



Department of Social and Organizational Psychology

# Being a minority: Predictors of relative ingroup prototypicality and strategies to achieve social change

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**cis** centro  
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À Francisca, o meu maior tesouro





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## Abstract

Previous research on relative ingroup prototypicality (RIP) has shown that a complex representation of a (positive) superordinate category (SC) decreases ingroup projection for members of higher-status groups. Very little is known about the role of complexity perceptions for members of lower-status groups, and for categories that are negatively valued. Three studies (Studies 1 to 3) tested the hypothesis that the effect of complex representations of (positive) self-relevant SC on RIP is moderated by status. Two other studies (Studies 4 and 5) tested the interaction of group status and complexity of SCs in perceptions of RIP, also within negative SC's. Overall, we expected and found with natural (Study 1,  $N = 192$ ) and with artificial groups (Study 2,  $N = 106$ , Study 3,  $N = 76$ ), that in contrast to higher-status groups, for lower-status groups, a more complex representation of a positive SC increases RIP. In study 4 ( $N = 163$ ) Black-Portuguese (lower-status) were perceived as more prototypical of the SC "Criminals" than White-Portuguese (higher-status) but more equal prototypicality perceptions were achieved when a complex representation of that category was primed. Finally, in Study 5 ( $N = 160$ ) valence (positive vs. negative) and complexity (simple vs. complex) of the SC were manipulated. In line with Study 4, prototypicality perceptions were constraint by standing status differences: Lower-status groups perceived themselves and were perceived as less prototypical of a positive, but more prototypical of a negative SC than members of the higher-status group. Overall, in both studies complexity helped members of the lower status groups to distance themselves from the negative SC by claiming less RIP. The conclusion that complexity can be used by lower-status groups as a strategy to achieve a better social position and to promote social change is discussed.

## Resumo

A investigação que tem sido realizada sobre a prototypicalidade endogrupal relativa (PER) tem mostrado que uma representação complexa de uma categoria supraordenada (CS) (positiva) diminui a projecção endogrupal de membros de grupos de estatuto elevado. Pouco se sabe, no entanto, sobre o papel da complexidade para membros de grupos de baixo estatuto e para categorias negativas. Três estudos (Estudos 1 a 3) testam a hipótese de que o efeito de representações complexas para categorias supraordenadas (positivas) na percepção de prototypicalidade é moderado pelo estatuto. Dois outros estudos (Estudos 4 e 5) testam a interação das variáveis estatuto e complexidade das CS nas percepções de PER também para CS negativas. De uma maneira geral, tal como esperado, verifica-se – quer com grupos naturais (Estudo 1,  $N = 192$ ), quer com grupos artificiais (Estudo 2,  $N = 106$ , Estudo 3,  $N = 76$ ) – que, em comparação com os grupos de estatuto elevado, para os grupos de baixo estatuto uma representação complexa de uma CS positiva aumenta a PER. No Estudo 4 ( $N = 163$ ) os participantes Portugueses de origem Africana (baixo estatuto) foram percebidos como sendo mais prototípicos da CS “delinquentes em Portugal” do que os Luso-Portugueses. No entanto, uma representação complexa dessa categoria conduz a uma PER mais igual entre os dois grupos. No estudo 5 ( $N = 160$ ) foram manipuladas as variáveis valência (positiva vs. negativa) e complexidade (simples vs. complexa) da CS. Os resultados indicam, e no seguimento do Estudo 4, que as percepções de prototypicalidade dependem das diferenças de estatuto entre os grupos: o grupo de baixo estatuto percebe-se e é percebido como sendo menos prototípico da CS positiva, mas mais prototípico do que o grupo de estatuto elevado quando essa categoria é negativa. Em geral e em ambos os estudos uma representação complexa da CS permite que os grupos de baixo estatuto se distanciem da CS negativa ao diminuírem a sua PER para essa categoria. No final deste trabalho será discutido o papel que a complexidade poderá ter para grupos de baixo estatuto enquanto estratégia de promoção e de mudança social.

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## General Introduction

*“... We may have different stories, but we hold common hopes;  
we may not look the same and we may not have  
come from the same place, but we all want  
to move in the same direction - towards a better future  
for our children and our grandchildren”*  
(Barack H. Obama, “A More perfect Union”,  
Philadelphia Speech, 18 March, 2008)

### 1. Social psychology research and disadvantaged social groups

The current dissertation aims to contribute to a deeper understanding of the social psychology of minorities or socially devalued groups<sup>1</sup>: particularly it aims at examining intergroup judgements of minorities groups and the impact of social reality constraints (Ellemers, van Rijswijk, Roefs, & Simons, 1997; Waldzus, Mummendey, Wenzel, & Boettcher, 2004) related to standing status and power inequalities between different groups on those judgments. It also aims to examine how such groups deal with ongoing status differences in order to achieve a better social position. This issue constitutes an important subject matter due to the pervasiveness of social inequalities and their social implications.

