% of the children reported this type of causal attribution, among children aged 9-10 year-olds, 33% did so, and 59% of the children aged 11-12 year olds referred to societal causes for explaining child poverty. Societal causal attributions do not vary with children's personal SES (χ^2 (1) = 1.260, $p = .262$) or with the school's SES (χ^2 (1) = 0.655, $p = .418$).

Individualistic Causal Attributions. The individualistic causes are the least mentioned by the participants. As individualistic causes, some children attribute responsibility for the bad economic conditions to the children themselves, as the following cases demonstrate.

"C: She came from Spain and she did not respect her mother and then stayed like that. Now her mother does not help her. Because she sometimes beat her mother." (12 y.o., lower SES_c, lower SES_p)

"C: Maybe because he goes out at night, and his mother warned not to go out at night, and then his mother scolded him but as he was always going out at night, she sent him out of the house." (10 y.o., lower SES_c, lower SES_p)

However, most of the participants who attribute such causes blame the parents of poor children for their situation. One example is bad management of savings, as illustrated in the first example below.

"I: And what do you think that happened to these children to became poor?

C: I think, for example, she could have money and then spent it for nothing. And then, as she did not like it, and those people like her had no money, and she couldn't give money to her children. She could not give what they deserved, she could not give food, she could not give a house...

I: And they became poor because they misspent their money, is that it?

C: Yes.

I: And when you say, "they spent it for nothing", what do you mean by that?

C: For nothing for example, he could buy... for example, he had €10, he could buy a television, could buy a command, a Play Station, and then realized that those things were useless. It was better to have used up in the food, in the house." (9 y.o., middle-to-higher SES_c, middle-to-higher SES_p)

Still focusing on parental responsibility, there are participants who point out that the lack of money and the poverty situation are due to illicit consumption behaviours, such as the examples given below.

"C: My mother already told me that he got into drugs and became poor." (7 y.o., lower SES_c, middle-to-higher SES_p)

"C: There are also people who go to the casino, play, lose and then get addicted and continue to play and play and play. Then they lose all their money." (9 y.o., lower SES_c, middle-to-higher SES_p)

Another cause cited by children is the incompetence of the family or parents of the poor children.

"I: And what do you think that happened to these children to become poor?

C: Their parents had money because they had work. But, they worked very badly and they were took out of their job and then they ran out of money.

I: Do you think this is what happens to all children who are poor or can there be other reasons?

C: I think it could also be that they also ... their parents worked badly on the job and they did not earn almost any money, but without losing it." (6 y.o., lower SES_c, middle-to-higher SES_p)

In this context, there are still children who mention education and the need to study to overcome their poverty situation and point out the lack of studies as a possible individual cause.

"C: Their parents did not have much money because they either did not study or went to work when they should have been studying." (11 y.o., lower SES_c, middle-to-higher SES_p)

"I: If it is the situation you're talking about, are they to blame?

C: Yes, one thing that I'm thinking about. If they know that they have to study, have a good life, and need to make an effort to support themselves if they have a family, then they miss classes and then they cannot support the family later.

I: And you think this can happen? Are there people who are poor because of this, because when they were in school they did not study enough?

C: Yes, to have a good life, an appropriate job, and all that…" (11 y.o., lower SES_c, lower SES_p)

Individualistic causal attributions does not vary with children's personal SES ($\chi^2(1)=0.566$, $p = .452$) or with the school's SES ($\chi^2(1)=0.162$, $p = .688$). These causes are also not associated with the age of the children ($\chi^2(2)=0.039$, $p = .981$).

Complexification of the attributional process. Another objective of this study was to understand the extent to which perceptions of the causes of poverty change over time. In this case, we were interested in understanding if children throughout childhood presented a complexification of their discourse regarding the causes of poverty not only by presenting a higher number of explanatory causes of child poverty, but also by the diversification of the type of causal attributions presented, this is, by the co-occurrence of different causal attributions. In Table 16, it is possible to find, on average, how many explanations children mentioned according to the age group and the SES of the school context.

Thus, to understand the effect of age and socioeconomic context of children on the number of causal explanations of poverty, a two-way analysis of variance was performed.

The results show that, in general, children report on average 1.64 different causes to explain child poverty (*SD* = 1.08). This ANOVA revealed a main effect of age indicating that the number of explanations increases with age (F (2, 99) = 12.210, $p < .001$, $\eta^2 = .18$). The results also reveal a main effect of SES of the school context- children enrolled in a school within middle-to-higher SES context report a higher number of explanations compared to children in the lower SES school (F (1,99) = 5.124, $p = .026$, $\eta^2 = .04$). An interaction effect was not found (F (2,99) = 2.670, $p = .074$, $\eta^2 = .04$).

Table 16

Number of causal explanations of poverty according to the age group and SES in the school context (Mean and Standard Deviation)

SES school	6-7 y.o. *M* (*SD*)	9-10 y.o. *M* (*SD*)	11-12 y.o. *M* (*SD*)	Total *M* (*SD*)
Lower SES	1.00 (0.79)	1.13 (0.92)	2.00 (1.10)	1.38 (1.02)
Middle-to-higher SES	1.00 (0.63)	2.14 (0.96)	2.25 (1.12)	1.86 (1.08)
Total	1.00 (0.71)	1.72 (1.06)	2.14 (1.1)	1.64 (1.08)

The results also show that the attributions that children make are not exclusive. In their discourse, children indicate causes that can be included in different types of causal attributions for poverty. Thus, in addition to the number of causes children present in their discourse, the complexification of attributional perspectives also translates into this diversity of types of attributions that each child refers to. The following example precisely illustrates this, as this 11-year-old child reports that the economic situation of poor children may be due to social causes such as lack of employment but also a fatality in their life, such as abandonment by parents:

"C: Either their parents do not have enough money and they have no job; or they were abandoned by their parents and left on the street." (11 y.o., middle-to-higher SES_c, middle-to-higher SES_p).

Results show that with age children are increasingly mentioning different types of causal attributions for poverty. As can be seen in Table 17, 28% of 6-7 year old children mention two types of assignments, while 50% of 9-10 year old children and 73% of 11-12

year children mention two or more types of attributions at the same time throughout his speech (χ^2 (2) = 13.538, p = .009).

Analysing specifically the most frequent co-occurrences in children's discourse, the reference to fatalistic causes and societal causes are those most often mentioned by the same child (21%, n = 23), followed by individualistic causes in co-occurrence with fatalists (10%; n = 11), and finally the societal and individualistic causes are those that are mentioned less often by the same children (7%, n = 8).

Table 17

Number of causal attributions according to the age group (absolute and relative frequencies)

Diversification of causal attributions	6-7 y.o.	9-10 y.o.	11-12 y.o.
	n (%)	*n* (%)	*n* (%)
One type of attribution	18 (72%)	16 (50%)	9 (27%)
Two types of attributions	7 (28%)	15 (47%)	20 (61%)
Three types of attributions	0 (0%)	1 (3%)	4 (12%)

Poverty persistence and solutions to get out of poverty

In addition to the causes of poverty, participants were asked about their beliefs in the persistence of poverty in poor children. Almost all children consider that children can overcome poverty: 91% believe that child poverty can come to an end and that, when certain conditions are met, poor children may cease to be poor; 5% of children reported that it depends and 4% believed it would not be possible for poor children to leave poverty. Participants who mentioned that poor children may leave poverty or that it depended were questioned about what would have to happen to that effect. Their responses were grouped into two categories: *poor child as agent of change* and *poor child not agent of change*. Table 18 shows the relative frequencies for each of the categories and for the four subcategories whose observations were greater than 10 units of text, that is, that had the largest number of responses.

Table 18

Solutions to the causes of poverty (absolute and relative frequencies).

Solutions	*n*	%
Poor child as not an agent	68	64%
Someone help: give money	42	40%
Someone help: adopt / shelter	18	17%
Poor child as an agent	48	45%
Find a job	27	26%
Study	19	18%

The solutions presented by children are almost equally divided between those that place children as agents of poverty (45%, *n* = 48) and those that place this agency external to the child (64%, *n* = 68). In some cases, these conditions were often presented spontaneously as conditions for poor children to cease to be poor, as can be seen in the example below, of a 10-year-old child:

> "I: And do you think she will be poor forever or she will overcome poverty?
>
> C: She can stop being poor.
>
> I: Why?
>
> C: Because there may be somebody, who is good, very good, and may want to take her to her house and give her things and so she can become her mother, or her father.
>
> I: So what do you think it must happen for them to stop being poor?
>
> C: She cannot hide herself, to see if someone wants to take her. But she cannot go with everyone. She has to see if that person is gentle. It can be someone that not cares too much, it could be something else." (10 y.o., lower SES_c, lower SES_p)

The most mentioned solution was related to the help of other people, in this case through their help by giving money, food, clothing, among other necessary goods.

"C: Maybe they will stop being poor because people will give them money and as they gather, they buy food and buy things they need." (9 y.o., middle-to-higher SES_c, middle-to-higher SES_p)

Likewise, 16% of the participants also mention that another possibility may involve the adoption of the child who is poor by a family that can care for them and give them what they need. Both possibilities recognize the child as a target of help, without considering the situation of the child being able by his/her own, to overcome the poverty situation.

> "C: Adults could go there, see the children suffering, poor, all dirty with torn clothes, and feel sorry, help the child, take him home, feel sorry and treat him like a son and give him better clothes." (9 y.o., middle-to-higher SES_c, middle-to-higher SES_p)

On the other hand, one out of four of the respondents say poor children can get a job when they grow up, get money to support themselves and their families, and almost one out of five mention the importance of studying so that the child can get out of poverty.

> "I: And what do you think might happen?
> C: When they become older they are no longer poor.
> I: Why? What happened?
> C: They save money. Go to a job." (6 y.o., lower SES_c, lower SES_p)

> "C: There are several examples of people who were poor, then they studied more and more, they managed to get very good grades, and then got to college." (12 y.o., middle-to-higher SES_c, middle-to-higher SES_p)

The perception that the poor child must be an agent of change increases with age (χ^2 (2) = 7.606, p = .022). Among the younger children, 32% (n = 11) presented solutions in which the poor child is seen as an agent of change and among the older children, this type of solution is presented by 65% of the children (n = 22). Contextual SES (χ^2 (1) = 1.709, p = .191) and personal SES (χ^2 (1) = .624, p = .429) do not significantly influence the internal solutions to the poor child (agent).

With regard to the solution in which the poor child is not an agent of change, no differences were found in relation to the various age groups (χ^2 (2) = 3.996, p = .136). However, in relation to SES, the external solution to the poor (non-agent) child varies with contextual SES (χ^2(1) = 5.633, p = .018). Among children within higher SES schools, 75% (n = 43) present this type of solutions, whereas in lower status schools, these types of solutions,

external to the child, are presented by 53% (n = 25). The variation in these external solutions in relation to the personal SES is marginal (χ^2 (1) = 3.258, p = .071), with middle-to-higher SES children (75%, n = 48) mentioning these causes more than lower SES children do (54%, n = 20).

Finally, we analysed the role of causal attributions throughout childhood in the development of children's perceptions of solutions to the elimination of child poverty. Thus, we tested the mediating role of the causal attributions for poverty in the relation between age and the perception that the poor child may or may not be the agent of change in the resolution of their poverty situation. Six *probit* mediations were conducted separately, with the three types of causal attribution as the mediating variable and the presentation of solutions for the exit of poverty in which the poor child is an agent of change (dimension "*Poor child agent*" present / absent in the discourse) and is not agent of change (dimension "*Poor child not agent*" present / absent in discourse) as dependent variables. The choice of this analysis is that the mediating and dependent variables are dichotomous. These analyses were conducted in Mplus version 7.31 (Muthen & Muthen, 2012) with the weighted least squares estimator with mean and variance adjusted (WLSMV), suitable for categorical mediating and dependent variables. The nonparametric *bootstrap* method with 10000 samples was used to obtain the 95% confidence intervals of the indirect effects.

Among the six mediation analyses carried out, only the mediation of the relationship between age and the perception of solutions with the poor child as agent through societal attributions of poverty was shown to be statistically significant[30]. Therefore, only this mediation model is presented here (see Figure 18 and Table 19). The mediation model tested shows an improvement in the adjustment in relation to the null model (χ^2 (2) = 11.315, p = .004)[31].

[30] No significant indirect effects in all mediations between age and the perception of solutions to exit poverty in which the poor child is not agent of change: mediator 'societal attributions' (B=-0.010, SE=0.058, 95% Boot IC [-0.126 0.105]), mediator 'individualistic attribution' (B=-0.002, SE=0.011, 95% Boot IC [-0.038 0.013]) and mediator 'fatalistic attribution' (B=0.023, SE=0.024, 95% Boot IC [-0.010 0.089]). Not significant indirect in mediations between age and the perception of solutions to exit poverty in which the poor child is an agent of change: mediator 'individualistic attribution' (B=0.004, SE=0.015, 95% Boot IC [-0.014 0.058]) and mediator 'fatalistic attribution' (B= -0.002, SE=0.015, 95% Boot IC [-0.045 0.022]).

[31] We conducted a robust chi-square difference test of the model using the Mplus function DIFFTEST in order to understand if the proposed model corresponds to an adjustment improvement (applied to test *nested* models with the estimator WLSMV). This Mplus

In a first step, and in line with the previous results, it is confirmed that with age the probability of children presenting solutions where the poor child is in action increases (B = 0.133, *SE* = 0.061, 95% CI [0.019 0.255], *p* = .030). Secondly, we find that age is also a predictor of the causal attributions for poverty associated with social factors (B = 0.296, *SE* = 0.072, 95% CI [0.167 0.448], *p* < .001). Specifically, with age children tend to present more structural causal attributions in their discourse. Finally, a third regression including *age* and *societal causal attributions* as predictors of poverty solutions that point poor children as agents of change, shows that only the attributions are significantly related to the solutions (B = 0.369, *SE* = 0.154, 95% CI [0.042 0.644], *p* = .017) and age does no longer predicts the solutions for poverty (B = 0.023, *SE* = 0.080, 95% CI [-0.136 0.178], *p* =.567). The indirect effect is significant (B = 0.110, *SE* = 0.056, 95% BootCI [0.017 0.238]). These results are consistent with a full mediation effect.

In sum, these results indicate that with age, the perception of solutions that target poor children as agents of change in their poverty situation increases with age, as with age also increases the identification of societal causal attributions in the explanations of child poverty.

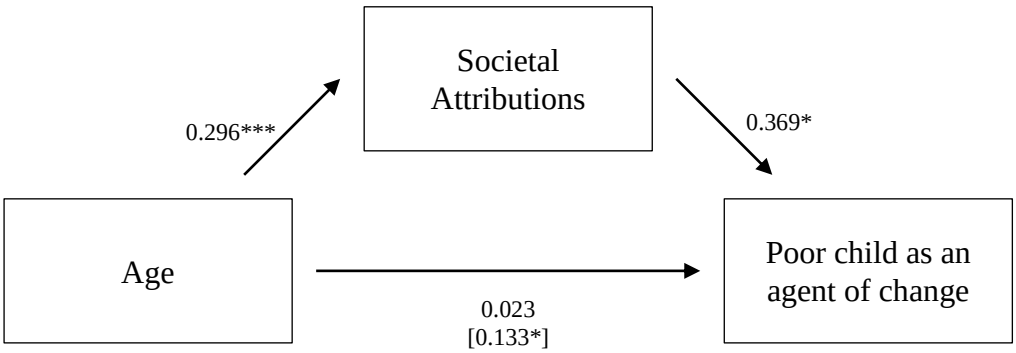


Figure 18. Standardized regression coefficients for the relationship between children's age and the presentation of solutions in which the poor child is the agent of the resolution of their poverty situation as mediated by societal causal attributions. The arrows indicate the presence of significant indirect effects. The beta coefficient in parentheses refers to the total effect of age on the solutions. $^{*}p < .05$, $^{**}p < .01$, $^{***}p < .001$.

function compares the fit of the null model (H_0: Model without direct effects) with an alternative model (H_0: Models with all direct effects present), and test the hypothesis that the inclusion of the variables 'societal causal attributions' and 'age' as predictors of the solutions for child poverty that see children as agents of change improves the adjustment of the model.

Table 19

Probit regression results for the mediation model

Predictors	Societal Causal Attributions (1)		Poor child as agent of change(2)	
	B	SE	B	SE
Total effect				
Constant			-1.304*	0.575
Age			0.133*	0.061
Direct effect				
Constant	-2.938***	0.698	-1.306*	0.575
Age	0.296***	0.072	0.023	0.080
Societal Causal Attributions			0.369*	0.154
Indirect effect				
Coef.	*SE*	*95% Bootstrap IC*		
0.110	0.056	0.017	0.238	

*** p < .001; ** p < .01, * p < .05

(1) Presence of societal causal attributions for poverty in discourse – category of reference
(2) Presentation of solutions in which the poor child is an agent of change – category of reference

Discussion

This study aimed to describe the development and relationship between the causal attributions for child poverty and the perception of the solutions to this social problem in children aged 6 to 12 years-old who were attending two schools with a socioeconomic status either mostly lower or mostly middle-to-higher.

The results allow us to conclude that, in the ages under analysis, children are able to provide explanations for child poverty, and that these explanations are in line with those that have been identified in the literature with adults. Thus, the attributions referred to by children can be classified as structural, fatalistic or individualistic.

In line with the literature (Rholes & Ruble, 1984; Leahy, 1981) and our hypotheses, the external attributions (structural and fatalistic) are the most prevalent in children's explanations. However, unlike other studies in this field, where social causes were the most mentioned (Hakorvita & Kallio, 2016; Amar et al., 2015; Chafel & Neitzel, 2005), the most prevalent attributions in this study were fatalistic. In these, poor children are seen as victims

of fate, either because they suffered accidents that deprived them of more favourable economic conditions, or because they were born into an economically disadvantaged family, or even because they were abandoned by their parents. This result could lead us to think that this explanation would be frequent in Portuguese culture and that, through socialization, it would be more present in children's discourse. However, studies with adults show that Portugal, along with countries such as Hungary, Lithuania, Poland, and others, attribute structural causes to poverty (Costa & Dias, 2015). Alternatively, we consider that this result can be explained by the fact that this study specifically focused on the explanations of *child poverty* (not poverty in adults). Given that the targets are children, beliefs about the limited autonomy and responsibility of children to ensure their survival may have been activated, consequently, evoking their misfortune.

The prevalence of fatalistic attributions does not vary with age, however the results show that they are more prevalent in schools with a higher SES, which may be explained when considering the role of socialization and the direct experience in the learning of causal attributions (Chafel & Neitzel, 2005). Contrasting with contexts where the labour instability and economic deprivation have a higher incidence, it is possible that in particularly affluent settings, learning opportunities regarding the factors associated with socioeconomic variations and with poverty in particular are more limited, which results in a greater evocation of fatalistic explanations.

The perception of the causes of poverty as unrelated to the individual and to society, drives to a perception of the poor child as a victim of their fate, as a child with little luck. Despite the lack of studies that link the attribution of fatalistic causes to the manifestation of more negative attitudes towards the poor, in several studies Olson and colleagues (2006, 2008) show that children, throughout childhood and regardless of their culture, prefer those that experience luck to those with bad luck (Olson, Banaji, Dweck, & Spelke, 2006; Olson, Dunham, Dweck, Spelke, & Banaji, 2008). Furthermore, children tend to judge "unlucky" targets as more likely to behave negatively. This evidence suggests that the explanation of child poverty associated to destiny and to their "bad luck" may reinforce the marginalization of poor children by their peers.

Structural external attributions (e.g., unemployment, economic crisis, current government) are the second most prevalent in our study, which is in line with previous studies that have analysed the perceptions of children and adolescents on the reasons for poverty in general (Hakorvita & Kallio, 2015, Amar et al. 2015). As we assumed in the hypotheses, the prevalence of these attributions increases with age, and is the one with the

greatest expression between the ages of 11 and 12. This result demonstrates that with age and, as a consequence of a combined effect of the socio-cognitive development and socialization (Abrams et al., 2009), children tend to broaden their view of the phenomenon of poverty, specifically regarding the role of specific external factors rather than those of a random/fatalistic external nature.

Individualistic attributions are those least mentioned in children's discourse, a result that is according to literature (Hakorvita & Kallio, 2016). However, as shown by Hussak & Cimpian (2015), in our study children aged 6 to 7 years old were also able to attribute poverty to internal causes, specifically to poor children, without any variation with age. Although this result is not linked to the SES of the child's family or school, the fact that some younger children recognize the role of internal causes may be explained by the fact that children in Portugal are generally very exposed to the phenomenon of poverty, and in this sense also to the individualistic explanations that circulate in society. As for older children, from the perspective of socio-cognitive development they are more able to recognize individualistic attributions (Rholes & Ruble, 1984). However, they will also be more sensitive to social norms that condemn the expression of prejudice and discrimination (Rodrigues, Rutland, & Collins, 2016; Monteiro, França, & Rodrigues, 2009; França & Monteiro, 2013; Rodrigues, Monteiro, & Rutland, 2012), which may inhibit its explicit recognition. Finally, and as noted above, we consider that the low prevalence of individualistic expressions translates the knowledge that children are dependent on others, and that poor children in particular have no responsibility for their social and economic conditions. In fact, although a minority of children reported that the poor child's behaviour led to poverty (e.g., left home, misbehaved), the majority holds the parent of the child responsible.

Similar to previous research with children and adults (Hakorvita & Kallio, 2016; Kreidl, 2000), the present study demonstrated that at different ages children are able to simultaneously mobilize different types of attributions, and this complexity along with the multiplication of the attributional contents, gains expression with age. This result is probably explained either by the increased ability of older children to integrate complementary and even contradictory information (Monteiro et al., 2009; França & Monteiro, 2013), or by their exposure to a growing variety of perspectives on the phenomenon of poverty in the context of normal socialization processes.

This study pursued a second objective, namely to verify if children consider that child poverty is a problem with a solution, and in that case, what would be the possible solutions.

Almost all the interviewed children considered that poor children will not be poor forever, and in line with the results that show a greater prevalence of external (fatalistic and structural) attributions, it was verified that the majority of the children identify external actions to the child as solutions to child poverty, and therefore do not hold them responsible for the resolution of the poverty situation.

However, our hypothesis that external solutions to the child would be associated with external attributions, and that solutions with the child as the agent of change would be associated to individualistic attributions, was not confirmed. Specifically, the results showed that the solutions to child poverty that require action on the part of poor children are associated to structural attributions, and that this association constitutes a path that explains the increase of the prevalence of this type of solutions with age. In other words, the solutions whose agent of change is the poor child itself increase with age, since with age the explanations that signal the role of external socio-structural factors also increase. From our perspective this unexpected and paradoxical result may have two explanations.

On the one hand, this connection may be related to the perspective that, considering the child as an agent of change means, at the same time considering them capable of overcoming adversity and having one day other living conditions. We hypothesize that unlike poor adults – that are stereotyped as lazy or incompetent (Cozzarelli *et al.* 2001; Enesco & Navarro, 2003) – poor children can be perceived as resilient and competent, and more so when the social structure is perceived as responsible for their economic conditions. This perspective is compatible with the view that children understand that the path to leaving poverty passes through the social mobility of the individual, ensured by, for example, studying and guaranteeing a better job.

On the other hand, when referring to these solutions, children do not conceive social change as a way to reduce poverty, which leads to the consideration that this result may translate into a legitimizing phenomenon of the system (Olson et al., 2008), which lies in the way social inequalities are framed by the current economic and social policies. The beliefs that social systems are just are present from the ages of 4-6 years old (Hussak & Cimpian, 2015), and incorporate the notion that the individual effort is rewarded; in this case, that if the child tries, they will (in the future) overcome and resolve their unfavourable, eminently unfair, social condition thus restoring justice in the system. Moreover, the development of this perspective that the solution to structural problems is carried out in the sphere of individual action can reduce the future support for public policies aimed at structurally reducing social inequalities.

The link between causal attributions and perceptions of the solutions to child poverty should be drawn into future studies. More specifically, and based on studies on the development of proto-political attitudes (Hussak & Cimpian, 2015, 2018), it will be important to assess how the causal attributions for child poverty in childhood are linked to beliefs about the systems' justice and the adequacy of different social policies. On the other hand, it may be important to explore how these attributions relate to the stereotypical traits of poor children. Moreover, given the existent relationship between essentialist beliefs and the expression of negative behaviours in an intergroup context (Rhodes *et al.* 2018), future studies should also analyse the relationship between causal attributions, attitudes and behaviours toward poor children, for example, in terms of resource allocation. Future studies should consider investigating these perceptions more extensively in experimental studies in order to, precisely, test the causality of these relationships. Furthermore, the role of the socioeconomic status of the children in the way they analyse this phenomenon should be deepened, and a more precise SES measure should be included, possibly aggregating a number of socio-demographic information such as the parents' profession, income, among others.

In conclusion, research with children regarding causal attributions plays a fundamental role in understanding how children explain the world around them, and what they perceive about social phenomena. In this study, by giving them a *voice*, it was possible to understand their explanations about the phenomenon of child poverty, as well as solutions that they already envision for child poverty. Contrary to the studies developed thus far, the reflection of children on their peers living in poverty, meaning that the focus is on *child poverty* instead of poverty in general, is fundamental for a more in-depth understanding of inclusion and exclusion behaviours of poor children in childhood. There is evidence that in more heterogeneous schools, children with a lower SES feel discriminated against due to their economic status (Hooper *et al.* 2007). Additionally, literature on how the school community works on these issues in the classroom (e.g., White, Mistry, & Chow, 2013) shows that, unlike other social categories (e.g., gender or ethnicity), social class is still a taboo subject, difficult to approach by teachers. The results of this study can therefore support and inform projects and actions aimed at exploring and deepening these issues with children, making them an active participant in the debate and future intervention on social inequalities and poverty.

CHAPTER FIVE

‘To be or not to be poor’: Development of implicit and explicit social class self-categorization in childhood

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Abstract

This study investigates the role of children's objective socioeconomic status in the development of implicit and explicit social class self-categorization in childhood. The study included 532 children aged from 6 to 12 years, from lower (n = 180) and middle-to-higher socioeconomic background (n = 352), attending Portuguese public schools. Results reveal that children explicitly and implicitly self-categorize as non-poor, but less so implicitly. Children's lower SES is associated to implicit and explicit self-categorization as poor, showing that children integrate objective social-economic conditions in their self-concept. Older children explicitly self-categorize less as a non-poor independently of SES, but no age-related changes were observed for implicit social class self-categorization. An association between implicit and explicit self-categorization was found for lower SES children, although unexpectedly only for those who answered first to the implicit social class self-categorization measure. Findings are discussed in terms of the possible underlying processes for the non-association with the poor category, specifically the role of self-categorization as a subjective individual mobility strategy towards a positive social identity.

Keywords: self-categorization, social class, socioeconomic status, children, implicit and explicit

Introduction

Child poverty is a pervasive social problem in the richest countries (UNICEF, 2017), and despite increasing efforts to tackle this issue (United Nations, 2015) child relative poverty rate remains high in OECD countries (OECD, 2018a). Relative poverty is defined in relation to the economic conditions of other members of the society (UNESCO, n.d.). Children in relative poverty are those that live in a household where the disposable income is less than 50% of the national median (OECD, 2018b). Recent data reveals that 13.4% of all children across OECD countries is relatively poor, with Portugal ranking fourth among the European Union countries (15.5%; OECD, 2018a). Furthermore, comparing to other OECD and European Union countries, Portugal is one of the countries with comparatively higher income inequality (UNICEF, 2017). Findings suggest that in contexts where the gap between rich and poor is larger, low-income children may experience the negative psychological and physical outcomes of being materially deprived exacerbated (Odgers, 2015; Odgers & Adler, 2018; Wilkinson & Pickett, 2009).

As described above in the indexes widely used to analyse the poverty phenomenon, the common definition of poverty is based in economic deprivation. However, the idea that poverty is just an economic problem has been widely disputed. Several researchers and organizations have argued for a broader definition that captures the complexity of the phenomenon, namely its social-psychological implications (UNDP, 1997; Aber, Morris, & Raver, 2012). In fact, compared with non-poor children, children from low socioeconomic backgrounds are more likely to experience diminished physical health, more emotional (e.g., depression, anxiety) or behavioural problems (e.g., aggressive behaviours), and lower levels of academic achievement (for a review, see Yoshikawa, Aber, & Beardslee, 2012; Brooks-Gunn & Duncan, 1997; Odgers & Adler, 2018). Furthermore, studies show that children from lower SES families not only experience more financial barriers to participate in social activities, but also more negative treatment by others, leading to feelings of peer victimization (Crowley & Vulliamy, 2007), especially when living in affluent areas (Hooper, Gorin, Cabral, & Dyson, 2007).

Despite the extensive research on the effects of poverty in children's health and cognitive development, social psychology has contributed relatively little to our understanding of the shape and dynamics of intergroup relations along the divide lines of the social class dimension (Fiske, 2015; Ostrove & Cole, 2003; Williams, 2009). This has been particularly the case for the social-developmental context of childhood (Hazelbaker & Mistry, 2018), where most research on stigmatized categories and/or asymmetric status

relations has focused on ethnicity, gender, age, or nationality (for a review, see Killen & Rutland, 2011; Raabe & Beelman, 2011). Noteworthy, in all these contexts the inclusion/exclusion features for group membership are rather visible and salient, contrasting with the social class intergroup context where the divide line between categories can be perceived as less clear-cut. This aspect is also evident in the rather vast criteria set forth by international organizations to define child poverty. The feature of diffuseness in the social class domain raises a fundamental question as to children's perceptions and self-categorization based on social class standing. Our study aims to shed light on this issue, by examining the development of children's explicit and implicit social class self-categorization and its relationship with objective socioeconomic.

Social class self-categorization development

Social categories within the spectrum of the social class dimension play a central role in children's early understanding of social reality. Some studies show that 3-5 years-old children are already able to distinguish between rich and poor based on observable material and symbolic characteristics, like clothes, use of brands, or cultural practices (Leahy, 1981; Ramsey, 1991), and around that age children already show a preference for wealthier groups over poor ones (Horwitz, Shutts, & Olson, 2014). There is also evidence that after the age of six children hold less favourable attitudes towards people perceived as poor (Sigelman, 2012; Shutts, Brey, Dornbusch, Slywotzky, & Olson, 2016), and negative stereotypes around the ages of 10-11 years (Sigelman, 2013; Woods et al., 2005). While engaging in social-categorization in terms of social class, as the above findings describe, self-categorization into "us" and "them" in terms of social class related groups (e.g. poor, non-poor, rich) is central. Self-categorization is crucial not only to understand how children make sense of their social world (e.g., group stereotypes, attitudes), but also because group memberships shape the way children behave (Nesdale, 2004; Turner et al., 1987). Interestingly, and to the best of our knowledge, there is hardly any research inspecting children's self-categorization with social class related categories.

The few studies that provide insights about children's social class self-categorization overall suggest that children do not self-categorize as poor (Amar, Llanos, Martinez-González, Monroy Agamez, Cortés, & Crespo, 2015; Hakorvita & Kallio, 2015; Rauscher, Friedline, & Banerjee, 2017; Sarti, Schalkers, & Dedding, 2015). Rauscher and colleagues (2017) found that 5-6 year-old North American children are aware of social inequalities but misperceive (or misreport) their own lower socioeconomic standing. Amar et al. (2015)

found that, in Colombia, 4- to 7-year-old children's objective socioeconomic status, as defined by the researcher, was associated to children's social class self-categorization. As to 10- to 15-year-old Finish children, Hakorvirta and Kallio (2015) showed that they self-categorized as middle-class independently of their family's actual economic situation. In a similar vein, ethnographic and participatory action research conducted with 8- to 14-years-olds living in impoverished areas in the Netherlands found that there was a taboo about poverty among children (Sarti et al., 2015). Despite evidence that children's perspectives about poverty changed after discussing the topic, they never reported to be poor or to live in a context of poverty (Sarti et al., 2015). In another study, but focusing on middle to upper middle-class 10- to 12-year-old children, Mistry and colleagues (2015) measured children's subjective social status and found a moderate positive correlation between objective (i.e., household income) and subjective social status. This result suggests that at least midlevel status, and older, children integrate in their perceived social status some knowledge about their objective socio-economic conditions (Mistry, Brown, White, Chow, & Gillen O'Neel, 2015).

While these findings provide important insights to the understanding of children's social class self-categorization, they also prompt a number of questions that demand deeper investigation. More specifically, the results from these studies raise the questions if children ever self-categorize as poor and to what extent does knowledge about socioeconomic differences in general, as well as children's own objective socioeconomic status, play a role.

Previous research shows that children's knowledge about socioeconomic differences and, particularly, about the category of poor children are actually related to children's objective socioeconomic status and age (see Chapter 4). Results show that lower SES children attribute more positive traits to poor children, and do not hold such a negative and extreme image of this social group as their middle-to-higher SES counterparts. Moreover, with age, children hold more negative attitudes towards the poor (Sigelman, 2013; Woods et al., 2005). Yet, they also describe a poor child more comprehensively (see Chapter 4), which strongly suggests that older children possess more information about this social group. In addition, with age, children make increasingly more social attributions to poverty, perceiving it more as a consequence of social aspects external to the individual (e.g. unemployment, low wages; Amar et al., 2015; Costa, Rodrigues, & Waldzus, in press; Hakorvita & Kallio, 2016). This seems to indicate that older children integrate in their view of poverty a more social perspective about the phenomenon. In sum, it is likely that by holding a more extensive knowledge about the social category, children attribute different meanings to the social class

related categories. In turn, this information may shape children's perception of their social standing, depending on the specific comparative context they are in.

This idea is consistent with Self-Categorization Theory (SCT; Turner et al., 1987) that contends that self-categorization is a dynamic and context dependent process. For SCT, the psychological salience of a particular group membership is dependent on the individual's past experience, present motives, values and expectations (i.e., *accessibility* of a self-category), on the comparison between the self and members of the ingroup and outgroup (i.e., *comparative fit*) and on the extent to which the stereotypical knowledge about the category align to the actual content of the category. (i.e., *normative fit*). In fact, studies on the development of self-categorization for other social categories (e.g., national, ethnic) show that the intergroup differentiation and self-stereotyping is informed by children's knowledge and the meaning of the categorization within a particular comparative context (Barrett & Davis, 2012; Rutland, 1999). In sum, children from different socioeconomic backgrounds may give different meanings to the intergroup context due to their different experiences in what regards their socioeconomic patterns of life (e.g. consuming habits, parents purchasing power). Moreover, they may do that differently in different contexts (e.g., at home, on the play-ground, at school), depending on the salient comparison context. Hence, it is crucial to develop a more systematic and broader examination of how children from diverse socioeconomic backgrounds perceive their context-specific social standing in regard to social economic status.

Another important issue to the question if children ever self-categorize as poor is the fact that the existing evidence is based only on explicit self-report measures. Explicit measures are prone to be influenced by self-presentational concerns (Nosek, 2007). Through self-presentational behaviours children aim to achieve or maintain a positive image of one-self in the eyes of others (Banerjee, 2002; Vasey, Crnic, & Carter, 1994). Literature shows that with age children increasingly recognize the impact of a certain behaviour on the way they are evaluated by others (Banerjee & Yuill, 1999). The ability to change their own behaviour for self-presentational purposes systematically increases with age and becomes particularly sophisticated from middle childhood onwards (with 8-11 years; Aloise-Young, 1993; Banerjee, 2002). Evidence on children's self-presentational bears support to Social Identity Development Theory's (SIDT; Nesdale, 1999, 2004) central assumption that, similar to adults (SIT; Tajfel & Turner, 1979), children, too, are motivated to achieve and maintain a positive sense of themselves through their social identities. According to SIDT, in the course of childhood children learn to self-regulate their behaviours within social situations (Nesdale

& Dalton, 2011). Studies about the expression of attitudes towards minority group indicate that children's ability to manage their behaviour driven by self-presentational concerns may already be present from 5 years of age onward (McGuire, Rutland, & Nesdale, 2015; Rutland, Cameron, Milne, & McGeorge, 2005). Overall, evidence on children's development of self-presentational behaviours provides support to the hypothesis that, when self-categorizing as non-poor, children might be managing their public self so as to avoid a potential negative categorization. This hypothesis particularly fits the social class intergroup context where the distinction between the categories is less perceptible. In such contexts, the perceived fuzziness of the comparative context may influence the way children place themselves within their specific context. Thus, it is through the specificities of such social class based intergroup contexts that this hypothesis will be approached.

Social class self-categorization as social identity management

Different from many other social categorizations (e.g., gender, ethnicity), the distinction between social class related groups is not based on phenotypic differences between individuals and is therefore less visible. Children and adults categorize others in terms of social class based on external markers such as clothes, technology goods, and interests (e.g. Becker, Kraus, & Rheinschimidt-Same, 2017; Kraus & Keltner, 2009; Leahy, 1981; Ramsey, 1991; Rauscher et al., 2017), which are highly concealable. Given the generalized access to material goods and juxtaposition of different class markers in economically developed countries, the cut-line between social class groups may be perceived as fuzzy and more of a continuum (DiMaggio, 2012). Consequently, children may consider the boundaries between social class related categories as more permeable than those of other social categories such as gender and ethnicity. In turn, social class self-categorization may also be characterized by greater flexibility and subjectivity, and therefore less aligned with objective socioeconomic conditions comparing with other self-categorizations with their objective markers. More specifically, the fuzziness of the category boundaries (Ellemers, 1993; Tajfel & Turner, 1979) may shape the way children define themselves and their position in relation to social class related categories and how they communicate those identities.

According to Social Identity Theory (SIT; Tajfel & Turner, 1979), lower-status group individuals engage in strategies to achieve a positive social identity that varies depending on socio-structural elements in the social context (Ellemers, 1993; Tajfel & Turner, 1979). In intergroup contexts that involve more permeable group boundaries, as those based on social

class, upward individual mobility might be one likely identity management strategy (Bettencourt, Charlton, Dorr, & Hume, 2001). According to Social Identity Development Theory (SIDT; Nesdale, 2004, Nesdale & Flesser, 2001), children, too, are sensitive to the relative status of their social group. Consistently, a study with artificial groups found that children preferred higher- rather than lower-status groups, and lower-status group children were more willing to leave the group when an opportunity was provided (Nesdale & Flesser, 2001). While in these experimental studies permeability of group boundaries was manipulated, in real life the differences in permeability may depend on the kind of intergroup relation. The higher fuzziness of the social class context in comparison to other intergroup contexts may result children's relatively strong belief in permeability of the social class categories. Thus, children's membership in the disadvantaged group of poor children may be to a large degree subjective, a question of interpretation and allowing for a great deal of flexibility. In the case of our study, we argue, therefore, that explicit self-categorization as a non-poor child in the face of comparative information that speaks for own relative poverty can be a process of subjective individual social mobility, motivated by self-presentational purposes and by the necessity to maintain a positive social identity.

Some plausibility for this hypothesis comes from research in other intergroup domains. Consistent with SIDT, studies on racial and ethnic self-categorization have systematically shown that a significant proportion of children from stigmatized groups do not self-categorize as members of their ingroup despite showing the ability to categorize other lower status group members. In their seminal study, Clark & Clark (1947) found that even though almost all 3-year-old Black children were able to categorize other White and Black children based on skin colour, approximately two thirds still self-categorized as White. Interestingly, around the age of 7, the percentage of Black children that self-categorized as White dropped significantly to about 13%. This effect has been replicated in many studies (for a review, see Aboud, 1977; Cramer & Anderson, 2003; Milner, 1973). Interestingly, in studies where 'mulatto' was included in addition to 'white' and 'black' categories, a 'whitening' effect was observed among children aged 5 to 12 years, that is, a significant percentage of children categorized by the researchers as black self-categorized as mulatto, and children categorized by the researchers as mulatto self-categorized as white (França & Monteiro, 2002; Máximo, Camino, Nunes, & Lins, 2012; Silva, Pereira & Camino, 2002). One explanation for this 'whitening effect' may be that children engage in a strategy to move away from a disadvantageous racial group membership (França & Monteiro, 2002).

Summing up, as an intergroup context where the boundaries between groups may be perceived as fuzzy and permeable, social class self-categorization may be characterized by great flexibility. Therefore, children's explicit self-categorization as a non-poor child can be a process of subjective individual social mobility towards a more positive social identity, as found in other intergroup contexts (França & Monteiro, 2002). In light of these findings, while investigating a construct vulnerable to biased responses due to public self-image and social identity concerns, in addition to explicit measures, it is relevant to capture children's responses in a more spontaneous and less controllable way. Implicit measures to assess social class self-categorization, is one of the possible ways.

Explicit and implicit social class self-categorization

Compared to explicit measures, implicit measures are less prone to self-presentational influences and allow capturing spontaneous and difficult to control associations (Baron & Banaji, 2009; Nosek, Greenwald & Banaji, 2007). Although most studies using implicit measures have focused on attitudes and intergroup bias, a few studies have used implicit measures to assess self-categorization, more specifically children's ethnic (Duhnam et al., 2007) or gender identity (Cvencek, Greenwald, & Meltzoff, 2016), or adults' gender identity (Cadinu & Galdi, 2012) and sexual orientation (Cadinu, Galdi, & Maass, 2013; Fasolim et al., 2018).

One of these studies investigated the implicit group identity of 5 to 12 years disadvantaged minority Hispanic American children (Dunham and et al., 2007). The results showed that when the comparison group was African Americans (lower status), children explicitly and implicitly identified with their ingroup independently of their age. Differently, when the comparison group was White Americans (higher status), older children still explicitly identified with their ingroup, but implicitly identified with both Hispanic and White. According to the authors the results suggest the early internalization of the status inequalities between these groups and replicate some earlier findings with other disadvantaged minority groups (e.g., Clark & Clark, 1947). Overall, this study shows that implicit self-categorization is also exposed to some context-driven flexibility, raising the question if this flexibility is motivated by social identity principles, namely the search for a positive social identity through individual mobility strategies.

To sum up, the literature using direct measures of social class self-categorization has shown that lower SES children tend to self-categorize above of what researchers consider their actual social standing (e.g., Rauscher et al., 2017; Sarti et al., 2015). Notwithstanding

this apparent mismatch, there is some evidence that children's self-categorization might still reflect some knowledge about their objective SES (Mistry et al., 2015). This suggests that children might adjust their social standing upward, particularly lower SES children (Amar et al., 2015), but do so while anchored to their objective SES. Although this effect seems to be independent of children's age (e.g., Amar et al., 2015), no systematic examination of age changes has been conducted so far. Because only direct measures have been used, we do not know if this mismatch between declared and objective SES reflects children's lack of knowledge about their social standing or a self-presentational motivated strategy.

The present study

By adopting a developmental social identity approach (Nesdale, 1999, 2004; Tajfel & Turner, 1979; Turner et al., 1987), the current study explores children's development of explicit and implicit self-categorization in the social class intergroup context and its association to children's objective SES.

Considering children's motivation to maintain or search for a positive social identity (Nesdale & Flesser, 2011; Tajfel & Turner, 1987), alongside evidence showing that children hardly define themselves as a poor child (e.g., Rauscher et al., 2017; Sarti et al., 2015), we expect children to explicit self-categorize as non-poor, and do so irrespective of their SES (H1). Nevertheless, building on SCT's prediction that self-categorization is dependent on individuals' knowledge about the category and connected to their experiences and expectations (Rutland, 1999; Turner et al., 1987), we expect children's objective socioeconomic status to still influence their explicit social class self-categorization. Therefore, we expect that lower SES children, although self-categorizing as members of the non-poor category, will position themselves closer to the poor end of the non-poor vs. poor continuum (H2).

As to our account on the development patterns of explicit social class self-categorization, competing predictions can be put forward. The first prediction draws on evidence that explicit social cognition (e.g., attitudes) can be influenced by self-presentational concerns, more specifically that older children are more concerned with self-presentational aspects in general and evaluations by others than younger children (Banerjee & Yuill, 1999, Banerjee, 2002, McGuire et al., 2015; Rutland et al., 2005). Based on this evidence alone, we would expect that with increasing age children explicitly position themselves closer to the non-poor end of the social class continuum vs. poor end (H3a). However, taking into account that as children grow older they become more experienced and

hold a more extensive knowledge about the social category of poor children (and about poverty in general), a second and alternative age trend could be predicted, namely a stronger tendency to categorize themselves closer to the poor category with increasing age (H3b). Given children's overall increasing knowledge about the poor category, and their greater developmental ability for up-ward social comparisons with their peers (Dijkstra, Kuyper, van der Werf, Buunk, & van der Zee, 2008), we expect this effect for both lower and middle-to-higher SES groups.

As to the implicit measurement, to the best of our knowledge there are no prior studies measuring implicit social class self-categorization. Therefore, we approached this question in a more exploratory way, integrating different strands of research. Given the relatively lower vulnerability of implicit measures to self-presentational motives, it is possible that lower SES children are not able to control their implicit responses and therefore associate themselves more with the category of poor children than middle-to-higher SES children (H4). This could be particularly the case for older children (H4a), for the same reasonings regarding our predicitions in the explicit measure, such as the greater knowledge about the poor category and increasing social comparison skills (Dijkstra et al., 2008). Alternatively, consistent with the early internalization of information about groups' unequal status (Dunham et al. 2007), which motivates children to engage in a process of individual social mobility in order to achieve a more positive social identity (Turner & Tajfel, 1979), it is also likely that children implicitly associate more with the category of non-poor children (higher status group) than with the poor children category (lower status group), and do so regardless of their age (H4b).

Moreover, regarding the association between explicit and implicit self-categorization, literature shows that the strength of the relationship between these two types of measures is moderated by motivational, cognitive and methodological factors. Relevant to the present study, a meta-analytical analysis identifies self-presentational concerns as one of the possible moderators, such that the higher the motivation to preserve a positive image of the self the weaker the association between the two measures (Fazio & Olson, 2003; Nosek, 2005; Rutland et al., 2005). Based on this, we expect to find lower correlations between explicit and implicit self-categorization for older children.

Method

Participants

Five hundred and thirty-two children (278 female) from seven Portuguese public schools located in the Lisbon Metropolitan Area participated in the study. Participants were enrolled in 1st, 4th and 6th grades and their age ranged between 6 and 12-years (M = 9.13, SD = 2.18). Children were grouped in three age groups: 6-7 years-old (N = 179; M = 6.25; SD = 0.46), 9-10 years-old (N = 150; M = 9.34; SD = 0.49) and 11-12 years-old (N = 203; M = 11.26; SD = 0.44). Power analysis for a Factorial ANOVA with 12 groups was conducted in G*Power 3.1 (Faul, Erdfelder, Lang, & Buchner, 2007) with the following parameters: power of .80, alpha of .05, and a small effect size (η^2 = .02), establishing the optimal sample size of 476.

Participants' objective SES was determined as a categorical variable based on their eligibility for free or price-reduced meals, an individual school indicator that is directly based on family income and on the family eligibility for allowance provided by the national social security[32]. Accordingly, 33.8% (n = 180) of the participants in our sample were eligible for such free or price-reduces meals and therefore classified as coming from lower SES families, and the remaining 66.2% (n = 352) were classified as coming from middle-to-higher SES families. The percentage of children with lower SES at the participating schools ranged from 6% to 64% with an average of 34.8% across schools (SD = 20.3%).

Procedure

Schools were responsible for distributing the study consent form to the parents. The signed forms were collected by teachers and delivered to the researcher. Children were tested individually in the classroom performing all the measures on a laptop with headphones. In each session, there was a maximum of three participants at the same time, positioned in a way that the screen was not visible to anyone else. Besides the participants and the researcher, there was no one else in the room during the application. The interview took approximately 20-30 minutes. The instructions along the interview were given to the

[32] Objective SES refers to the material conditions of life that an individual enjoys (e.g. individual's financial resources, access to educational opportunities, and participation in social institutions; Oakes & Rossi, 2003). Although acknowledging that different indicators should be collected, given the limited access to this information in schools, we only took into account family financial resources. Specifically, we used the school indicator of "Ação Social Escolar" (Portuguese wording for school social support) as a proxy of objective SES.

participant in an initial video, and on the beginning of each task with audio recordings via the headphones.

The procedure started by collecting children's date of birth and explaining that all the instructions would be given by the computer, in the course of the interview. Children were instructed to ask the researcher in case they would have any question. Participants watched an initial video in which the researcher explained how the experiment was going to unroll. Participants were told that there were no right or wrong answers and that all responses were anonymous and confidential. This video also introduced the categories under study, poor children and non-poor children (see next section), and children were told that the interview was about themselves in relation to those two groups of children. After watching the video, participants completed the measure of explicit and implicit social class self-categorization measures. The order of the implicit and explicit measures was counterbalanced between participants. At the end of the interview, children were debriefed [33] and thanked for participating in the study, and they were reassured of the confidentiality of the information.

Social categories construal. The categories under study, *poor children* and *non-poor children*, were presented in the initial video along with illustrations depicting children belonging to these two social categories (4 illustrations for each social category, examples in Figure 19-A and Figure 19-B; see Appendix D). The poor children category was defined as follows (translated from the Portuguese original text): 'As you know, there are many kids that go to school like you, in this or in any other school, and these boys and girls are similar in some things and different in other things. For example, there are kids that have more things and there are kids that have fewer things. This group of boys and girls that have less money than the others, we are going to call the group of poor children. They have few toys, the family goes through difficulties and cannot afford to buy much food, they do not often use branded clothes and sometimes they dress more damaged and torn clothes, live in smaller

[33] Children were debriefed by explaining the objectives of the study, stating that we wanted to know how children with their age understand socioeconomic differences in their school and what children with their age feel about themselves in relation to those differences. It was reinforced that that a larger number of children with 6- to 12 years-old from different schools were also participating The experimenter reassured that their answers were only important for research purposes and no one would know about them. Moreover, the experimenter answered the questions raised by the participants in the moment of the debriefing, and communicated to each participant that they could meet them in the coming days if they wanted to talk about the study again. The researcher relayed the contacts for possible questions from parents.

houses and more deprived areas.' (Figure 19 -A). The non-poor children category was defined as follows: 'There are also kids in schools that do not go through many difficulties and have more things than these other kids. Even though, they are not rich, they just are not poor. Let us call this group of boys and girls that have more money the group of children that are not poor. These children have more toys, live in bigger and arranged houses, already use some branded clothes, and because their family has no difficulties, they have more food to eat.' (Figure 19 - B).



Figure 19. Example of illustrations presented in the instructions video, along with the sound of the description of the category poor children (A) and non-poor children (B). (Copyright 2015 by Maria Remédio)

There is evidence showing that children around 4 years-old begin to develop a set of attitudes and beliefs about wealthy groups (Horwitz et al., 2014; Horwitz & Dovidio, 2017, Sigelman, 2012). Therefore, in this initial video, we made clear to the participants that the *rich children* category was not the focus of the study, by stating the following: 'Of course there is also a group of kids that are rich, living in much larger homes and sometimes they even have a pool. But today, I don't want to talk about those. I just want you to think of the group of children that are poor, and this group of children that are not rich, but they are not poor either.'.

At the end of the video, we introduced the *self,* using a gender-matched "puppet" that represented the participant across the various measures of the study (Figure 20). At this point, the participant was told that we would also talk about him/her during the interview.



Figure 20. Matched gender puppet representing the *self* .

Measures

Explicit Social class Self-Categorization. Explicit self-categorization with poor vs. non-poor children was accessed by using a one-item pictorial self-categorization measure (Appendix G), through an adaptation of the Overlap of Self, Ingroup, and Outgroup Scale that has been used in other intergroup contexts (Schubert & Otten, 2002).

The original measure includes three items assessing the overlaps of self and ingroup, self and outgroup, and ingroup and outgroup. It uses overlapping circles representing the self and the groups, and individuals may choose the level of overlap (low-high), that represents their perception of the self in relation to each group (Schubert & Otten, 2002). Different from the original scale, the present measure plotted the overlap of the self with one group against overlap of the self with the other group, on one dimension only (see Figure 21). The choice of collapsing the originally independent items measuring the overlaps of self with the ingroup and self with the outgroup (Shubert & Otten, 2002) was made after the participants in a pre-test answered that they equally belonged to the two groups. While such an answer strategy might correctly reflect participants' avoidance to show any disambiguating statement about their self-categorization, it would be difficult to interpret in the light of our research question. We therefore opted for encouraging participants to take either one side or the other by the design of the measure. Accordingly, participants answered the question "To which of these two groups do you think you belong?" by moving the figure representing the self as much as they wanted towards one of the categories.

The explicit social class self-categorization was measured with an one-item measure[34], measured on a continuous slider scale ranging from -2 to +2, with higher scores indicating stronger self-categorization as non-poor and weaker categorization as poor. Scores below zero indicated that children self-categorized more with poor children than with non-poor children.

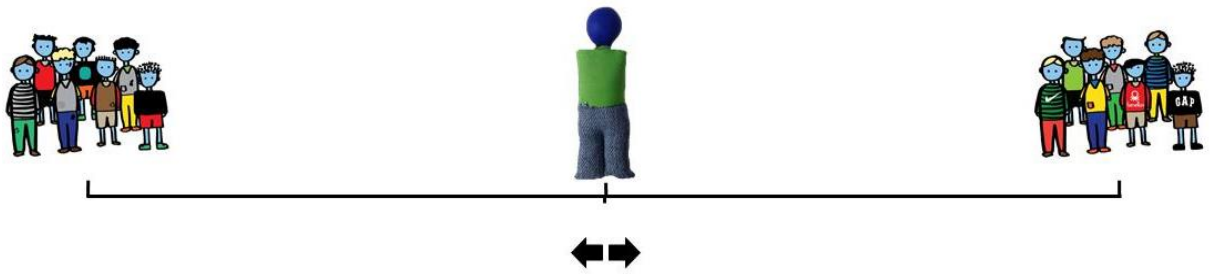


Figure 21. Screen display presenting the measurement of the explicit social class self-categorization: "To which of these two groups do you think you belong?". The images used were previously presented and described as representing the non-poor child group (right) and the poor child group (left).

Implicit Social class Self-Categorization. To measure children's implicit self-categorization an adaptation of the Self-Categorization Implicit Association Test was devised (SC-IAT: Cadinu & Galdo, 2012; Cvencek, Greenwald, & Melrzoff, 2016). The SC-IAT measures the strength of automatic associations between the self and a given social category. The adaptation of this instrument for children followed the procedures and recommendations that inform other child-friendly versions of attitude IATs, namely: 1) 20% reduction of the number of trials compared to adult measures; 2) using sounds and images as stimulus - each trial involved both an audio presentation (i.e., spoken word or beep sound) and a visual presentation (i.e., written word or picture); 3) children were given positive feedback after completion of every task (e.g., ''good job"); 4) the test was presented as a game, in which they should answer "as quickly as possible".

[34] An additional item was presented to the participants regarding their perception of the closeness between the group of poor children and the group of non-poor children, by asking the question "How do you think that, in reality, these two groups of children that are poor and the group of children that are not poor are close to each other?", moving the figures representing the groups in a continuum. Moreover, beyond this explicit measure, and always immediately after it, we administered a child adaptation of a multidimensional identification scale (Leach et al., 2008; Ramos & Alves, 2011). These measures were not analysed to the present thesis. Both measures can be found in Appendix G.

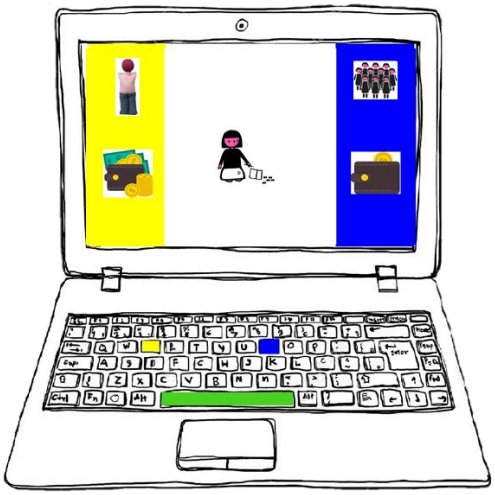


Figure 22. Child's view of the apparatus used for the SC- Child-IAT.

In this social class self-categorization IAT, children sorted stimuli belonging to four categories: 1) *me* (words/sounds about the *self*- I (eu), myself (eu próprio), my (meu), for me (para mim)); 2) *them* (image of many boys/girls; words/sounds about *them*- they (eles), their (deles), theirs (seus), for them (para eles); 3) *poor children* (4 illustrated pictures depicting a poor child), 4) *non-poor children* (4 illustrated pictures depicting a non-poor child). Figure 22 represents the apparatus of the self-categorization Child-IAT. The four categories were assigned to two response buttons: one operated with the left hand ('e' key – marked with yellow scotch tape) and the other operated with the right hand ('i' key – marked with blue scotch tape). Stimuli (words and/or images) were presented one at a time in the centre of the screen. The child's task was to sort the stimuli as soon as they appear in the centre of the screen by pressing one of the response buttons ('e' or 'i' keys).[35] Coloured stripes on either side of the screen (one yellow and one blue) contained visual anchor pictures for each of the four categories (Appendix F). The anchor picture for 'me' appeared with the 'puppet' representing the self, and the anchor picture for 'them' appeared as a group of other boys/girls. The anchor picture for 'poor children' and of 'non-poor children' appeared (below the two other categories) as a wallet almost empty or a wallet full of money, respectively.

The illustrated pictures stimuli were similar to those presented in the instruction video (see Figure 22), but with the difference that in each image only one child, a boy or a girl, was presented (Appendix E). To make the measure suitable for children that are still learning to

[35] The green space key was used only to advance in the test instructions.

read, each stimulus of a printed word on the screen was presented simultaneously with the same word spoken. A native female Portuguese speaker recorded auditory stimuli for this experiment. Moreover, each poor-children-image and each non-poor-children-image was synchronized with a uniform short beep (Cvencek et al., 2016). The SC-IAT was matched to the gender of the participant using matched gender stimuli (e.g. pictures, Portuguese words and sounds).

As Table 20 reports, the Self-Categorization Child-IAT consisted of seven blocks (160 trials). Blocks 1, 2 and 5 consist in practice blocks and blocks 3, 4, 6 and 7 consist in test blocks. A total of four versions of the IAT were randomly administered to the participants. The configuration presented in Table 20 is one of the four possible configurations. The four versions accounted for the order of the presentation of the self-categorization combinations (combination (1)- "self" and "non-poor child" assigned same response key in Blocks 3 and 4; combination (2)- "self" and "poor child" assigned the same response key in Blocks 3 and 4), and for left or right handed (switching what was assigned for left and right key in the Me/Them discrimination). In what regards the combination order, for half of the sample, Blocks 3 and 4 were presented with the self-categorization combination (1) and Blocks 6 and 7 presented the self-categorization combination (2), like is shown on Table 20. For the other half, Blocks 3 and 4 were presented with the self-categorization combination (2) and Blocks 6 and 7 presented the self-categorization combination (1). In what regards the key assignment, for half of the sample Blocks 1 and 5 are performed as presented in Table 20, for the other half the left key and right key response options for Me/Them discriminations was reversed. For all the participants, along the 7 blocks, incorrect responses were followed by a red-cross mark, and children were instructed to press the correct key to "continue the game."

The self-categorization IAT was analysed following the standard protocol for the improved scoring algorithm recommended by Greenwald, Nosek and Banaji (2003). For each participant, an IAT score (*D*) was calculated yielding an effect size estimate with possible range from -2 to +2 for each participant. In the present study, positive values reflect stronger automatic associations between the self and the non-poor category and negative values reflect stronger automatic associations between the self and the poor category. The IAT showed good internal consistency ($\alpha = .77$), as computed from a split-half reliability test of the odd and even trials.

Table 20

Trial blocks used in the IAT task: one example of the presentation of the stimuli.

Block	Task	Left key ('e')	Right key ('i')	No. of Trials
1	Me/Them discrimination (words/sounds)	Them	Me	16
2	Poor/Non-Poor child discrimination (images)	Poor child	Non-poor child	16
3 and 4	Self-categorization combination (1)	Them, Poor child	Me, Non-poor child	24+24
5	Reverse Self/Non-self discrimination	Me	Them	32[36]
6 and 7	Self-categorization combination (2)	Me, Poor child	Them, Non-poor child	24+24

Note: Self-categorization combination (1) was considered as the combination of the self and the non-poor child stimuli with the same response key, self-categorization combination (2) was considered as the combination of the self and the poor child stimuli with the same response key.

Results

To address our research questions and understand how implicit and explicit social class self-categorization develops trough childhood taking into account children's objective SES, a series of separate between-subjects analyses of variance were conducted. We used children's implicit and explicit self-categorization as dependent variables, with age group (6-7 vs 9-10 vs 11-12 years old), socioeconomic status (lower vs. middle-to-higher) and order of the application of the measures (implicit measure first vs. explicit measure first) as between-participants variables. In Table 21 the correlation of the variables in the study are presented. Lastly, the relationship between implicit and explicit measures is examined by analysing the correlation between the variables for each group according to children's age and socioeconomic status, controlling for the order of the application of the measures.

[36] One of the most common artefacts observed on the IAT is a tendency of interference of the first combined configuration (Blocks 3 and 4) with the performance of the second one (Blocks 6 and 7), where the response buttons are reversed from the first part of the IAT to the second part of IAT. In order to reduce this order effect, found in a pre-test of this study, we have duplicated the number of trials of the Block 5 (practice block), preceding the second set of combined pairings (Nosek, Greenwald, & Banaji, 2005; Lane et al., 2007).

Table 21

Correlations among variables

	1	2	3
1. Months of age	-	- .248***	- .102*
2. Explicit Self-Categorization		-	.203***
3. Implicit Self-Categorization			-

Note: * $p < .05$; ** $p < .01$; *** $p < .001$

Explicit Social class Self-Categorization

Preliminary analysis showed that the large majority of children self-categorized as non-poor (92%; *M* = 1.20; *SD* = 0.94; one sample t-test against 0 *t* (523) = 29.275, $p < .001$, *d* = 1.28). This variable showed a non-normal distribution, highly and negatively skewed (skewness = -1.45 [*SE* = 0.11]; kurtosis = 2.02 [*SE* = 0.21]).[37] Explicit social class self-categorization was submitted to a 3 (Age groups: 6-years-old, 9-ydoears-old and 12-years-old) x 2 (SES: Lower vs middle-to-higher SES) x 2 (Implicit first vs Explicit first) factorial ANOVA[38]. The results showed no interaction effect between the age and objective socioeconomic status (*F* (2, 512) = 0.471, $p = .625$, η^2=.00; see Figure 23).

Consistent with our prediction (H2), a main effect of children's personal SES was found (*F* (1, 512)= 9.736, $p = .002$, $\eta^2 = .02$). This main effect indicates that middle-to-higher SES children perceived themselves more as non-poor (*M* = 1.29, *SD* = .83) compared to lower SES children (*M* = 1.04, *SD* = 1.11; mean difference of 0.262, BCa 95% CI [0.080, 0.454]).

[37] In order to overcome the issue of non-normality of the dependent variable in our analyses, we used a bootstrap method (5000 sub-samples) and bias-corrected accelerated confidence intervals when estimating mean differences (Hayes & Preacher, 2014).

[38] In this ANOVA order of the implicit/explicit measures was included as a factor for control purposes. On the explicit social class self-categorization measure no main effect of order was found (*F* (1, 512)= 0.164, $p = 0.686$, $\eta^2 = 0.00$), and no two-way interactions (*F* (1, 512)= 2.276, $p = 0.132$, $\eta^2 = 0.004$ with objective SES; and *F* (2, 512)= 1.419, $p = 0.243$, $\eta^2 = 0.01$ with age groups) or three-way interaction (*F* (2, 512)= 1.205, $p = 0.301$, $\eta^2 = 0.004$) were found.

Consistent with one of our predictions regarding the developmental pattern of explicit self-categorization as poor (H3b), although it was not moderated by objective SES, we found a main effect of children's age (F (2, 512) =15.265, $p \leq .001$, $\eta^2 = .05$) showing that for older participants explicit social class self-categorization as non-poor was less extreme and approached the divide line between the two categories (6-7 years-old: M = 1.52, SD = 1.02; 9-10 years-old: M = 1.14, SD = 0.87; 11-12 years-old: M = 0.98, SD = 0.85), with a reliable difference between 6-7 years-old and 9-10 years-old participants (mean difference of 0.36, BCa 95% CI [0.128, 0.581]) as well as between 6-7 years-old and 11-12 year-olds (mean difference of 0.54, BCa 95% CI [0.313, 0.759]). There was no difference between the explicit social class self-categorization of 9-10 years-old and the 11-12 years old participants (mean difference of 0.18, BCa 95% CI [-0.021, 0.381]).

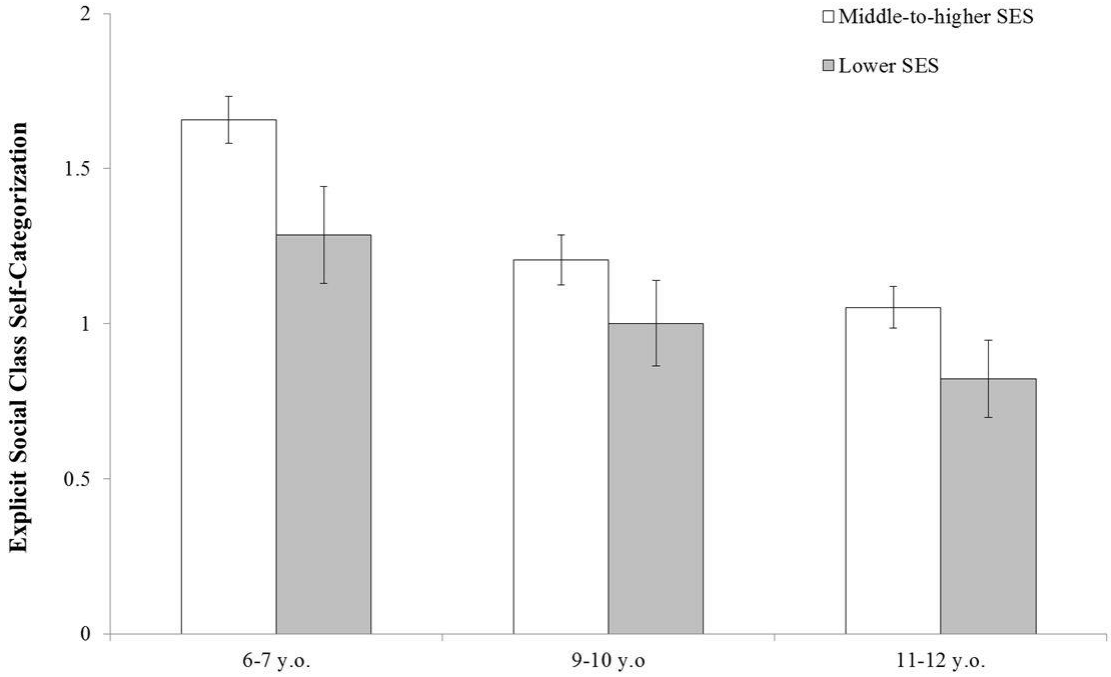


Figure 23. Explicit social class self-categorization mean values according to SES and age groups. Standard errors are represented in the figure by the error bars for each group.

Implicit Social class Self-Categorization

Consistent with procedures from previous adult and Child-IAT studies (e.g., Cvencek et al., 2011), data were excluded for subjects that met the following criteria: (a) ≥ 10% of responses faster than 300 ms; (b) error rate ≥35% or (c) average response latency 3 standard deviations above the mean response latency for the whole sample. Twenty-eight participants

were identified as outliers based on these pre-established criteria, and their scores were excluded from the analysis[39]. No difference was found across gender (t (502) =1.627, p = .104) and no difference across versions of the IAT according to the order the two double combination blocks (t (502) = 0.543, p = .587) and the versions accounting for left or right handed (t (502) = -.656, p = .512).

Overall, children associated the self more with the non-poor category than with the poor category (M = 0.19, SD = 0.44; t-test against 0, t (503) = 9.830, p < .001, d = 0.43). Implicit social class self-categorization was submitted to a 3 (Age groups: 6-years-old, 9-years-old and 12-years-old) x 2 (SES: Lower vs. middle-to-higher SES) x 2 (Implicit first vs. Explicit first) factorial ANOVA. No interaction effect was found between SES and age (F (2, 492) = 0.058, p = .943, η^2=.00; see Figure 24). Consistent with our prediction (H4), there was a significant main effect of children's SES on their implicit social class self-categorization (F (1, 492) = 7.410, p = .007, η^2=.01), showing that middle-to-higher SES children self-categorized more as non-poor (M=0.23, SD=0.42) than lower SES children (M = 0.11, SD = 0.47). Partially consistent with one of our hypothesis for the development of implicit self-categorization (H4a), only a marginal main effect of children's age was found (F (2, 492) = 2.650, p = .072, η^2=.01), and Pairwise comparisons showed that participants aged 6-7 years implicitly self-categorized more with the non-poor (M=0.25, SD=0.45) than 11-12 year-old participants (M=0.14, SD=0.45; p = .023). No other significant differences were found between age groups (always p > .237).

[39] Two participants were eliminated due to criterion a), 24 participants were eliminated due to criterion b), no participant was eliminated due to criterion c) and two participants were eliminated simultaneously due to criterion a) and b). Participants whose IAT data was deleted differed from the rest of the sample by their age (t (530) = -5.671, p > .001), as they were younger (M=6.82 y.o.; SD=1.74) than not excluded participants (M=9.15 y.o.; SD=2.14). Moreover, among participants whose IAT data was deleted, there were more lower-SES children (85.7%) than middle-to-higher SES children (χ^2 = 18.66, p < .001).

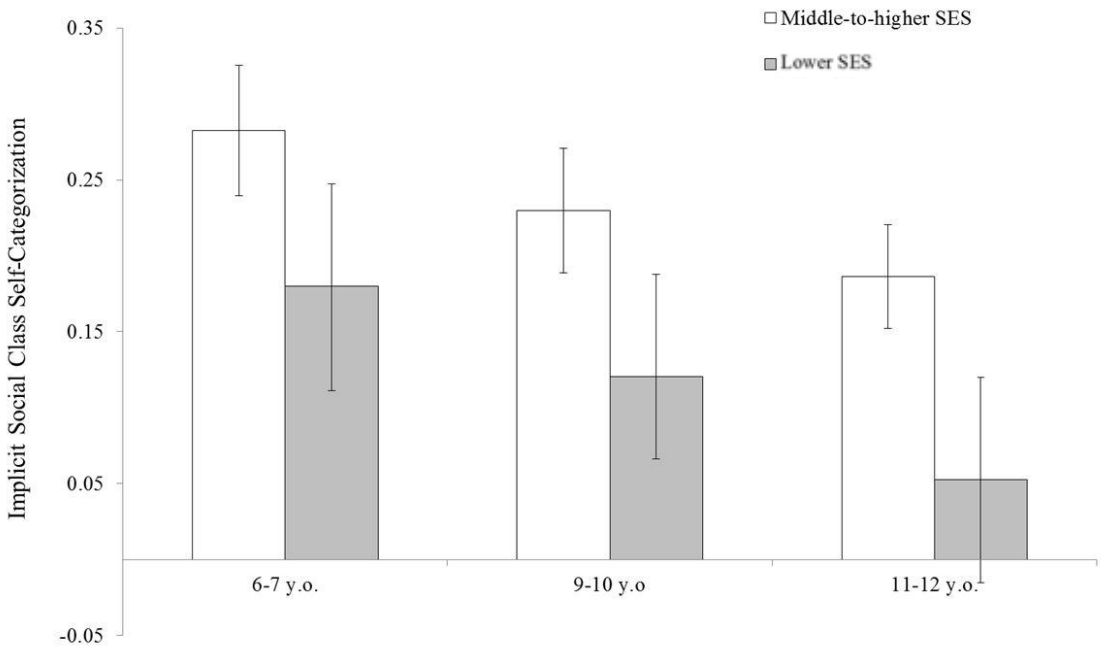


Figure 24. Implicit social class self-categorization mean values according to SES and age groups. Standard errors are represented in the figure by the error bars for each group.

A non-predicted significant main effect of the order of application of the measures on implicit social class self-categorization was found (F (1, 492) = 8.940, p = .003, η^2=.02), qualified by a marginally significant interaction of order and age groups (F (2, 492) = 2.626, p = .073, η^2=.01). Accordingly, 6-7 year-old children who first responded to the implicit measure (M=0.13, SD=0.45) scored lower on the IAT measure (i.e., associated themselves more to poor children) than those who answered first to the explicit measure (M=0.37, SD=0.43) as shown in a simple main effect analysis (F (1, 492) = 11.033, p = .001, η^2=.02). In the group of children aged 11-12 years, this effect of order of the application was marginally significant (F (1, 492) = 3.146, p = .077, η^2=.01) and in the group of 9-10 years-old there was no effect of order (F (1, 492) = 0.008, p = .928) (see Figure 25).

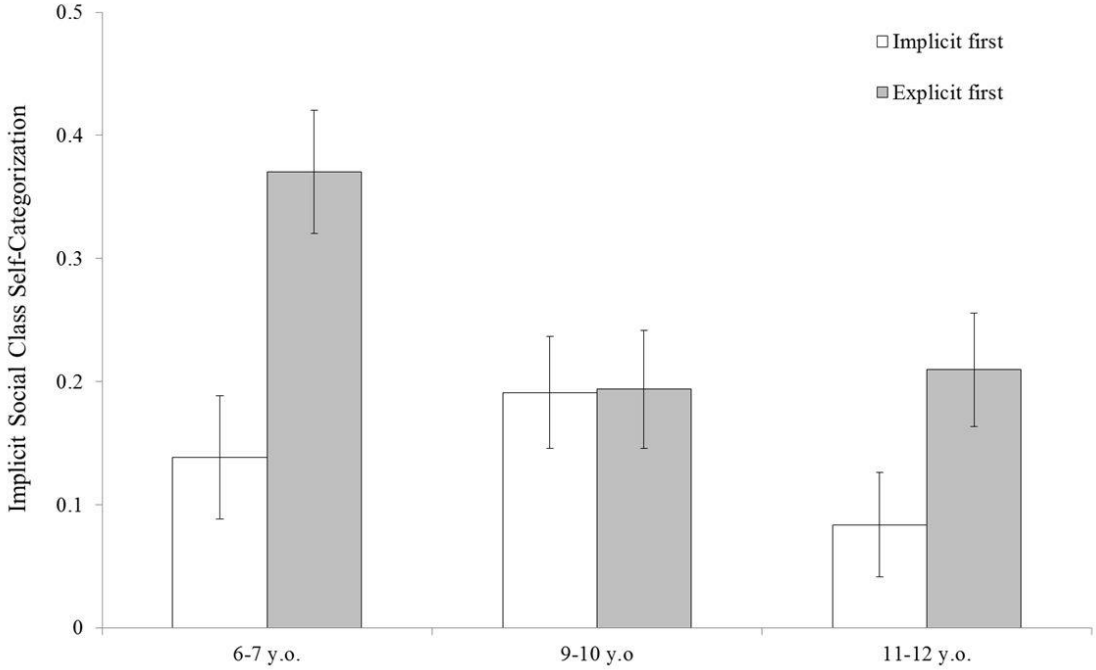


Figure 25. Implicit social class self-categorization mean values according to age groups and implicit-explicit order. Standard errors are represented in the figure by the error bars for each group.

Relationship between Implicit and Explicit social class self-categorization

One of our goals was to examine the relationship between explicit and implicit measures of social class self-categorization. For the global sample (see Table 21), and controlling for measures' application order, we found that implicit and explicit self-categorization measures were moderately correlated, and children that implicitly showed more association of the self with the poor category also showed more explicit self-categorization as poor children (r (496) = .203, $p < .001$). The magnitude of this correlation is consistent with other studies measuring implicit and explicit aspects of social cognition (e.g. attitudes, self-esteem, group identity; for a review, see Hofmann, Gawronski, Gschwendnerm Le, & Schmitt, 2005; Nosek, 2005).

In order to verify our hypothesis about the effect of the socioeconomic status and age in the relationship between implicit and explicit measure of social class self-categorization, we calculated the correlations between these variables in the groups crossing age and socioeconomic status (see Table 22). Contrary to our hypothesis, children aged 9-10 years showed significant moderate positive correlations between implicit and explicit social class self-categorization, meaning that the more they self-categorized as a poor child at the explicit

level, the more they did the same at the implicit level. In older children from lower SES backgrounds, we also found the same result. We found no correlation among the two variables for the youngest age group, regardless of their socioeconomic status. Within lower SES children, the correlation in the age group of 6-7 year-old children is statistically different from one of the 9-10 year-old group (z = -2.38, p = .017), but the difference to the correlation shown by 11-12 years-old children was not significant (z = -1.10, p = .271). There was also no significant difference between the correlations found in the two oldest age groups (z = 1.42, p = .156), and they were no significant differences across correlations of the different age groups within middle-to-higher SES children (always $p > .107$).

Table 22

Correlations between implicit and explicit social class self-categorization according to children's age and socioeconomic group

	Lower SES	Middle-to-higher SES	*z*
6-7 years-old	.08	.01	0.06
9-10 years-old	.49***	.25*	1.56
11-12 years-old	.26*	.14	0.92

Note: * $p < .05$; ** $p < .01$; *** $p < .001$

Taking into account the non-predicted effect of order on the implicit social class self-categorization scores, additional analysis were performed as we also calculated separate correlations for children who answered first to the implicit or to the explicit measure of self-categorization. Table 23 presents the correlations calculated for the relationship among these variables in the groups crossing age, socioeconomic status and order of the measures. Results showed a different pattern in the two order conditions.

For children that first answered to the implicit measure, for lower SES children we found a significant, positive and moderate to strong correlation between implicit and explicit social class self-categorization in the age groups of 9-10 and 11-12 year-old children. This association shows that at this age, when answering first to the implicit measure, the more lower SES children self-categorize as poor children at the implicit level, the more they do the same at the explicit level. In contrast, in the same age groups, middle-to-higher SES children did not present a significant association between the two variables, with a significant or

marginally significant difference between the upper-middle and lower SES children (z = 1.99, p = .047 for 9-10 year-old children and z = 1.62, p = .105 for 11-12 year-old children). For younger children, independently of their socioeconomic status, there was no association between the two measures.[40]

For children that first answered to the explicit social class self-categorization measure the results show dissociation between the two measures, with no significant relationship across the different age groups and SES groups. The comparison between the correlations in terms of their magnitude, does not show any significant differences between the correlation coefficients (always p > .379).

Table 23

Correlations between implicit and explicit social class self-categorization according to children's age, socioeconomic status group and order of the measures.

	Implicit first		Explicit first	
	Lower SES	Middle-to-higher SES	Lower SES	Middle-to-higher SES
6-7 years-old	.07	-.05	.10	.09
9-10 years-old	.65***	.27	.01	.24
11-12 years-old	.48*	.16	.12	.13

Note: * p < .05; ** p < .01; *** p < .001

Discussion

This study aimed to investigate the development of implicit and explicit self-categorization regarding social class in children aged from 6 to 12 years. The novel findings of this study revealed that children from early childhood on have a sense of their relative position in the social class continuum, as is manifested in their self-categorization at the

[40] Within lower SES children that answered first to the implicit measure, there was a significant difference between the correlations between implicit and explicit self-categorization at the age of 6-7 years and 9-10 years old (z = -2.39, p = .017). No difference was found between 6-7 years and 11-12 years old (z = -1.58, p = .114) and between 9-10 years and 11-12 years old (z = 0.93, p = .352). Within upper-middle SES children that answered first to the implicit measure, there were no significant differences between the correlations across age groups (always p > .719) .

implicit and explicit level. Our results are, however, unambiguous regarding the fact that most children, in an absolute sense, and independently of their social-economic status and age, negate any membership in the devalued social-category of poor children.

Results show that, regardless their socioeconomic status, most children self-categorize as non-poor at the implicit and explicit level throughout childhood. That is, the variation is not between those that negate and those that do not negate such category membership; it is rather in the strengths of this negation of being one of the poor kids where we can find the developmental and contextual effects.