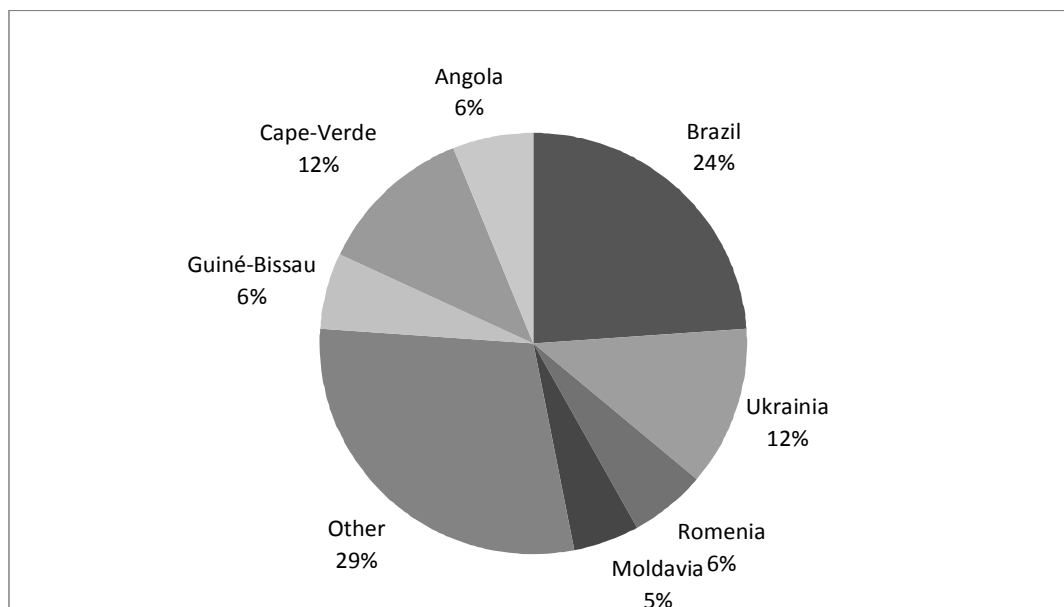
Human societies are stratified by gender, sex orientation, age, physical or health disabilities (Haslam, Jetten, Postmes, & Haslam, 2009), abilities, religion, access to education opportunities and by social class, or ethnical criteria (Farley, 1999; Henrich & Boyd, 2008; Tajfel, 1978a). They are therefore pluralist. Regarding ethnical and cultural diversity, social reality in modern societies has become more pluralist as a result of migration influxes throughout the XX<sup>th</sup> century particularly in Europe, North

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<sup>1</sup> Although they are conceptually different (e.g., Ellemers & Barreto, 2001; Sachdev & Bourhis, 1987), in social reality numerical size and social status of groups are often correlated (e.g., Ellyson & Dovidio, 1985; Lücken & Simon, 2005; Simon, Aufderheide, & Kampmeier, 2001): those that have a higher status are usually also dominant and have more means to influence others. That is why throughout this work we did not make a distinction between these concepts. We concentrate on lower status groups that are at the same time socially disadvantaged, dominated groups and numerical minorities, and on higher status groups that are socially advantaged, dominating groups and numerical majorities. But the principle guiding definition is the social position held by the groups (Tajfel, 1978b). That does not exclude the possibility that numerical minorities can be advantaged or socially dominant and holding higher status. The reported results, however, do not generalize to these cases.

America and South America, and refugees' movements since World War II, they all have contributed for such social reality (e.g., Deaux, 2006a, 2006b; Hutnik, 1991; Tilly, 2004; Wright & Taylor, 2003). The Portuguese context is not an exception particularly concerning to migration: Until the 1960's Portugal was a country of emigrants (Serrão, 1974). With the 1974's political revolution and the consequent independency of the Portuguese colonies by that time (e.g., Angola), migrant movements have changed radically: from being an emigrant country, Portugal turned to an immigrant society. During the 1980's and the 1990's the immigrant population living in Portugal was mainly coming from Portuguese speaking African countries (PALOP) and Brazil; at the end of the XX<sup>th</sup> century immigrants from Eastern European countries, particularly from Ukraine, arrived to Portugal (Baganha & Marques, 2001; SEF, 2008). According to official statistics of SEF<sup>2</sup> (2008) 440 227 immigrants were living in Portugal. Brazilians (106 961), Ukrainians (39 480), Cape-Verdeans (51 352), Angolans (27 619), and immigrants from Guiné-Bissau and Moldavia represented 71% of the total immigrant community (Figure 1).

*Figure 1.* Most representative countries of origin of immigrants living in Portugal in 2008 according to SEF.



<sup>2</sup> Serviços de Estrangeiros e Fronteiras.