In fact, just by analysing the distributions of the variables and, particularly, the left-skewed distribution of the explicit measure, we can argue that, when measured directly, children place themselves far away from the group of poor children. This tendency is less extreme in the implicit measure of self-categorization, where children associations are more wide-ranging, yet it is still there. For the central tendencies (i.e., difference from zero), we found a large effect size for the explicit self-categorization measure and a medium effect size for the implicit self-categorization measure. This result is consistent with our hypothesis and with previous results on group identity with disadvantaged categories (Dunham et al., 2007) in the sense that children internalize the social status information about social categories already early in age (Dunham, Baron, & Banaji, 2008) as they are aware of the unequal status position of the poor and the non-poor children. We assume that this has an impact on their (non-) association with the group of poor children. The fact that they self-categorize predominantly as non-poor even at the implicit level, though less extremely, indicates that self-presentation concerns cannot entirely explain this tendency. With other words, they are not pretending, but actually seem to believe in their own non-membership in the poor category. Yet, that does not mean that their self-categorization is void of strategic motivation. Based on Social identity Theory one can argue that, when realizing these asymmetric status relations, children try to maintain or achieve a positive social identity by engaging in a subjective individual mobility strategy by rejecting the label of poor children (Tajfel & Turner, 1979). Based on the data of this study, we can neither confirm nor refuse this explanation, and the question will be addressed in the next study reported in Chapter 6.

Despite this overall rejection of the category of poor children, and partially supporting our hypothesis, the results show also that in both measures of implicit and explicit self-categorization, children with lower socioeconomic status do self-categorize less as non-poor children than those with higher status. These results are consistent with self-categorization theory as they suggest that the context in which children grow up and live their everyday life

has an impact on their self-categorization, which after all is grounded in children's experiences and knowledge about the social world, including the category of poor children (Turner et al., 1987). Consistent with previous studies (Rutland, 1999), our results suggest that social class self-categorization is indeed dependent on children's understandings of particular social categories and on the nature of, and their position in, the social and comparative context, as well as the salience of the category within their social context. It is plausible to assume that children that face daily economic privation, and that have a surrounding background in which they lack some material or symbolic goods that others have, may have a different understanding of the phenomenon and of the category than children with more affluent background, and that they are aware of their lower relative position. The way how we measured self-categorization in our study made such comparative context salient by explicitly introducing the categories of poor and non-poor children as groups and by characterizing them with attributes that are familiar to children and often used for social comparisons among them.

Regarding our research question about the development of social class self categorization along childhood, we found that with age children tend to explicitly self-categorize less with the non-poor category. We interpret these less extreme responses of older children by an increasing sense of their own objective social status position. The result is consistent with one of our proposed alternative hypotheses and contradicts the other. It contradicts the idea that increasing self-presentational concerns should lead older children to distance themselves more from the stigmatized category of the poor. Instead, our result supports the idea that with age children advance towards a more integrated, complex and sophisticated social identity as proposed by SIDT (Nesdale, 1999, 2004). It is also consistent with previous research showing that younger children, aged 4-7 years misreported their own social class standing relative to others (Rauscher et al., 2017; Amar et al., 2015) but 10-12 years-old children from middle to upper middle class showed some convergence of their ratings of subjective social status and their objective SES (Mistry et al., 2015). One possible explanation is that, via socialization, children get to know more about the social phenomenon and about the category of the poor itself, increasingly realizing its complexity (see Chapter 4). When children get older, the perceptions of the causes of child poverty become more differentiated and children become increasingly aware of sub-categories within the group of poor children, i.e, admit more variety within the category. Furthermore, with the developing capability of making social comparisons (Dijkstra et al., 2008), older children may be more aware of the continuum of the scale perceiving social class as graded, rather than as a strict

twofold classification. Nevertheless, regardless of this effect of age on the explicit social class self-categorization, it is important to notice that even older children do not consider themselves as poor children, which also conforms to previous studies (Hakorvita & Kallio, 2015).

At the implicit level there was no significant main effect of age and children from all age groups implicitly self-categorized as non-poor. Although we recognize that most evidence regards other social concepts than poverty, literature in the domain of implicit attitudes shows that implicit intergroup preferences appear quite early in life, as soon as an ingroup-ougroup contrast is acquired, and show little developmental change across lifespan (e.g. Baron & Banaji, 2006). The lack of a main effect of age on the implicit measure is consistent with this general pattern.

Yet, one meaningful age-related result that we did not predict was the marginal effect of order of the implicit-explicit application found on the implicit measure of self-categorization. Children who immediately responded to the explicit measure and later to the implicit one associated more with the non-poor category than children who answered first to the implicit measure, and this tendency was strongest for the youngest age group. This unexpected result suggests that implicit self-categorization may show some flexibility according to the contextual conditions that participants are exposed to. We suggest two possible explanations for this finding. One may be that children responding first to the explicit measure may anchor their implicit memory of their group membership on the previously given explicit response. With other words, once they have openly declared to which degree they consider themselves closer to the non-poor than to the poor category, their awareness of their response may inform their implicit beliefs about themselves. The same would not work the other way around, because it is unlikely that participants were aware of their implicit tendencies. However, the dissociation between explicit and implicit measures that was found when the explicit measure was taken first contradicts such an explanation. We therefore suggest an alternative explanation, namely that the explicit measure may have triggered a social identity threat. By explicitly asking about children's social class self-categorization, we directly put into question their membership in the group of non-poor children by promoting the possibility that they could instead belong to the poor, which involuntarily may have produced categorization threat (Branscombe, Ellemers, Spears, & Doosje, 1999). In the face of such possible categorization threat children may have adjusted their self-categorization towards a more valued social category, that is, in our paradigm, the category of non-poor children. This adjustment may have been easier for the younger

children, given the increasing internalization of the knowledge about their own social class standing with age.

The relation between implicit and explicit social class self-categorization in the total sample is in line with previous analyses and meta-analyses about implicit-explicit relations (Hofmann et al., 2005; Nosek, 2007). Overall, children that implicitly showed more association of the self with the poor category also showed more perception of belonging to the group of poor children in the explicit measure, even if the correlation was not very strong. This result supports the fact that implicit and explicit social class self-categorization are two different measures, but that they are indeed measuring the same underlying construct.

We predicted to find stronger dissociation between the two measures among lower SES children, in comparison to middle-to-higher SES children. However we found the opposite result, namely the most positive and moderately strong implicit-explicit correlation in lower SES children aged above 9 years. One possibility for this result can be related to the fact that children facing economic deprivations and living in disadvantaged contexts may be more aware of their economic situation than those from middle-to-higher SES families. For children living in these conditions the content of the category is possibly present in their daily lives and 'to be or not to be a poor child' is a question that they are confronted with on a daily basis and that is internalized and chronically more salient. Interestingly, when comparing these correlations between the groups of children that answered either first to the implicit or to the explicit measure, we find this association only for children who first answered to the implicit measure. The dissociation found between implicit and explicit social class self-categorization for lower SES children who answered first to the explicit measure is in line with our predictions about the self-presentational concerns (e.g. Nosek, 2005). Thus, the dissociation between the two measures may be due to the need of lower SES children to manage their positive social-identity Yet, results show that this only happens when children answer first to the explicit measure of social class self-categorization, which supports our above mentioned speculation that the explicit measure may have involuntarily triggered categorization threat.

Strengths, limitations and future directions

The present study showed innovative results regarding the development of social class self-categorization, and the influence of objective social-economic status. These findings are very informative, given the importance of taking into consideration children's own perception of their membership to social class categories, which is different from their

objective SES. Nevertheless, this study generated new questions that future research should try to answer in order to better understand this understudied social class intergroup context.

One of the strengths of this study is that it covered children of the different age groups and from different social-status backgrounds in a sufficient number to analyse the development across the status groups robustly. However, the use of the single, categorical measure, namely the eligibility to free or price-reduced meals in schools, as the only indicator of objective socio-economic status, can be considered a limitation of the study. It is unclear whether we would have found stronger effects of objective SES with a more fine-grained measure. What speaks for using this indicator is the fact that it is based on parent's unquestionably relevant financial incomes as well as on the somehow ecologically valid cutoff-points for eligibility of national family allowance. Moreover, schools frequently use it in their policies and practices. Nevertheless, we consider that, in future studies, it would be better to include additional indicators such as parent's occupation and academic qualifications.

This study combined different adapted instruments that involved the creation of appealing tools suitable for children, which helped to catch their attention and commitment to the tasks. Along the procedure, the label used to name the social categories under study (i.e., poor child and non-poor child) may also have been a constraint. Children do hold extreme and negative perceptions about the group of poor children (see Chapter 4; Sarti et al., 2015) and although we introduced the poor child category in a non-extreme way at the beginning of the procedure, this *imposed* representation may not have been sufficient to overwrite the one they already acquired elsewhere, which may have directly influenced their responses. Indeed, one possibility for the lack of self-categorization with the poor child category, even at the implicit level, may be related to children's social representations of the category of poor children that they brought already to the classroom where the study was run. Self-categorization theory contends that self-categorization is dependent on normative fit, the extent that the attributes of an individual conform to the participants' expectations and prior experiences (Oakes, Turner & Haslam, 1991). In our case, and despite the fact that we had previously defined the category of poor children in a non-extreme poverty situation, there is a chance that the label 'poor children' was stronger than the definition of the category itself. As a consequence their own economic disadvantage might not have been enough to fit to their activated knowledge about the poor category (e.g., that poor children have no shoes, nothing to eat, and do not go to school). It would have been important to access their knowledge about the poor child category and their representations about it in order to check which image

prevailed. Another problem might have been implied by the use of the non-poor category, which can be considered a non-category it was ill-defined due to the absence of own distinctive attributes that define the category. Moreover, although it was aforethought (see Method section), when using non-poor child as the opposite category of poor children we did not consider the full continuum of the social class spectrum in our measures of social class self-categorization. There was not category of rich children in our measures. Probably the distribution on the explicit measure would have been less skewed when the scale anchor opposite to the poor children would have been the rich children. Moreover, because we did not ask children for their own representation of the category of non-poor children, and despite the fact that we mentioned they were not rich, we are not able to know the characteristics they attributed to this group. It might have been interesting to collect data about children's perception of similarities/differences within the group of poor children and between the groups of poor and non-poor children (metacontrast principle; Turner, 1987) and check how their proportion would be related to self-categorization regarding social class. More specifically, it would be interesting to understand if children's perception of a lower variability within the poor category, and stronger differences between categories, would drive children to self-categorize less as poor; and on the opposite, if children's perception of the category as more variable, and thus more similar to the non-poor category, would decrease their avoidance of position in the category of poor children.

Another line of research should address the study of explicit and implicit attitudes towards poor children, and the interplay with social class self-categorization in childhood. According to SIDT (Nesdale, 2004), self-categorization comes before the origin of attitudes. In relation to the literature about the attitudes towards poor, studies show that very early in age children have a negative image about this group. Given that our results suggest that only later in childhood children integrate their objective SES when speaking about their self-categorization, these findings raise the question if negative attitudes towards poor children emerge earlier than the perception of belonging to this group of children, and therefore shape from the beginning the perception of (and avoidance of) belonging to this group of children.

Future studies should focus in more detail on the understanding of the processes underlying the non self-categorization as poor children. There is literature showing that self-categorization processes are not straightforward and can be used as a strategy to cope with a disadvantaged or stigmatized group membership and as a process of identity negotiation (Walter, Jetten, Parsell, & Dingle, 2015). More precisely, and in line with the unpredicted results found in this study regarding the order effect, the specific effect of social identity

threat on social class self-categorization should be investigated. In an intergroup context where categories are fuzzy, group boundaries may be perceived as permeable. Future studies should test if children, to achieve or maintain their positive social identity, can indeed use self-categorization as an individual mobility strategy.

Overall, this study fills a gap in the literature in developmental social psychology as it contributes to the understanding of the developmental differences in children's perceptions of their own social class standing and of the impact of the objective socioeconomic status in this perception. The study demonstrates the importance of measuring self-reported explicit social class self-categorization in conjunction with the implicit measure of social class self-categorization, which can access thoughts and feelings that can operate outside conscious control and therefore are less confounded with self-presentational concerns. This study also demonstrates that, in specific contexts, their assessment may be important to understand their different relation or effects on other variables such as attitudes, self-esteem or even behaviours towards poor children.

CHAPTER SIX

Managing a threatening social identity: children's implicit self-categorization as poor and behaviour towards poor children

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Abstract

The current experiment examined the impact of acceptance and categorization threat on 9-12 year-old children's implicit self-categorization as poor vs. non-poor and behaviour towards an excluded target (N = 321). Acceptance threat was manipulated by depicting the exclusion of a poor child vs. exclusion of a non-poor child vs. inclusion of a poor child in a ball tossing game (Cyberball). Categorization threat was manipulated by explicitly asking children to self-categorize according to their socioeconomic standing either before or after the implicit self-categorization assessment. Implicit and explicit social class self-categorization and inclusive behaviour towards the excluded/included target child were measured. As expected, children explicitly self-categorized more as non-poor than as poor, but more so when they were younger. In addition, for younger children, implicit self-association with the non-poor was more evident under conditions of acceptance threat combined with categorization threat. In the Cyberball game, children passed the ball more often to the target child in the exclusion conditions. However, for the oldest, this inclusive behaviour was negatively associated with implicit self-categorization as poor if the target child was depicted as poor and excluded. The results are discussed in light of a developmental social identity perspective on children's social class self-categorization. It is proposed that as implicit self-categorization becomes more grounded on objective social-economic conditions with age, children move from a self-centered identity management strategy to a social and utilitarian other-centered strategy.

Keywords: children, social class, social identity threat, implicit and explicit self-categorization

Introduction

Poor people, including children, often feel ashamed for their socioeconomic condition and avoid situations where they might be labelled as poor (Chase & Walker, 2012; Walker et al., 2013). Actually, it has been shown that children see the condition of being poor as stigmatizing (e.g., Horwitz, Shutts, & Olson, 2014; Sigelman, 2012). Previous research shows that children hold an extreme and negative image of poor children (e.g., homeless, with torn and dirty clothes), and perceive them as victims of discriminatory behaviours by peers (e.g., contempt, exclusion, mock; see Chapter 4). As a result, inherent to the associated social stigma, being a poor child may undermine children's full acceptance and inclusion among their peers (Goffman, 1963), what makes the experience of children who feel poorer than their peers even more hurtful. In fact, the evidence shows that children coming from a lower SES background are more likely to be excluded by their peer group than their higher SES counterparts (Pereira, Mendonça, Neto, Valente, & Smith, 2004; Tippet & Wolke, 2014).

Together, this evidence shows that children with relatively lower SES face a double jeopardy, not only from the potential association with a negative social category in general, but also from the anticipation of peer exclusion. In a comparative context where children may be at risk of being seen as members of a disadvantaged group, they may feel their positive evaluation challenged and may experience a sense of threat. In short, as Social Identity Theory proposes individuals strive to maintain a positive image of themselves (Tajfel & Turner, 1979). When they fail to evaluate themselves in a positive manner, that is, when they experience social identity threat, they may feel motivated to manage their threatening and stigmatizing identity (Branscombe, Ellemers, Spears, & Doosje, 1999; Ellemers, Spears, & Doosje, 2002). The current study aims to address, for the first time, the extent to which children whose social identity is under threat because of their relative lower SES strategically respond to manage their positive social identity.

Social class identities and Social Identity Threat

According to the social identity approach (Tajfel & Turner, 1979), while individuals try to achieve or maintain ingroup distinctiveness they may experience different forms of identity threat. A threat to identity may occur when, in the face of intergroup comparisons, the social identity and evaluation processes are, for some reason, unable to provide distinctiveness and positive self-esteem (Branscombe et al., 1999; Breakwell, 1986). Branscombe and colleagues' (1999) threat taxonomy offers a classification of situations in

which different identity concerns arise and describes the strategies and responses that may result, depending on the individual's commitment to the group at stake. For the authors, the social context of the individual determines the nature of the threat (e.g., value of the group). Moreover, the dimension of social comparison or the content of the social identity, in addition to the degree to which individuals feel committed to the group, are key factors to define the individual's responses to each type of threat. Based on the research reviewed earlier suggesting children's lower sense of self-worth when categorization as poor might be at stake alongside the perceived risk of peer exclusion, we propose that children might face two types of threat: *categorization threat* (i.e., concern of being categorized as a poor child), and *acceptance threat* (i.e., concern with potential lack of acceptance or exclusion from a valued group; Branscombe et al., 1999; Ellemers et al., 2002).

Categorization threat. Categorization threat is defined as the concern of being categorized as member of a group against one's will. This might result from different circumstances, such as individuals do not identify with the group, the categorization is situationally inappropriate, the group is low status and threatens individuals' self-esteem (Branscombe et al., 1999; Ellemers et al., 2002). Typical responses to categorization threat include resistance to being categorized as a group member, and concealing or adapting the stigmatized identity (Barreto & Ellemers, 2003; Cadinu, Galdi, & Maass, 2013; Goffman, 1963; Newheiser, & Barreto, 2014). Moreover, rejection or avoidance of a given categorization is more likely to occur for low identifiers.

Being categorized as a poor child may constitute a menace to children's self-esteem and thus elicit categorization threat. In this vein, the literature shows that from a very young age, children hold negative beliefs and stereotypes about the poor, specifically about poor children (Horwitz et al. 2014; Sigelman, 2012; see Chapter 4). These negative beliefs and stereotypes are also reflected in children's preference for the wealthier groups over poor ones (Horwitz et al., 2014; Shutts, Brey, Dornbusch, Slywotzky, & Olson, 2016). In addition, the literature shows that with age stereotypes about and attitudes towards the poor tend to become more negative (Sigelman, 2012, 2013; Rauscher, Friedline, & Banerjee, 2017; Woods, Kurtz-Costes, & Rowley, 2005). Interestingly, and suggesting that children of relative lower SES may internalize this negative representation, studies have shown that children reporting lower subjective social status were more likely to endorse negative stereotypes of the poor than their counterparts reporting middle subjective social status (Mistry, Brown, White, Chow, & Gillen O'Neel, 2015).

Together, these results suggest that children from disadvantageous socioeconomic backgrounds might experience a lower sense of self-worth when social class self-categorization is salient. If indeed children are worried about their SES, their negative attitudes and stereotypes about poor people may result in low identification with this devalued social group and, therefore, in strong resistance to being categorized as such while looking for alternative and positive self-categorizations.

Acceptance threat. Acceptance threat is defined as a situation in which individuals are uncertain of being accepted or included in a group they consider themselves members of, or would like to join (Branscombe et al., 1999). Research shows that children do experience acceptance threat, more specifically that they are sensitive to possible rejection and exclusion by their peers, and that rejection itself increases children's anxiety, decreases self-esteem and increases dislike for the rejecting group (Nesdale & Pelyhe, 2009).

In the particular intergroup context of social class, there is some evidence showing that relative lower SES children may experience situations where acceptance by their peers is at stake. Research shows that children from low-income families living in harsh economic conditions often feel bullied by their peers (Crowley & Vulliamy, 2007; Ridge, 2002). In a similar vein, a study conducted among more than four thousand Portuguese pupils from 10 to 12 years old showed that children from lower SES backgrounds have a greater risk of being bullied than those from higher SES backgrounds (Pereira et al., 2004). The same result was found in a recent meta-analysis (Tippet & Wolke, 2014), that explains that his might happen due to children's different. Lower SES children are not able to afford the same lifestyle goods and status symbols as their higher SES peers, and it is this not conformation to the normative standards of their peer groups may drive to their social exclusion (Hamarus & Kaikkoonen, 2008, Thornberg, 2010; Tippet & Wolke, 2014).

In light of the literature about categorization threat and acceptance threat, children with a threatened social identity may feel motivated to respond to those threats in order to achieve a more positive social identity. The question of what are the possible coping responses to social identity threats resulting from being poor must be clarified.

Coping responses to social identity threats

The literature on social identity threat provides robust evidence about the possible coping responses to social identity threats individuals are likely to exhibit both at the group and individual levels. A significant portion of this literature has been developed while

focusing on the more specific *queen bee phenomenon*, that is, the processes by which successful women in male-dominated work contexts adapt to the masculine culture and self-distance from other women in order to pursue individual goals (Derks, van Laar, & Ellemers, 2016; Derks, van Laar, Ellemers, & Raghoe, 2015). According to this literature, these responses are elicited when women experience social identity threats at work and may comprise presenting themselves more like the higher status group (men), by physically and psychologically distancing themselves from the lower status group (other women), or by denying or endorsing and legitimizing the unequal gender relations. Several studies show that successful women are more supportive of the status hierarchy, by not promoting and supporting policies to address gender-bias in the workplace (Derks, Ellemers, Van Laar, & de Groot, 2011; Ellemers, Van Den Heuvel, De Gilder, Maass, & Bonvini, 2004; Ng & Chiu, 2001).

Importantly, evidence shows that the queen bee phenomenon is not specific to women, and has also been found among members of other stigmatized groups (e.g., homosexuals, see Bishop, Kiss, Morrison, Specht, & Rushe, 2014; ethnic groups, see Cohen & Garcia, 2005; Steele & Aronson, 1995; Steinberg, Dornbusch, & Brown, 1992).

Overall, this literature shows that when ingroup identification is weak, responses at the individual level are more likely to occur, including mobility to the higher status group (*individual mobility*; Tajfel & Turner, 1979), a response that is also present in childhood (Nesdale & Flesser, 2001). As an example of a response, individuals may choose to self-distance from a devalued group are to hide their actual membership and "pass" as members of the more valued group (Cadinu, Galdi, & Maass, 2013; Newheiser & Barreto, 2014). In effect, and example of self-group distancing under social identity threat was found in Hindustani employees in the Netherlands that present themselves more stereotypically as Dutch when reminded of ethnic bias (Derks et al., 2015). Moreover, evidence also show that individuals may display discriminatory behaviours against the devalued group (Ellemers et al., 2004), or be unsupportive of policies addressing current inequalities (Ng & Chiu, 2001). Studies with African American participants show that, under threat, they not only underlined their dissimilarities from the group members and describe themselves in a less stereotypical way (Steele & Aronson, 1995), but also sat further away from the ingroup peer who they believed to have discredited their social identity (Cohen & Garcia, 2005).

So far, children's specific responses addressing social identity threats have not been tested in the social class intergroup context. In the present study we will test whether children are engaging in identity management by self-distancing from the poor child category or not.

To do so, we will take into account two different responses. First, we will analyse the impact of social identity threat on children's social class self-categorization. Second, we will examine whether reminding children of these threats would trigger compliance with a group-specific norm of social exclusion of poor children among those who self-categorize more as poor. Literature regarding these two processes will be presented below.

Social class self-categorization in childhood. Self-Categorization Theory (SCT; Turner et al., 1987) defines self-categorization as "a cognitive grouping of oneself and some class of stimuli as the same (identical, similar, equivalent, interchangeable, and so on) in contrast to some other class of stimuli" (Turner et al., pp. 44). Moreover, SCT contends that self-categorization is a dynamic process, characterized by some fluidity given its dependency on the context the individual is in (Oakes, 1987; Oakes, Turner, & Haslam, 1991; Turner, Oakes, Haslam, & McGarty, 1994). These considerations are particularly important in the case of social class self-categorization. More specifically, this intergroup context is characterized by a generalized access to material goods and juxtaposition of different class markers, which is likely to make the boundaries of social class groups to be perceived as fuzzy and more of a continuum (DiMaggio, 2012). In turn, this perceived fuzziness is likely to shape individuals' social class self-categorization, which may be more subjective and less aligned with objective socioeconomic conditions than other self-categorizations with their objective markers.

In line with this idea, research providing evidence about children's social class self-categorization suggests that children across childhood and adolescence (4- to 15-years-old), usually do not self-categorize as poor, and do so very much independently of their objective socioeconomic status (Amar, Llanos, Martinez-González, Monroy Agamez, Cortés, & Crespo, 2015; Hakorvita & Kallio, 2015; Rauscher et al., 2017; Sarti, Schalkers, & Dedding, 2015; Sutton, 2009). Rauscher and colleagues (2017) found that although 5-6 year-old American children are aware of social inequalities, their positioning on the social class ladder was not associated to their socioeconomic status. Amar et al. (2015) found that Colombian higher SES 4- to 7 year-old children were more accurate in categorizing themselves according to their objective status, as defined by the researcher, than their lower SES counterparts. In the same vein, studies with older Finish children aged 8- to 15 years show that they self-categorize as middle-class independently of their family's actual economic situation (Hakorvirta and Kallio, 2015) and both lower and higher SES English children perceive themselves as being on the 'average' within a poverty vs. affluence continuum

(Sutton, 2009). The same pattern of results emerges even with children living in impoverished areas, where poverty is more visible (Sarti et al. 2015): one ethnographic and participatory action research conducted with 8- to 14 year-old Dutch children found that children never acknowledged to be poor or to live in a context of poverty. In accounting for these results, researchers have proposed that children and adolescents avoid identifying with the poor because of the stigma associated to that social category (Sarti et al., 2015; Sutton, 2009). In a more homogeneous sample of middle to upper middle-class 10- to 12 year-olds, Mistry and colleagues (2015) found a positive correlation between objective (i.e., household income) and subjective social status (Mistry, Brown, White, Chow, & Gillen O'Neel, 2015). These results suggest that, at this age, children from middle and higher status groups are more able to incorporate their objective socioeconomic conditions in the perception of their social standing.

All together, these findings raise two possible explanations for children not identifying with lower SES groups. On the one hand, children might develop and hold particular beliefs about socioeconomic reality that warrant distancing from those groups. On the other hand, despite their knowledge about socioeconomic differences, children might be motivated to avoid a stigmatizing group membership.

So far, while providing substantial insights, research focusing on children's self-categorization regarding their socioeconomic status has been limited to explicit self-report measures, which does not allow to answer the question of whether children do not self-categorize as poor to protect their public self (Tajfel & Turner, 1979) or because they are indeed not aware of their socioeconomic standing. Compared to explicit measures, implicit measures of self-categorization should be less prone to self-presentational influences as they allow capturing spontaneous and hard to control instances, such as associations in memory (Baron & Banaji, 2009; Nosek, Greenwald & Banaji, 2007). One study reported in this thesis with children from 6- to 12 years old assessed children's implicit and explicit social class self-categorization (see Chapter 5). Findings from this study were consistent with previous research, in that children did not self-categorize as poor at the explicit level. In addition, the results also revealed a similar tendency for children not to identity with the poor at the implicit level. Moreover, both implicit and explicit association with the non-poor category decreased with age and were associated to children's objective SES. Together, these results suggest that at least older children do integrate knowledge about objective socioeconomic conditions in their self-concept (Turner et al., 1987), what is consistent with research revealing that children's social-cognitive skills to make upward and downward social

comparisons increase with age (Dijkstra, Kuyper, van der Werf, Buunk, & van der Zee, 2008).

Most important for the current research was an unpredicted order effect of the explicit and implicit self-categorization measures on children's implicit self-categorization. Younger children's implicit self-association with the non-poor category was stronger when they were exposed to the explicit self-categorization measure before the implicit measure was taken. One possible explanation of this effect is that asking children directly how they perceive themselves as being *poor* vs *non-poor* can trigger a concern for being categorized as poor, that is, *categorization threat* (Branscombe et al., 1999) as discussed before. This hypothesis assumes that categorization threat could potentially have an impact on children's implicit self-categorization, meaning that children's implicit self-concept with regard to a poor-non-poor continuum is not fixed but rather malleable to situational influences (Cadinu et al., 2013; Dunham, Baron & Banaji, 2007). Consistent with this hypothesis is the finding that the explicit self-categorization did not change depending on whether children were given the implicit measure first or second. This more stable response to the explicit self-categorization measure can be expected if one assumes that the explicit measure elicits from the start children's concerns with being categorized as poor, hence, children's explicit rejection of the label.

The assumption of malleability of implicit self-categorization is supported by research focusing on situational influences on implicit self-categorization. A study conducted by Dunham and colleagues (2007) showed that Hispanic children change their implicit self-identification as members of a higher status category. Specifically, children were found to implicitly self-identify as Hispanic when the comparison group was African Americans (lower status), but not when the comparison group was White Americans (higher status). Overall, this study provides good reasons to assume situational malleability of children's implicit self-categorization reflecting their perceptions of status differences between the groups (Dunham, Baron, & Banaji, 2007). A second study with adults, also found that homosexuals adjust their implicit self-categorization in terms of sexual orientation depending on the context to which they are exposed (Cadinu et al., 2013), this is, depending on the salience of their group membership. Results show that homosexual individuals (and not heterosexuals) were faster in categorizing themselves as homosexuals, than according to their age (young) when their membership to the group of homossexuals was made salient (experimental condition: computer desktop with a movie image with a gay couple as protagonist). On the opposite, homosexual individuals were faster in categorizing themselves

as young, than as homosexuals when the sexual orientation was not made salient (computer desktop with a movie image with an heterosexual couple as protagonist). Although the authors did not analyse the results from a social identity threat perspective, we could speculate that a desktop background with an image of a gay couple (i.e., salience condition) demonstrates greater support for or acceptance of this social category being, therefore, less threatening compared to the control condition.

Compliance with norm of social exclusion of poor children as an identity management strategy. Literature with adults shows that one of the typical responses from individuals who feel uncertain about the extent to which they are recognized as members of a more valued group (i.e., to which they want to belong or continue belonging) may be derogating the group that they do not want to belong to, while favouring the valued group (Noel, Wann & Branscombe, 1995). Therefore, individuals under acceptance threat from the group with which they want to align themselves with may display favourable attitudes towards that group, follow the norms of the group and adopt its prototypical behaviour (Branscombe et al, 1999; Noel, Wann & Branscombe, 1995). This kind of behaviour may happen as means for differentiating the self from an undesirable group. By self-distancing, individuals are more likely to convince others, and themselves, that they are really members of a more valued or higher status group.

In childhood, compliance to the norms of a higher status group as a response to acceptance threat can be considered in light of Social Identity Development Theory (SIDT; Nesdale, 2004, 2011). According to SIDT, peer group acceptance is central to children (Nesdale & Pelyhe, 2009), and perceived group membership constitutes the basis for children's behaviour (Nesdale, 2004; Turner et al., 1987). Accordingly, for SIDT, children's group memberships plays a central role on the development of intergroup prejudice in childhood, as children's attitudes and behaviours are influenced by prevailing ingroup norms. Supporting this assumption, studies show that children that identify with a specific group follow the norms of that group in regard to the inclusion or exclusion of both ingroup and outgroup members (Nesdale & Dalton, 2011; Nesdale, Durkin, Maass, Kiesner, & Griffiths, 2008; Nesdale, Maass, Durkin, & Griffiths, 2005). Converging evidence has been found when studying bullying as an intergroup behaviour (Duffy & Nesdale, 2009; Mulvey et al., 2018; Ojala, & Nesdale, 2004), in that children's responses to bullying depend on the norms of the group. More specifically, children that perceive a pro-bullying group norm are more likely to engage in bullying behaviours than children who perceive an anti-bullying norm (for

a review, see Jones, Livingstone & Manstead, 2017). For instance, in a study conducted with children aged 8-11 years, children's evaluations of the acceptability of the exclusion of an outgroup member predicted their behaviour in a virtual ball tossing game, with children tossing the ball fewer times as they increasingly judged exclusion as more acceptable (Mulvey, Boswell, & Niehaus, 2018).

Everything considered, namely the centrality of group acceptance, children's concern with and conformity to group norms, we can speculate that group acceptance threatened (without actual rejection) may intensify children's conformity to the group norms, so as a way to guarantee their place in the group and reduce the threat. Consistent with the idea that lower SES children might respond to acceptance threat with conformity to the perceived norms of their higher status peers, there is evidence of a relationship between children's fear of being mistreated or excluded and their motivation to conform to the high status norms of consuming label-branded clothes (Elliot & Leonard, 2004; Pilgrim & Lawrence, 2001; Roper & La Niece, 2010). Moreover, a study on bullying comparing lower- with higher-status children's bystander behaviours showed that this behaviour was actually dependent on children's social standing (Thornberg, 2010). Lower-status children were more likely than higher SES children to comply with bullying behaviour (by avoiding or ignoring the victim), from fear of subsequent harassment, social disapproval from the peer group, and to be associated with the bully-victim (Thornberg, 2010). Again, consistent with the assumption that poor children experience acceptance threat from higher status groups, lower-status children only helped the bully-victim when no higher status children were present in the situation. In sum, this evidence provides support to the idea that in a context where children feel that their lower SES may compromise their membership to a relatively higher status group, they may show more compliance to the norms of that group.

In addition to SIDT, it is also relevant to consider here the Social Reasoning Development Model (SRD; Killen & Rutland, 2011), as it contends that children and adolescents actually navigate between different forms of reasoning when approaching intergroup relations. More specifically, the SRD proposes that children and adolescents balance between conforming to conventional group norms and the more generic moral norms of fairness and justice. Furthermore, research shows that although children recognize the importance of following the norms of the group, it also shows they acknowledge that there are contexts in which challenging these norms is legitimate and acceptable because they violate a generic norm of fairness (Mulvey, Hitti, Rutland, Abrams, & Killen, 2014; Mulvey & Killen, 2016; Mulvey & Killen, 2017).

Importantly, in the specific case of children's responses to inequalities, literature shows that from very early age on children are willing to rectify inequalities through allocation of more items to those with fewer resources (Blake & McAuliffe, 2011; Li, Spitzer, & Olson, 2014), and share more with poor than with wealthy individuals (Paulus, 2014). One study also showed that children aged 10-11 years rectified inequalities through resource allocations, and did so regardless of whether the disadvantageous group was their ingroup or an outgroup (Elenbaas, Rizzo, Cooley & Killen, 2016). Interestingly, the 5-6 year-old children in this study showed ingroup-favoritism, In sum, these findings suggest the existence of a strong norm that prescribes the rectification of resource inequalities in childhood, by increasingly recognizing the importance to guarantee a fair access to goods (Elenbaas et al., 2016). Nevertheless, this literature also shows that with age children become increasingly attentive to group dynamics and group norms and more likely to consider and even prioritize group-specific norms that might condone prejudice or social exclusion (Killen, Rutland, Abrams, Mulvey, & Hitti, 2013). Relatedly, with age children increasingly expect that challenging group norms may have consequences on group acceptance, likely resulting in decreased ingroup support (Elenbaas & Killen, 2016). In the same vein, a study with children from 9- to 14 years-old drawing on SRD about challenging ingroup norms about aggressive behaviours (Mulvey & Killen, 2016) found that support to challenging aggressive ingroup norms decreased with age. In addition, this study found that although children recognized the importance of challenging aggressive group norms, they also acknowledged the pressure to demonstrate loyalty to the group through norm conforming behaviour (Mulvey and Killen, 2016).

Taken together, this literature raises the question of how will children respond to a social identity threat that compromises their acceptance to higher SES group, namely if they will attend more to the group-specific norms or instead challenge those in favour of the generic non-exclusion norm grounded on the principles of fairness and justice.

The present study

In the present study, we experimentally manipulate categorization and acceptance threat and examine its effect on 9- to 12-years-old children's explicit and implicit social class self-categorization and social inclusion behaviours towards other children in a context where a descriptive inclusion or exclusion norm in enacted.

According to the literature on children's perception of socioeconomic context, at the age of 9 children are more knowledgeable about the complexity of poverty issues and present

more stable and negative attitudes towards the poor that are less salient before this age. Moreover, older children are more capable of engaging in social upward and downward comparisons between themselves and their peers (for a review, see Dijkstra, Kuyper, van der Werf, Buunk, & van der Zee, 2008). As such, older children's knowledge about the social class intergroup context is more differentiated and should take into account contextual and situational variations. Moreover, research shows that at the age of 9 children are already aware of the importance of their membership in the group they belong or would like to belong to and to the prevailing norms of that group (Abrams, Rutland, Cameron, & Marques, 2003; Duffy & Nesdale, 2009; Ojala & Nesdale, 2004).

Accordingly, we expect that under the motivation to maintain a positive social identity (Nesdale, 2004; Tajfel & Turner, 1979), children will explicitly self-categorize as non-poor because of the categorization threat activated by the direct question in itself (H1). Therefore, we do not expect to find any effect of the categorization threat manipulation in this measure. Given this overall resistance to self-categorizing as poor, we also do not expect to find an effect of the acceptance threat manipulation. However, and in line with previous findings, we expect that this association with the non-poor category will decrease with age (H2) due to children's increasing ability to make social upward comparisons with their peers (for a review, see Dijkstra et al., 2008).

Building on the existent research about social identity management (Barreto & Ellemers, 2003; Cadinu et al., 2013; Dunham et al., 2007), we hypothesize that categorization threat should increase implicit self-categorization as a non-poor and this effect should be amplified by acceptance threat. In terms of developmental differences, we expect that with age children's implicit self-categorization will become less dependent on the presence of threats to their social identities. Given children's increasing understanding of the phenomenon and of the comparative socioeconomic context where they are in, we believe that with age children have less freedom to change their implicit self-categorization. Thus, we expect to find stronger threat-effects on implicit self-categorization as non-poor for younger than for older kids (H3).

Regarding the inclusion behaviour towards the poor target, on the one hand the literature shows evidence of children's knowledge of a strong inequality-rectification norm (Elenbaas et al., 2016; Li et al., 2014; Paulus, 2014; Rizzo & Killen, 2016). On the other hand, the literature suggests that children under acceptance threat from a valued group will conform to the norms of that group. Therefore, consistent with the inequality-rectification norm, when there are no conflicting concerns, that is, in the presence of a peer group norm of

inclusion, we expect that overall children will conform to that norm independently of acceptance threat (H4). However, in conditions of an exclusion peer group norm, we expect children to weigh both that norm with the generic fairness norm of rectifying the exclusion of the poor child, which implies challenging the social exclusion of the poor. The group norm of exclusion of the poor should be the more influential the more children implicitly identify as poor and therefore experience the exclusion of the poor condition as threatening their acceptance. Moreover, as studies consistently show an increasing knowledge about group dynamics and group functioning with age (Killen, Elenbaas, Rizzo e Rutland, 2017, Rutland, Killen & Abrams, 2010), we hypothesise that children under acceptance threat will respond differently according to their age. Hence, we expect that younger children will show a greater focus on general fairness and justice norms and that older ones will focus more on the specific norms generated by the valued group. Summing up, we hypothesise that acceptance threat will trigger children's compliance with the norms of the peer group, and more so with increasing age and the more children implicitly associate with the poor category (H5).

Method

Sample

Three hundred and twenty one children aged 9 to 12 years ($M_{\text{years of age}}$= 10.30; $SD_{\text{years of age}}$ = 1.00; 50.5% female) participated in this study. Power analysis for a Linear Multiple Regression with 12 predictors was conducted in G*Power 3.1 (Faul, Erdfelder, Lang, & Buchner, 2007) with the following parameters: power of .80, alpha of .05, and a small effect size (f^2 = .02), establishing the optimal sample size of 311.

The experiment was conducted in two public schools located in the Lisbon Metropolitan Area. The two schools where the data was collected are located in economically and socially disadvantaged neighbourhoods, and are part of a national intervention program focused on the prevention of early school drop-out and absenteeism, and on the promotion of educational success for all students. Among the interviewed children, 50.5% (n = 162) were eligible for free or price-reduced meals, an individual school indicator that is directly based on family income and on eligibility to family allowance provided by the Portuguese National Social Security. This school indicator was used as a measure of children's objective socioeconomic status.

Design and Procedure

The study was submitted to the General Directorate of Education (DGE) of the Portuguese Ministry of Education and Science, which authorized its application. Moreover, the experiment was conducted with children whose parents gave their written informed consent.