Intergroup relations can be broadly defined as "any aspect of the human interaction that involves individuals perceiving themselves as members of a social category, or being perceived by others as belonging to a social category" (Taylor & Moghaddam, 1994, p. 6). Generally, human societies seem to be structured according to group-based social hierarchies (e.g., Blumer, 1958; Bobo & Hutchings, 1996; Sidanius, Levin, Federico, & Pratto, 2001); consequently, in very different human societies it is possible to distinguish between dominant, valued or advantaged groups, and dominated, devalued or disadvantaged groups (Tajfel & Turner, 1979). The former groups, at the very top of the hierarchy, hold more privileges, positive social value, status, social power or cultural domination. The so called "host" communities in societies with a significant number of immigrants, are an example of such groups (Bourhis, Montreuil, Barrette, & Montaruli, 2009). The other groups, in turn, allocated at the bottom of that hierarchy are usually perceived as having a lower status and a powerless position. As such they hold a negatively social value, associated much of the time with negative ingroup stereotypes (e.g., Biernat & Dovidio, 2000; Brewer & Brown, 1998; Burkley & Blanton, 2008; Fiske, 1998) and social rejection (Wright, Gronfein, & Owens, 2000). Stereotype research, for example, has shown that groups that are at the bottom of a social hierarchy are usually perceived as incompetent, untrustworthy or at least in an ambivalent way in an interplay between positive and negative dimensions (e.g., Fiske, Cuddy, Glick, & Xu, 2002; Lee & Fiske, 2006). Therefore, it is difficult for them to accede to the same privileges or resources that valued groups enjoy. The Indian caste system can be an example of how social stratification constitutes an explicit barrier. In ethnically diverse countries, social stratification is particularly related with ethnic groups' membership. In this regard, and following Herek's (1991) reasoning, minorities can be defined according to four different characteristics: 1) they "comprise a subordinate segment within a larger complex state society" (p. 62); 2) they hold attributes that are usually perceived in a less positive regard by a dominant group; 3) they are "self-consciously bound together as a community" (p. 62), and 4) usually receive a differential treatment based upon such attributes and characteristics.

For the quality of intergroup relations in pluralist societies such social asymmetries are particularly relevant because they are usually linked to a high potential of intergroup conflicts: as we mentioned already, due to their standing status and power valued groups usually hold a dominant or powerful social position (Deaux, 2006a, 2006b), and tend to develop a sense of "ownership" (Hornsey & Hogg, 2000) over a self-relevant inclusive category (e.g., a certain society) that they share with devalued groups (e.g., immigrants or social minorities such as Gypsies, or other stigmatized groups). Therefore, through such higher status position, valued group's members, gain a sense of being more entitled to privileges and resources (Wenzel, 2004). As a consequence they are often motivated to preserve social inequalities, for instance in order to maintain their positive social value and their position in the underlying standing social structure (e.g., Blumer, 1958; Dovidio et al., 2009; Morrison, Fast, & Ybarra, 2009). Based on such ethnical membership criteria, members of higher status or dominant groups generally hold negative attitudes, stereotypes, or negative emotions (e.g., Stephan & Stephan, 1985) and can also display discriminatory treatment toward immigrants, ethnic minorities or stigmatized groups (e.g., Deschamps, Vala, Marinho, Costa Lopes, & Cabecinhas, 2005; Ellemers & Barreto, 2001; Pettigrew, 1998). Besides attitudes, it is also possible to identify a "self-fulfilling" impact of stereotypes and prejudice that helps to maintain social inequalities between groups (Wright & Taylor, 2003, p. 439): similarly to what can happen at an interpersonal level (e.g., Snyder, Tanke, & Berscheid, 1977), at an intergroup level, a set of studies showed that negative attitudes toward certain members of a social group, lead members of other groups to behave in a way that confirm such negative expectations (e.g., Word et al., 1974; see also Major & O'Brien, 2005).

One of the main research topics within social psychology has been the study of intergroup relations and intergroup processes such as prejudice and discrimination. Although there are some exceptions (Barreto & Ellemers, 2009; Goffman, 1968; Major & O'Brien, 2005; Schmitt & Branscombe, 2002; Schmitt, Ellemers, & Branscombe, 2003; Wright, Taylor, & Moghaddam, 1990; Wright & Tropp, 2002) traditionally, such research on the understanding of intergroup processes has mainly focused on the social psychology of advantaged group members (e.g., Shelton, 2000; Ryan, Hunt, Weible, Peterson, & Casas, 2007). Regarding the American context, in particular,

Sears (2008) highlighted that “with the rise of the civil rights struggle in the 1950’s and the decline in American anti-Semitism, attention turned more singularly to White’s prejudices against Blacks” (p. 137). Several meta-analyses confirm such a tendency. Recently Pettigrew and Tropp’s (2006; see Demoulin, Leyens, & Dovidio 2009, for a discussion) meta-analysis on intergroup contact literature, for example, confirmed that in a set of 500 studies reviewed seventy two percent of them directed the attention to majority group perceptions, whereas only twenty percent focused on the perspective of minority groups.