Participants were randomly assigned to six experimental conditions in a 2 (Categorization Threat: Explicit measure first vs. Implicit measure first) × 3 (Acceptance Threat: Inclusion of a poor child vs Exclusion of a non-poor child vs. Exclusion of a poor child) between-subjects design. Participants first filled in a form asking for their day of birth, age and sex. Next, the experiment started with the visualization of an instruction video (Appendix H), followed by a video manipulating acceptance threat. Subsequently, all participants completed the implicit and explicit social class self-categorization measures.[41] The administration order for the implicit and explicit measure was counterbalanced (categorization threat manipulation). After that, children played a ball tossing game (Cyberball; Mulvey et al., 2018; Riem, Bakermans-Kranenburg, Huffmeijer, & Van Ijzendoorn, 2013; van der Meulen, van IJzendoorn, & Crone, 2016; Vrijhof et al., 2016) to measure inclusive behaviour towards a target child. Finally, in order to obtain relevant context information about the sample, participants answered to a questionnaire that accessed well-being, perceived discrimination and perceived family affluence (Family Affluence Scale), followed by four manipulation checks.

Children answered to all the measures on a laptop provided by the researchers in an isolated room of the school in the presence of two researchers. A maximum of eight children were answering at the same time, each one on one separate laptop positioned in a way that no one could watch the other's responses. In addition, headphones were used to ensure complete confidentiality at the time of collection. The experimenters were present during the application, but all instructions were given by text and sound. The experimenters helped when any question emerged and guaranteed the transition between the different steps of the study (e.g., opening the right software application after the video-based manipulation). The

[41] The application of the explicit measure of social class self-categorization was conducted simultaneously to an additional measurement of the perception of the variability of the social category of poor children.

interview lasted an average of 25 minutes. After completing all measures, participants were fully debriefed[42], and thanked for their participation.

Acceptance threat manipulation. To manipulate acceptance threat participants were randomly assigned to three experimental conditions: 1) inclusion of a poor child, 2) exclusion of a non-poor child and 3) exclusion of a poor child. To this end, a Cyberball paradigm (Williams, Cheung, & Choi, 2000; Williams et al., 2002) was used, more specifically the participants were shown a video of a ball tossing game between three players in the school playground (see Figure 26; Appendix I). The Cyberball paradigm has been used in research on the effects of ostracism and social exclusion with both adults (Wirth & Williams, 2009; Park & Park, 2015) and children (Abrams, Weick, Thomas, Colbe, & Franklin, 2011; Hawes, Zadro, Fink, Richardson, O'Moore, Griffiths, Dadds, & Williams, 2012).

Different from the standard Cyberball paradigm, participants watched the game as observers. To prevent participants from spontaneously identifying with the player typically placed below (in a traditional triangular Cyberball formation), the middle player was placed at the top of the triangle (Park & Park, 2015). The virtual players' gender was matched with the gender of the participant.

In the beginning of the video, only two players are playing (Figure 26a) and a newcomer (player at the top of the triangle) whose backpack was clear white (no brand), arrives and asks to play with them. The newcomer is the target of the inclusion/exclusion.

[42] Children were informed about the study goals and the fact that there were different experimental conditions. More specifically children were told that the videos were created and used to the sole purpose of manipulating acceptance threat and were not based in any veridical situation. In addition to answering the questions that were raised by the participants in the moment of the debriefing, the experimenters communicated to each participant that they could meet them in the coming days if they wanted to talk about the study again. Although present in the informed consent form, the researchers' contacts for possible questions from parents were relayed.

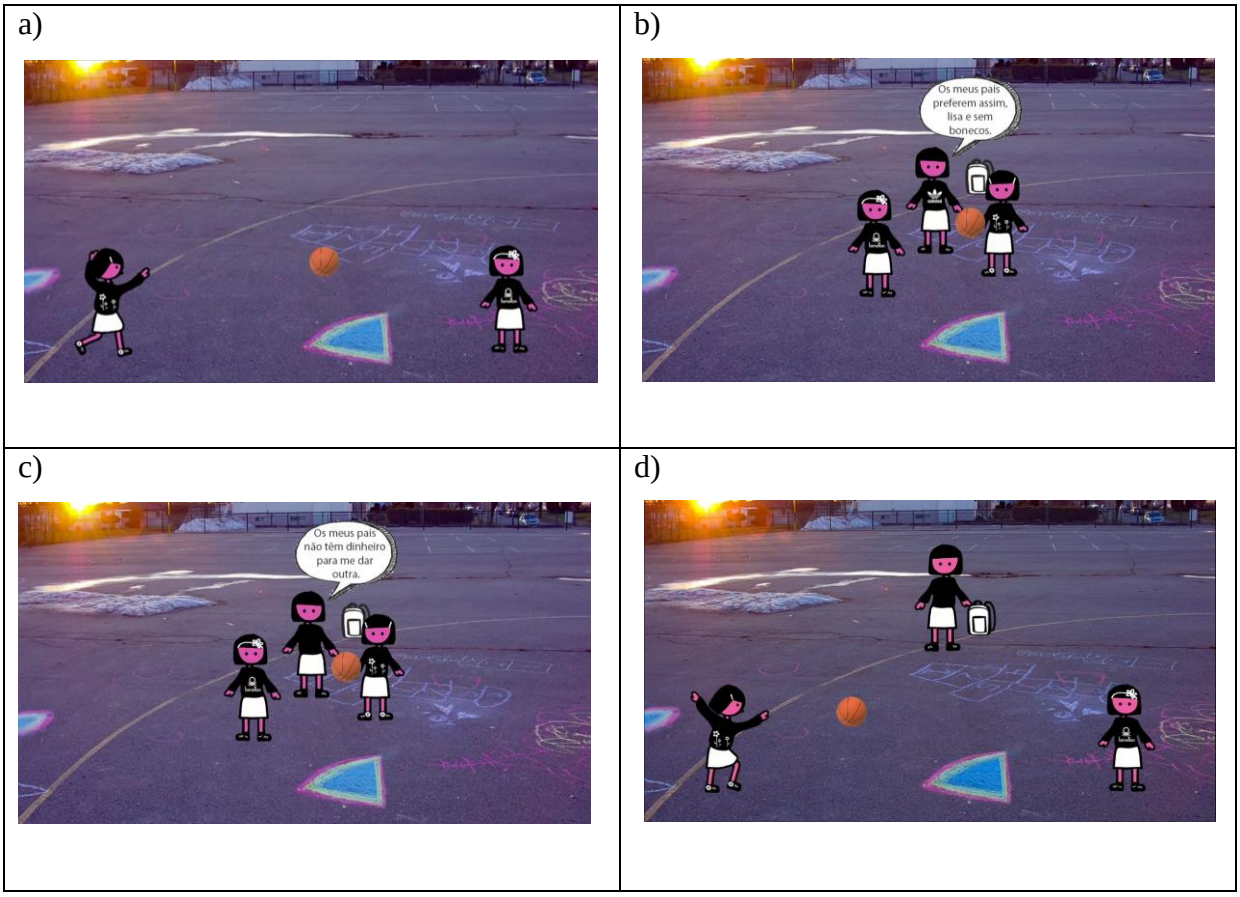


Figure 26. Video frames of the video used to manipulate acceptance threat (female version) (Female version): a) initial game with only two players, b) newcomer arrival and conversation, specific moment of the manipulation of newcomer's SES – non-poor condition; c) newcomer arrival and conversation, specific moment of the manipulation of newcomer's SES – poor condition; d) game with the three players, differing in the number of tosses to the newcomer. [43]

The three conditions of the acceptance threat manipulation required to manipulate both, socioeconomic status of the target and inclusion/exclusion of the target. The socioeconomic status of the newcomer is manipulated by the sweater he/she is using and by what he/she says about his/her backpack. When asked about his simple backpack ("N: Can I play with you?/ P1: Yes you can. Look ... there is a backpack behind. It's a bit ugly..."), the newcomer in the poor child conditions answered "That one? It is mine… My parents do not

[43] Regarding the players and environment of the scene, the video regarding the condition of the non-poor child exclusion is only different on the sweater of the newcomer, namely in this condition the non-poor child uses a black sweater from a well-known clothing brand (Elliot & Leonard, 2004).

have the money to give me another one. I asked for another, but they have no money to give me. But can we play?" (Figure 26c). In the non-poor child condition, the newcomer answers "That one? It is mine… My parents prefer plain backpacks, without embellishments. I asked for another, but my parents prefer plain backpacks, without embellishments. But can we play?" (Figure 26b). In all the conditions, the other two players answered the same thing, being positive about the newcomer's participation in the game "Yeah! Let's go, the bell is almost ringing.". Moreover, the poor newcomer was using a plain black sweater whereas the non-poor newcomer was using a black sweater from a well-known clothing brand (see, e.g., Elliot & Leonard, 2004, for the importance of the symbolic meanings of branding at this age). The two initial players were using well-known clothing brand sweaters or a sweater with embellishments.

The inclusion vs. exclusion manipulation was achieved by the variation in the number of tosses from the initial two players to the newcomer (Figure 26d). The total number of ball tosses in each game was equal to 30. In the inclusion condition, each player received the ball the same amount of times as the other players (one-third of the total number of tosses). In the two exclusion conditions the target child (either poor or non-poor) received the ball only twice at the beginning of the game and was ignored by the other players during the rest of the game (e.g., Williams et al., 2002; Park & Park, 2015).

Categorization threat manipulation. Categorization threat was manipulated by counterbalancing the measurement order of the social class self-categorization measures. Children assigned to the categorization threat condition started the experiment by responding to the explicit social class self-categorization before the implicit social class self-categorization measure. In the no-categorization threat condition, children were exposed to the measures in the inverse order, starting with the implicit measure followed by the explicit self-categorization measure.

Measures

Implicit social class self-categorization: Implicit Association Test (SC-IAT). Social class implicit self-categorization was measured using an adaptation of an adult version of the Self-Categorization Implicit Association Test (SC-IAT: Cadinu & Galdi, 2012; Cvencek, Greenwald, & Meltzoff, 2016). This test measures the strength of automatic associations between the self and a given social category, in this case, the categories of poor

and non-poor children. The adaptation of this measure to children followed the guidelines of other previously tested adaptations (e.g., Baron & Banaji, 2006; Cvencek, Greenwald, & Meltzoff, 2011, Cvencek et al., 2016), namely: 1) decreasing the test length through reduction by 20% of the overall trials; 2) presentation of the stimuli with images (i.e., written word or image) and sounds (i.e., spoken word or beep sound); 3) inclusion of positive feedback at the end of every task (e.g., ‘‘good job”); 4) presentation of the task as a game, where the participant was supposed to answer as fast as possible.

The stimuli for each category are presented in Table 24 and the IAT apparatus, as visualized by the participants, is presented in Figure 27.

Table 24

Stimuli used for each category of the IAT.

Category	Anchor image	Visual Stimuli	Audio stimuli
Me	Image of a puppet representing the self (gender matched)	Written words (*I*, *my*, *myself*, *for me*)	Audio vocalization of the words about the self (*I*, *my*, *myself*, *for me*)
Them	Image of a group of boys/girls (gender matched)	Written words (*they*, *them*, *their*, *for them*)	Audio vocalization of the words about them (*they*, *them*, *their*, *for them*)
Poor children	Purse almost empty	Images/illustrations depicting poor children	(beep sound)
Non-poor children	Purse full of money	Images/illustrations depicting non-poor children	(beep sound)

Stimuli of the four categories (*me*, *them*, *poor children*, *not-poor children*) were displayed one at a time in the centre of the computer screen. As seen in Figure 27, the coloured stripes on the sides of the monitor (yellow and blue) contain the images for each of the four categories (Appendix F). The child's task is to classify each stimulus that appears in the centre by pressing the key corresponding to the colour of the respective side image. Two

response buttons are associated to each side: one with the left hand ("e" key - marked with yellow tape) and one with the right hand (letter "i" - marked with blue tape).[44] Each stimulus word printed on the screen was presented simultaneously with the same word spoken loudly via the headphones, to avoid the requirement of an ability to read. Moreover, each poor/non-poor image was synchronized with a short beep (Appendix J). Incorrect responses were followed by a red-cross mark and participants were told to press the correct key to "continue the game" when they saw the red "X". The IAT was matched to the gender of the participant using gender-matched images of poor and non-poor children and, of picture and words representing the self[45].

The Self-Categorization Child-IAT consisted of seven blocks (a total of 160 trials) in which the task was to categorize the stimuli using the correct computer key ("e" or "i"). The first two blocks consisted of training blocks where children classified sounds/words related to self and non-self (16 trials; Block 1) and pictures of a poor and non-poor child (16 trials; Block 2). Block 3 and 4 permitted the double categorization of Self/Non-self and Non-poor/Poor child, (total of 48 trials). Block 5 served again as a training block, where children had to categorize sounds/words related to self and non-self, but now on opposite sides than in the first block (32 trials)[46]. At last, in Block 6 and 7 (a total of 48 trials), participants categorized words/sounds of Non-self/Self (allocation of the sides the same as in Block 5) and Non-poor/Poor child pictures (allocation of the sides the same as in Block 2).

The standard protocol for the improved scoring algorithm was used to analyse the Self-categorization Implicit Association Test (Greenwald, Nosek, & Banaji, 2003). For each participant, an IAT score (*D*) was calculated yielding an effect size estimate with possible range from -2 to +2 for each participant. In the current study, positive values reflect stronger automatic self-associations with the non-poor category than with the poor category, and

[44] The green key was only used to move forward when the instructions appeared. The pink key was used in the behavioural measure.

[45] One of the Portuguese words for I, my, myself, for me differs between the feminine and masculine form, which are: Eu, Meu, Eu próprio, Para mim (masculine) and Eu, Meu, Eu própria, Para mim (feminine). Three of the Portuguese words for they, them, their, for them differ between the feminine and masculine form, and are: Eles, Seus, Deles, Para eles (masculine) and Elas, Seus, Delas, Para elas (feminine).

[46] According to the literature, a common artefact observed on the IAT is the interference of the first combined configuration with the performance on the second one. In order to reduce this order effect, found in former applications of this measurement, we have duplicated the number of trials of the practice block before the beginning of the second set of combined pairings (Nosek, Greenwald, & Banaji, 2005; Lane, Banaji, Nosek, & Greenwald, 2007).

negative values reflect stronger automatic self-associations with the poor category than with the non-poor category. To measure the internal consistency of the present IAT, we calculated a split-half reliability of the odd and even trials, which resulted in an acceptable internal consistency (α=0.66).

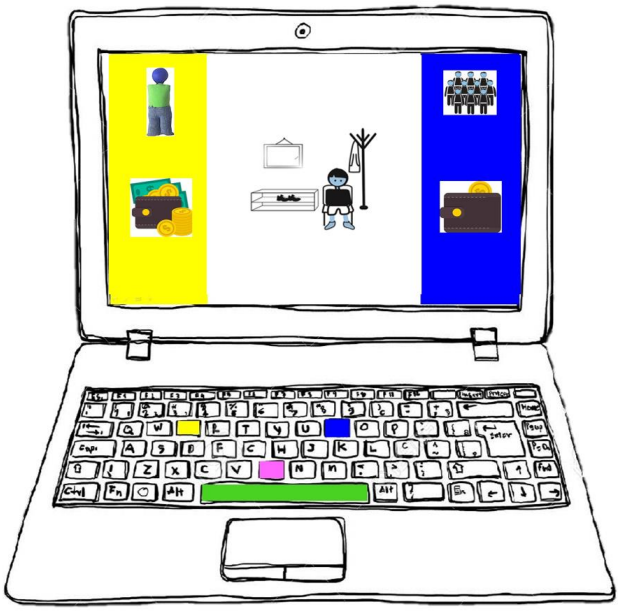


Figure 27. Child's view of the apparatus used for the SC-Child-IAT.

Explicit social class self-categorization measure. Participants answered to six items (see Figure 28, as an example; see full items in Appendix K), with a scale from 1 to 7, represented by 7 images of a gender matched child varying in their belongings (1=Few belongings, 7=Many belongings)[47]. Participants were asked to think about the amount of belongings that children in general possess (e.g., food, toys, money, grocery) while the seven images were shown on the screen. After that, they were questioned about themselves, selecting the image that mostly corresponded to their own situation. A new variable was calculated reflecting the mean value of all items (α=0.76), with higher scores meaning

[47] A first instruction question was asked to participants, in order to demonstrate how to answer to this measure. Seven images from green to blue were presented and participants were asked to position the Self in the colour they dressed the most or which they had more clothes with the chosen colour.

stronger association with non-poor children than with poor children and lower scores meaning stronger association with poor children than non-poor children.[48]

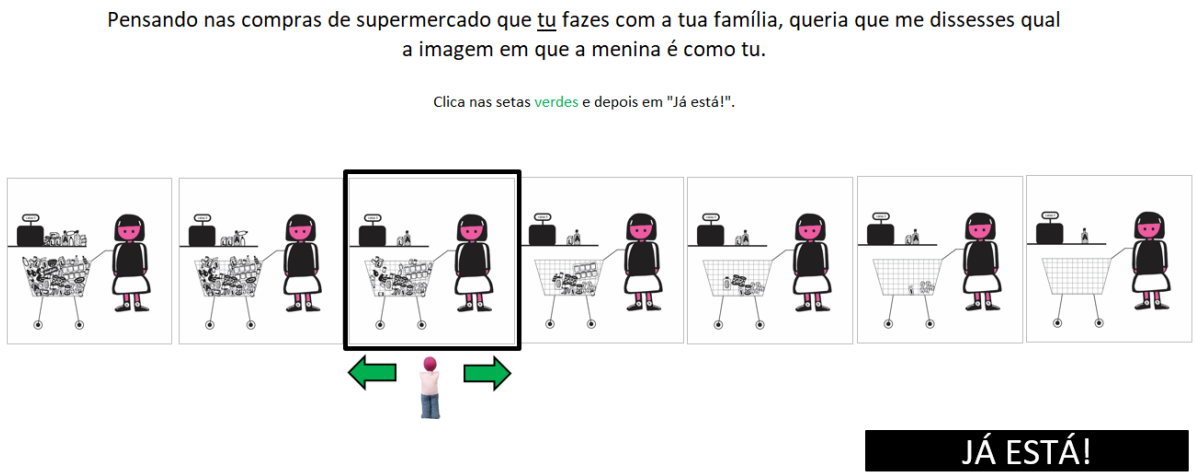


Figure 28. Example of an item of the Explicit Social Class Self-Categorization measure (Female version).

Social inclusion behaviour. An adaptation of the prosocial version of the Cyberball game was used to measure children's social inclusion behaviour (Mulvey et al., 2018; Riem, Bakermans-Kranenburg, Huffmeijer, & Van Ijzendoorn, 2013; van der Meulen et al, 2016; Vrijhof et al., 2016). In the current study, besides using the Cyberball paradigm to manipulate acceptance threat, we also used it to measure behavioural inclusion (William & Jarvis, 2006), as it has been done already with children (Mulvey, Boswell and Niehaus, 2018; Vrijhof, van den Bulk, Overgaauw, Lelieveld, Engels, & van Ijzendoorn, 2016). For that purpose, after responding to the self-categorization measures participants were invited to play the Cyberball game themselves. The three experimental conditions of the acceptance threat manipulation were brought forward to the context of the measurement of social inclusion behaviour. That means, that the participant had the opportunity to play the game with the three players that he/she had watched playing in the acceptance threat manipulation video.

[48] An additional measurement of the perception of the variability of the social category of poor children was done simultaneously. We administrated six items (8-point scales) asking children to place the boundary of the poor child category. We used the same images as in the explicit self-categorization measure, but instead of asking their own positioning, we asked about where they thought was the divide line between the non-poor and the poor child. The six items of the social class self-categorization and the variability of the social category of poor children were intercalated (Appendix K). The present variable was not analysed to the present thesis.

Moreover, although the dialogues between players from the beginning of the manipulations were not repeated, the behavioural measure scenario replicated the acceptance threat manipulation scenario in terms of tosses to the newcomer from the other two initial players (observed in the beginning of the experiment): *Inclusion of a poor child* versus *Exclusion of a non-poor child* versus *Exclusion of a poor child*. The only difference was that a fourth player was added to the Cyberball game, the participant. The formation of the players on the screen is a rhombus shape, with the player representing the participant at the bottom of the screen (gender of the players were matched with the participant's gender). Of the player representing the participant, only his/her arms that threw the ball to the other players were visible (Appendix L). Whenever the ball was tossed to the participant, the participant could choose to whom he/she wanted to toss the ball pressing the yellow (*e* key), blue (*i* key) or pink key (*b* key) of the laptop (see Figure 29), in accordance to the position of the players on the screen. In all the conditions, the ball was tossed to the participant always after two tosses between the other players. In the exclusion conditions the two original players (not newcomers) never tossed the ball to the player in the upper position on the screen (poor or non-poor newcomer) but tossed the ball to the participant to the exact same amount as between them. In the inclusion condition, the ball was tossed among the three players to the same amount as between them and the participant, and the only difference could be because of the choices made by the participant. The game was composed by only one trial with a total of 96 tosses between the players. The number of possible tosses from the participant to other players depended on the choices made by the participant, but varied between 24 and 32 tosses. A qualitative interpretation of different tossing behaviour would have to consider that throwing the ball more than one third of the times to the target (newcomer) would gain the target, presumably indicating conformity with the general norm of compensating the social exclusion by the peers (in the exclusion conditions) or helping the poor (in the poor-child conditions). On the contrary, throwing the ball less than one third of the times to the target would disadvantage the target, presumably indicating exclusion of the target (Vrijhof et al., 2016), which would also indicate conforming to the peer-norm in the exclusion conditions. Quantitatively, we considered the percentage of tosses that each participant made to the newcomer (target of inclusion/exclusion) as a measure of social inclusion.

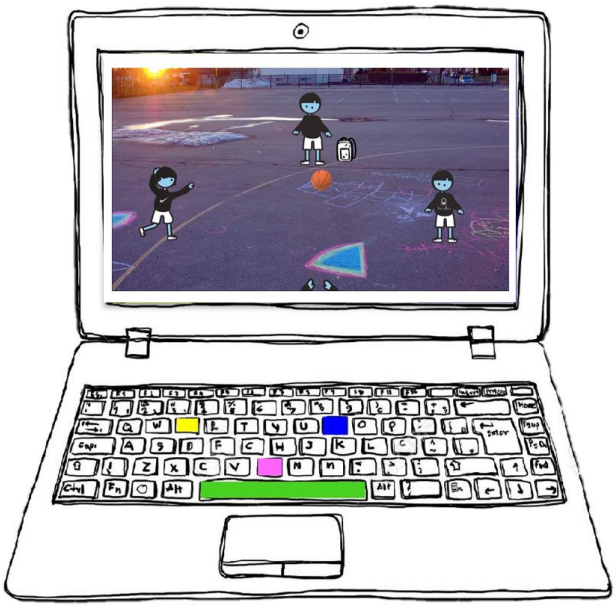


Figure 29. Child's view of the apparatus used for the Cyberball Game to measure inclusion behaviour towards the target (male version)

Child Well-being. Children's well-being was accessed using two items taken from the Portuguese version of the Personal Well-Being Index for school children (PWI-SC; Cummins & Lau, 2005; Dias & Bastos, 2014; Dias, Bastos, Marzo, & Rodriguez, 2015). The items used were the first two of the eight items of the scale, asking children 'How happy are you with your life as a whole?' and 'How happy are you about the things you have, like the money you have and the things you own?'. Children answered these questions on a scale from 1 (Very Sad) to 5 (Very happy), using smiley icons instead of text. These two items were analysed separately.

Perceived discrimination. Children responded to a perceived discrimination scale, adapted from a scale used in previous studies with children and adolescents (Cassidy, O'Connor, Howe, & Warden, 2004; Verkuyten, 1998). The scale includes four items, asking children how often they were victims of discrimination, exclusion, name-calling and mocking in school by their peers due to having fewer things than other people. The responses were measured on a Likert scale from 1 to 5, where 1 was equal to "Never" and 5 was equal to "Happens a lot of times". A new variable was calculated reflecting the mean value of the four items (α=0.82), with higher scores meaning that children perceived more personal discrimination.

Family Affluence Scale. The Family Affluence Scale (FAS) III is an international measure of social economic status of adolescents, originally developed to measure material affluence, a proxy for socioeconomic status, in the Health Behaviour in School-Aged Children (HBSC-WHO) Study (1998). The scale comprises of six items related to family cars, holidays, computers, rooms, bathrooms, and dishwasher at home (Hartley, Levin, & Currie, 2015; Torsheim et al., 2016; Ng, Tynjälä & Kokko, 2017). The measure constitutes an index varying from 0 to 13 that represents the number of items that children report to possess. An internationally established formula can also be used to define three groups of family affluence: low, middle, and high (Torsheim et al., 2016).

Manipulation Checks. At the end of the experiment, four questions were posed to check the success of the experimental manipulation of acceptance threat questioning about: 1) the money owned by the family of the target child, by asking to what extent the newcomer's family had money (1=*No money* to 10= *A lot of money*); 2) the behaviour of the players toward the newcomer during the game, by asking to what extent the newcomer was included (1= *Totally excluded* to 10= *Totally included*); 3) the reasons for that behaviour, by asking to what extent did the participant think it happened because the newcomer was poor (1= *It happened because the child was poor* to 10= *It did not happen because the child was poor*) and 4) the perceived norm of social exclusion of poor children, by asking to what extent the participant thinks that poor children, in general, are included in school (1= *Always excluded by their colleagues* to 10= *Always included by their colleagues*).

Analytical Strategy

To analyse the data, a PROCESS macro for SPSS was used (Hayes, 2017). PROCESS models estimation is based on multiple linear regression, and it allows the analysis of interactions between one or more experimental variables and a continuous independent variable (Hayes, 2017). In the present study, age is included as a continuous variable (months of age). The hypotheses of this study include a three-way interaction effect between categorization threat, acceptance threat and the continuous moderator of children's age on implicit social class self-categorization. Additionally, a main effect of age on explicit social class self-categorization is predicted, with no other main effect or interaction effects between the social identity threat manipulations and age. Finally, we predict a three-way interaction between acceptance threat, implicit self-categorization and age on children's behaviour

towards the target child. To test these hypotheses, we estimated three moderated moderations models using PROCESS Model 3 (Hayes, 2017).

Results

Preliminary Analyses

According to our hypothesis (H1), results show that the large majority of children self-categorized as non-poor at the explicit level (88%; *M* = 5.83; *SD* = 0.83; one sample t-test against 4[49], *t* (313) = 39.19, *p* < .001, *d* = 2.21). The same did not happen at the implicit level, where we found more wide-ranging response scores (*M* = -0.003; *SD* = 0.42; one sample t-test against 0, *t* (318) = -0.12, *p* = .902, *d* = - 0.007).

To characterize participants' implicit and explicit social class self-categorization and its relations with other meaningful variables, such as family affluence scale, general well-being, economic/financial well-being and perceived discrimination, we conducted a correlational analysis among these variables. Table 25 presents the correlations between these variables for the total sample and for lower SES participants. As can be seen, implicit and explicit self-categorizations were weakly, but significantly, positively correlated (*r* (312) = .17, *p* = .003), meaning that the more participants identified with the non-poor children category at the explicit level the more they associated with the non-poor children category at the implicit level. Results showed that the implicit self-categorization was not related to any other measure. In contrast, explicit self-categorization was moderately correlated with the Family Affluence Scale (*r* (314) = .33, *p* < .001), general well-being (*r* (314) = .34, *p* < .001) and economic well-being (*r* (314) = .31, *p* < .001). These results indicate that the more children explicitly self-categorized as non-poor children, the more they reported their families as having resources and being affluent, the more they expressed general satisfaction with their life and satisfaction with the things and money they have. Perceived discrimination showed a negative correlation with general well-being (*r* (321) = - .33, *p* < .001), in the sense that the more children perceived discrimination towards themselves, the less happy they were with their lives. Importantly, the more children perceived that they are poor children (*r* (314) = - .14, *p* = .016) or the less they reported their families as affluent (*r* (321) = - .11, *p* = .048), the more they perceived that they are targets of discrimination in their schools.

[49] The scale used for each item of the composing variable of explicit social class self-categorization varied between 1 and 7, being 4 the midpoint of the scale.

Table 25

Correlations, Mean and Standard Deviation for Implicit and Explicit Social Class Self-Categorization, Family Affluence Scale, General and Economic/Financial Well-being and Perceived Discrimination.

Items	(a)	(b)	(c)	(d)	(e)	(f)	*M*	*SD*
(a) Explicit Social Class Self-Categorization	-	.17**	.33***	.34***	.31***	-.14*	5.83	0.83
(b) Implicit Social Class Self-Categorization	.24**	-	.07	.01	.03	-.07	0.00	0.42
(c) Family Affluence Scale III	.30***	.05	-	.22***	.27***	-.11*	2.01	1.08
(d) How happy are you with your life as a whole?	.36***	.00	.26**	-	.23***	-.33***	4.27	0.81
(e) How happy are you about the things you have, like the money you have and the things you own?	.32***	-.03	.27**	.23**	-	-.17**	4.23	0.80
(f) Perceived Personal Discrimination	-.10	-.11	-.20	-.31***	-.17*	-	6.91	2.46

Note: Correlations above and to the right of the diagonal are presented for the total sample (*N*=321). Correlations below and to the left of the diagonal are presented for the participants from low socioeconomic status according to eligibility for free or price-reduced meals in school (n=157). Mean (*M*) and Standard Deviation (*SD*) are presented for the total sample. *** $p < .001$; ** $p < .01$ * $p < .05$

Manipulation checks

In order to verify the success of the experimental acceptance threat manipulation for both age groups, each of the four manipulation checks were included as dependent variable in a 3 (acceptance threat conditions) x 2 (categorization threat conditions) GLM, controlling for age and objective socioeconomic status (eligibility for free or price-reduced meals in school) as factors.

In the first GLM on the question about participants' perception of wealth of the newcomer player we found a main effect of the acceptance threat manipulation (F (2, 313) = 23.343, $p < .001$, $\eta^2 = .13$). As expected, participants perceived that the newcomer player had more money in the condition of the social-exclusion of the non-poor child (M=4.60; SD=2.31) than in the condition of social exclusion (M=2.83; SD=2.13; $p < .001$) and social inclusion of the poor child (M=2.94; SD=1.82; $p < .001$), and the latter were not different from one another ($p = .692$).

We also found an acceptance threat manipulation main effect for the perception of inclusion/exclusion behaviour of the two players towards the newcomer player (F (2, 313) = 257.647, $p < .001$, $\eta^2 = 0.59$). As expected, participants perceived that the newcomer player in the condition of the inclusion of the poor child was more included by the other two players (M=8.48; SD=2.27) than in the condition of social exclusion of the poor child (M=1.78; SD=2.21; $p < .001$) and of the social exclusion of the non-poor child (M=2.22, SD=2.73; $p < .001$), which were not different from one another ($p = .379$).[50]

Regarding the perceived motives of social-exclusion of the newcomer player, we again only found an acceptance threat manipulation main effect (F (2, 300) = 36.121, $p < .001$, $\eta^2 = .19$). In the condition of exclusion of the poor child, participants perceived more

[50] The Two-Way GLM with perception of inclusion/exclusion behaviour of the two players towards the newcomer player as dependent variable also revealed a main effect of the covariable objective socioeconomic status (F (1, 313) = 8.159, $p = .005$, $\eta^2 = .01$). Thus, a succeeding Three-Way GLM was performed with acceptance threat, categorization threat and objective socioeconomic status as factors, controlling for age. The results showed the same main effect of the acceptance threat manipulation (F (2, 308) = 266.851, $p < .001$, $\eta^2 = .59$), qualified by a three-way interaction between acceptance threat, categorization threat and objective socioeconomic status (F (2, 308) = 4.239, $p = .015$, $\eta^2 = .01$). In this sense, in the categorization threat condition we found that children from objectively middle SES considered a stronger exclusion of the non-poor newcomer than of the poor newcomer ($p = .038$). Yet, children from objectively lower SES considered a stronger exclusion of the poor newcomer than of the non-poor ($p = .001$). In the condition of low categorization threat, both lower and middle-SES children evaluated the exclusion of the non-poor and the exclusion of the poor child in a similar way (always $p > .783$).

that it was due to his/her poverty condition (*M*=8.30; *SD*=2.77) than in the condition of the exclusion of the non-poor child (*M*=6.32, *SD*=3.65, $p < .001$). The perception of inclusion of the newcomer was attributed less to the poor conditions of the child (*M*=4.16; *SD*=3.69) than the exclusion in the other two conditions (both $p < .001$).

Ultimately, regarding the perceived school norm of exclusion of poor children in general, we found again a main effect of the acceptance threat manipulation (F (2, 313) = 5.949, $p = .003$, $\eta^2 = .04$). Those who were in the condition of exclusion of the non-poor child (*M*=3.28; *SD*=2.92) and those who were in the condition of exclusion of the poor child (*M*=3.65; *SD*=3.21) did not differ in their perception of the generic norm of exclusion of the poor child ($p = .288$). However, participants in both conditions perceived more that poor children are, in general, victims of exclusion by their peers than the ones in the condition of inclusion of the poor child (*M*=4.65; *SD*=2.74, both $p < .025$).

Explicit social class self-categorization

To examine explicit social class self-categorization we conducted a moderated moderation analysis using PROCESS version 3.3 for SPSS (Model 3; Hayes, 2018), with categorization threat (Implicit measure first vs. Explicit measure first) as independent variable, acceptance threat (Poor child exclusion vs. Non-poor child exclusion vs. Poor child inclusion) and months of age as moderators, and explicit social class self-categorization as dependent variable.[51]

The specified model for this group of participants was significant and explained 8% of the variance (F (12,301) = 2.248, $p = .009$, R^2=0.08; see Table 26 for regression results). As we did not predict any significant interactions in this analysis, but only a main effect of age, we defined the multicategorical coding system in PROCESS as *indicator coding*, also known as *dummy coding*. This analysis resulted in a main effect of months of age on explicit self-categorization as poor child (b = -0.018, $p = .001$; 95% CI [-0.031, -0.005]). Consistent with our hypothesis (H2), this negative effect of age on social class self-categorization means that with increasing age children presented a stronger association with the category of poor children at the explicit level. As predicted, and as can be seen in Table 26, there was no main

[51] This moderated moderation contrast analysis was controlled for participants' objective socioeconomic status (eligibility for free or price-reduced meals in school) used as covariate in PROCESS Model 3, which did not reveal a significant main effect. The moderators used in the analysis (categorization threat and months of age) were mean-centered when conducting the analysis.

effect of categorization and acceptance threat, nor any interaction between the experimental conditions and age on children's explicit social class self-categorization.

Table 26

Results of the moderated moderation with explicit social class self-categorization as dependent variable (PROCESS, model 3).

	b	*SE*	*t*	LLCI	ULCI
(Constant)	5.840	0.096	60.757	5.650	6.029
Categorization Threat	-0.307	0.161	-1.909	-0.624	0.010
Acceptance Threat (a)	0.102	0.114	0.890	-0.123	0.327
Acceptance Threat (b)	0.031	0.112	0.277	-0.190	0.252
Months of Age	-0.018	0.007	-2.635**	-0.031	-0.005
Categorization Threat X Acceptance Threat (a)	0.193	0.226	0.853	-0.252	0.637
Categorization Threat X Acceptance Threat (b)	0.337	0.225	1.499	-0.106	0.780
Acceptance Threat (a) X Months of Age	-0.004	0.010	-0.382	-0.023	0.016
Acceptance Threat (b) X Months of Age	0.008	0.010	0.834	-0.011	0.027
Categorization Threat X Months of Age	0.006	0.013	0.438	-0.021	0.032
Categorization Threat X Acceptance Threat (a) X Months of Age	-0.027	0.020	-1.382	-0.066	0.012
Categorization Threat X Acceptance Threat (b) X Months of Age	-0.006	0.019	-0.291	-0.043	0.032
Personal SES	-0.105	0.094	-1.107	-0.290	0.081

Model: R^2= .082, F(12, 306)=2.248, p = .009.

Note: *p < .05; *** p < .01*** p < .001. In Acceptance Threat (a) the reference condition is the 'exclusion of the poor child' and in Acceptance Threat (b) the reference condition is the 'inclusion of the poor child'.

Implicit social class self-categorization

To examine the effect of categorization threat, acceptance threat and the moderation by age on implicit social class self-categorization, another moderated moderation analysis was conducted using PROCESS version 3.3 for SPSS (Model 3; Hayes, 2018), with

categorization threat (Implicit measure first vs. Explicit measure first) as independent variable, acceptance threat (Poor child exclusion vs. Non-poor child exclusion vs. Poor child inclusion) and months of age as moderators and implicit social class self-categorization as dependent variable.[52] To test our specific hypothesis that the effect of categorization threat (explicit measure precedes the implicit measure) on children's readiness to implicitly associate themselves with the non-poor category would be stronger when acceptance threat is high (in the Poor child exclusion condition) than when it is low (Non-poor child exclusion and Poor child inclusion) we used a Helmert coding system for acceptance threat conditions representing two orthogonal contrasts, namely: Acceptance Threat (c), contrasting the exclusion of the poor child condition against the other two conditions where a poor child was not excluded (Non-poor child exclusion and Poor child inclusion), and Acceptance Threat (d), contrasting the exclusion of a non-poor child condition against the inclusion of a poor child condition (see Table 27).

The specified model for this group of participants was significant and explained 8% of the variance (F (12,306) = 2.325, p = .007, R^2=0.08; see Table 27 for regression results). A positive effect of categorization threat was found (b = 0.098, p = .032; 95% CI [0.009, 0.188]), meaning that children in the high categorization threat condition showed a stronger implicit self-categorization as non-poor than participants in the low categorization threat condition. Moreover, according to our hypothesis, this main effect was qualified by a three-way interaction effect between categorization threat, Acceptance Threat (c) and age (b = 0.019, p = .028; 95% CI [0.002, 0.036]). The results of the conditional effects of categorization threat on implicit self-categorization, show that categorization threat had a positive effect only for younger (-1SD of mean age) and children at the mean age, in the condition of exclusion of the poor child (see Table 28 and Figure 30), meaning a stronger association with the poor category. Overall, this analysis shows that younger children's implicit measure of social class self-categorization was influenced by the combination of both types of threat, that is, threat of categorization as poor and threat of not being accepted by their peers. Consistently with our hypothesis (H3), this result was not found for the older children.

[52] This moderated moderation contrast analysis was controlled for participant's objective socioeconomic status used as covariate in PROCESS Model 3, which did not reveal a significant main effect.

Table 27

Results of the moderated moderation (PROCESS, model 3) with implicit social class self-categorization as dependent variable.

	b	*SE*	*t*	LLCI	ULCI
(Constant)	0.041	0.033	1.259	-0.023	0.106
Categorization Threat	0.098	0.046	2.159*	0.009	0.188
Acceptance Threat (c)	0.007	0.050	0.144	-0.090	0.105
Acceptance Threat (d)	-0.062	0.056	-1.112	-0.171	0.048
Months of Age	-0.006	0.002	-2.881***	-0.010	-0.002
Categorization Threat X Acceptance Threat (c)	-0.095	0.097	-0.982	-0.286	0.096
Categorization Threat X Acceptance Threat (d)	-0.002	0.111	-0.014	-0.221	0.217
Acceptance Threat (c) X Months of Age	0.004	0.004	1.021	-0.004	0.013
Acceptance Threat (d) X Months of Age	0.008	0.005	1.678	-0.001	0.017
Categorization Threat X Months of Age	-0.005	0.004	-1.313	-0.013	0.003
Categorization Threat X Acceptance Threat (c) X Months of Age	0.019	0.009	2.213*	0.002	0.036
Categorization Threat X Acceptance Threat (d) X Months of Age	-0.001	0.009	-0.061	-0.019	0.018
Personal SES	-0.089	0.047	-1.894	-0.182	0.004

Model: R^2=.084, F(12, 306)=2.325, p = .007.

Note: *p < .05; *** p < .01*** p < .001. In Acceptance Threat (c) the condition ‘exclusion of the poor child’ (coded as -2/3) was contrasted against the other two conditions where a poor child was not excluded (Non-poor child exclusion and Poor child inclusion- coded as 1/3). In Acceptance Threat (d) the condition ‘exclusion of a non-poor child’ (coded as -1/2) was contrasted against the condition ‘inclusion of the poor child’ (coded as 1/2).