The tendency to centre attention to members of higher status groups constitutes an important limitation within this field. In order to fully understand intergroup dynamics research needs to encompass both higher and lower status groups’ perspectives focusing on the interactions between these two groups in a particular context (e.g., Dafflon, 1999; Demoulin et al., 2009), and consequent intergroup processes. This issue has become particularly relevant as there has been a growing body of research that has been showing that higher and lower status groups endorse different perspectives or ideologies on intergroup relations (e.g., Deaux, Reid, Martin, & Bikmen, 2006; Dovidio et al., 2009; Farley, 2009; Ryan et al., 2007). Also, in several Western countries, such as North America or countries in Western Europe, the growing number of immigrants and ethnic minority members posits new challenges for the relation between majority and minority groups, which need to be understood from the perspective of both groups. For example, the increasing number of Spanish-speaking ethnic groups in several states in the United States of America have been leading to the raise of bilingual states (Farley, 2009), which consequently requires the examination of new dynamics between the Spanish speaking and English speaking socio-linguistic communities in particular.

For many years, social psychological research has often treated lower status groups as passive agents, socially invisible (Lorenzi-Cioldi, 2003), as their point of view in the analysis of the nature of intergroup dynamics had been considered less important or not relevant at all. The first European Minorities and Discrimination survey studying variables such as experiences of discriminatory treatment, racist crimes, and the report (or not) of complaints or incidents of discrimination was conducted only recently, in 2008, by the European Union Agency for Fundamental

Rights (FRA, 2009)<sup>3</sup>. But attempts for directing attention to the perspective of minority or lower status groups have been increasingly growing during the last decades (e.g., Butera & Levine, 2009; Demoulin et al., 2009; Devine, Evett, & Vasquez-Suson, 1996). Some approaches have been examining the internalization or acceptance of a certain social inferiority by lower status groups (e.g., Allport, 1954; Jost & Banaji, 1994; Tajfel & Turner, 1979) and its consequences for self-efficacy and performance (e.g., Steele, 1997; Steele & Aronson, 1995), well-being and psychological distress (e.g., Broman, Mavaddat, & Hsu, 2000; Crocker & Major, 1989; Barreto & Ellemers, 2003; Outten, Schmitt, Garcia, & Branscombe, 2009; Richman & Leary, 2009; Twenge & Crocker, 2002) as well as for intergroup perceptions. Overall, stigmatized or disadvantaged groups, particularly women, blind, mentally ill, obese or Lesbian, Gay, Bisexual and Transsexual individuals (LGBT) are aware that they are stigmatized by others, report more frequently than dominant groups that they are victims of discrimination (Crocker & Quinn, 2001; Haslam et al., 2009; Schmitt & Branscombe, 2002) and tend to believe that they are discriminated against. Recently, 33% of inner European minority groups – particularly Gypsies – and immigrants living in the European Union reported that they experienced discriminatory treatment. The data also showed that members of such disadvantaged groups often did not report such discriminatory incidents against themselves to authorities and did not make any complaints, mainly because they thought that nothing would happen or change by reporting (FRA, 2009). Moreover, some findings, such as Schmitt and Branscombe's (2002), suggest that attributions to prejudice against the own group are likely to be stable (e.g., "I am discriminated and things are not going to change"), which can be psychologically harmful as it relates to the perception of lack of control over one's life. Stigmatized groups or those groups that experience discrimination also tend to display negative health symptoms, such as depression and anxiety (e.g., Crandall, 1994). Similarly, individuals that are exposed to extreme forms of segregation, such as ostracism, are threatened in four basic needs – belonging, self-esteem, control, and meaningful existence, which increase anger and sadness (Williams & Carter-Sowell, 2009).

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<sup>3</sup> A total of 23.500 ethnic minorities and immigrants from 27 EU member States were interviewed.



Despite all these negative indicators, results are complicated when it comes to self-esteem and psychological distress: perceptions of discrimination seem to be related to higher levels of psychological distress (e.g., Branscombe, Schmitt, & Harvey, 1999; Richman & Leary, 2009); nonetheless in a meta-analysis examining racial differences in self-esteem, Twenge and Crocker (2002) found different results for different minority groups: African-Americans reported higher levels of self-esteem than European Americans, whereas Hispanics, Asian Americans, and Native Americans reported lower self-esteem than do European Americans. Many controversial discussions have been going on, related to the best way of explaining such results, and even though this topic goes beyond the purpose of this thesis, it can be affirmed that some results indicate that it is important to study how lower status and minorities actively deal with their situation.

### **1.1. Strategies to cope with a disadvantaged social position**

With regard to intergroup perceptions and intergroup discrimination, some approaches have emphasized that members of lower status groups tend to accept and conform to established social hierarchies and therefore they tend to display outgroup rather ingroup favouritism<sup>4</sup> (Jost & Banaji, 1994; Sidanius & Pratto, 1999). Nonetheless, such internalization of relative inferiority is not always passively accepted (Crocker & Major, 1989). A significant amount of research has been dedicated to examine how disadvantaged or lower status groups cope with their disadvantaged social position and, particularly, how they challenge their subordinate position. One of the most influential contributions has been the Social Identity Theory (Tajfel & Turner, 1979). Overall it postulates that part of peoples identity is based on their membership in social groups (i.e., to its social identity). The need to achieve a positive self-esteem can motivate members of lower status groups to engage in certain cognitive and behavioural *identity management strategies* (Blanz, Mummendey, Mielke, & Klink, 1998; Ellemers, 1993; Ellemers, Wilke, & van Knippenberg, 1993;

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<sup>4</sup> Ingroup favoritism or ethnocentrism (Sumner, 1906) consists in ascribing more positive characteristics to the in-group than to the outgroup or to evaluate more positively ingroup characteristics over outgroup characteristics. Outgroup favoritism corresponds, in turn, to a more positive evaluation of the outgroup than of the ingroup.

Mummendey, Klink, Mielke, Wenzel, & Blanz, 1999; Tajfel, 1978b). These strategies are used in an attempt to change the ingroup's relative inferiority, and therefore their negative social identity: *Social creativity* is one of those strategies and includes 1) changing the value of negative dimensions associated to the ingroup, 2) shifting intergroup comparisons to new comparison dimensions or enhancing non-status-defining dimensions (e.g., Ellemers et al., 1997; Lemaine, 1974), or 3) engaging in downward comparisons (e.g., with groups holding a lower status position)<sup>5</sup>. Alternatively, people can engage in collective actions, that is “acting as a representative of the group and where the action is directed at improving the condition of the group as a whole” (Wright & Tropp, 2002, p. 203). Those actions correspond to a behavioural identity management strategy that Tajfel (1978b) defined as *social competition*.

Other approaches highlighted that members of lower status groups may adopt other ways to cope with such relative inferiority, and consequently to protect psychological well-being. Concretely, Schmitt and Branscombe (2002) observed that members of disadvantaged groups can respond to experienced discrimination by increasing their identification with the ingroup (see also Branscombe et al., 1999), which implies increasing opportunities for social support and feelings of acceptance from other ingroup members. In a similar vein, results within the ostracism literature (Williams & Carter-Sowell, 2009) show that ostracized individuals often cope with ostracism by increasing their sense of belonging and self-esteem.

## **2. Research questions**

### **2.1. Ingroup projection and reality constraints for lower status groups**

Building on the assumption that intergroup comparisons and intergroup differentiation depend on a self-relevant higher order or superordinate category in which different (sub)groups or lower-order social categories are included (Turner, Hogg, Oakes, Reicher, & Wetherell, 1987), in the present dissertation we aim to address two particular issues: 1) examine whether disadvantaged groups internalize

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<sup>5</sup> See Chapter 2 for a detailed description of identity management strategies.

their devalued position or perceive it as a defining group feature when compared with a higher status outgroup, in an intergroup context where both groups share a superordinate category that is either positively and negatively valued; 2) examine how disadvantaged groups deal with their inferiority in such conditions (either when a superordinate category is positive or negative valued) in an attempt to challenge their relative status position. The analysis of these two issues will rely on a particular theoretical framework – the Ingroup Projection Model (Mummendey & Wenzel, 1999). Generally<sup>6</sup>, this model has its roots in Self-Categorization Theory (Turner et al., 1987): According to this theoretical perspective, (sub)groups compare themselves on dimensions and in terms of norms that are used to define a shared superordinate category. The prototype of this category – defined as the most representative exemplar of a certain category – constitutes the (positive) normative reference standard. A further assumption is that, the more prototypical a certain (sub)group is, the more positively evaluated it will be. Because prototypicality cannot be defined in an objective manner, Mummendey and Wenzel (1999) defined *relative ingroup prototypicality* as “the degree to which the ingroup is perceived to be more (or less) prototypical for the given superordinate group than the outgroup” (Wenzel et al., 2007, p. 336). It is this perception of ingroup prototypicality compared to outgroup prototypicality, which is considered to be in the basis of intergroup evaluations, ethnocentrism (Turner et al., 1987) and consequently of perceived entitlements, legitimizing a higher ingroup status position (Weber et al., 2002). In this regard, Wenzel (2002, 2004) yielded empirical evidence for these assumptions by showing that subgroups which are perceived more prototypical of a shared superordinate category (e.g., Germany more prototypical for Europe than Turkey), were also perceived as more entitled to valued outcomes and privileges than outgroups, legitimizing their higher status position (e.g., see also Weber, Mummendey, & Waldzus, 2002).