Table 28

Moderated moderation analysis: Conditional effects of Categorization threat on Implicit social class self-categorization at values of the Moderators - Months of age and Acceptance Threat (c).

Acceptance Threat Condition	Age groups	b	SE	t	LLCI	ULCI
Exclusion Poor child	Youngers	0.37	0.12	3.24**	0.15	0.60
	Average	0.16	0.08	2.04*	0.01	0.32
	Olders	-0.05	0.12	-0.42	-0.28	0.18
Exclusion Non-poor child	Youngers	0.05	0.11	0.45	-0.17	0.27
	Average	0.07	0.08	0.85	-0.09	0.22
	Olders	0.08	0.11	0.78	-0.13	0.30
Inclusion Poor child	Youngers	0.06	0.11	0.50	-0.16	0.27
	Average	0.07	0.08	0.84	-0.09	0.22
	Olders	0.08	0.11	0.68	-0.15	0.30

Note: * $p < .05$; ** $p < .01$

Levels of the moderator months of age is 1 *SD* below the mean (Youngers), the mean (Average) and 1 *SD* above the mean of months of age (Olders). In Acceptance Threat (c) the condition 'exclusion of the poor child' (coded as -2/3) was contrasted against the other two conditions where a poor child was not excluded (Non-poor child exclusion and Poor child inclusion- coded as 1/3).

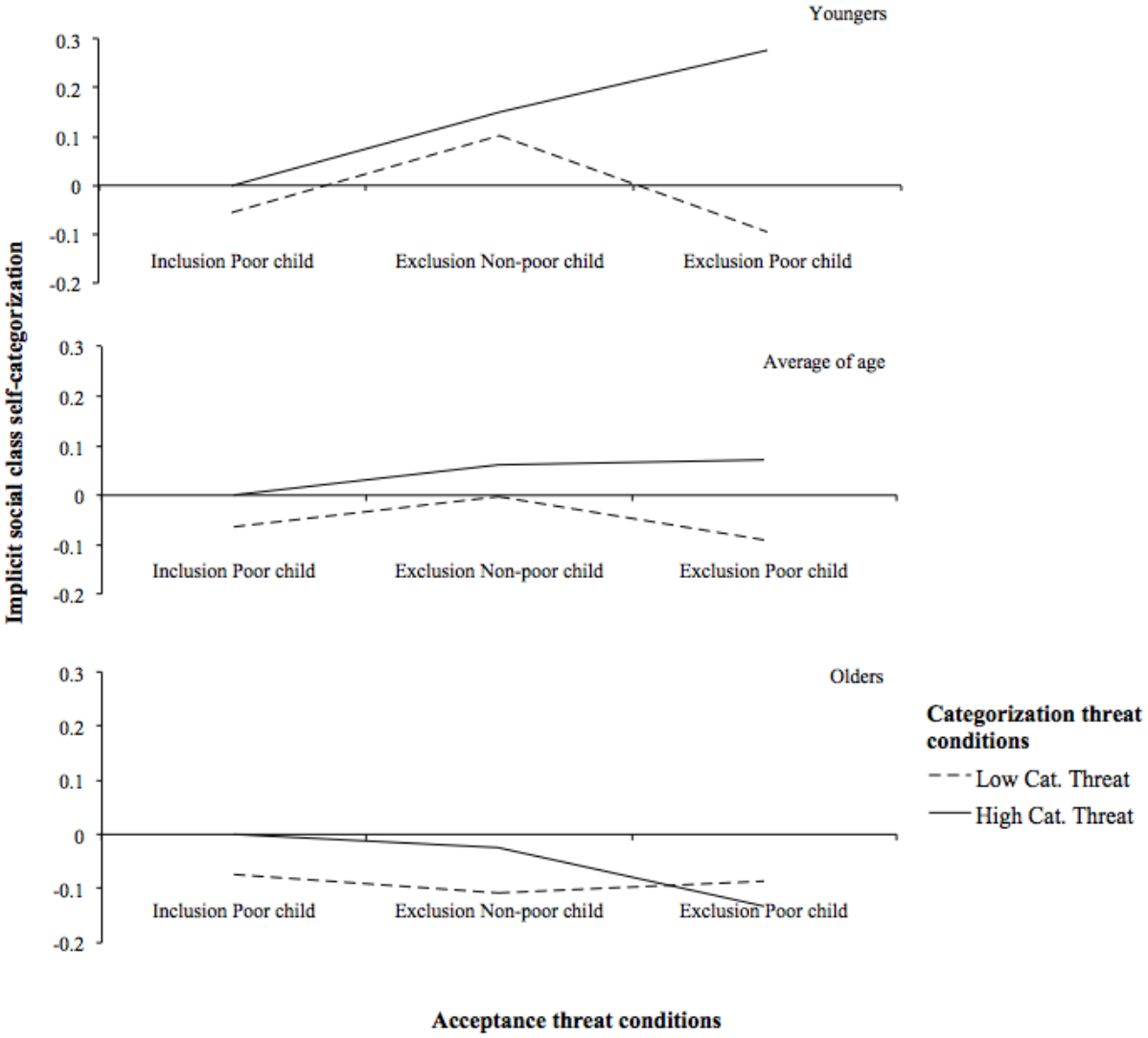


Figure 30. Implicit social class self-categorization by categorization and acceptance threat for 1 SD below the mean of months of age (youngers), mean of months of age (average), and 1 SD above the mean of months of age (olders). Positive values of the implicit social class self-categorization reflect stronger automatic self-associations with the non-poor category than with the poor category, and negative values reflect stronger automatic self-associations with the poor category than with the non-poor category.

Social inclusion behaviour towards poor children

We conducted a moderated moderation in order to test the moderating role of children's implicit self-categorization and age in the relation between acceptance threat and behaviour towards the target of exclusion or inclusion, that is, the number of ball tosses towards the newcomer target. We used PROCESS version 3.3 for SPSS (Model 3; Hayes, 2018) and tested the specific hypotheses that a) children in both exclusion conditions (Poor

and Non-poor) would compensate the exclusion behaviour and throw the ball more often to the target than in the inclusion of the poor child condition (H4), and b) children in the exclusion of the poor child condition would compensate less the exclusion behaviour than in the exclusion of the non-poor condition, moderated by implicit self-categorization as poor and age (H5). To this end, we used a Helmert coding system with two orthogonal contrasts, namely: Acceptance Threat (e), contrasting the inclusion condition against the two conditions where a child was excluded (Non-poor child exclusion and Poor child exclusion), and Acceptance Threat (f), contrasting the exclusion of a non-poor child condition against the exclusion of a poor child condition (see Table 29).[53] Our hypothesis predicts fewer ball throws to the excluded poor target, as compared to throws to the excluded non-poor target, for participants that implicitly associated themselves more with the poor, and particularly so for older children. This three-way interaction model was tested controlling for participants' socioeconomic status. The specified model for this group of participants was significant and explained 40% of the variance (F (12,304) = 16.52, $p < 0.001$, R^2= .40; see Table 29 for regression results).

As can be seen in Table 29, two main effects were found of the new coded categorical variables representing the hypothesized contrast variables of acceptance threat. Accordingly, and as expected (H4), a positive main effect of Acceptance Threat (e) was found, meaning that children in the conditions of exclusion threw the ball more times to the target (poor and

[53] The model reported here does not control for the effect of the categorization threat because at this time of the procedure all children were exposed to the explicit self-categorization measure (i.e., being under threat of categorization). Nevertheless, for children in the low categorization threat condition, the implicit measure might not be such a sensitive indicator to predict behaviour because it was not measured immediately before the behavioural measure. Therefore, in order to check if this pattern of results was also found in the specific group of children in the high categorization threat condition we conducted two analyses splitting the participants into those in the low categorization threat condition and those in the high categorization threat condition. Accordingly, comparing to the overall sample, the same pattern of results was found in the high categorization threat condition (F (12,149) = 12.480, $p < .001$, R^2= .50), with a main effect of Acceptance Threat (e), b = 17.292, $p < .001$; 95% CI [14.195, 20.388], Acceptance Threat (f), b = 5.659, p = .004; 95% CI [1.830, 9.488], and a three-way interaction between Acceptance Threat (f), implicit self-categorization and months of age, b = 1.178, p = .002; 95% CI [0.449, 1.906]). For the low categorization threat participants, the model was significant (F (12,142) = 6.229, $p < .001$, R^2= .35) but only a main effect of Acceptance Threat (e), b = 17.388, $p < .001$; 95% CI [13.210, 21.566], and (f), b = 4.898, p = .049; 95% CI [0.029, 9.766] were found. No other main or interaction effects were found.

non-poor; M = 51.67%, SD = 11.72%; $t_{\text{against 33\%}}(208) = 23.028$, $p < .001$, d =1.59[54]) than in the condition of inclusion of the poor target, in which they displayed a more egalitarian behaviour towards the players (M = 35.00%, SD = 9.10%; $t_{\text{against 33\%}}(109) = 2.304$, $p = .023$, d =0.22). Moreover, a positive main effect of Acceptance Threat (f) was found, meaning that children in the condition of exclusion of the poor target threw the ball more times to the target (poor; M = 53.42%, SD = 11.82%; $t_{\text{against 33\%}}(104) = 17.687$, $p < .001$, d = 1.72) than in the condition of exclusion of the non-poor target (M = 49.91%, SD = 11.40%; $t_{\text{against 33\%}}(103) = 15.127$, $p < .001$, d =1.48).

Importantly, and as predicted (H5), this main effect of Acceptance Threat (f) (contrasting the exclusion of the poor and non-poor conditions against each other), was qualified by a significant three-way interaction effect between Acceptance Threat (f), implicit social class self-categorization and age of the participants, as we expected (H5). Table 30 shows the conditional effects of Acceptance Threat (f) on the tossing behaviour towards the newcomer at different values of the moderators. The results show that for younger children, the more children implicitly self-categorized as poor the more they threw the ball to the poor excluded target, in comparison to the non-poor excluded target. Younger children who implicitly self-categorized as non-poor did not show any difference in the number of ball tosses to the poor or non-poor excluded child. In contrast, older children that self-categorized as poor at the implicit level, did not present any difference in the percentage of ball tosses to the excluded target, while older children that implicitly self-categorized as non-poor, threw the ball significantly more often to the excluded target in the condition of exclusion of the poor than in the condition of exclusion of the non-poor.[55] Figure 31 illustrates this moderated moderation.

[54] A one-sample t-test against 33% was performed given that this is the relative number of tosses that each player in the game should receive from the participant in the case of a fair and equal game between all the players (Vrijhof et al., 2016).

[55] Conducting a moderated moderation (Model 3) with Implicit self-categorization as predictor, and acceptance threat and age as moderators, results show that implicit self-categorization positively predicted the number of tosses to the child in the condition of exclusion of the poor child and for older children (b = 7.230, p = .046; 95% CI [0.140, 14.321]). This conditional effect is not significant at any other level of the moderators. Conducting another moderated moderation (Model 3) with age as predictor, and acceptance threat and implicit self-categorization as moderators, results show that age positively predicted the number of tosses to the child in the condition of exclusion of the poor child and for children who implicitly self-categorize as non-poor (b = 0.272, p = .026; 95% CI [0.033, 0.511]. This conditional effect is not significant in any other levels of the moderators.

Table 29

Results of the moderated moderation (PROCESS, model 3) with social inclusion behaviour as dependent variable

	b	*SE*	*t*	LLCI	ULCI
(Constant)	45.277	0.877	51.647	43.552	47.002
Acceptance Threat (e)	17.021	1.288	13.212***	14.486	19.557
Acceptance Threat (f)	4.854	1.543	3.147**	1.818	7.889
Implicit social class self-categorization	1.089	1.504	0.724	-1.870	4.048
Months of Age	0.083	0.052	1.586	-0.020	0.185
Acceptance Threat (e) X Implicit social class self-categorization	5.860	3.154	1.858	-0.347	12.067
Acceptance Threat (f) X Implicit social class self-categorization	-1.964	3.707	-0.530	-9.259	5.331
Acceptance Threat (e) X Months of Age	0.124	0.109	1.141	-0.090	0.339
Acceptance Threat (f) X Months of Age	-0.066	0.129	-0.509	-0.319	0.188
Implicit social class self-categorization X Months of Age	0.171	0.119	1.444	-0.062	0.405
Acceptance Threat (e) X Implicit social class self-categorization X Months of Age	-0.206	0.245	-0.842	-0.688	0.276
Acceptance Threat (f) X Implicit social class self-categorization X Months of Age	0.667	0.299	2.234*	0.080	1.255
Personal SES	1.698	1.249	1.359	-0.760	4.157

Model: $R^2 = .40$, $F(12, 304) = 16.523$, $p < .001$.

Note: $^{*}p < .05$; $^{**}p < .01$ $^{***}p < .001$. In Acceptance Threat (e) the condition ‘inclusion of the poor child’ (coded as -2/3) was contrasted with the other two conditions where a child was excluded (Non-poor child exclusion and Poor child exclusion- coded as 1/3). In Acceptance Threat (f) the condition ‘exclusion of a non-poor child’ (coded as -1/2) was contrasted with the condition ‘exclusion of the poor child’ (coded as 1/2).

Table 30

Moderated moderation analysis: Conditional effects of Acceptance Threat (f) on Behaviour towards the target at values of the moderators (Months of Age and Implicit Self-Categorization)

Months of age	Implicit Self-Categorization (SC)	b	SE	t	LLCI	ULCI
Youngers	SC as poor	9.714	3.350	2.900**	3.122	16.305
	SC Average	5.631	2.210	2.548*	1.282	9.979
	SC as non-poor	1.548	2.562	0.604	-3.493	6.589
Average	SC as poor	5.666	2.213	2.560*	1.311	10.021
	SC Average	4.854	1.543	3.147**	1.818	7.889
	SC as non-poor	4.041	2.136	1.892	-0.162	8.245
Olders	SC as poor	1.618	2.840	0.570	-3.970	7.207
	SC Average	4.076	2.130	1.914	-0.115	8.268
	SC as non-poor	6.534	3.312	1.973*	0.017	13.051

Note: $^{*}p < .05$; $^{**}p < .01^{***}p < .001$

Levels of the moderator months of age is 1 *SD* below the mean (Youngers), the mean (Average) and 1 *SD* above the mean of months of age (Olders); Levels of the moderator Implicit social class self-categorizations is 1 *SD* below the mean (SC as poor), the mean (Average SC) and 1 *SD* above the mean of the implicit measure (SC as non-poor). In Acceptance Threat (f) the condition ‘exclusion of a non-poor child’ (coded as -1/2) was contrasted with the condition ‘exclusion of the poor child’ (coded as 1/2).

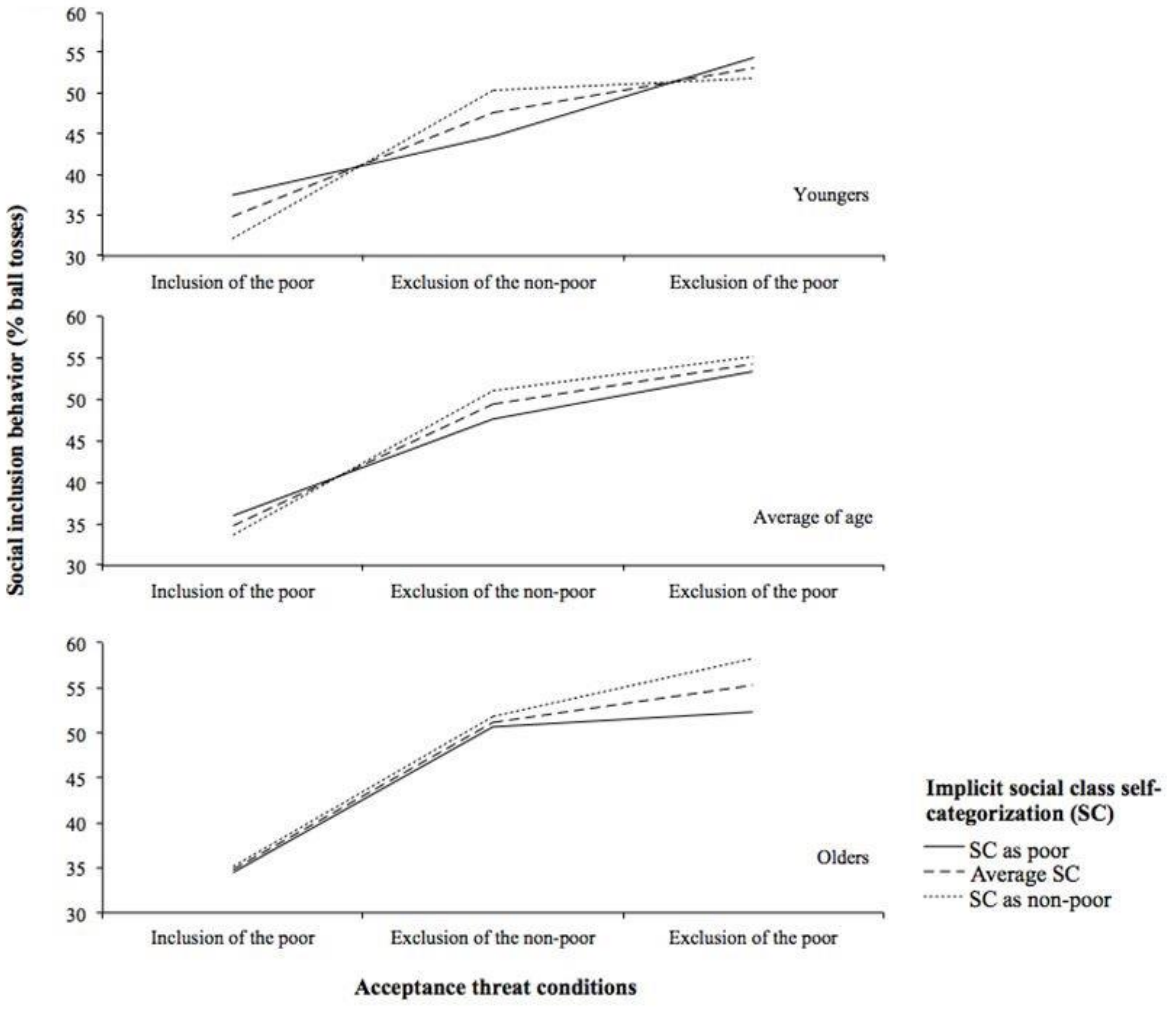


Figure 31. The conditional effect of acceptance threat on social Inclusion behaviour, moderated by months of age (-1 *SD* for Youngers, average months of age and +1 *SD* for Olders) and implicit social class self-categorization (-1 *SD* for self-categorization as poor, average of the implicit self-categorization, and +1 *SD* for self-categorization as non-poor).

Discussion

In the present experiment we were interested in studying the process behind 9- to 12-year-old children's distancing from the poor child category, as by means of self-categorization and social inclusion/exclusion behaviour towards poor children. Adopting a developmental social identity approach, we addressed this question by studying the effect of social identity threats in this process, namely *categorization threat* and *acceptance threat* (Branscombe et al., 1999). We argued that children might avoid self-categorization as poor as an individual mobility strategy, to respond to a threatening social identity. Moreover, we also predicted that a threat to children's acceptance in a valued group of peers could have an effect on children's compliance to the norms of the valued peer group in terms of their

behaviour towards poor children, and that effect should be stronger in the case of older children that implicitly self-categorize as poor.

In this experimental study we found support for our initial hypothesis about children's explicit self-categorization (H1). In line with previous findings, including our previous studies (see Chapter 5), regardless of their socioeconomic status and age, most children self-categorized as non-poor at the explicit level throughout childhood. That result is consistent with our proposition that asking children about their social standing in the social class context induces categorization threat, and that children's responses are driven by their motivation to negate their belonging to the poor category (Newheiser & Barreto, 2004; Sarti et al., 2014; Sutton, 2009). Moreover, this explicit self-categorization as non-poor was not influenced by our manipulation of acceptance threat, meaning that there might be a general motivation for children to self-categorize as non-poor not bounded by situational influences. However, results replicate a previous finding (see Chapter 5) showing that this self-categorization as non-poor tends to become weaker as children grow older (H2). This finding supports the assumption that in the course of childhood children integrate their knowledge about the overall socioeconomic context and, more specifically, about their own objective economic conditions in their explicit self-concept. This is consistent with the literature showing that with age children become more proficient in comparing themselves with their peers, either with those who are in higher status positions but also those who are in lower status positions (Dijkstra et al., 2008) and this is also conveyed to their perception of their own social standing in the intergroup context. As they have knowledge of both poorer children and richer children it can be expected that their responses become more moderate with age.

Children's advancements towards a more sophisticated social identity regarding social class, more grounded in children's social reality, can also explain our findings for implicit social class self-categorization. Supporting this idea, the results on children's implicit self-categorization show that only younger children were able to adapt their self-categorization as a response to the presence of social identify threats. More specifically, our results show that younger children's implicit self-association with the non-poor was stronger under conditions of acceptance threat combined with categorization threat. Differently, and as predicted, such an interaction between categorization and acceptance threat was not found among older children (H3). This result may be explained by the increasing stability of children's implicit self-categorization with age due to its decreased malleability. While explicit self-categorization is more easily adapted to the circumstances that render children a higher self-esteem and positive image of themselves, implicit self-categorization is less controllable

(Baron & Banaji, 2009; Nosek, Greenwald & Banaji, 2007). In sum, our results extend our previous research by demonstrating that younger children's self-association with the non-poor category in the face of categorization threat (also found in Chapter 5 study) is amplified by the presence of a threat to poor children's acceptance by a valued group of peers.

At last, we found support for our hypothesis that children in the presence of a peer group norm of inclusion would conform to that norm by throwing the ball the same amount of times to each player (H4). Our results also show that the same does not happen in the presence of a peer norm of exclusion. In this case, we found that overall children challenged the group norms of exclusion by tossing the ball more times to the excluded target than to the other two players, following the generic norm of fairness and just behaviour when rectifying for the social exclusion behaviour of the other two players. This is consistent with studies drawing on SRD (Killen & Rutland, 2011) showing that children are willing to rectify social inequalities and social exclusion when these are morally unacceptable (e.g., Mulvey et al., 2014).

Interestingly, on average, children played the ball more to the excluded poor child than to the excluded non-poor child, what may be explained in light of the highly prevalent norm of helping the poor in todays' society (e.g., Elenbaas et al., 2016; Paulus, 2004). However, as could be expected, we found that children differed in their behaviour as a function of their age and their implicit association with the poor category. Therefore, our results suggest that different identity management strategies might be at place for older and for younger children. For the younger children the tendency to behave more favourably to the excluded poor child than to the excluded non-poor child was increased by implicit self-association with the poor and was no longer present for those that implicitly self-associated with the non-poor category. This result suggests that younger, but not older, children, may engage in social competition to manage their social identity (Tajfel & Turner, 1979) to the degree that they cannot escape by social mobility (i.e., implicit self-categorization as non-poor). That is, children who implicitly self-categorize as poor show ingroup favouritism by tossing the ball more times to the poor child, showing thereby solidarity with 'other' poor kids and/or seeking a positive or at least eliminating negative distinctiveness.

As hypothesized (H5), we find the opposite pattern of results for older children. The more they implicitly self-categorized as poor, the less they advantaged the excluded poor child as compared to the excluded non-poor child. This result suggests that children that implicitly associate with the poor do not engage in the same identity management strategy any more when getting older. In this case, older children who implicitly self-categorized as

poor tossed the ball the same amount of time to the non-poor as to the poor excluded child. Moreover, the results show that in the condition of the exclusion of the poor child, the more older children implicitly self-categorized as poor, the less they threw the ball to the poor child. This result is consistent with our hypothesis that older children that feel their acceptance in the group under threat, because of their association to the poor category, would conform more to the norms of the peer-group than children who are not under acceptance threat (H5). In contrast, children that implicitly associated with the non-poor child showed a more inclusive behaviour to the poor child than towards the non-poor, tossing the ball to the excluded target more often when he/she was poor, than when he/she was not poor. One explanation for this result may be that older children who implicitly associate to a non-poor category engage in an alternative identity management strategy typical for higher status groups, namely *noblesse oblige* (Vanbeselaere, Boen, Van Avermaet, & Buelens, 2006). That is, when members from a high status group feel their position secure and legitimate, they may engage in compensation behaviour in favour of a lower status group in a less meaningful dimension. There is evidence that this noblesse oblige effect is dependent upon individual's pressure to show an anti-discrimination behaviour (Cambon, Yzerbyt, & Yakimova, 2015; Yzerbyt & Cambon, 2017), what supports the idea that children who associate with the non-poor are engaging in such a strategy to follow the norm of non-discrimination.

The explanation for these age differences in identity management that corresponds to the arguments behind our hypothesis relates to the developmental differences in social exclusion reasoning during childhood. Previous research has shown that children who feel their acceptance in a group at risk tend to conform to the ingroup norms of inclusion or exclusion of the group they (want to) belong to (Duffy & Nesdale, 2009; Ojala, & Nesdale, 2004; Thornberg, 2010; for a review, see Rodrigues, Rutland, & Collins, 2016). However, they are aware of the generic norms that are morally accepted in society, and in the presence of conflicting norms they navigate between both group-specific and generic norms. Studies show that with increasing age and knowledge about group dynamics and group functioning (Rutland, Killen, & Abrams, 2010), children move from a focus on general fairness and justice norms to a stronger focus on specific ingroup norms (Killen, Elenbaas, Rizzo, & Rutland, 2017). Although in our study among older children we find different responses depending on children's implicit social class self-categorization, as mentioned above. Thus, we believe that it is unlikely that this response is interpretable only in the light of developmental changes in intergroup dynamic processes per se. Instead, this result drives us to think that it is more likely that we are in face of a social identity strategy from the children

who implicitly self-categorize as poor, given that the more older children implicitly self-categorize as poor, the less they throw the ball to the poor child. Nevertheless, these results are not totally in line with our hypothesis (H5), due to the fact that children compensate the exclusion behaviour anyway. Yet, given the difference between children who implicitly self-categorize as poor and the ones that self-categorize as non-poor, we contend that older children engage in different identity management strategies. Thus, these results suggest that these children are protecting their self by conforming to the norms of the peer group to a greater extent as a response to acceptance threat. This interpretation is consistent with literature showing that lower status children are motivated to follow the norms of the higher status groups because they are fearful of being teased or excluded (Elliot & Leonard, 2004; Thornberg, 2010).

All together, these findings are also consistent with the queen-bee phenomenon (Derks et al., 2016) by suggesting that children are engaging in self-group distancing under the presence of social identity threats in order to up-lift their own condition (Cohen & Garcia, Derks et al., 2015). More precisely, we suggest the presence of two different self-group distancing responses: adaptation of implicit self-categorization with a stigmatizing category (more prevalent in younger children) and stronger adherence to the norms of the valued peer group (more prevalent in older children). Hence, these novel findings support our hypothesis that children engage in different social identity management strategies in order to self-distance from the category of poor children when they experience a threatening social identity, either because they feel their categorization or their acceptance to a valued group under threat. Beyond these predicted social mobility strategies we also found hints of alternative identity management strategies such as social competition (i.e., subjectively poor participants giving advantage to other poor targets, more prevalent in younger children) and noblesse oblige (subjectively non-poor participants giving advantage to poor targets, more prevalent in older children).

To the best of our knowledge, this study is the first to experimentally test how children manage their threatening social identity with regard to social class membership. This study brought novel findings about children's management of a stigmatizing identity and the importance of the social context in this process. Nevertheless, some limitations should be addressed in future research. One of those limitations is raised when comparing the present results with the ones of the previous study (Chapter 5). We found different results in both studies with regard to the effect of objective socioeconomic status on social class self-categorization, specifically the current study did not reveal any effect either on the explicit or

the implicit self-categorization as poor. We propose two possible explanations for that. First, the present sample was more homogeneous in terms of objective social status than the sample in the previous study (Chapter 5). In the present study both schools where the data was collected were located in economically and socially disadvantaged areas. Although there is heterogeneity between children within each school, we believe that these differences are reduced. This was not the case in the previous study, as we also included schools from more wealthy areas. Second, in the current study participants were exposed to a video with peers (i.e., manipulation of acceptance threat). In this case, the social-comparative judgments among peers might have had stronger influence in their responses than their knowledge about their objective SES. The latter might have had a stronger impact in the study reported in Chapter 5, because there was little other context information provided before the measure.

One of the questions that can be pointed out about this study is related to the manipulation of acceptance threat, and particularly to the differentiation between the poor child target and non-poor child target. We believe that the settings that we created in the manipulation of acceptance threat had clear parallels to real-life situations, and indeed the manipulation checks confirmed that children evaluated the poor target as having less money than the non-poor target. However, given that we are studying an intergroup context with fuzzy group boundaries, and that there is a generalized access to material goods, specifically those with brand-name labels, it is possible that children might have doubted the expressed reasons behind the story of the backpack of the non-poor child, believing that he/she could actually also be poor and just hide it because of his/her own sense of threat. Nevertheless, that is one of the specificities of this intergroup context and by using a non-straightforward indicator of social class we think to have well recreated the potential uncertainties and suspicions that children face in real life.

Moreover, a consideration about the specific experimental manipulation for categorization threat should be made. Specifically, our decision about this manipulation followed the unexpected effect of the order of the implicit-explicit self-categorization assessment on children's implicit self-categorization in the previous study (Chapter 5). We interpreted this finding as a possible effect of categorization threat triggered by the explicit measure, but acknowledged that a more definite conclusion that would rule out a spurious effect would require a second test, that we included in the present study. Nevertheless, in order to gather more evidence about the robustness of the categorization threat effect, future studies could include a more indirect manipulation, one possibility being that this is

methodologically comparable to the acceptance threat manipulation included in the present study.

Overall, our study does not show that children conform to the exclusion norm of the group, on the contrary. In both situations of exclusion of the target, but more in the poor target condition, children threw the ball more times to the excluded than to the other two players. Overall, this suggests that the norm of behaving with fairness and justice is stronger than the group loyalty norm for 9- to 12-year-old children. This general result raises two important issues that may be addressed in future studies. One is related to the experimental setting per se, where participants did not know or had any relation with the children with whom they were playing the game. Another, and more important fact, is that there were no consequences of behaving differently from the two players representing the valued group in terms of participants' own effective inclusion/exclusion in the group. However, in the real world, the decisions that children take have direct consequences for the way they are treated in the future. Upcoming studies should test if including direct consequences on participants' exclusion based on their responses would increase their compliance to the norms of the group.

Another open question is related to the impact that these social identity management strategies may have on children's well-being and self-esteem. Overall, we find that, although children in the face of social identity threats, and regardless of their age, explicitly report that they are not poor children, only youngers are able to adapt their implicit self-categorization by associating strongly with the non-poor category. We may conjecture that this adaptation can be protective of children's self-esteem (Dunham et al., 2007), because they intrinsically think that they are not poor. Moreover, when they do think that they are poor, it seems that they can turn to other strategies such as social competition. In this vein, one might suspect that in the case of older children, of which many implicitly self-associated with the poor category while explicitly not, this discrepancy might have a rather problematic impact on their self-esteem and, lately, on their relations with their peers. Importantly, research should address what may be the psychological consequences of children's concealment of their socioeconomic status (Barreto, Ellemers, & Banal, 2006; Newheiser & Barreto, 2014).

In conclusion, this study illuminates how children respond when they feel their social identity under threat because of a potential association with the stigmatizing category of poor children, amplified by the risk of being excluded because of that same categorization. Actually, we believe, and research also demonstrates, that these threats are present in the daily life of children, which may have consequences for their development and their relations

with other children, both when they are in a higher or in a lower status position. Moreover, looking to the bigger picture, our findings also suggest that these processes of social class identity management may have consequences in the perpetuation of inequalities related to social class memberships. If a child that feels at risk of being categorized as poor and of exclusion is more likely to conform to group norms that harm his/her own group, to a certain extent this child is supporting the existent asymmetric relations (Derks et al., 2016). Yet, these results also point to possible ways to address these issues. Specifically, this study shows that this self-group distancing is flexible, rather than a stable response from the members of disadvantageous groups. Therefore, it shows that one of the possible ways to reduce the burden of potentially stigmatized children is to contribute to a threat-free environment by intervening with children to promote a more inclusive and accepting climate in schools and other peer-contexts.

CHAPTER SEVEN

Conclusion

Notwithstanding its social importance, just recently, an emergent body of research has been examining how children's knowledge of social class groups informs intergroup relations in childhood (Hazelbaker & Mistry, 2018). In this thesis we intended to contribute to expand the knowledge about the development of children's understanding of social class taking a social identity approach (Social Identity Theory: SIT, Tajfel & Turner, 1979; Self-Categorization Theory: SCT, Turner, Hogg, Oakes, Reicher, & Wetherell, 1987). More specifically, we looked into the process of self-categorization regarding social class in order to understand how children perceive their position in this intergroup context and to what extent it could be shaped by aspects of their social situation.

In our examination of children's position in terms of social class within a social identity approach, we developed the present work in two distinct phases. In a first phase, given that self-categorization depends on the knowledge about the social categories at stake and is deeply connected to experiences and expectations of the individual (Turner et al., 1987), we examined children's stereotypes, attitudes and behaviours towards the poor, more specifically towards poor children (Study 1 and 2), and explored what is the development of the causal attributions for poverty in childhood (Study 2). In a second phase, we investigated the development of children's social class self-categorization during childhood while examining the influence of objective socioeconomic status (Study 3), and proceeded to investigate the particular effect of contextual social identity threats on social class self-categorization and social inclusion behaviour towards poor children (Study 4).

In the present chapter, we revisit the main research questions of the present thesis by presenting a summary of our findings and their major contributions to this field of research. Furthermore, we address some limitations of the present work as well as possible future directions for research on intergroup relations based on social class differences in childhood. Finally, we approach the implications of our findings for policy making, by raising some questions about the most frequently used school-based interventions designed to reduce prejudice in childhood.

Revisiting the main research questions and findings of the present thesis

Literature shows that children are aware of the social category of the poor already in pre-school years (Leahy, 1981; Ramsey, 1991; Rauscher, Friedline, & Banerjee, 2017). Yet, with age, children's beliefs about poverty become more elaborated (Enesco & Navarro, 2003; Woods, Kurtz-Costes, & Rowley, 2005, Amar, Llanos, González, Agamez, Peña, & Romero,

2015). Specifically, studies show that in late childhood children express negative stereotypic beliefs about the poor (e.g. sad, lonely, uneducated, incompetent) similar to those that have been found among adult populations (Cozzarelli et al., 2001; Enesco & Navarro, 2003; Mistry, Brown, White, Chow, and Gillen-O'Neel, 2015). Alongside, research focusing on attitudes suggests that, in their pre-school years, children already show a preference for wealthier groups than poor ones (Horwitz, Shutts, & Olson, 2014; Shutts, Brey, Dornbusch, Slywotzky, & Olson, 2016). Moreover, these negative attitudes seem to become increasingly prevalent and strong with age (Sigelman, 2012).

In sum, this research suggests that, from early on, children do categorize people into social class related groups, and that this social categorization sets the ground for the construction of their beliefs and attitudes. This idea is consistent with a developmental social identity approach (Nesdale, 2004; Tajfel & Turner, 1979, Turner et al., 1987), according to which the social categorization process, namely categorization of oneself, creates a sense of identity and, therefore, the basis for intergroup beliefs and behaviour. In this sense, a deeper understanding of self-categorization is instrumental to a better understanding of intergroup relations in general, and social identity processes in particular. Nevertheless, previous research studying children's stereotypes and attitudes towards the poor, as cited above, has overlooked self-categorization related to social class groups, a context in which being poor often implies facing stigmatization.

Self-Categorization Theory (SCT; Turner et al., 1987) contends that self-categorization is a dynamic process dependent upon the context where the individual is in. Particularly, SCT proposes that self-categorization in a given social category is the outcome of an interplay between *accessibility* of the category (i.e., individual's past experiences, values, present motives and expectations), *comparative fit* (i.e., comparison between the self and members of the ingroup and outgroup), and *normative fit* of the category (i.e., extent to which the stereotypical knowledge about the category align to the actual perceived social stimuli in the situation). It is the interaction between these three features that determines the use of a particular self-category, and which renders self-categorization its known flexibility (Oakes, 1987; Oakes, Turner, & Haslam, 1991; Turner, Oakes, Haslam, & McGarty, 1994). These predictions gain particular significance in an intergroup context where the distinction between social class related categories is very much based on social markers (e.g., clothes, communication, cultural practices) that are highly concealable and external to the individual (e.g., Becker, Kraus, & Rheinschimidt-Same, 2017; Kraus & Keltner, 2009). This particularity accounts for why the boundaries between social class related categories are

perceived as highly fuzzy and permeable (DiMaggio, 2012), features which in turn may shape individuals' perception of their position regarding social class. More specifically, such fuzziness may render more fluidity to social class self-categorization, making it even more context-dependent than self-categorization in other intergroup domains where group boundaries are more defined (Ostrove & Long, 2007; Ellemers, 1993; Tajfel & Turner, 1979). Hence, in this thesis we propose that children operate within such flexibility when self-categorizing as poor or non-poor by specifically distancing themselves from lower social class identities. Indeed, the few studies in this domain suggest that, when asked explicitly, children do not self-categorize as poor (e.g., Amar et al., 2015; Hakorvita & Kallio, 2015; Rauscher et al., 2017). Thus, the main goal of the present thesis is to investigate the development of self-categorization as poor or non-poor in childhood, considering that this should unfold both at the explicit and implicit levels and examining the influence of particular situational threats.

Following this line of research, we identified two major limitations in the literature on children's perceptions of social class differences, namely: 1) the exclusive use of explicit measures of stereotypes about and attitudes towards the poor; and 2) the prevalent use of poor adults as the social category of reference. These limitations were key in how we outlined the first research questions of the thesis, addressed in the first two studies, which in turn informed the two following studies on social class self-categorization.

Firstly, studies about the explicit measures of stereotypes about and attitudes towards the poor show that from early age children prefer wealthier groups than poor ones (Horwitz, Shutts, & Olson, 2014; Shutts, Brey, Dornbusch, Slywotzky, & Olson, 2016). Yet, with increasing age, at the same time that children become more knowledgeable about the socioeconomic concepts of the category of the poor (Enesco & Navarro, 2003; Leahy, 1981), they also increasingly express more negativity towards this social group (Sigelman, 2012), negativity that is also present in the adult population (Durante & Fiske, 2017). Interestingly, this pattern of an increasing expression of negative attitudes and stereotypes towards the poor with age is at odds with research on attitudes towards other social categories (e.g., racial, gender). In these other intergroup contexts, an anti-prejudice norm is in place, resulting in children's decreased expression of negative attitudes towards the outgroup when they grow older, particularly under conditions of public accountability (França & Monteiro, 2004; Monteiro, et al., 2009; Rutland, Cameron, Milne, & McGeorge, 2005). Hence, this more overt expression of negative stereotypes by older children about the poor social group suggests that the social class intergroup setting may rely on a specific normative context.

Therefore, we questioned whether younger children are only reproducing the normative discourse about this social group when they prefer the wealthier group (because they are not so knowledgeable about the category) or if, instead, they may indeed have internalized these negative stereotypes towards the poor (i.e., integrated this beliefs and attitudes into a coherent sense of self; Grolnik, Deci, & Ryan, 1997; Kelman, 1958, 1961).

Thus, our first study investigated from what age and to what extent negative perceptions about the poor are internalized in childhood and can be detected at an implicit level (Study 1, Chapter 2). In order to answer to this question, we conducted a study applying the Reverse Correlation Task paradigm with children aged 6 to 13 years. The results from this study showed that children's retrieved mental representation of the poor through the reverse correlation procedure was rated more negatively (e.g., lazier, more incapable), than the one of the non-poor (e.g., more friendly, more clean). However, our results did not provide evidence supporting developmental changes in children's mental representations of the poor. This result indicates that children hold negative stereotypes about the poor from the age of 6 years-old onwards (Study 1; see Chapter 2).

Our second question emerged from the fact that previous research has been mostly focusing on children's perceptions about poor adults, not looking into their perceptions about other children living in conditions of poverty. However, to proceed in our study about children's social class self-categorization, it was crucial to understand, first, children's experiences, values and expectations about the particular social category of poor children. In effect, in a social comparative context, the salience of social class related categories is based on this stereotypical knowledge about the group (Turner et al., 1987) and the meanings of the categorization (Barrett & Davis, 2012; Rutland, 1999). Therefore, our second study explored children's beliefs about poor children in the course of childhood. More specifically, following a mixed methods approach, our study aimed to see if children's negative representations of the poor, which have been found in previous studies, extended to the group of poor children. With this aim, we drew on both qualitative and quantitative data to describe 6- to 12-year-old children's stereotypes, attitudes and behaviours towards poor children (Study 2, Chapter 3). In addition, we also investigated children's causal attributions to child poverty (Study 2, Chapter 4). Importantly, we investigated the extent to which these beliefs were influenced by children's objective socioeconomic status (SES) and age.

The results of the second study showed that the negative representations that we found in the first study towards poor adults, were also present in children's perceptions of poor children. More specifically, the results showed that the majority of children perceived

this group as living in very extreme conditions of poverty (Study 2; see Chapter 3): lacking the essential goods, such as clothes, house or food. Overall, we found that children's stereotypes about poor children are similar to those that they hold about adults living in poverty (e.g., sadder, less intelligent, less healthy, less hard working, more unlucky, uglier and dirtier compared to non-poor children).

Nevertheless, contrary to the results of Study 1, in Study 2 we found that the expression of negative stereotypes about and attitudes towards poor children increased with age, which is in line with previous research (e.g., Enesco & Navarro, 2003). One possible explanation for this discrepancy between Study 1 and Study 2 may be that in the first study, while using the Reverse Correlation Task, we might have captured the more general and spontaneous image that children hold about the poor. In the second study, when children were asked to reason about their beliefs and to describe what they know about the social category, younger children may have been less capable to do so than older ones. This may be due to younger children's lack of awareness of broader socioeconomic concepts, which is consistent with our general finding that older children spontaneously describe a poor child in a more comprehensive and detailed way than younger children did. In line with the assumption of such an increasing complexity, an important finding from Study 2 is that the prevalence of social explanations of poverty increased with age (e.g., unemployment, low wages, bad government policies). The shift from basing their explanations of poverty only in random/fatalistic causes to more social causes suggests that with age children are likely to broaden their view of the poverty phenomenon (Chapter 4).

Interestingly, the development of the spontaneous descriptions of poor children with age, contrasted with the development of children's comparatively ratings of poor and non-poor children in a trait attribution task. This is, while older children expressed a more negative description of poor children than their younger counterparts, their ratings were more positive than those of younger children when they evaluated non-poor and poor children in a trait attribution task. This inconsistent result of the second study is puzzling, and raises, once more, the question about children's perceptions of prevailing norms about expressing prejudice towards poor individuals, specifically poor children. On the one hand we may hypothesise that, given the increasing expression of these negative beliefs, at least spontaneously, in this social intergroup context there is no such strong anti-prejudice norm inhibiting children to express this negativity about poor children. On the other hand, it seems that when children are in a more comparative and evaluative setting, older children do show a more egalitarian evaluation of the groups of non-poor and poor children which is consistent

with being aware of such anti-prejudice norm. Thus, these results suggest that as children grow older they might become increasingly aware and comply with an anti-prejudice norm in the face of direct and clear comparisons between social class related groups. Consistent with this awareness of not showing prejudice towards poor children, results of Study 2 on behaviours towards the poor children show that when asked about other children's behaviours towards poor children, participants perceive both positive (e.g., help) and negative behaviours (e.g., make fun). However, when asked about their own behaviour towards poor children, participants consistently express only positive behaviours (e.g. help, be friend, play).

Study 2 also provided evidence on the influence of the socioeconomic background on children's beliefs and values about children living in poverty. Evidence from this study is in line with an overall preference for the non-poor child over the poor child (Chapter 3), which is consistent with previous research (Horwitz et al., 2014; Shutts et al., 2016). However, participants from lower SES schools reported more that they would play with poor children, while children from middle-to-higher SES schools mentioned helping the poor children to a greater extent. Moreover, participants from lower SES schools showed a more egalitarian evaluation of the poor and non-poor children (i.e., on the trait attribution task) than children from higher SES schools did. Lower SES children expressed fewer negative representations of a poor child (e.g., go to school, live in houses, have something to eat) than children from higher SES. In conclusion, children from lower SES schools held a less extreme and less negative representation of the poor children than children from higher SES schools did, suggesting that children who face daily economic privation or have more frequent contact with other children that are from lower SES families (e.g., at school or in the neighbourhood) may have a different understanding of the phenomenon and of the social category of the poor than children from more affluent background. The contact with these socioeconomic differences may lead children to a more positive perception of this group of children.

In sum, these studies further our knowledge on the development of children's attitudes and stereotypes towards the specific social class group of poor children. Previous literature only focused on explicit measures of stereotypes about and attitudes towards poor adults, and our novel findings expand this knowledge about children's perceptions of the social class intergroup context. Overall, the first study supported the idea that the negative stereotypes that children explicitly express towards the poor are also present implicitly and from an early age. Moreover, the findings of the second study extend the previous literature by showing that the negative stereotypes and attitudes that children hold towards poor adults

are also directed towards poor children. This constitutes a finding of major relevance to the study of intergroup relations based on social class in childhood. Together, these two studies provided information that was crucial to understand in more detail what children from 6- to 12-years-old understand and how they reason about other children living in more deprived conditions. In addition, these studies also allowed us to draw some conclusions as to the influence of socioeconomic status in the development of attitudes and stereotypes towards poor children.

Regarding the main goal of the present thesis about the development of social class self-categorization, Study 2 did provide a first approach to how children perceive themselves in the social class intergroup context, even if this approach was rather indirect. Children's spontaneous discourses and drawings in this study hinted on the centrality of this self-categorization process. Specifically, the analysis of children's discourses and drawings suggests that children are motivated to convey their distinctiveness in relation to the stigmatized category of poor children by depicting themselves with social markers associated to the non-poor. Indeed, only one child in our sample self-identified as being a poor child. Hence, this work raised the question of whether the particular beliefs about poverty in childhood (e.g., as extreme and severe,) and/or the need to distinguish their own experiences from those of the poor child category would influence children's social class self-categorization in such a way, that they would avoid expressing any belonging to this category.

Only a few studies have looked into children's social class self-categorization, and these indicate that, overall, children do not self-categorize as poor, and do so regardless of their objective socioeconomic status (e.g., Hakorvita & Kallio, 2015; Sarti, Schalkers, & Dedding, 2015; Sutton, 2009). However, this literature has exclusively relied on explicit self-report measures, which raises two possible explanations for the findings. One refers to children's knowledge and beliefs about the socioeconomic reality in general, and about the social class related groups in particular, that might be construed in a way that inevitably pushes children away from the lower social class groups. If children perceive poor children as only those that are homeless, it is unlikely that they would see themselves as poor. A second explanation alludes to children's motivation to avoid a stigmatizing group membership, more specifically, self-categorization as non-poor may express children's management of a stigmatized social identity. To investigate the hypothesis that children's social class self-categorization is informed by an identity management strategy to achieve a positive social identity (Tajfel & Turner, 1979), in the proceeding studies we explored children's social class

self-categorization both explicitly and implicitly. With that purpose, we conducted two studies, one correlational (Study 3) and the other experimental (Study 4).

Study 3 aimed to investigate the role of children's objective socioeconomic status (lower SES vs. middle-to-higher SES) on the development of implicit and explicit social class self-categorization among 6- to 12-year-old children. Explicit social class self-categorization was measured using one single item that required children to position themselves on a continuum from poor to non-poor. Implicit social class self-categorization was measured using an adapted version of the Implicit Association Test.

Consistent with previous research, the results of Study 3 were unambiguous regarding the fact that overall children self-categorized more as non-poor than as poor. Extending the previous literature, the novel findings of this study show that children do not self-categorize as poor both implicit and explicitly. Consistent with our hypotheses, the implicit and explicit self-association with the non-poor category decreased with age and for those with lower SES, suggesting that children do integrate in their self-concept knowledge about their objective socioeconomic conditions. These results seem consistent with a developmental social identity approach (Nesdale & Flesser, 2001; Tajfel & Turner, 1979) according to which children should show preference for higher- rather than a lower-status group memberships, hence, that they self-categorize as non-poor to achieve or maintain a positive identity.

Most interestingly, an unpredicted interaction between age and the order of the implicit-explicit self-categorization assessment was found. Younger children's implicit self-association with the non-poor category was stronger when preceded by the explicit measure than when it was not. This result suggests that asking children directly how they see themselves in a *poor* vs *non-poor continuum* might have triggered a concern with being categorized as a poor child (i.e., categorization threat; Branscombe, Ellemers, Spears, & Doosje, 1999), preventing youngers from associating themselves with a stigmatized group. This unexpected result suggests that younger children's implicit self-categorization may show some flexibility to situational cues.

In Study 4 we followed up on these findings, by investigating the extent to which 9- to 12-year-old children's explicit and implicit social class self-categorization is influenced by contextual features that may render membership in the poor category as aversive, and how this unfolds with age. This study also aimed to go one step further from self-categorization outcomes and tested the effect of these threatening contexts on children's behaviour towards poor children, and while taking into account children's implicit social class self-categorization. In this experimental study we specifically tested the effect of *categorization*

threat (i.e., induced by asking explicit self-categorization either before vs. after the implicit measure) and *acceptance threat* (i.e., induced by depicting the exclusion of a poor child vs. exclusion of a non-poor child vs. inclusion of a poor child in a ball tossing game). Explicit social class self-categorization was measured by a six-item scale, and implicit social class self-categorization through an adapted version of the Implicit Association Test. Behaviour towards an excluded/included target was measured using the Cyberball game paradigm.

Consistent with Study 3, Study 4 showed, again, children's overall tendency to explicitly self-categorize more as non-poor than as poor, and again less distancing from the poor category with increasing age. The effect of objective SES found in Study 3 was not replicated. At the implicit level, as predicted, acceptance threat amplified an effect of categorization threat on inducing a self-association with the non-poor category, but only for younger children. In the Cyberball game, overall children passed the ball more often to the target child in the exclusion conditions (both poor and non-poor) than in the inclusion condition, compensating the exclusion behaviour of the other players. Most importantly, this tendency was even stronger when the excluded child was poor than when it was not. This result is consistent with a prevalent and strong societal norm that prescribes helping the poor as a fair and just way to behave (Elenbaas et al., 2016; Paulus, 2014; Rizzo & Killen 2016). However, age differences were also found in children's inclusion or exclusion behaviour towards the excluded poor target. Specifically, results showed that younger, but not older children, who implicitly self-identified with the poor, threw the ball more often to the excluded target in the condition where the child was depicted as poor than when depicted as non-poor, whereas younger children who implicit self-identified with the non-poor did not show such bias. This result suggests that younger children are engaging in social competition (ingroup favouritism) to manage their social identity (Tajfel & Turner, 1979). In contrast, for the older children, this inclusive behaviour became less likely the more children implicit self-categorized as poor when the target child was depicted as poor and excluded. In other words, the more older children implicitly self-categorized as poor the less they tossed the ball to the poor child when it was excluded.

This novel finding is consistent with the hypothesis that older children implicitly self-categorizing as poor are showing a behavioural strategy of self-distancing from a member of the aversive social category in order to avoid being associated with that category, by conforming more to the exclusion norm of the valued peer group. Importantly, this strategy was not used by children in any of the other conditions. This interpretation is consistent with existing evidence showing that lower status children are particularly motivated to follow the

norms of the higher status groups out of fear of being teased or excluded (Duffy & Nesdale, 2009; Ojala, & Nesdale, 2004; Thornberg, 2010). Together, the findings show two distinct ways, with different developmental onsets, of children self-distancing from the poor category – younger children by literally implicitly self-categorizing as non-poor, and older children by behaviourally conforming to a group exclusion norm of the poor. Both strategies are coherent with the well-studied queen-bee responses addressing social identity threats (Cohen & Garcia, 2005; Derks, van Laar, & Ellemers, 2016).

Overall, the results of Studies 3 and 4 suggest that younger children may abstain from explicit self-categorizing as poor as a subjective individual mobility strategy towards a positive social identity, while integrating information about their own objective economic conditions in their explicit self-concept that takes course with increasing age. Moreover, and in line with Self-categorization Theory (Turner, 1987), the novel findings of this thesis show that social class self-categorization is flexible and context dependent. Accordingly, social class self-categorization not only depends upon the objective socioeconomic conditions where children grow and live, but also in the features of the situation that can trigger strong feelings of threat associated to lower social class groups memberships. Yet, as children grow older, an increased awareness of their position in the social-structural context seems to reduce their ability to manage their social identity through flexible implicit self-categorization, which is consistent with children's internalization of a lower social class position. Whereas explicit self-categorization is more easily adapted to the circumstances in a way that renders children's self-esteem higher and their image of themselves more positive, implicit self-categorization is less controllable (Baron & Banaji, 2009; Nosek, Greenwald & Banaji, 2007). In the cases where it is not possible to adjust the implicit self-categorization as non-poor, older children seem to engage in alternative management strategies such as conforming to the specific norms of the valued group as a way to guarantee their acceptance in it. In sum, our results from Study 4 extend those of Study 3 by showing the specific processes by which children manage their potentially stigmatizing and threatening social identity connected to social class.

In sum, to the best of our knowledge, the studies presented in this thesis are the first to systematically investigate how children self-categorize according to social class. While adopting a developmental social identity approach, this thesis presented novel findings in what regards children's management strategies to maintain or achieve a positive social identity. Moreover, this thesis provided important information about the way children understand poverty in childhood, in terms of stereotypes about, attitudes, behaviours towards

poor children, and their more complex comprehension about the causes and possible solutions to end poverty in childhood.

Methodologically, the studies presented in this thesis resorted to different research methodologies and data analysis techniques: from qualitative to quantitative methods, correlational and experimental studies, using explicit and implicit measurements. This combination of diverse methods allowed to access different types of information in a complementary and integrative way. Moreover, the materials (e.g., illustrations, manipulation videos) and measures used in the correlational and experimental studies were specifically designed for these studies, aiming to create appealing tools to improve children's attention and commitment to the tasks. In short, the used materials proved to be engaging and suitable to work on these topics with children in this age.

Limitations and future directions

The studies conducted, and the overall thesis, have limitations that we would like to address and discuss. In this section we will address the limitations that concern the overall thesis, going beyond those that were presented in each empirical chapter.

One of such limitations regards the measure used to assess participants' objective socioeconomic status in Studies 2, 3 and 4, specifically our dichotomous one item measure provided by the school regarding children's eligibility to free or price-reduced meals in schools, that only takes into account the family income. This indicator is materialized in children's experiences in the school setting since it is explicitly used in school's practices and perceptible for children (e.g., some schools may use different colours for the meal vouchers depending on whether it is offered or bought). Although the use of this measure offers the studies additional ecological validity, we acknowledge that a more comprehensive and continuous measure of socioeconomic status could confer more sensitivity to our analysis. Relatedly, according to the social cognitive perspective on social class (Kraus, Piff, Mendoza-Denton, Rheinschmidt, & Keltner, 2012), socioeconomic status is informed by individuals' experiences at different levels, such as wealth, education and occupation. Accordingly, we consider that future studies should use a measure including additional indicators such as parents' academic qualifications and occupation, thereby covering a broader spectrum of relevant dimensions in the social class based intergroup context.

Another limitation regards how we labelled the social categories used in Study 2 and Study 3: *poor child* vs. *non-poor child*. In Study 2 we asked children to describe a poor and a non-poor child, collecting the meanings of these social categories for our participants.

However, inadvertently, the use of such extreme category of poor children may have induced participants' essentialist beliefs about poverty, possibly eliciting more negative stereotypes and attitudes towards this social group. Although during the interview we introduced the idea of variability within the group (i.e., asked about the existence of other poor children with different characteristics from the ones described) it is possible that the use of this label induced children to think about the characteristics of the poor child category has an essence, that is, with natural properties (del Río & Strasser, 2011; Gelman, 2004). At the same time, we should note that almost all the participants of Study 2 considered that poor children would not be poor forever, and that social mobility was possible. This idea of instability of the group membership runs against essentialist beliefs. In Study 3, so that children would not think of extreme poverty, we used the same labels but added brief definitions for each of the social groups (e.g., poor children that go to school like the non-poor, poor children that live in smaller houses than the non-poor). Still, the meanings and beliefs about the categories that children held beforehand might not have fit with our description, which may have influenced our results. Particularly, it is possible that participants' beliefs about extreme poverty were strong enough to override our description of the groups, leading children to a stronger dissociation from the group of poor children. To overcome this limitation, in Study 4 we decided not to associate any label or description to the social categories. Instead we presented the two groups of children as having more or less things. Therefore, in this study, by not referring to the label 'poor children', children had more room to think on the wide spectrum of social class and it is possible that we have mitigated children's most extreme representations of poverty, thereby diminishing the overall tendency for children to dissociate themselves from the category. Nevertheless, in order to control for children's understanding of the categories, future studies should include a question that requires children to make explicit their reasoning.

One final limitation that we would like to discuss concerns our developmental account of children's social cognitive abilities during childhood. The work presented in this thesis was collected with samples from 6- to 12-years-old and the variable age was used as a key predictor. In developmental studies, age can be a proxy for psychological, social, moral and cognitive developmental stages. Indeed, during the period of childhood important social-cognitive skills develop which in turn may influence the way children understand the social class intergroup context and children's own standing in it (e.g, multiple classification skills, social perspective-taking, social comparison skills). In the thesis we alluded to some cognitive developmental skills when interpreting the results of our studies, such as when

considering the possible influence of the increasing social comparison skills in the more moderate self-categorization as non-poor in older children. However, we did not measure these skills to test specifically for these effects. In order or provide stronger evidence about the role of such social-developmental variables, future studies should include measures to ascertain their influence in children's social class self-categorization.

The studies presented in this thesis open an avenue of questions that should be further addressed in future studies. First of all, some of these questions are related to our primary contribution to the field. Namely, future studies should continue examining how children at risk of being stigmatized due to their families' lower income manage their threatened social identity. More specifically, they should examine what the different social identity management strategies are that children use when trying to self-distance from an association with an aversive social category. Our studies show that younger children adapt their implicit self-categorization as non-poor, whereas older children do not show such flexibility and pursuit self-distance through their greater behavioural compliance to the norms of the valued peer group. Nevertheless, apart from these strategies, evidence on queen-bee behaviour also shows that individuals under social identity threat may respond by agreeing with the existent negative stereotypes about the lower status group, and by endorsing or legitimize the unequal asymmetric power relations (Derks et al., 2016). In line with this idea, future studies should investigate the impact of social identity threat on children's attitudes towards children with fewer resources and on the extent of children's endorsement of anti-prejudice norms. This line of research should include both implicit and explicit measures of attitudes towards poor, allowing to analyse in more detail children's internalization of an anti-prejudice norm towards children living in poverty (Dunham et al., 2014; Rutland, Cameron, Milne, & McGeorge, 2005).

Interesting to a more complete developmental account about the coping responses to social identity threats of lower SES individuals is addressing this issue with older age groups. Study 3 and 4 show that explicit self-categorization with the non-poor decreases with age. Moreover, Study 3 shows that older children's closeness to the poor category is stronger among those with lower SES. Hence, one may question if adolescents from lower SES backgrounds would ultimately integrate their objective socioeconomic status in their self-concept by associating themselves to the poor category. Our results are compatible with the hypothesis that in the course of children's social development different skills can be mobilized and different strategies may emerge to cope with these identity threats. Therefore, and admitting that for adolescents the association to the poor category might become

stronger, they may actually engage in other strategies to achieve positive distinctiveness than self-distancing from the category (Tajfel & Turner, 1987), like social creativity (e.g., by valuing other comparative dimensions, such as happiness, or recognition of the value of things in life) or social competition (e.g., by showing bias in favour of the poor group).

Moreover, this thesis has just remotely touched the study of discrimination of less resourceful peers in childhood. Our focus was precisely on understanding the extent to which children would engage in self-distance from a stigmatizing category through behaviour by conforming to an exclusion norm of a more valued group. However, from the beginning, our foremost interest was to provide evidence that could inform future studies to investigate in more detail how children behave towards a less resourceful peer in terms of inclusion and exclusion behaviours. Despite its importance, to the best of our knowledge, previous research has mostly studied behaviour towards less resourceful peers in contexts involving resource allocation (Blake & McAuliffe, 2011; Elenbaas, Rizzo, Cooley, & Killen, 2016) and has overlooked social inclusion and exclusion behaviour towards poorer children. Importantly, literature shows that feelings of exclusion have negative emotional and health outcomes (Killen & Rutland, 2011). In addition, when social exclusion is based on intergroup bias, the likelihood of negative outcomes is stronger than for the general interpersonal harassments (Russell, Sinclair, Poteat, & Koenig, 2012). Some of these negative outcomes are related to risky behaviours, depression, and lower academic performance (Killen & Cooley, 2014; Russell et al., 2012). Therefore, future studies should systematically analyse how children behave towards less resourceful peers, using social inclusion and exclusion measures. Importantly, this research should take into account the importance of children's perception of their position in the social class intergroup context, and foremost the social context where the child is in, since we demonstrated that it has a significant impact on the way they behave towards lower income children (Study 4).

To conclude, we would like to identify some implications for policy making of the findings in our work. Specifically, some of the new insights that this thesis produced may raise some questions about the most frequently used school-based interventions designed to promote more favourable intergroup relations in childhood. Literature on how the school community approaches social class differences in the school and the classroom shows that, unlike other social categories (e.g., gender, ethnicity), social class is still a taboo subject, difficult to approach by teachers (White, Mistry, & Chow, 2013). Nevertheless, we consider important that schools, supported by social developmental psychologists (Killen, Rutland, & Ruck, 2011), are committed to build a threat-free environment for all children. In this sense,

future research should explore the viability of interventions aiming to reduce prejudice towards children with fewer resources, in order to promote a more inclusive and accepting school climate.

So far, interventions have been designed to reduce prejudice between salient social groups and with well-defined boundaries between categories (e.g., race, gender). However, and as we largely discussed in this thesis, this is not the case in the social class intergroup context. This peculiarity can pose significant challenges to the applicability of the traditional school interventions that have been designed and tested by social developmental psychologists. The results of our studies further stress that directly translating such interventions to the social class contexts should be conducted with caution.

For instance, our findings suggest that making the category of poor children salient might constitute a threat to children's social identity who fear to be associated to this social category. Although our studies do not allow to take any conclusions about the (negative) consequences of engaging in identity management strategies, studies with adults in other domains suggest that hiding a stigmatizing identity may have psychological costs, such as decreased feelings of belonging (Newheiser & Barreto, 2014) or decreased feelings of self-confidence, that in turn may undermine their performance (Barreto, Ellemers, & Banal, 2006). As such, interventions that turn salient the category and the possibility of someone feeling the threat of being categorized as poor must be aware of the possible consequences of this.

Moreover, the fact that children do not self-categorize as poor, especially at a younger age, should also be taken into account. This specific characteristic of the intergroup context may pose a challenge to some of the proposed interventions in intergroup contact (direct or indirect; e.g., Dovidio, Eller, & Hewstone, 2011) or the ones rooted in social categorization principles (recategorization or dual identity model; Gaertner & Dovidio, 2000; Guerra, Rebelo, Monteiro, & Gaertner, 2013) because of the lack of children's awareness of their group memberships.

Ideally, to avoid that a specific intervention makes children feel threatened, and to guarantee that it has a stronger effect on the reduction of children's prejudice, interventions should occur early in development before stereotypical expectations are well established (Killen, Mulvey, Hitti, & Rutland, 2012). In other words, interventions should be conducted while children are constructing their sense of the social class intergroup context, attributing meanings to the social categories and taking into account the specific context they are in (Turner et al., 1987). If it is so, it would be likely that interventions aiming to enlighten about

diversity (Mistry, Brown, Chow, & Collins, 2012), by creating spaces of training and dialogue about socioeconomic differences (e.g., including variability within the groups, conveying counter-stereotypical messages) would have a stronger effect at this stage of development than later, when children already have well-established beliefs about and attitudes towards poor children.

Concluding remarks

The present thesis aimed to contribute to extend the knowledge about the development of children's understanding of the social class context, by focusing on the development of children's explicit and implicit social class self-categorization. This thesis provides evidence that for 6- to 12-year-old children, being a poor child is seen as negative and stigmatizing. This negativity may constitute the basis for children's non-association with this group by explicitly and implicitly self-categorizing as non-poor. However, as children grow older they seem capable of integrating knowledge about their own socioeconomic conditions in where they position themselves in the intergroup context. Importantly, this thesis supports the hypothesis that not only explicit, but also implicit self-categorization, is sufficiently flexible to accommodate younger children's coping responses to social identity threats. Differently, however for older children, they seem to cope with social identity threats through the adoption of non-poor peers norms that condone the exclusion of poor children.

Previous research on the development of intergroup inclusion and exclusion has overlooked the importance of social class categorizations. The findings of this thesis emphasize the importance of embracing intergroup context related to social class in the research field of the social development of intergroup inclusion and exclusion.

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Appendix A

Materials for project dissemination in schools

Animated videos presenting the Project

Portuguese Version that was sent to schools can be seen at https://youtu.be/_9PzpIEWFEc

The English version was the final product presented in the 1st Autumn School "SCoRE'17 – Science Communication for Researchers in Education: how to do it successfully", by CIDTFF - Universidade de Aveiro, and can be seen at https://youtu.be/NttqNu4x4Lc

Flyer



Appendix B

Chapter 3 and 4. Interview Guide used in the study presented in chapter 3 and 4

Guião de entrevista (A)

[Interview Guide]

[Entrevistador: Ao longo de toda a entrevista existem várias indicações que o entrevistador deve ler, de forma a aplicar corretamente este guião. O material para toda a aplicação encontra-se no início deste documento, mas ao longo do guião assinala-se quando devem ser utilizados cada um. Deve seguir o guião apresentado, podendo adaptar o discurso de acordo com as respostas dadas pela criança, para que se torne numa conversa fluida. O entrevistador pode não aplicar todas as questões na ordem apresentada, mas deve garantir que todos os tópicos são abordados. Deve fazer perguntas esclarecedoras das respostas da criança, quando tiver dúvidas, mas nunca deverá induzir as respostas. Quando se pede à criança para desenhar em cinco minutos, a intenção é de limitar o tempo mas não é obrigatório que se use o tempo todo: mal se perceba que a criança não tem mais nada a acrescentar ao desenho pode passar-se às questões.]

[Interviewer: Throughout the interview there are several guidelines that the interviewer should read in order to correctly apply this script. The material for the entire application can be found at the beginning of this document, but throughout the script, it is specified when each should be used. The interviewer must follow the script presented and can adjust the speech according to the answers given by the child, so that it becomes a fluid conversation. The interviewer may not apply all questions in the order presented, but must ensure that all topics are covered. You should ask clarifying questions about the child's answers when you have questions, but you should never induce answers. When the child is asked to draw in five minutes, the intention is to limit the time but it is not mandatory to use all the time: as soon as one realizes that the child has nothing more to add to the drawing the interviewer shall go on to the questions.]

MATERIAL: (Material:)

Guião da entrevista A e B (Interview Guide A and B)

Cartão A (Card A)

2 conjuntos de adjetivos - meninos ou meninas (2 sets of adjectives - boys or girls)

Documento registo de respostas quantitativas (Document to write children's responsed to the quantitative measures)

3 caixas iguais etiquetadas (3 equal boxes – labeled)

Lápis de cor – caixa de 12 (Coloured pencils – box of 12)

Folhas de papel A4 branco (White A4 paper sheets)

Cronómetro/Relógio (Stopwatch / Clock)

Gravador Digital/Portátil com opção gravação (Digital / Desktop with recording option)

Olá. Estás bom/boa? Como te chamas? Olá ! Eu chamo--- me . Quantos anos tens (apontar mês em que faz anos)? Muito obrigada por teres vindo falar comigo um bocadinho. Sabes, eu também ando na escola e estou a fazer um trabalho em que é importante para mim saber o que tu pensas. Para isso vou fazer--- te algumas perguntas, mas é só para saber o que achas porque não há respostas certas nem erradas. Por isso, se não souberes responder a alguma pergunta, não tem problema nenhum. Basta dizeres que não sabes, está bem? Se entretanto não quiseres responder a mais nenhuma pergunta, dizes-me também.
[Hello. How are you? What is your name? Hello ! My name is. How old are you (interviewer write the month)? Thank you so much for coming to talk to me a little bit. You know, I also go to school, and I'm doing work where it's important for me to know what you think. For that I will ask you some questions, but just to know what you think because there are no right or wrong answers. So if you don't know how to answer a question, there's no problem. Just say you don't know, okay? If you don't want to answer any more questions in the meantime, you tell me that and we stop.]

Tens alguma pergunta para me fazer a mim? Posso começar? Vamos começar, então.
[Do you have any questions to ask me first? Can I start? Let's start then.]

PARTE I (Part I)

Tarefa de Desenho de uma criança pobre [Drawing of a Poor Child Task]

[Objetivo: Nesta secção da entrevista pretendemos uma caracterização da criança pobre na sua perspetiva mais física, mas também psicológica. Pretendemos conhecer como as crianças veem o dia-a-dia de uma criança pobre./ Objective: In this section of the interview we aim to

characterize the poor child from a more physical but also psychological perspective. We want to know how children see the daily life of a poor child.]

[Entrevistador: Para esta tarefa deve ter uma folha de papel A4 + caixa de lápis de cor (sempre a mesma caixa, ordenar os lapis como estão apresentados na imagem da caixa no início de cada entrevista)./ Interviewer: For this task you should have an A4 sheet of paper + colour pencil box (always the same box, order the pencils in the way it is presented in the box in the beginning of each interview).]

1. Já ouviste falar de pessoas pobres? (Have you ever heard about poor people?)
2. E de crianças pobres, já ouviste falar? (And about poor children, have you heard?)
   (se criança refere que é uma criança pobre, aplicar o Guião B da entrevista a partir daqui; Appendix C/ if the child reports that he/she is a poor child, apply the interview guide B from hereinafter; Appendix C)

Tenho aqui uma folha de papel e estes lápis. Queria pedir-te para, em cinco minutos, me desenhares uma criança pobre. Mas gostava que escolhesses apenas uma cor para a desenhares. Pode ser qualquer cor, mas só pode ser uma. Não há problema se não conseguires desenhar neste tempo, mas aproveita estes cinco minutos para desenhares o que conseguires, está bem? Desenha aquilo que para ti é uma criança pobre, está bem? [I have here a sheet of paper and these pencils. I wanted to ask you if you could draw a poor child in five minutes. But I would like you to choose just one colour to draw it. It can be any colour, but only be one. There is no problem if you cannot draw in this time, but take these five minutes to draw what you can, okay? Draw what is a poor child to you, all right?]

[Entrevistador: Após o desenho, fazer as seguintes questões sobre a criança que está no desenho./ [Interviewer: After the task, ask the following questions about the child in the drawing.]

Agora queria fazer-te algumas perguntas sobre esta criança que desenhaste. [Now I would like to ask you some questions about this child you just drew.]

3. Então e o que é para ti uma criança pobre, esta criança que desenhaste? (So what is a poor child to you, this child you just drew?)
4. Como é que achas que esta criança é? Podes descrever-me a criança que desenhaste? (É um menino/menina? - Se respondeu menino, perguntar se também há meninas

pobres e vice-versa; alto/baixo; magro/gordo) [How do you think this child is? Can you describe me the child - Is it a boy / girl? - If the child answered boy, ask if there are also poor girls and vice versa; tall/short; thin/fat].

5. O que é que costuma vestir esta criança pobre? (What does this poor child usually wear?)

6. Onde é que esta criança que desenhaste está? (Where is this child you drew?)

7. E o que é que ela está a fazer? (And what is she doing?)

8. O que é que ela costuma fazer durante o dia? Consegues descrever-me o dia a dia dela? (se não conseguir responder, podemos começar nós o dia com "de manhã, acorda… depois faz o quê? Nesta questão devem introduzir-se os pontos seguintes, caso o participante não os refira espontaneamente) [What does she usually do during the day? Can you describe her daily life to me? (If the child can't answer, the interviewer can start by saying "In the morning, he/she wake up ... then do what? In this question the following points should be entered if the participant does not spontaneously refer to them.)]

   a. (Se não disser que vai à escola, perguntar diretamente) E ela vai à escola? (Se dizem que vai à escola, perguntar) E achas que ela gosta de ir à escola ou não? Como é que achas que ela é na escola? Gosta de estudar ou não? É bom/boa aluno/a? [(If the child don't say that the poor child go to school, ask directly) And she goes to school? (If they say she goes to school, ask) And do you think she likes to go to school or not? How do you think she's at school? Does he/she like to study or not? Is he/she a good student?]
   b. E onde é que mora? (And where does he/she live?)
   c. O que é que costuma comer? (What does he/she usually eat?)
   d. Durante o dia, costuma brincar? (During the day, does he/she usually play?)
   e. O que faz mais durante o dia? (What does he/she does more during the day?)

9. E como é que se está a sentir esta criança que desenhaste? (está contente, triste, feliz, infeliz...) O que está a pensar? [And how does he/she feel, this child you drew? (happy, sad, glad, unhappy ...) What is he/she thinking?]

10. Do que é que esta criança gosta, sabes dizer-me? E do que é que ela não gosta? (What does this child like, can you tell me? And what doesn't she like?)

11. Ela tem família? Como é a família dele/a? (Does she have a family? What is his/her family like?)

12. E amigos, tem amigos? Como são os amigos dele/a? (And friends, does he/she have

friends? What are his/her friends like?)

13. E achas que as crianças que são pobres são todas iguais umas às outras ou existem diferenças entre elas? Todas as crianças pobres são iguais a esta que desenhaste ou há (Se disse diferenças, perguntar quais.) (And do you think that children who are poor are all the same or are there differences between them? Are all the poor children the same, as the one you drew or there are different children (If the participant said differences, ask which ones.)

PARTE II (Part II)

Tarefa de Desenho de uma criança não pobre [Drawing of a Non-Poor Child Task]

[Objetivo: Aqui pretende-se conhecer como é que a percepção da relação das outras crianças com a criança pobre.] / [Objective: In this part is intended to know what is the perception of the relationship between other children with the poor child.]

Vou pedir-te para continuares o desenho. Agora, gostava que desenhasses um menino ou uma menina da tua idade que não seja pobre, está bem? Mais uma vez, queria que desenhasses em cinco minutos e apenas com um lápis, da cor que quiseres. (tentar perceber se ele está a desenhar uma criança qualquer ou se conhece quem está a desenhar) – os lapis devem estar organizados de acordo com o desenho da caixa antes da criança voltar a escolher uma cor. [Now, I will ask you to continue the drawing. I would like you to draw a boy or girl your age who is not poor, okay? Once again, I wanted you to draw in five minutes and just with a pencil, the colour you want. (try to understand if he is drawing any child or if he/she knows who he is drawing) – the pencils should be organized as in the picture of the box before children choose the new colour.]

[Entrevistador: Após o desenho, fazer as seguintes questões sobre a criança não pobre que acabou de desenhar.] / [Interviewer: After the tasj, ask the following questions about the non-poor child that has just be drawn.]

Agora queria fazer-te algumas perguntas sobre esta criança da tua idade que não é pobre que desenhaste. [Now I would like to ask you some questions about this child of your age who is not poor that you just drew.]

14. Como é que é esta criança que desenhaste? (perceber se conhece esse/a menino/a) (How is this child you drew? (interviewer should understand if the participant knows that

child he just drew)

15. O que achas dela? Gostas dela ou não gostas dela? (What do you think of her? Do you like her or don't you like her?)

16. Achas que estes dois meninos/as, o pobre e aquele que não é pobre? São amigos? (What do you think, do you think these two boys/girls, the poor and the one who is not poor? Are they friends?)

17. E o que achas que este/a menino/a da tua idade costuma fazer quando está com as crianças que são pobres, como esta que desenhaste? (And what do you think this boy/girl your age usually does when he/she is with children who are poor, like the one you drew?)

18. O que é que achas que ele/a pensa deste menino/a pobre? Achas que gosta ou não gosta dele/a? (apontar para os diferentes meninos/as para ajudar a identificar de quem se está a falar) (What do you think he/she thinks of this poor boy? Do you think he/she likes or dislikes him/her? - point to different boys to help identify who you are talking about)

19. E o que achas que este/a menino/a pobre que desenhaste, pensa deste menino/a que não é pobre? Achas que gosta dele ou não gosta dele? (And what do you think that this poor boy/girl you just drew thinks of this boy/girl who is not poor? Do you think he/she likes him or dislikes him?)

PARTE III (Part III)

Tarefa de Desenho de auto-retrato [Self-portrait Task]

[Objetivo: Nesta secção, pretende-se perceber as relações estabelecidas entre a criança participante e as crianças pobres. Questiona-se também sobre as atribuições das causas da pobreza.] / [Objective: In this section, we aim to understand the relationships established between the participant and poor children. It also questions the attributions of the causes of poverty.]

Vamos continuar o desenho, está bem? Agora gostava que te desenhasses a ti próprio/a nesta folha. Em cinco minutos, queria que fizesses um desenho de ti. Mais uma vez, gostava que escolhesses apenas uma cor para desenhares. Pode ser qualquer cor, mas só pode ser uma. Não há problema se não conseguires desenhar neste tempo, mas aproveita estes cinco minutos para desenhares o que conseguires, está bem? [Let's continue the drawing, ok? Now I would like you to draw yourself in this sheet of paper. In five minutes, I wanted you to draw a

picture of yourself. Once again, I would like you to choose just one colour to draw. It can be any colour, but it can only be one. It's ok if you can't draw in this time, but take these five minutes to draw what you can, ok?]

[Entrevistador: Após o desenho, fazer as seguintes questões.] / [Interviewer: After the task, ask the following questions.]

20. Conheces esse menino/a pobre que desenhaste há pouco? Já o/a viste antes? (dependendo da resposta, passar para as questões se sim ou se não) [Do you know this poor boy/girl you just drew? Have you seen him before? (depending on the answer, go to questions if yes or no)]

(Se SIM / If YES)

a. Onde é que costumas ver ou viste esse/a menino/a pobre? (Where do you usually see or where did you see this poor boy/girl?)

b. Podes descrever-me uma situação em que te tenhas encontrado com ela? (ex: onde foi, quando foi, estava com quem, o que aconteceu?) (Can you describe a situation in which you have met him/her? (e.g., where was it, when, whith whom do you were with, what happened?)

c. Quando o/a vês o que costumas fazer? (e aqui neste desenho, o que estás a fazer?) (When do you see him/her, what do you usually do? (And here in this drawing, what are you doing?)

d. E gostas dele/a? (e de estar com ele/a) Porquê? → Vai para a pergunta 21 (And do you like him/her? (and being with him/her) Why? → Go to question 21

(Se NÃO / If NO)

a. E outras crianças que sejam pobres, já viste alguma vez? (Se NÃO, vai para NUNCA viu nenhuma criança pobre) (And other poor children, have you ever seen? (If NOT go to NEVER saw any poor children)

b. Onde é que costumas ver ou viste esses/as meninos/as pobres? (Where do you usually see or where did you see this poor boy/girl?)

c. Podes descrever-me uma situação em que te tenhas encontrado com elas? (ex: onde foi, quando foi, estava com quem, o que aconteceu?) (Can you describe a situation in which you have met him/her? (e.g., where was it, when, whith whom do you were with, what happened?)

d. Quando os/as vês o que costumas fazer? (When do you see him/her, what do you usually do?)

e. E gostas dele/a? (e de estar com ele/a) Porquê? → Vai para a pergunta 21 (And do you like him/her? (and being with him/her) Why? → Go to question 21

(Se NUNCA viu nenhuma criança pobre / If NEVER saw any poor child)

a. Nunca viste nenhuma criança pobre? Sabes dizer-me porquê? Onde achas que elas estão? (Have you never seen any poor children? Can you tell me why? Where do you think they are?)

b. Se visses o que gostarias de fazer? (If you saw what you would like to do?)

c. E o que achas das crianças pobres? Gostas delas ou não gostas delas? Porquê? (And what do you think about poor children who are poor? Do you like them or don't you? Why?)