Relative prototypicality perceptions are also related with negative evaluations of outgroup members (Waldzus & Mummendey, 2004; Waldzus, Mummendey & Wenzel, 2005; Waldzus, Mummendey, Wenzel & Weber, 2003; Wenzel et al., 2003; see Wenzel, Mummendey & Waldzus, 2007, for a meta-analysis), more negative

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<sup>6</sup> A more detailed description of the theory will be presented in Chapter 2.

intergroup emotions, such as intergroup anxiety or resentment, as well as more competitive behavior (Kessler et al., in press). Thus, being prototypical implies being normative or conforming to relevant norms and values of the shared superordinate category, whereas being less prototypical means being deviant from those normative features. Sexual stigma research provided similar findings: regarding the superordinate category “people”, Herek, Gillis and Cogan (2009) found that heterosexuals were usually considered prototypical members of that category, whereas sexual minorities tended to be perceived as abnormal, unnatural, and deserving of discriminatory treatment and hostility.

Due to the perceived positive value and outcomes ascribed to prototypical members, and in line with Social Identity’s (Tajfel & Turner, 1979) assumption that group members tend to strive for a positive social identity, groups tend to disagree on their level of prototypicality for a shared superordinate category as they tend to project ingroup attributes, values, or norms onto that shared category (so called *ingroup projection*). For example, in a study with psychology and business students Wenzel, Mummendey, Weber and Waldzus (2003, Study 1) showed that psychology students perceived the psychology students as being more prototypical of the category students in general than business administration students did; business students, in turn, were perceived as more prototypical for the same superordinate category by business administration students, than by psychology students. Similarly, Waldzus et al., (2004, Studies 1 and 2) found that different subgroups of teachers and bikers considered themselves to be more prototypical than other subgroups. Interestingly, more recently, Bianchi, Mummendey, Stephens and Yzerbyt (in press), showed that ingroup projection can also occur automatically, at an implicit level.

The tendency for establishing positive distinctiveness of the ingroup over the outgroup by projecting own group attributes onto a certain superordinate category may be, however, constraint by social reality – that is, by the history of relations between groups and by socio-structural variables, such as group size, status and power asymmetries between dominant and subordinate groups (Blumer, 1958; Ellemers & Barreto, 2001; Ellemers et al., 1997; Sachdev & Bourhis, 1997; Simon et al., 2004; Tajfel & Turner, 1979). Groups’ status and power are important sources of ingroup evaluations and stereotypic judgments about of outgroup members; as we stressed

already, belonging to a lower status group is usually characterized as a disadvantage whereas belonging to a higher status group has usually more advantages (e.g., Mummendey, Kessler, Klink, & Mielke, 1999). The awareness of belonging to a lower status group may pose a threat to the self-esteem of members of those groups; an internal cohesion or the motivation to accentuate their positive social identity may come as a result of that awareness (Simon & Brown, 1987; Tajfel, 1978a). Although several studies have shown that members of lower status groups may strongly identify with the ingroup and display more ingroup bias than members of a higher status outgroup (Ellemers et al., 1997; Sachdev & Bourhis, 1984), this is not always the case. In this regard, Tajfel and Turner (1979) postulated that “under some conditions group members will behave in accordance with the prevailing status hierarchy” (p. 142); “subordinate groups (...) internalize a wider social evaluation of themselves as ‘inferior’ or ‘second class’ and this consensual inferiority is reproduced as relative self-derogation” (p. 37). As a result it is more likely for lower status groups to display outgroup than ingroup favoritism, so called “consensual discrimination” (Rubin & Hewstone, 1998, p. 44; Rubin & Hewstone, 2004) or reversed ethnocentrism. Such tendency is likely to occur in situations where status asymmetries between their ingroup and a self-relevant dominant outgroup are perceived as stable, that is, status relations do not seem to change over time, and legitimate (Tajfel & Turner, 1979; Turner & Reynolds, 2001). Reversed ethnocentrism has also been shown within research on causal attributions (see Hewstone, 1990, for a review): some studies have shown that lower status groups tend to display outgroup favouritism by making relatively more internal attributions, rather than external ones for own group failure (or negative behaviours displayed by ingroup members) and relatively more external attributions, rather than internal ones for own group success, or positive behaviours displayed by ingroup members (e.g., Deaux & Emswiler, 1974).

Research on perceived intra-group variability (Guinote, Aveiro, & Mata, 2002; Lorenzi-Cioldi, 1988; Lorenzi-Cioldi, Eagly, & Stewart, 1995; Mullen & Hu, 1989; Simon & Hamilton, 1994) has provided similar findings. Once group memberships are perceived and social asymmetries become salient, they tend to be linked to particular expectancies (Deaux, 1976) and to stereotypes associated with that membership (e.g., Fiske & Taylor, 1984); lower status groups, in particular, tend to internalize the

negative stereotypes that are socially shared about their own group (Lorenzi-Cioldi, 1988). As a result, they tend to display strong ingroup identification but simultaneously they perceive the ingroup as being a more homogeneous unit when compared to a self-relevant outgroup (e.g., Simon & Brown, 1987). Cabecinhas and Amâncio (1999, Study 1), for example, found evidence for this assumption, in a study with Angolans living in Portugal and white-Portuguese. In this study they showed that the tendency to homogenize the outgroup was weaker for the lower status group (Angolans) than for the higher status group (white-Portuguese). Moreover, they found a consensus between both groups in the sense that both tend to homogenise members of the lower or subordinate group, confirming negative stereotypes ascribed to them, and reinforcing a certain hierarchy of relative social positions between both groups.

Similarly to what has been shown for ingroup bias or for perceived intra-group variability, groups' relative position within a certain "social order" (Cabecinhas & Amâncio, 1999, p.23) or *group position* (Blumer, 1958) may also constrain claims of ingroup prototypicality for lower status groups (Wenzel et al., 2007). As a result, they may tend to assume that they are less prototypical for a superordinate category than members of a higher status group with which they share such category: Waldzus et al. (2004, Study 3) found empirical support for this hypothesis; using East (lower status) and West (higher status) Germans as participants, they showed that East Germans were seen by themselves and by the outgroup (West Germans) as being less prototypical than West Germans for the shared superordinate category (Germans in general). The historical political context of the relation between the two (sub)groups involved in this study illustrated how social reality (e.g., Ellemers, van Dyck, Hinkle, & Jacobs, 2000; Ellemers et al., 1997; Spears, Jetten, & Doosje, 2001) may impact ingroup projection.

At the same time, these findings do not mean that minority groups passively accept their inferiority; they can try to balance social reality constraints with the striving for a positive social identity. Although the results described previously (Waldzus et al., 2004, Study 3) showed a consensus between both groups with respect to which (sub)group was more prototypical, this consensus was only partial, as there was still a disagreement between the two involved groups on the magnitude of the difference on ingroup prototypicality judgments. That is, although members of the lower status groups accept their relative inferiority by claiming to be less prototypical

than members of the higher status group that difference is particularly accentuated by the latter but not by the former. Thus, under certain circumstances lower status groups do actually challenge the stereotype of lower prototypicality that is attached to the lower status position.

## **2.2. Status as moderator of complexity effects**

So far, ingroup projection research has provided empirical support for both the hypothesis that groups tend to perceive their own group as more relatively prototypical for a certain superordinate category than it is seen by others and for the hypothesis that such tendencies for increased relative ingroup prototypicality can be constrained by social reality. In this regard, our purpose was to identify socio-cognitive conditions that may enable members of lower status groups to claim greater ingroup prototypicality than is usually attributed to them by the higher status outgroup. Concretely ingroup projection research had examined how the representation of the superordinate category determines ingroup projection, and consequently evaluations of outgroup members. Mummendey and Wenzel (1999) postulated the existence of four different structural properties<sup>7</sup> that characterize the definition of prototypes of superordinate categories – (un)clarity, scope, broadness and complexity – and simultaneously impact the evaluation of intergroup differences. With respect to complexity it “may be regarded as the most dramatic and theoretically challenging form of tolerance” (Mummendey & Wenzel, 1999, p. 168). In fact a complex superordinate category means that the superordinate category is represented not by just one but by multiple prototypes (Waldzus, 2009) which gives the possibility for different subgroups to acknowledge their mutual normative strengths and inferiorities (Hewstone & Brown, 1986). Using the United States of America as an example, a representation that considers both George W. Bush as well as Barack Obama as representing a certain prototype of Americans may undermine a simple representation of Americans as ‘White’ (Devos & Banaji, 2005). As a consequence relative ingroup prototypicality of European Americans may decrease. This latter hypothesis has found empirical support by Waldzus et al. (2003, Study 2). Using these findings as point of

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<sup>7</sup> A detailed description of each property will be presented in Chapter 2.

departure, in the present research we aimed to go beyond previous research by examining the moderating role of relative status in the relation between complexity and relative ingroup prototypicality. As far as we know, this moderating role has not been tested yet.

For the current research we hypothesised that as a more complex representation, made up of different prototypes, undermines the ethnocentric perception of the shared inclusive category by higher status groups, it may release the 'established' relative inferior social position for lower status groups and consequently allow them to claim greater prototypicality. It is this hypothesis that we aimed to test.