21. E diz-me: achas que na tua escola há muitas ou poucas crianças como esta que desenhaste? (se tiver dito que há meninos pobres diferentes perguntar também no geral) (And tell me: Do you think that in your school there are many or few children like the one you drew? (if the particiant have said earlier that there were different poor children ask also in general)

22. Então e o que é que achas que aconteceu para que este/a menino/a seja pobre? (Explorar para tentar perceber a atribuição ou não de culpa.) [What do you think might have happened to make this child poor? (Explore to try to figure out if the participant thinks whether poor children are to blame or not)]

a. (Se tiver referido haver outro tipo de pobres perguntar também sobre as possíveis causas da pobreza para esses meninos/as) Achas que todos os/as meninos/as pobres são pobres por causa disso ou pode ter sido por causa de outras coisas? Quais? [(If the participant had mention earlier other types of poor people also ask about the possible causes of poverty for that children) Do you think all poor boys/girls are poor because of this or may have been because of other things? Which?]

b. Achas que eles são culpados ou não têm culpa? Então, há alguém que tem culpa? (se falarem dos pais ou familiares, explorar também esta resposta e perguntar mais sobre os pais para tentar perceber exatamente qual pensam ter sido a causa8) Do you think they are guilty or not guilty? So is there anyone to blame? (If talking about parents or family members, explore this answer as well and ask more about parents to try to understand

exactly what they think was the cause)]

23. Achas que ele/a vai ser para sempre pobre ou pode deixar de ser pobre? (Do you think he/she will be forever poor or can stop being poor?)

a. [Se sempre pobres] Porquê? [If always poor] Why?

b. [Se podem deixar de ser pobres] Porquê? O que é que tem de acontecer para eles deixarem de ser pobres? (perceber foco de ação: eles, pais deles, sociedade...) [If they can stop being poor] Why? What has to happen for them to stop being poor? (focus of action: them, their parents, society ...)

Muito obrigada pelas tuas respostas, vão ajudar-me muito. (Tank you very much for your answers, they will help me a lot.)

Agora vamos fazer algo um bocadinho diferente do que estivemos a fazer até aqui, está bem? (Now let's do something a little bit different from what we've been doing so far, okay?)

PARTE IV (Part IV)

Atitude face aos/às meninos/as que são pobres (Attitudes towards poor children)

[Entrevistador: As respostas a este conjunto de questões devem ser assinaladas de imediato no documento criado para o efeito com respetiva indicação do ID da criança. Depois de ler cada uma das perguntas, deve ler a escala que está no cartão A, seguida de deles/disso, consoante a pergunta.] / [Interviewer: Answers to this set of questions should be noted immediately in the document created for the purpose with the participant's ID. After reading each of the questions, you should read the scale on card A, followed by them/that depending on the question.]

Agora gostava que pensasses em todos os meninos/as pobres e diz-me, olhando para esta imagem (Cartão A): [Now I would like you to think of all the poor child and tell me by looking at this image (Card A):]

1- O que é que achas dos meninos/as pobres? (What to you think about poor children?)

(Não gostas nada deles; Não gostas deles, Gostas mais ou menos deles; Gostas deles ou Gostas muito deles?) / (You don't like them at all; you don't like them, you like them more or less; do you like them or do you like them very much?)

2- O que achas se estiveres ao pé dos meninos/as pobres? (What do you think of being around poor children?)

(Não gostas nada disso; Não gostas disso, Gostas mais ou menos disso; Gostas disso ou Gostas muito disso?) / (You don't like it at all; you don't like it, do you like it more or less; do you like it or do you like it very much?)

3- O que achas se os meninos/as pobres pedirem para brincar contigo? (What do you think if a poor child asks you to play with him/her?)

(Não gostas nada disso; Não gostas disso, Gostas mais ou menos disso; Gostas disso ou Gostas muito disso?) / (You don't like it at all; you don't like it, do you like it more or less; do you like it or do you like it very much?)

4 - O que achas de ter meninos que são pobres na tua turma? (What do you think of having poor children in your class at school?)

(Não gostas nada disso; Não gostas disso, Gostas mais ou menos disso; Gostas disso ou Gostas muito disso?) / (You don't like it at all; you don't like it, do you like it more or less; do you like it or do you like it very much?)

CARTÃO A (Card A)

Não gostas nada	Não gostas	Gostas mais ou menos	Gostas	Gostas muito
				

PARTE V (Part V)

Estereótipos face aos menino/as pobres (Stereotypes about poor children)

[Entrevistador: Deve ter três caixas exatamente iguais + 2 conjunto de adjetivos adequado a menino ou a menina, consoante sexo da criança. Numa caixa deve estar escrito MENINOS/AS, noutro MENINOS/AS POBRES e noutra não está escrito nada. Os três primeiros adjetivos são de treino, para melhor compreensão da tarefa. Para os seguintes adjetivos, inseridos na tabela abaixo, o entrevistador deve ler cada descrição a seguir a dizer o adjetivo, independentemente da criança compreender ou não o adjetivo. Caso a criança não saiba o que é, o entrevistador não deve sugerir outra descrição, apenas deve reler a descrição dada. Se a criança continuar sem saber o entrevistador deve dizer: "Não faz mal, deixa estes de parte, não coloques em nenhuma caixa. Não tem mal nenhum."] / [Interviewer: Must have three boxes exactly the same + 2 adjectives set suitable for boy or girl, depending on the child's gender. One box should be labeled with BOYS/GIRLS, another POOR BOYS/GIRLS, and another without label. The first three adjectives are training, for better understanding of the task. For the following adjectives, presented in the table below, the interviewer should read the adjective followed by each description, regardless of whether the child understands the adjective or not. If the child does not know what it is, the interviewer should not suggest another description, just (re)read the description given. If the child is still unaware the interviewer should say, "Never mind, let these out, don't put them in any boxes. There is no problem at all. "]

Sabes que as pessoas são iguais numas coisas e são diferentes noutras. Entre os meninos também é assim, às vezes são parecidos e às vezes são diferentes, não é? Tens aqui uns papelinhos onde estão escritas algumas destas características que nos fazem ser parecidos ou diferentes. E tens aqui também três caixas. Esta caixa pertence a um menino e esta caixa pertence a outro menino, mas que é pobre. Esta terceira caixa não é de ninguém. Queria que tu, para cada característica que eu vou ler colocasses o papelinho na caixa que achas que o menino/a é assim, está bem? [You know that people are similar in somethings and different in others. It is like that among children, sometimes they are alike and sometimes they are different, isn't it? You have here some little pieces of paper that have written some of the characteristics that make us look similar or different. And you have three boxes here too. This box belongs to one boy/girl and this box belongs to another boy/girl but who is poor. This third box is nobody's. I wanted that you, for each characteristic that I am going to read, put the little piece of paper of that each characteristic in the box that you think the boy/girl is like,

ok?]

Por exemplo: (For example)

Algumas crianças gostam de ver televisão, quem achas que gosta de ver televisão, este menino/a que é pobre, este menino/a que não é pobre, os dois meninos/as duas meninas, ou nenhum dos meninos/as? (Some children like to watch television, who do you think you like to watch television, this boy/girl who is poor, this boy/girl who is not poor, the two boys/ girls, or none of the boys/girls?)

(Depois da criança responder) (After the child answers)

Então, podes pôr aqui o(s) papelinho(s). (So, you can put that pieces of paper here.)

- Não gosta de correr (Doesn't like to run)
- Canta bem (Is a good singer)

Amigo (Friend)	Gosta de brincar com os outros meninos (Likes to play with other children)
Antipático (Unfriendly)	Costuma estar com má cara e sempre a responder mal às outras pessoas (Usually is with tough face and is always responding badly to other people)
Azarado (Unlucky)	Normalmente tudo de mal lhe acontece (Normally, everything bad happens to him/her)
Bom (Good)	Costuma partilhar os brinquedos com os outros meninos (Usually he/she shares his/her toys with other children)
Estúpido (Stupid)	Faz coisas estúpidas como por exemplo puxar e espalhar todo o papel higiénico da casa de banho (Do stupid things like pull and spread all the toilet paper in the bathroom)
Feio (Ugly)	Normalmente as pessoas não o acham bonito (Usually people don't find him/her very pretty)
Feliz (Happy)	Ri e sorri muito (Laugh and smile a lot)
Divertido (Funny)	É divertido brincar com ele (It's fun to play with him)
Inteligente (Intelligent)	Costuma aprender tudo e ter boas notas na escolar (Usually learn everything and get good grades in school)
Mal-educado (Rude)	Nunca diz obrigado às outras pessoas quando o ajudam (Never say thank you to other people when they help you)
Mau (Mean)	Sempre a meter-se e a brigar com os outros meninos (He/she is always getting in fighting with the other children)
Preguiçoso (Lazy)	Nunca tem vontade de fazer nada e diz sempre aos outros para fazerem por ele (He never wants to do anything and always tells

	others to do things for him)
Saudável (Healthy)	Comem sempre os legumes, a sopa, fazem um desporto, isso fá-los ter muita energia. (They always eat the vegetables, the soup, they play a sport, it makes them have a lot of energy.)
Responsável (Responsible)	Faz sempre aquilo que lhe pedem (Always do what he/she is asked
Sortudo (Lucky)	Tem sorte em tudo, costumam acontecer-lhe coisas boas. (He/she is lucky in everything, good things usually happen to him/her.)
Simpático (Nice)	Costuma ajudar os outros meninos, ou traz flores às professoras. (He/she usually helps other boys, or brings flowers to the teachers.)
Sujo (Dirty)	Está sempre com as mãos e a roupa suja. (He/she is always with his/her hands and clothes dirty.)
Trabalhador (Hardworking)	Estuda muito e está atento nas aulas. (Studies hard and is attentive in class.)
Triste (Sad)	Não sorri nem ri muito (Don't smile or laugh a lot)
Violento (Violent)	Costuma bater nos outros meninos. ((Usually beats other children)

Terminámos. Muito obrigada por me teres ajudado. Gostei muito de poder conversar contigo. Olha, é possível que os teus colegas te perguntem o que estiveste a fazer aqui. É muito importante que guardes segredo. Consegues guardar segredo? (We finished. Thank you so much for helping me. I really enjoyed talking to you. Look, your colleagues may ask you what you were doing here. It is very important that you keep a secret. Can you keep it a secret?)

Obrigada! (Thank you!)

[Entrevistador: No final, o entrevistador deve recolher todo o material e assinalar desde logo quais foram os adjetivos colocados em cada uma das caixas, em documento criado para o efeito com a respetiva indicação do ID da criança. Deve arrumar todo o material e preparar-se para a entrevista seguinte.] / [Interviewer: At the end, the interviewer should collect all the material and immediately indicate which adjectives were placed in each of the boxes, in a document created for that purpose with the participant's ID. The interviewer should pack up all the material and prepare for the next interview.]

Appendix C

Chapter 3 and 4. Interview Guide used in the study presented in chapter 3 and 4 for children who presented themselves as poor in the beginning of the interview

Guião de entrevista (B)

(usado com crianças que se se referem a si mesmas como sendo pobres)

Tenho aqui uma folha de papel e estes lápis. Queria pedir-te para, em cinco minutos, te desenhares. Mas gostava que escolhesses apenas uma cor para desenhares. Pode ser qualquer cor, mas só pode ser uma. Não há problema se não conseguires desenhar neste tempo, mas aproveita estes cinco minutos para desenhares o que conseguires, está bem?

[Entrevistador: Após o desenho, fazer as seguintes questões.] / [Interviewer: After the task, ask the following questions.]

1. O que é que é tu estás a vestir neste desenho? (What are you dressing in this drawing?)
2. Onde é que estás? (Where are you?)
3. E o que é que estás a fazer? (What are you doing?)
4. O que é que costumas fazer durante o dia? Consegues descrever-me o teu dia (se não conseguir responder, podemos começar nós o dia com "de manhã, acordas... depois fazes o quê? Nesta questão devem introduzir-se os pontos seguintes, caso o participante não os refira espontaneamente) (What do you usually do during the day? Can you describe your day to me (if the child can't answer, we can start by saying "in the morning, you wake up ... then you do what?" In this question the following items should be addressed if the participant does not spontaneously mention them)
    a. Também vens à escolar. (Se dizem que vai à escola, perguntar) E gostas de vir à escola ou não? Gostas de estudar ou não? És bom/boa aluno/a? (You also come to school. (If they say they go to school, ask) And, do you like coming to school or not? Do you like to study or not? Are you a good student?)
    b. O que faz mais durante o dia? (What else do you do during the day?)
5. E neste desenho, o que estás pensar? Como é que te estás a sentir? (está contente, triste, feliz, infeliz...) (And in this drawing, what are you thinking? How are you feeling? (happy, sad, glad, unhappy...)

6. Do que é que tu gostas mais, sabes dizer-me? E do que é não gostas? (What things do you like the most, can you tell me? And what do you dislike?)
7. Com quem moras? (With whom do you live?)
8. E amigos, como são os teus amigos? (And friend, how are your friends?)
9. E podes dizer-me porque achas que és uma criança pobre? (Can you tell me why do you think you are a poor children?)
10. E achas que as crianças que são pobres são todas iguais a ti ou existem outras crianças que são diferentes? (Se disse diferentes, perguntar quais as diferenças.) (And do you think that poor children are all the same as you or are there other children who are different? (If he/she said different, ask what are the differences.)

Tarefa de Desenho de uma criança não pobre [Drawing of a Non-Poor Child Task]

[Objetivo: Aqui pretende-se conhecer como é que a percepção da relação das outras crianças com a criança pobre.] / [Objective: In this part is intended to know what is the perception of the relationship between other children with the poor child.]

Vou pedir-te para continuares o desenho. Agora, gostava que desenhasses um menino ou uma menina da tua idade que não seja pobre, está bem? Mais uma vez, queria que desenhasses em cinco minutos e apenas com um lápis, da cor que quiseres. (tentar perceber se ele está a desenhar uma criança qualquer ou se conhece quem está a desenhar) – os lapis devem estar organizados de acordo com o desenho da caixa antes da criança voltar a escolher uma cor. [Now, I will ask you to continue the drawing. I would like you to draw a boy or girl your age who is not poor, okay? Once again, I wanted you to draw in five minutes and just with a pencil, the colour you want. (try to understand if he is drawing any child or if he/she knows who he is drawing) – the pencils should be organized as in the picture of the box before children choose the new colour.]

[Entrevistador: Após o desenho, fazer as seguintes questões sobre a criança não pobre que acabou de desenhar.] / [Interviewer: After the tasj, ask the following questions about the non-poor child that has just be drawn.]

Agora queria fazer-te algumas perguntas sobre esta criança da tua idade que não é pobre que desenhaste. [Now I would like to ask you some questions about this child of your age who is not poor that you just drew.]

11. Como é que é esta criança que desenhaste? (perceber se conhece esse/a menino/a) (How is this child you drew? (interviewer should understand if the participant knows that child he just drew)
12. O que achas dela? Gostas dela ou não gostas dela? (What do you think of her? Do you like her or don't you like her?)
13. E ele/a gosta de ti? (And does this child likes you?)
14. Este menino/a é teu amigo? Porquê? (Is he/she your friend? Why?)
15. E o que é que costumam fazer quando estão juntos/as? (Se disser que não costumam estar juntos perguntar porquê?) (And what do you usually do when you are together? (If he/she says they don't usually are together, ask why?)
16. E diz-me: achas que na tua escola há muitas ou poucas crianças como tu? (se tiver dito que há meninos pobres diferentes perguntar também no geral) (And tell me, do you think there are many or few children in your school like you? (if he/she has said earlier that there are different poor children ask also in general)
17. Então o que é que achas que aconteceu para que haja crianças pobres, em geral? (So what do you think happened that explain why there are poor children, in general?)
    a. Achas que todos os/as meninos/as pobres são pobres por causa disso ou pode ter sido por causa de outras coisas? Quais? (Do you think all poor children are poor because of this or it may have been because of other things? Which?)

Muito obrigada pelas tuas respostas, vão ajudar-me muito. (Tank you very much for your answers, they will help me a lot.)

Agora vamos fazer algo um bocadinho diferente do que estivemos a fazer até aqui, está bem? (Now let's do something a little bit different from what we've been doing so far, okay?)

PARTE IV (Part V)

Estereótipos face aos menino/as pobres (Stereotypes about poor children)

[Entrevistador: Deve ter três caixas exatamente iguais + 2 conjunto de adjetivos adequado a menino ou a menina, consoante sexo da criança. Numa caixa deve estar escrito MENINOS/AS, noutro MENINOS/AS POBRES e noutra não está escrito nada. Os três primeiros adjetivos são de treino, para melhor compreensão da tarefa. Para os seguintes

adjetivos, inseridos na tabela abaixo, o entrevistador deve ler cada descrição a seguir a dizer o adjetivo, independentemente da criança compreender ou não o adjetivo. Caso a criança não saiba o que é, o entrevistador não deve sugerir outra descrição, apenas deve reler a descrição dada. Se a criança continuar sem saber o entrevistador deve dizer: "Não faz mal, deixa estes de parte, não coloques em nenhuma caixa. Não tem mal nenhum."] / [Interviewer: Must have three boxes exactly the same + 2 adjectives set suitable for boy or girl, depending on the child's gender. One box should be labeled with BOYS/GIRLS, another POOR BOYS/GIRLS, and another without label. The first three adjectives are training, for better understanding of the task. For the following adjectives, presented in the table below, the interviewer should read the adjective followed by each description, regardless of whether the child understands the adjective or not. If the child does not know what it is, the interviewer should not suggest another description, just (re)read the description given. If the child is still unaware the interviewer should say, "Never mind, let these out, don't put them in any boxes. There is no problem at all. "]

Sabes que as pessoas são iguais numas coisas e são diferentes noutras. Entre os meninos também é assim, às vezes são parecidos e às vezes são diferentes, não é? Tens aqui uns papelinhos onde estão escritas algumas destas características que nos fazem ser parecidos ou diferentes. E tens aqui também três caixas. Esta caixa pertence a um menino e esta caixa pertence a outro menino, mas que é pobre. Esta terceira caixa não é de ninguém. Queria que tu, para cada característica que eu vou ler colocasses o papelinho na caixa que achas que o menino/a é assim, está bem? [You know that people are similar in somethings and different in others. It is like that among children, sometimes they are alike and sometimes they are different, isn't it? You have here some little pieces of paper that have written some of the characteristics that make us look similar or different. And you have three boxes here too. This box belongs to one boy/girl and this box belongs to another boy/girl but who is poor. This third box is nobody's. I wanted that you, for each characteristic that I am going to read, put the little piece of paper of that each characteristic in the box that you think the boy/girl is like, ok?]

Por exemplo: (For example)

Algumas crianças gostam de ver televisão, quem achas que gosta de ver televisão, este menino/a que é pobre, este menino/a que não é pobre, os dois meninos/as duas meninas, ou nenhum dos meninos/as? (Some children like to watch television, who do you think you like

to watch television, this boy/girl who is poor, this boy/girl who is not poor, the two boys/ girls, or none of the boys/girls?)

(Depois da criança responder) (After the child answers)

Então, podes pôr aqui o(s) papelinho(s). (So, you can put that pieces of paper here.)

- Não gosta de correr (Doesn't like to run)
- Canta bem (Is a good singer)

Amigo (Friend)	Gosta de brincar com os outros meninos (Likes to play with other children)
Antipático (Unfriendly)	Costuma estar com má cara e sempre a responder mal às outras pessoas (Usually is with tough face and is always responding badly to other people)
Azarado (Unlucky)	Normalmente tudo de mal lhe acontece (Normally, everything bad happens to him/her)
Bom (Good)	Costuma partilhar os brinquedos com os outros meninos (Usually he/she shares his/her toys with other children)
Estúpido (Stupid)	Faz coisas estúpidas como por exemplo puxar e espalhar todo o papel higiénico da casa de banho (Do stupid things like pull and spread all the toilet paper in the bathroom)
Feio (Ugly)	Normalmente as pessoas não o acham bonito (Usually people don't find him/her very pretty)
Feliz (Happy)	Ri e sorri muito (Laugh and smile a lot)
Divertido (Funny)	É divertido brincar com ele (It's fun to play with him)
Inteligente (Intelligent)	Costuma aprender tudo e ter boas notas na escolar (Usually learn everything and get good grades in school)
Mal-educado (Rude)	Nunca diz obrigado às outras pessoas quando o ajudam (Never say thank you to other people when they help you)
Mau (Mean)	Sempre a meter-se e a brigar com os outros meninos (He/she is always getting in fighting with the other children)
Preguiçoso (Lazy)	Nunca tem vontade de fazer nada e diz sempre aos outros para fazerem por ele (He never wants to do anything and always tells others to do things for him)
Saudável (Healthy)	Comem sempre os legumes, a sopa, fazem um desporto, isso fá-los ter muita energia. (They always eat the vegetables, the soup, they play a sport, it makes them have a lot of energy.)
Responsável (Responsible)	Faz sempre aquilo que lhe pedem (Always do what he/she is asked
Sortudo (Lucky)	Tem sorte em tudo, costumam acontecer-lhe coisas boas. (He/she is

	lucky in everything, good things usually happen to him/her.)
Simpático (Nice)	Costuma ajudar os outros meninos, ou traz flores às professoras. (He/she usually helps other boys, or brings flowers to the teachers.)
Sujo (Dirty)	Está sempre com as mãos e a roupa suja. (He/she is always with his/her hands and clothes dirty.)
Trabalhador (Hardworking)	Estuda muito e está atento nas aulas. (Studies hard and is attentive in class.)
Triste (Sad)	Não sorri nem ri muito (Don't smile or laugh a lot)
Violento (Violent)	Costuma bater nos outros meninos. ((Usually beats other children)

Terminámos. Muito obrigada por me teres ajudado. Gostei muito de poder conversar contigo. Olha, é possível que os teus colegas te perguntem o que estiveste a fazer aqui. É muito importante que guardes segredo. Consegues guardar segredo? (We finished. Thank you so much for helping me. I really enjoyed talking to you. Look, your colleagues may ask you what you were doing here. It is very important that you keep a secret. Can you keep it a secret?)

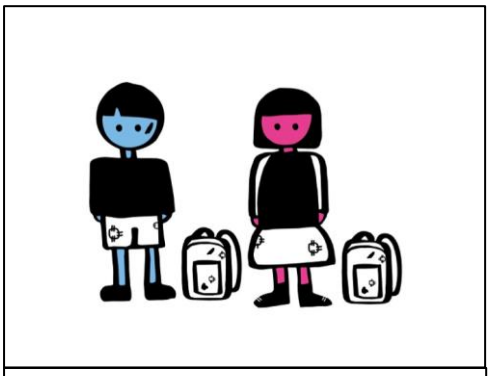
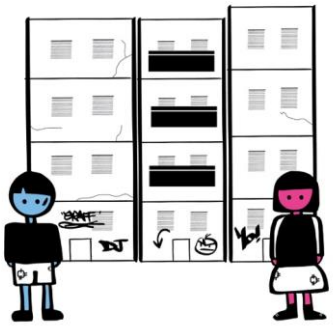
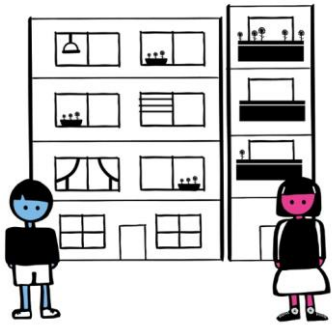
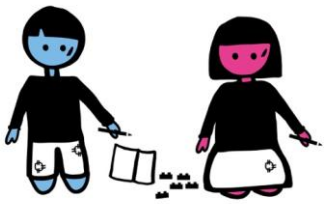
Obrigada! (Thank you!)

[Entrevistador: No final, o entrevistador deve recolher todo o material e assinalar desde logo quais foram os adjetivos colocados em cada uma das caixas, em documento criado para o efeito com a respetiva indicação do ID da criança. Deve arrumar todo o material e preparar-se para a entrevista seguinte.] / [Interviewer: At the end, the interviewer should collect all the material and immediately indicate which adjectives were placed in each of the boxes, in a document created for that purpose with the participant's ID. The interviewer should pack up all the material and prepare for the next interview.]

Appendix D

Study of Chapter 5 - Images used to present the group of poor and non poor children in the instructions video (Copyright 2015 by Maria Remédio)

[vídeos in Portuguese can be seen at https://youtu.be/P5Ojg25fgjQ (male version) and https://youtu.be/s-lxeZdxF4k (female version)]

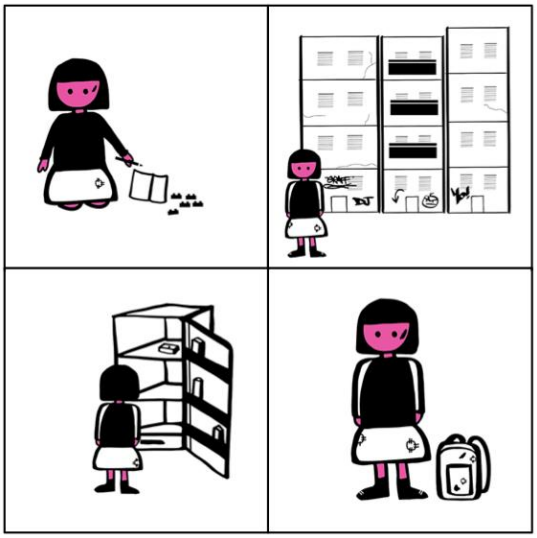
Poor children	Non Poor children
	
	
	
	

Appendix E

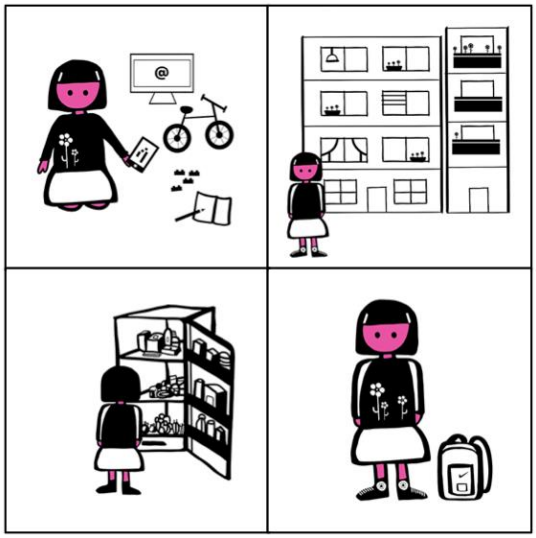
Study of Chapter 5. Stimuli used to categorize poor and non-poor children in the Implicit Association Test (Copyright 2015 by Maria Remédio)

[Female version]

Poor child stimuli

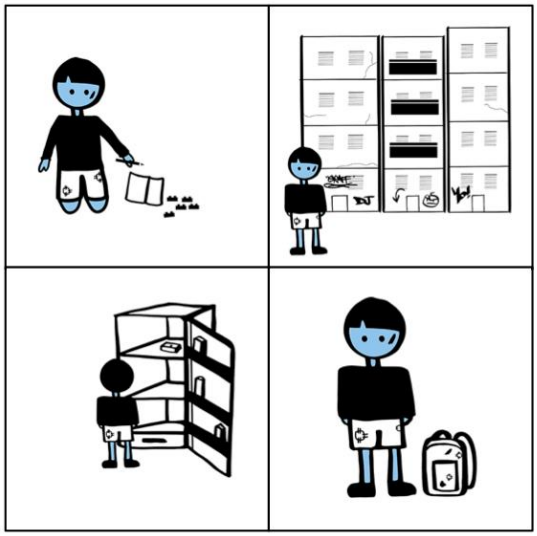


Non poor child stimuli

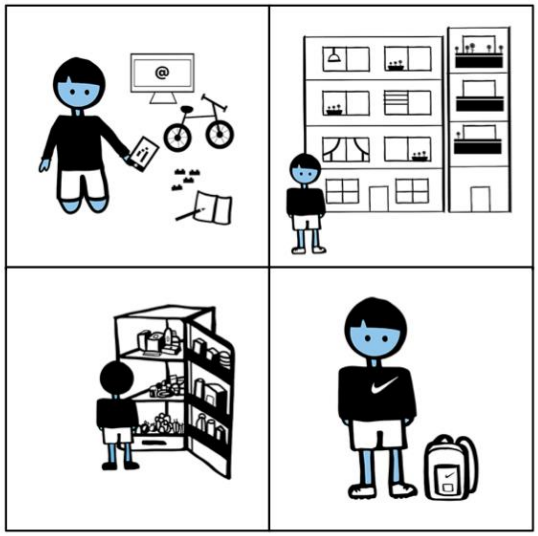


[Male version]

Poor child stimuli



Non poor child stimuli



Appendix F

Studies of Chapter 5 and Chapter 6 . Images used as anchors in the sides of the Implicit Association Test

Anchor pictures for ‘me’

[Female version]



[Male version]



Anchor pictures for ‘them’

[Female version]



[Male version]



Anchor pictures for social categories under categorization

[Poor category]



[Non-poor category]



Appendix G

Study of Chapter 5. Measure of Explicit social class self-categorization

Illustrations by Maria Remédio, Excel Macro Programming: Leonor Pereira da Costa

Female version

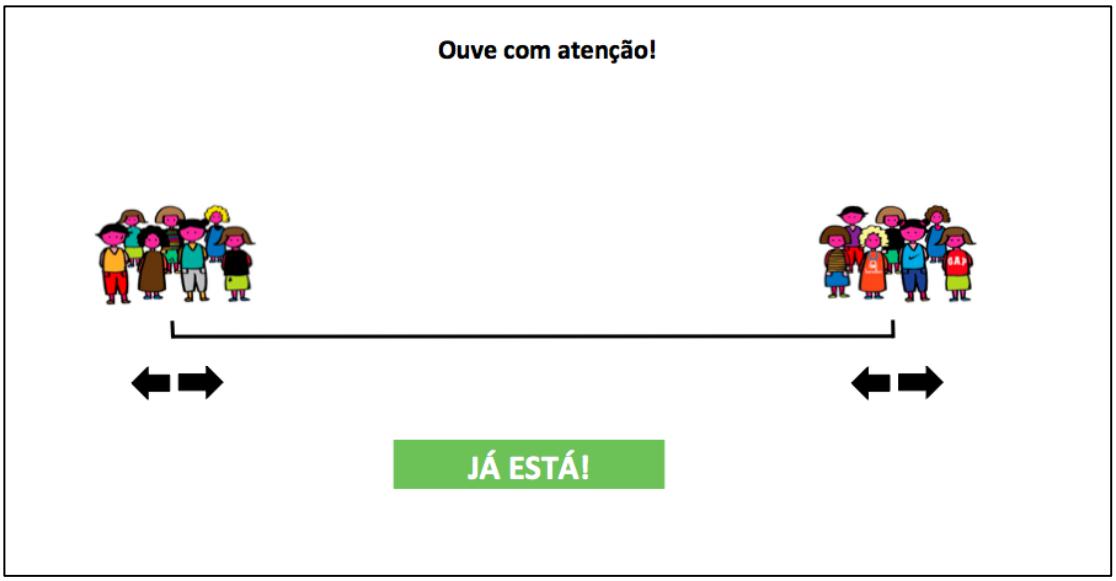


Instruções – 1ª Parte (via auscultadores):

Estas duas imagens que vês aqui representam os dois grupos de meninas de que te falei há pouco. A imagem a cinzento representa as meninas que são pobres. Não vestem roupas de marca nem tem tanto dinheiro como as outras meninas. E a imagem a vermelho representa as meninas que não são pobres. Não são ricas mas têm mais coisas que as outras meninas que são pobres. Por exemplo, já vestem roupas de marca, vivem em casas maiores e têm mais comida. O que quero que tu penses nas próximas perguntas, é sobre estes dois grupos de meninas na realidade, baseando-te naquilo que sabes sobre elas.

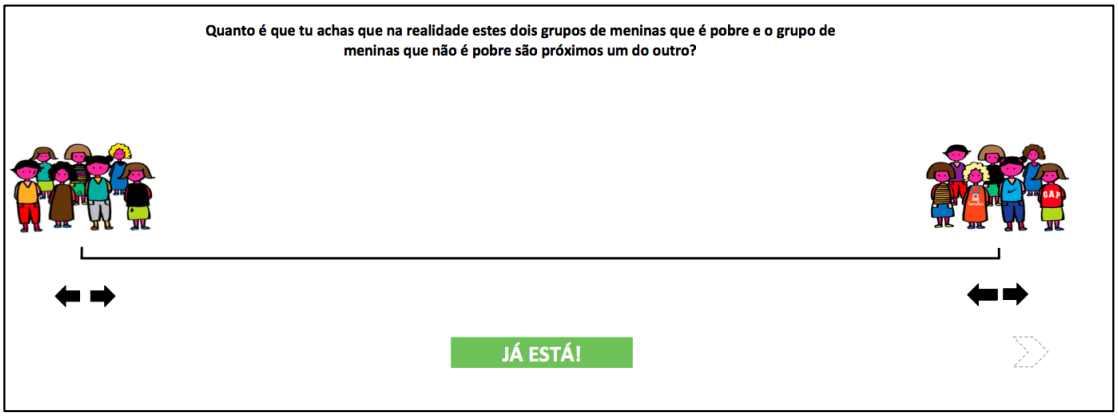
[Instructions – 1st Part (via headphones):

These two images you see here represent the two groups of girls I told you about earlier. The gray image represents girls who are poor. They don't wear brand-labelled clothes or have as much money as the other girls. And the red image represents girls who are not poor. They are not rich but have more things than other girls who are poor. For example, they already wear brand-labelled clothes, live in bigger houses and have more food. What I want you to think about in the next questions is about these two groups of girls in reality, based on what you know about them]



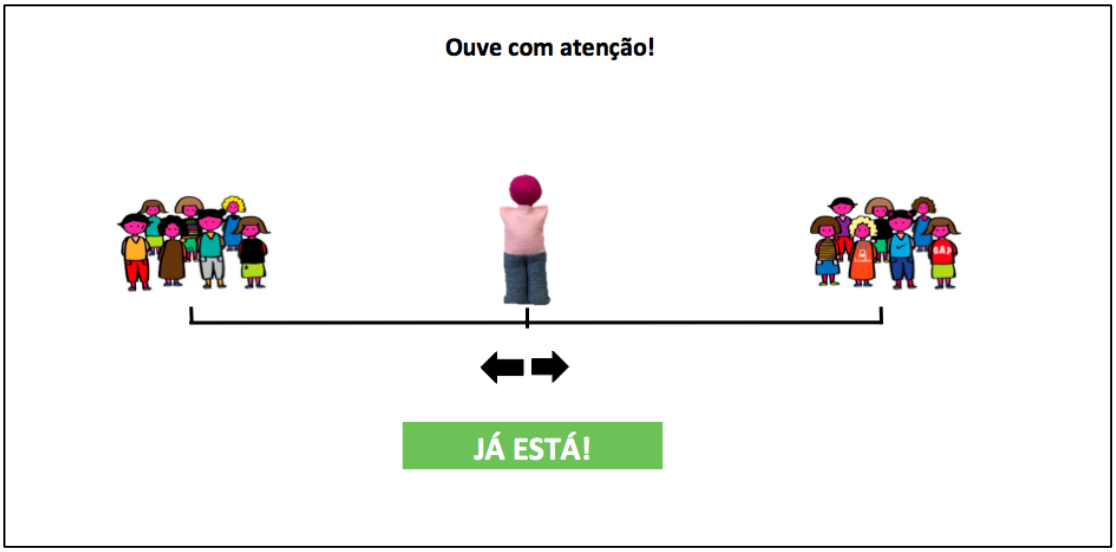
Instruções – 2ª Parte (via auscultadores; as instruções eram animadas e à medida que se relatava o que os participantes podiam fazer exemplificava-se com a imagem em animação):
Na próxima pergunta quero que me indiques quanto é que achas que estes dois grupos estão próximos, um do outro, na realidade. Podes carregar, nas setas em baixo de cada imagem, para as aproximares ou para as afastares. E quanto mais juntas estiverem as duas imagens é porque tu achas que estes grupos são muito próximos na realidade. Podes colocar as imagens mesmo juntas que significa que achas que estes dois grupos são mesmo muito próximos na vida real, ou mais afastados ou totalmente afastados se achares que não são mesmo nada próximos na vida real. Quando colocares as imagens na posição que achares melhor carrega na tecla verde para avançares.

[Instructions – 2nd Part (via headphones; the instructions were animated and while it was reported what the participants could do it was exemplified with the animated image):
In the next question I want you to tell me how much you think these two groups are close to each other, in reality. You can click on the arrows below each image to close them in or out. And the closer you put the two images is because you think these groups are very close in reality. You can put the images together evenly, which means you think these two groups are really close in real life, or farther apart or totally apart if you think they're not really close at all in real life. When you place the images in the position you think is best, press the green key to advance.]



Response screen

[Question: How much do you think these two groups of girls who are poor and the group of girls who are not poor are close to each other in reality?]

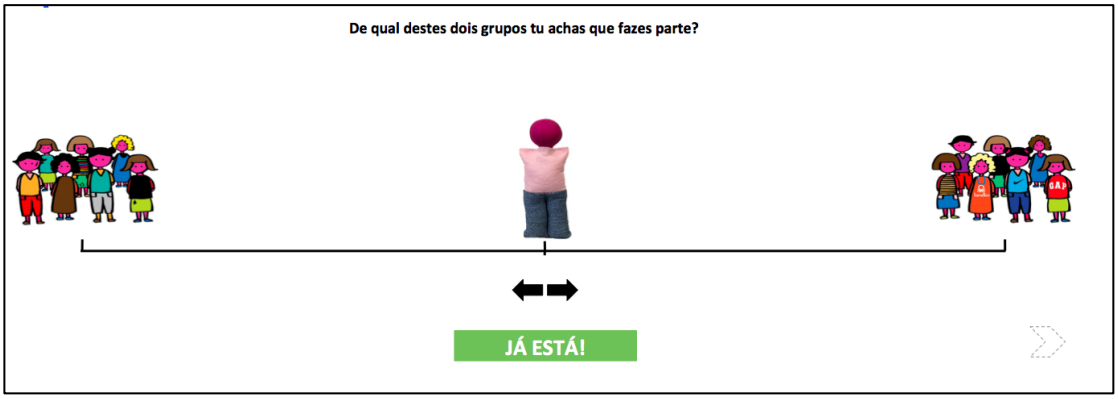


Instruções – 3ª Parte (via auscultadores; as instruções eram animadas e à medida que se relatava o que os participantes podiam fazer exemplificava-se com a imagem em animação):

Agora na próxima pergunta. Quero que me digas quanto é que tu achas que fazes parte de cada um destes grupos. Se achares que fazes parte do grupo de meninas que não é pobre aproximas-te da imagem que representa estas meninas. Se achares que fazes parte do grupo de meninas que é pobre podes aproximar-te da imagem que representa esse grupo de meninas. Podes colocar-te tão juntinho quanto achares que fazes parte desse grupo. Por

exemplo, se achares que fazes totalmente parte do grupo de meninas que não é pobre podes colocar-te mesmo lá dentro da imagem, ou vice-versa se achares que fazes parte do grupo de meninas que é pobre. Quando achares que já respondeste e as imagens estão no sítio que queres, então carregas na tecla verde. Podes responder a seguir.

[Instructions – 3rd Part (via headphones; the instructions were animated and while it was reported what the participants could do it was exemplified with the animated image):
Now in the next question. I want you to tell me how much you think you are part of each of these groups. If you think you are part of the group of girls who are not poor, approach the image that represents these girls. If you think you are part of the poor girl group you can approach the image that represents this girl group. You can put yourself as close as you think you are in this group. For example, if you think you are totally part of the group that is not poor you can put yourself in that picture, or vice versa if you think you are part of the group that is poor. When you think you have already answered and the images are in the place you want, then you press the green key. You can answer next.]



Response screen

[Question: To which of these two groups do you think you belong?]

Male version

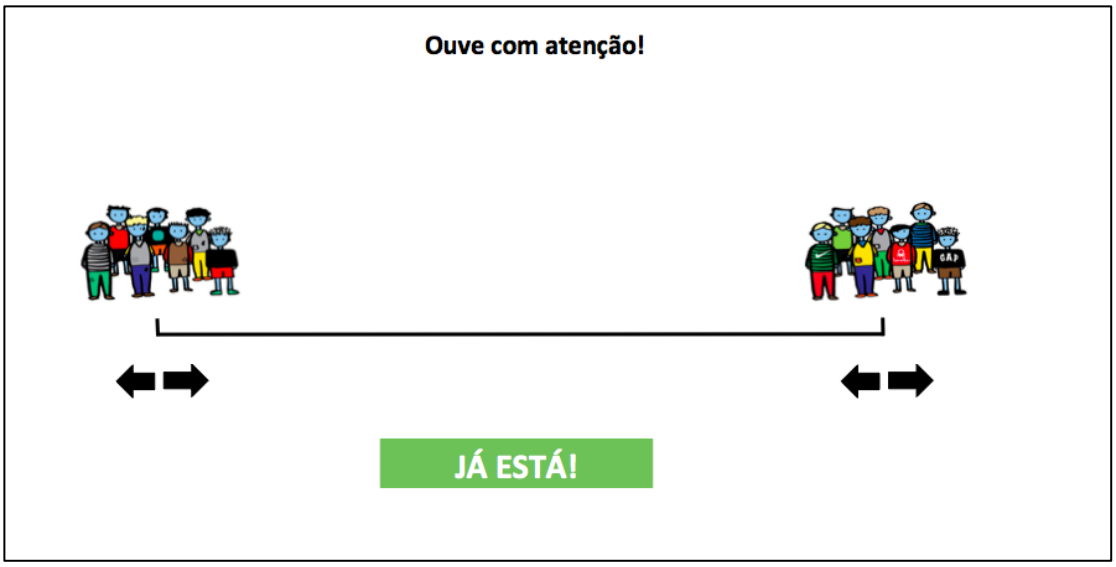


Instruções – 1ª Parte (via auscultadores):

Estas duas imagens que vês aqui representam os dois grupos de meninos de que te falei há pouco. A imagem a cinzento representa os meninos que são pobres. Não vestem roupas de marca nem tem tanto dinheiro como os outros meninos. E a imagem a vermelho representa os meninos que não são pobres. Não são ricos mas têm mais coisas que as outras meninas que são pobres. Por exemplo, já vestem roupas de marca, vivem em casas maiores e têm mais comida. O que quero que tu penses nas próximas perguntas, é sobre estes dois grupos de meninos na realidade, baseando-te naquilo que sabes sobre eles.

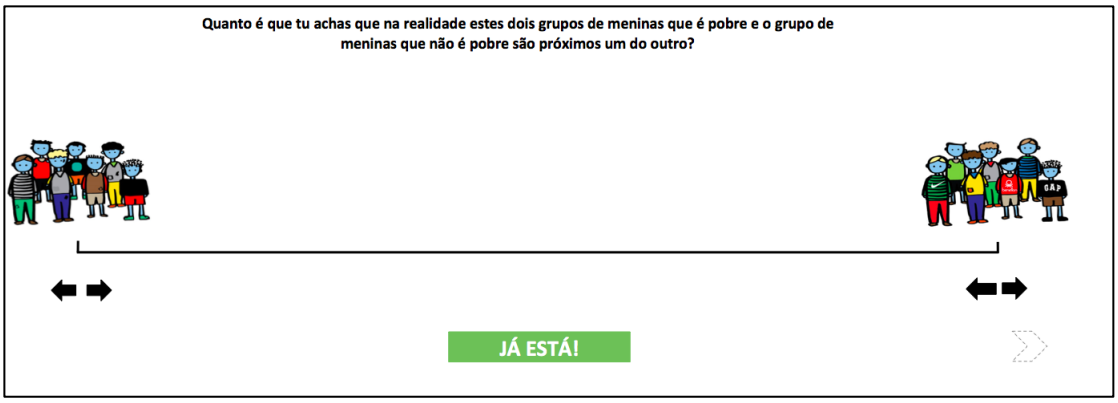
[Instructions – 1st Part (via headphones):

These two images you see here represent the two groups of boys I told you about earlier. The gray image represents boys who are poor. They don't wear brand-labelled clothes or have as much money as the other boys. And the red image represents boys who are not poor. They are not rich but have more things than other boys who are poor. For example, they already wear brand-labelled clothes, live in bigger houses and have more food. What I want you to think about in the next questions is about these two groups of boys in reality, based on what you know about them]



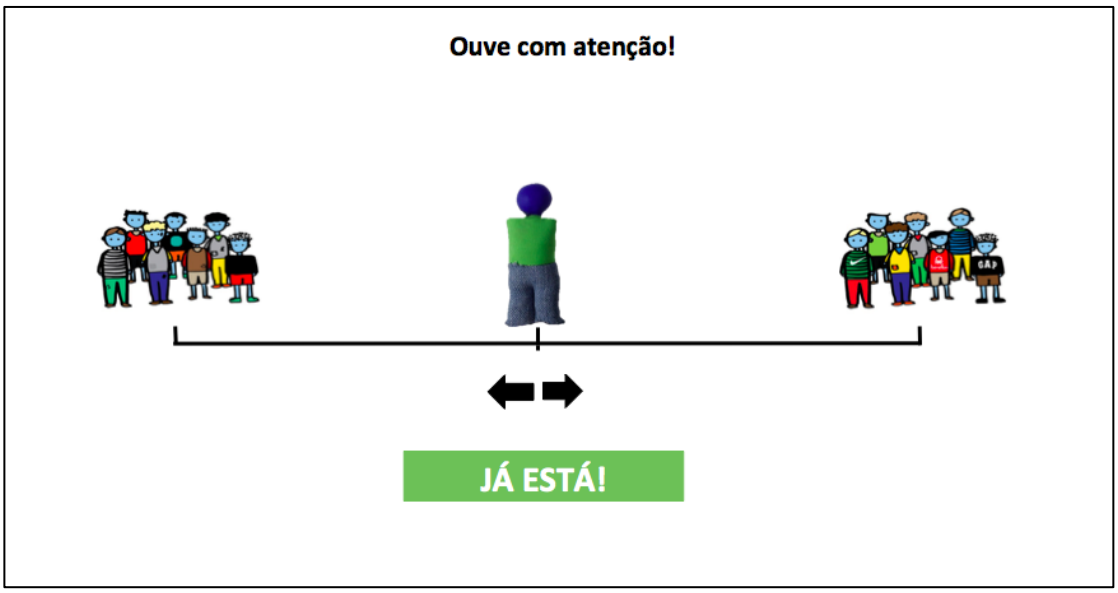
Instruções – 2ª Parte (via auscultadores; as instruções eram animadas e à medida que se relatava o que os participantes podiam fazer exemplificava-se com a imagem em animação):
Na próxima pergunta quero que me indiques quanto é que achas que estes dois grupos estão próximos, um do outro, na realidade. Podes carregar, nas setas em baixo de cada imagem, para as aproximares ou para as afastares. E quanto mais juntas estiverem as duas imagens é porque tu achas que estes grupos são muito próximos na realidade. Podes colocar as imagens mesmo juntas que significa que achas que estes dois grupos são mesmo muito próximos na vida real, ou mais afastados ou totalmente afastados se achares que não são mesmo nada próximos na vida real. Quando colocares as imagens na posição que achares melhor carrega na tecla verde para avançares.

[Instructions – 2nd Part (via headphones; the instructions were animated and while it was reported what the participants could do it was exemplified with the animated image):
In the next question I want you to tell me how much you think these two groups are close to each other, in reality. You can click on the arrows below each image to close them in or out. And the closer you put the two images is because you think these groups are very close in reality. You can put the images together evenly, which means you think these two groups are really close in real life, or farther apart or totally apart if you think they're not really close at all in real life. When you place the images in the position you think is best, press the green key to advance.]



Response screen

[Question: How much do you think these two groups of boys who are poor and the group of boys who are not poor are close to each other in reality?]

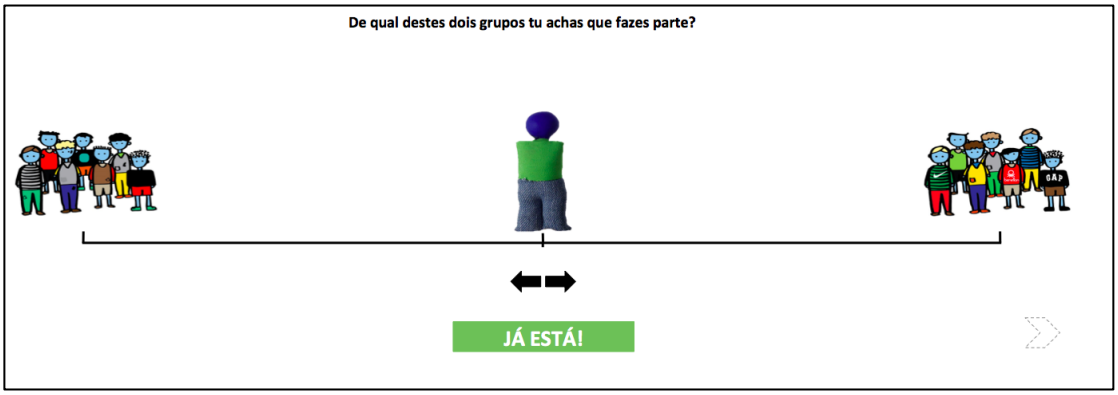


Instruções – 3ª Parte (via auscultadores; as instruções eram animadas e à medida que se relatava o que os participantes podiam fazer exemplificava-se com a imagem em animação):

Agora na próxima pergunta. Quero que me digas quanto é que tu achas que fazes parte de cada um destes grupos. Se achares que fazes parte do grupo de meninos que não é pobre aproximas-te da imagem que representa estes meninos. Se achares que fazes parte do grupo de meninos que é pobre podes aproximar-te da imagem que representa esse grupo de meninos. Podes colocar-te tão juntinho quanto achares que fazes parte desse grupo. Por exemplo, se achares que fazes totalmente parte do grupo de meninos que não é pobre podes colocar-te mesmo lá dentro da imagem, ou vice-versa se achares que fazes parte do grupo de

meninos que é pobre. Quando achares que já respondeste e as imagens estão no sítio que queres, então carregas na tecla verde. Podes responder a seguir.

[Instructions – 3rd Part (via headphones; the instructions were animated and while it was reported what the participants could do it was exemplified with the animated image):
Now in the next question. I want you to tell me how much you think you are part of each of these groups. If you think you are part of the group of boys who are not poor, approach the image that represents these boys. If you think you are part of the poor boys group you can approach the image that represents this boys group. You can put yourself as close as you think you are in this group. For example, if you think you are totally part of the group that is not poor you can put yourself in that picture, or vice versa if you think you are part of the group that is poor. When you think you have already answered and the images are in the place you want, then you press the green key. You can answer next.]



Response screen

[Question: To which of these two groups do you think you belong?]

Multidimensional Identification Scale

[Adapted from Leach et al (2008); Ramos & Alves (2011); Qualtrics survey)



Instruções áudio (via auscultadores):

Vais ouvir umas frases sobre ti em relação às crianças pobres. O que queria que tu me dissesses é quanto é que tu concordas ou não com cada uma destas frases. Podes escolher a resposta que mais indica a tua opinião. Pode ser que não concordas nada, e carregas no botão vermelho; que não concordas, no botão laranja; concordas mais ou menos, botão amarelo; concordas, botão verde claro; ou que concordas totalmente, botão verde mais escuro.

[Audio instructions (via headphones): You'll hear some sentences about yourself in relation to poor children. What I wanted you to tell me is how much you agree or disagree with each of these sentences. You can choose the answer that most indicates your opinion. You may not agree at all, and then you press the red button; you may disagree, click on the orange button; more or less agree, yellow button; agree, light green button; or totally agree, darker green button.]

Items (randomly presented, with words and sound via headphone):

1- Eu acho que as crianças pobres têm razões para gostarem de ser pobres.
[I think poor children have reasons to like being poor.]
2- É bom ser uma criança pobre.
[It's good to be a poor child.]
3- Ser uma criança pobre deixa-me feliz.
[Being a poor child makes me happy.]
4- Eu estou contente por ser uma criança pobre.
[I am happy to be a poor child.]

5- Eu penso muitas vezes que sou uma criança pobre.
[I often think I'm a poor child.]

6- Eu ser uma criança pobre é muito importante para mim.
[Being a poor child is very important to me.]

7- Quando penso em mim, penso que sou mesmo uma criança pobre.
[When I think of myself, I think I'm really a poor child.]

8- Eu sinto que sou amigo das crianças pobres.
[I feel that I am friend of poor children.]

9- Eu sinto que devo ajudar as crianças pobres.
[I feel that I must help poor children.]

10- Eu sinto-me com vontade de apoiar as crianças pobres.
[I am willing to support poor children.]

11- Eu gosto das mesmas coisas que as crianças pobres gostam.
[I like the same things poor children like.]

12- Eu sou parecido com as crianças pobres.
[I look like poor children.]

13- As crianças pobres gostam das mesmas coisas entre elas.
[Poor children like the same things among themselves.]

14- As crianças pobres são muito parecidas entre elas.
[Poor children are very similar to each other.]

Response scale:



[Totally disagree, Disagree, More or less, Agree, Totally agree]

Appendix H

Study of Chapter 6.

Videos presented with the instructions for the study presented in chapter 6 (PT)

Female version – https://youtu.be/UZp9JzZ4GHw

Male version – https://youtu.be/R5tNYgoyREA

Appendix I

Study of Chapter 6. Videos used to manipulate Acceptance Threat (PT)

Illustrations by Maria Remédio, Video edition: Leonor Pereira da Costa

Condition of inclusion of the poor child

Female version – https://youtu.be/hJypLR084Sg

Male version – https://youtu.be/IOftL4wEovo

Condition of exclusion of the non-poor child

Female version – https://youtu.be/aVRF9ivh1B8

Male version – https://youtu.be/qD2f0lnHANI

Condition of exclusion of the poor child

Female version – https://youtu.be/o0UNmX0eeL4

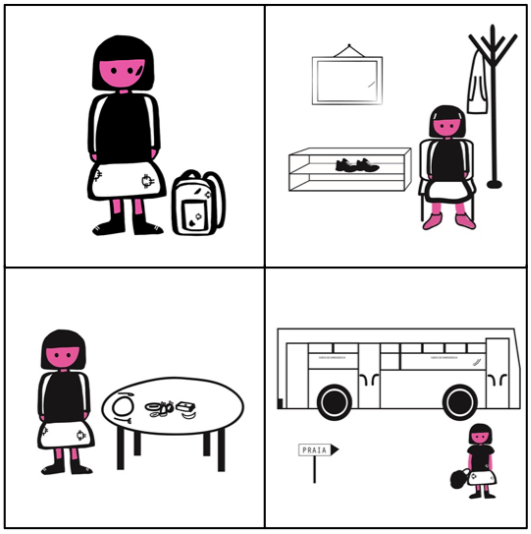
Male version – https://youtu.be/tNo4wduvrtA

Appendix J

Study of Chapter 6. Stimuli used to categorize poor and non-poor children in the Implicit Association Test (Copyright 2017 by Maria Remédio)

[Female version]

Poor child stimuli

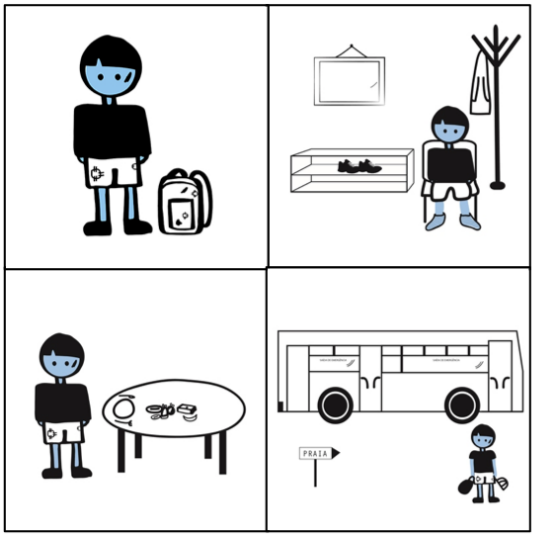


Non poor child stimuli

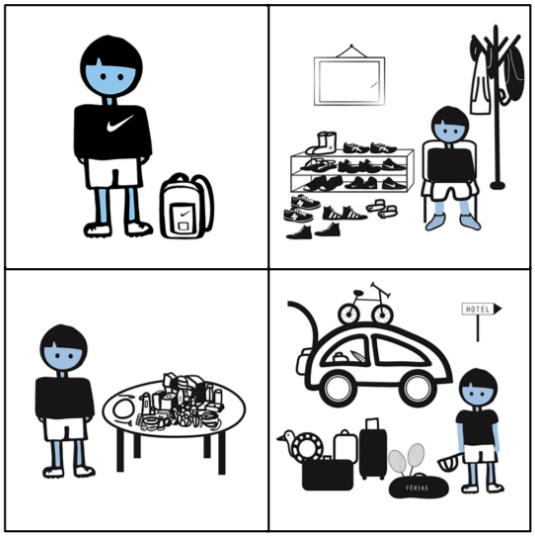


[Male version]

Poor child stimuli



Non poor child stimuli



Appendix K

Study of Chapter 6. Explicit social class self-categorization and variability of the social category of poor children

Illustrations by Maria Remédio, Excel Macro Programming: Leonor Pereira da Costa

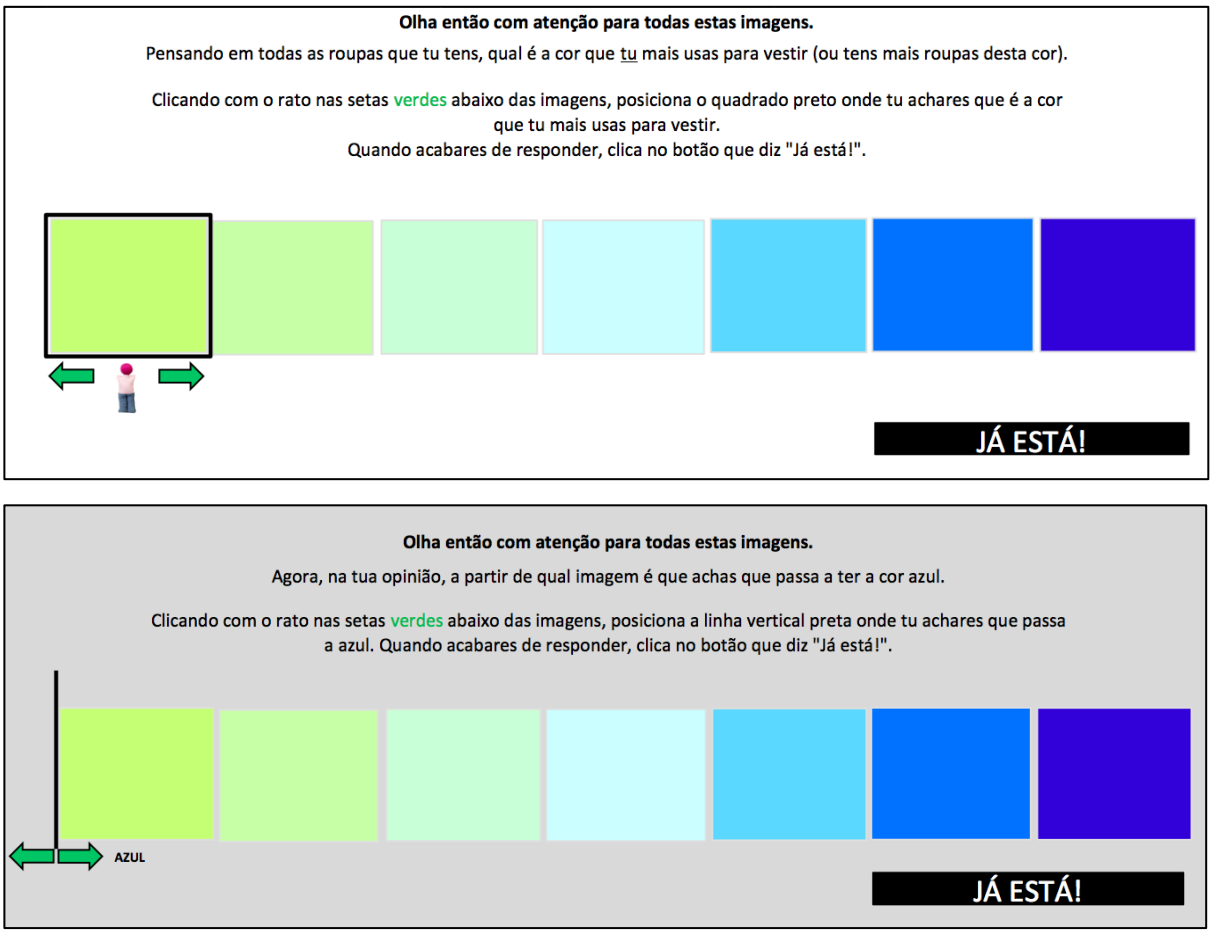
Procedure:

Explicit social class self-categorization measure corresponds to the six items with white background. The variability measure corresponds to the six items with grey background. The first two items correspond to an instruction example (green to blue). Each pair of items with the same images (self-categorization and variability) were preceded by an animation with the 7 images, from the child with a lot of belongings to the child with nothing (GIF animation), with the indication to look carefully to the images. Only after that children responded. In the self-categorization measure we asked children to choose the image that mostly corresponded to him or herself. In the variability measure we asked children to put the vertical line where they thought that the child started to be considered as a poor child. The position of the self in the self-categorization measure, and of the line representing the boundary in the variability measure, was always in the first image. To respond participants should click with the mouse on the green arrows. In these examples further presented, we simulated responses to better represent the measure. The measure was matched with the gender of the participant. The measure was designed in an Excel Macro document, and each item was responded in one separate sheet (only visualized one at a time).

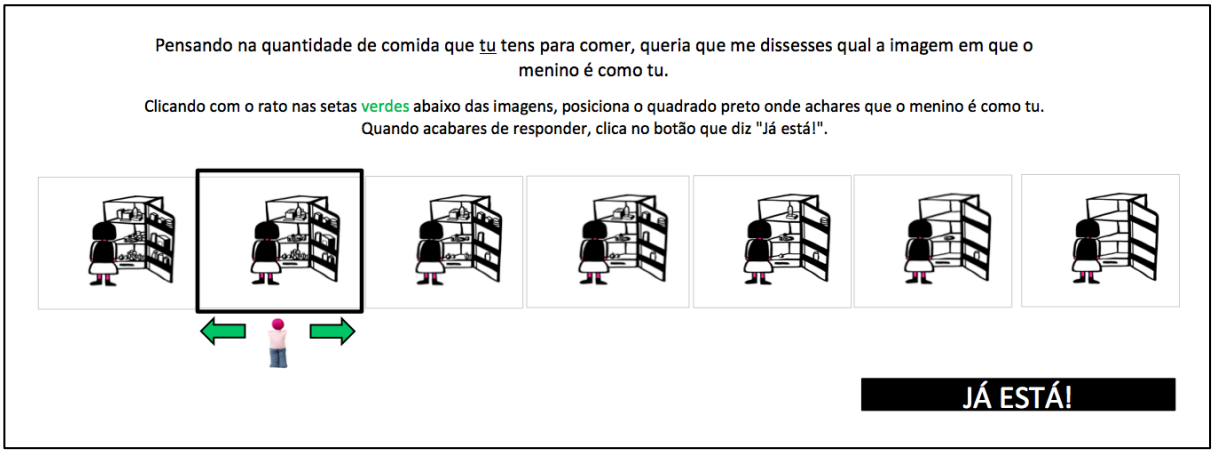
The order of the six pair of items was the same, but the order of the presentation of self-categorization or variability was randomized in the following way: for half of the participants the first three items were responded self-categorization first, followed by variability measure, and the reverse in the last three items. For the other half of the participants, the first three items were responded variability measure first, followed by self-categorization, and the reverse in the last three items.

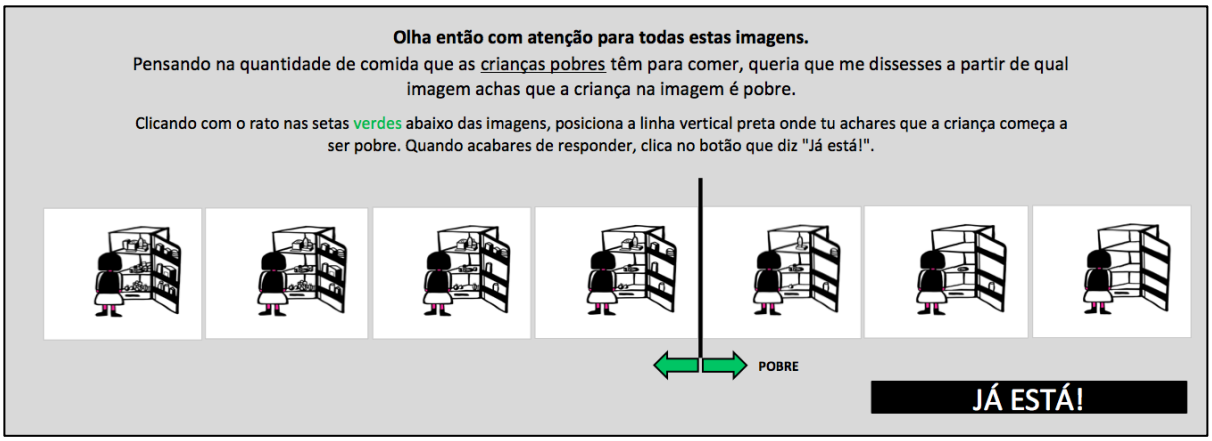
In the following images we present the female version of the measures.

Instructions pair (example of order: first self-categorization in the first three items):

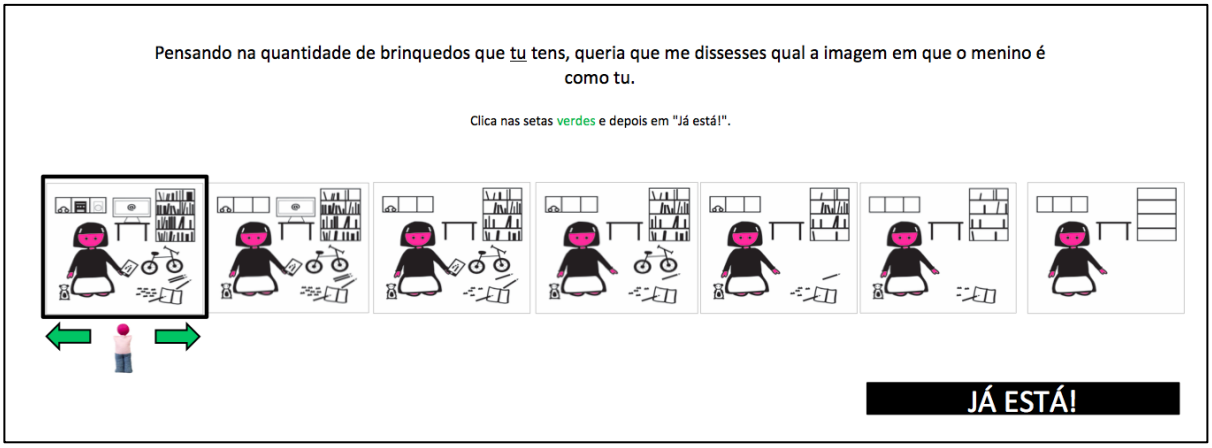


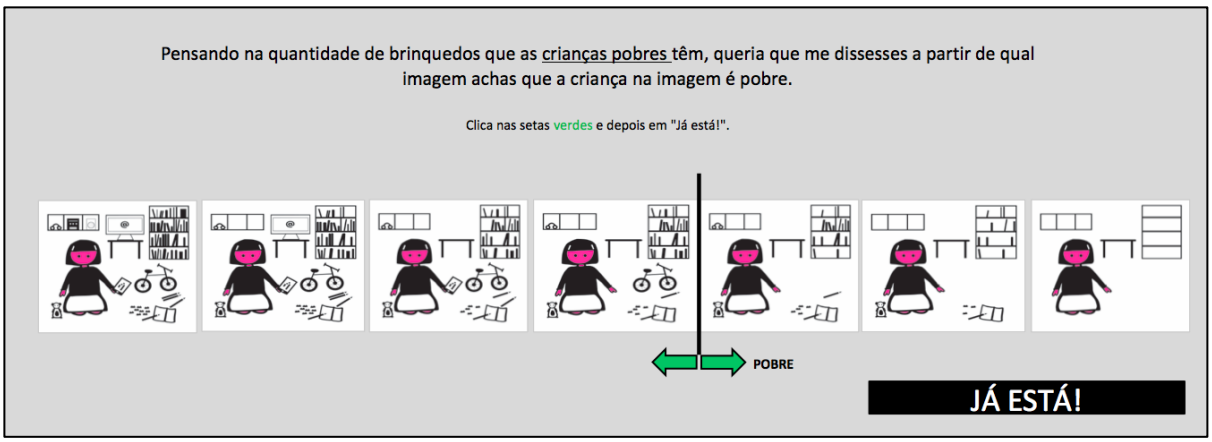
First pair of items:



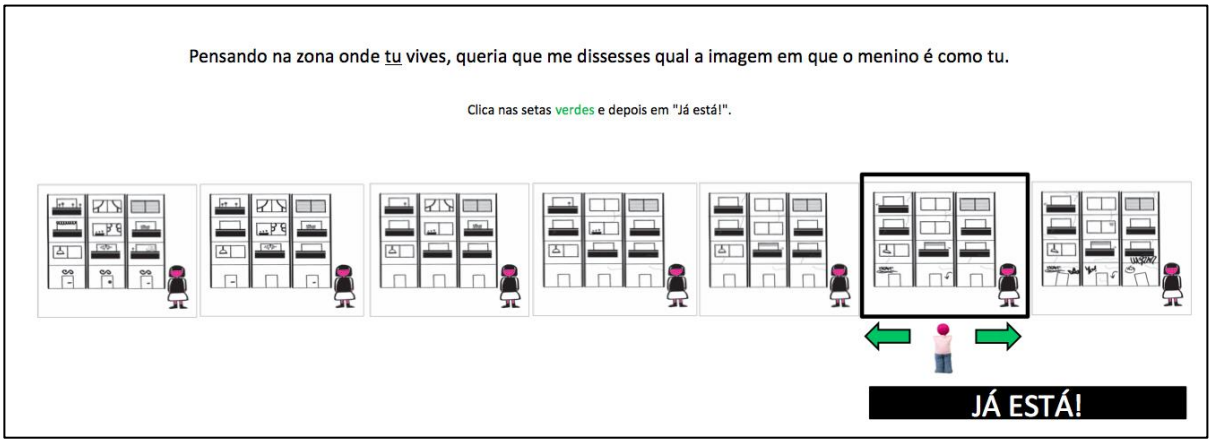


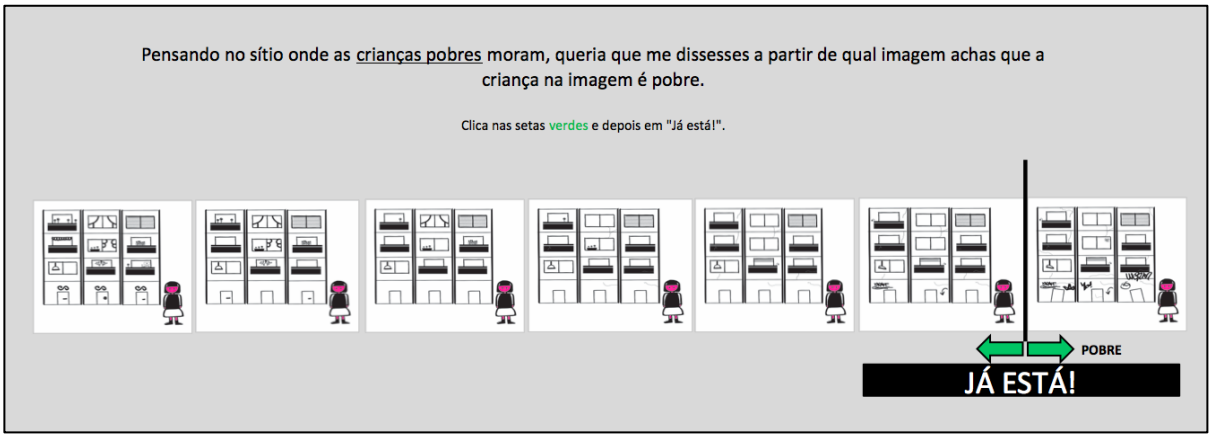
Second pair of items:





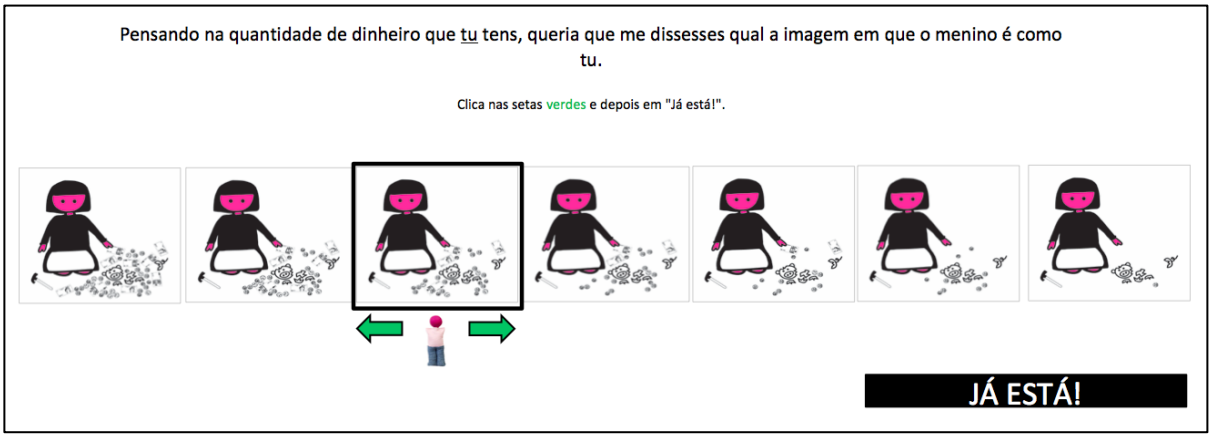
Third pair of items:





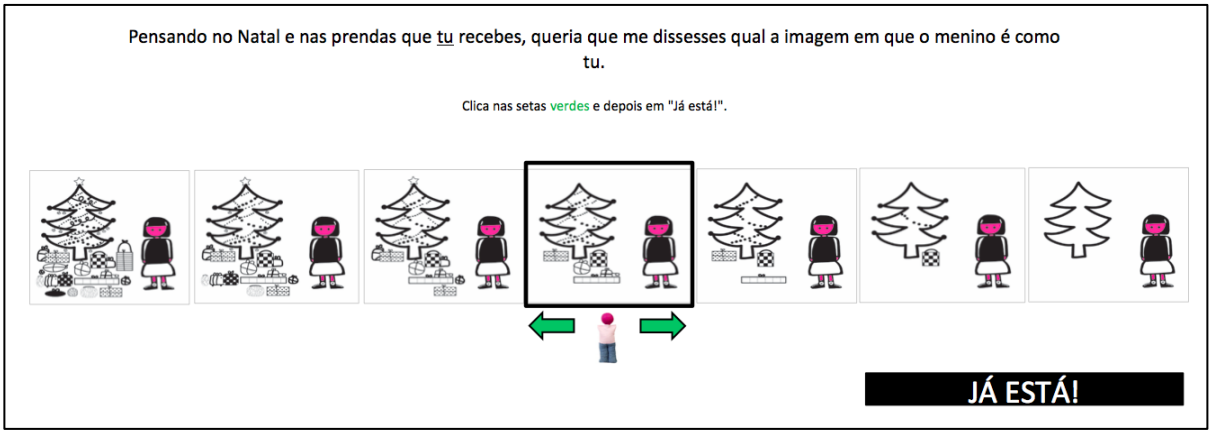
Fourth pair of items: (moment of reversing the orders between measures)



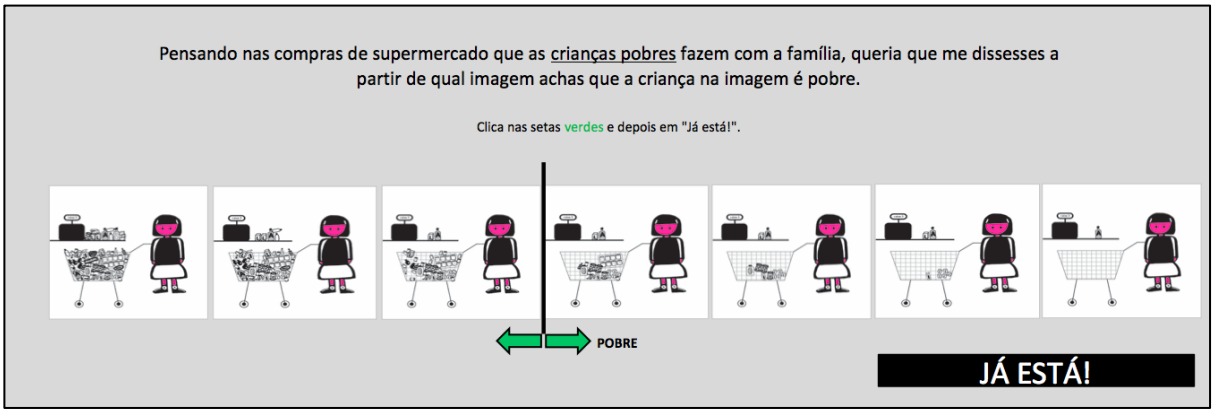


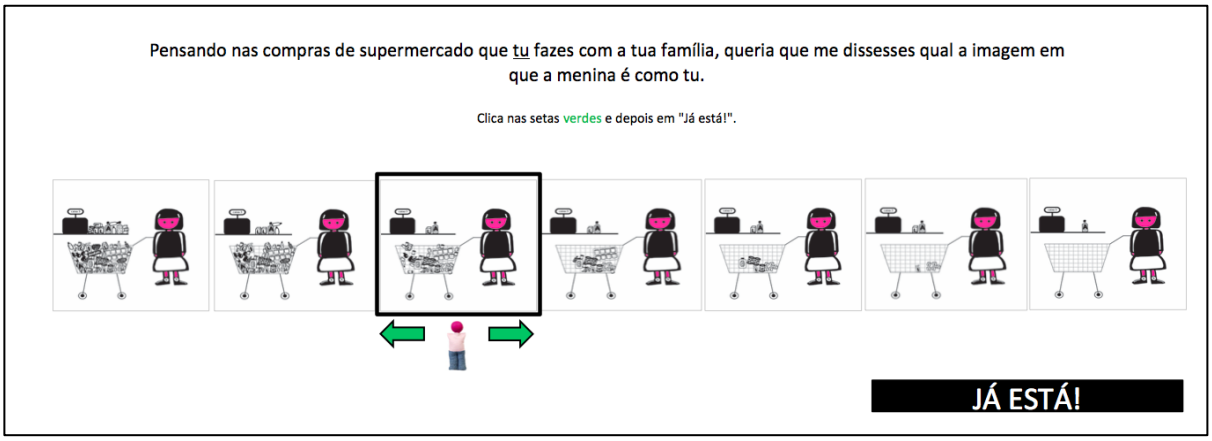
Fifth pair of items:





Sixth pair of items:





Appendix L

Study of Chapter 6. Cyberball game as behavioural measure

Screen-shots of the E-prime experiment

Illustrations by Maria Remédio, Video edition/E-Prime programming: Leonor Pereira da Costa

Female version – Example where the target is non-poor (in the top of the screen)



Male version – Example where the target is poor (in the top of the screen)