### **2.3. Ingroup projection, reality constraints and complexity effects in the context of negative superordinate categories**

A second research question addressed another limitation of research on relative prototypicality. With only a few exceptions (Wenzel et al., 2003, Study 3) ingroup projection research has been limited to positively evaluated superordinate categories (Wenzel, Mummendey, & Waldzus, 2007). Despite the reasonable assumption that higher order categories are usually positively evaluated ingroups (Turner, 1987; Reynolds, Turner, & Haslam, 2000) it is also possible to belong and to be identified with categories that are negatively evaluated; thus superordinate categories can provide not only positive but also negative standards. Considering that the need for a positive social identity and the need for a positive self-esteem (Tajfel & Turner, 1979) are fundamental human motivations, and that they can be achieved not only by higher positions in terms of positive reference standards but also by lower positions in terms of negative standards, prototypicality for such negative superordinate categories can be extremely relevant.

So far, research has shown that the meaning of prototypicality is not the same in contexts where superordinate categories provide negative reference standards. In these situations groups are motivated to distance themselves from such a negative inclusive category by, for example, displaying less ingroup identification. Wenzel et al. (2003, Study 3) manipulated the evaluation of the superordinate category experimentally and found the expected moderation effect of the valence of the superordinate category on



the relation between ingroup identification and relative ingroup prototypicality: when the superordinate category (Europe) was positively primed the relation between ingroup identification and relative ingroup prototypicality was positive, whereas when it was negatively primed the relation was negative. Thus, the tendency to project ingroup attributes onto the superordinate category (Europe) and therefore to consider the ingroup relatively more prototypical of that superordinate category than a certain outgroup seems to be limited to positively valued categories. These findings support the assumption that ingroup projection may have a functional role as groups seem to claim to be relatively more prototypical only in contexts where prototypicality implies a better (positive) social identity. These results are also in line with other findings, showing that individuals perceived themselves as less similar to their own group when negative information was provided about that group (Jackson, Sullivan, Harnish, & Hodge, 1996). Apart from a motivational explanation of distancing one's group from a certain superordinate category, a more instrumental one was recently advanced by Sindic and Reicher (2008): In two studies with Scottish and British respondents, they showed that groups (in their study the Scottish) may display less ingroup prototypicality and more outgroup prototypicality if that helps to protect their group's political interests (in their case separatist policy).

More relevant for the current research, what has not been studied so far is how relative status impacts prototypicality judgments that refer to negative standards provided by negatively evaluated superordinate categories. From previous research, it can be concluded that members of dominating groups may be able to distance themselves from such negative superordinate categories (Wenzel et al., 2003). The case might be, however, more complicated for lower status groups. Being ascribed to a certain social category representing a disadvantaged group is usually linked to the generation of stereotypic expectations and negative inferences toward members of that group (e.g., Zarate & Smith, 1990). In this regard, members of minority groups tend to stereotype themselves when compared to members of majority groups (Simon & Hamilton, 1994) internalizing others' negative views of their ingroup (Allport, 1954; Cassidy, O'Connor, Howe, & Warden, 2004). For example, the 9/11 attack on the World Trade Centre in New York and the subsequent promotion of a so called "war against terrorism" had an important negative impact on several immigrant

communities in the western hemisphere, for instance on Montreal Pakistani respondents, as they internalized a negative self-image and displayed negative representations of Muslim and South Asian identities (Rousseau & Jamil, 2008).

In general, when a superordinate category has a negative connotation, it may be difficult for lower status groups to distance themselves from a category with which they can be easily associated. As we highlighted before, groups' status position influences the tendency for lower status groups to favour their own group (Ellemers et al., 1997; Lorenzi-Cioldi, 1988). In the context of negative superordinate categories we may expect that members of lower status groups perceive the ingroup as being more prototypical of a negative superordinate category than outgroup members. This is another hypothesis that we aimed to test in the current research.

As we highlighted previously, the awareness of social reality constraints due to status and/or power differentials does not mean that members of lower status groups accept or conform to their standing inferiority. According to Tajfel and Turner (1979), it can also be assumed that this tendency to inferiorize ones' group is more likely to happen when relations between the ingroup and the higher status outgroup are *secure*, that is, stable and legitimate. Similar to the research goal that we aimed to accomplish for positive superordinate categories, it was also our aim to examine how a more complex representation of a negatively valued superordinate category impacts relative prototypicality judgments and how this impact differs for lower status groups as compared to higher status groups. We hypothesise that a more complex negative superordinate category makes multiple prototypes normative, opening the possibility of considering not only lower status groups as the most representative group of such a category but also other groups that share the same inclusive category. As such, complexity might allow for considering alternatives for the standing status quo of lower status groups within negative categories, which consequently can foster a more positive social identity (Tajfel & Turner, 1979), and improve lower status group's value (e.g., Ellemers et al., 1997; Lemaine, 1974).

### **3. Aims and general hypotheses**

Overall, the aim of the current research was to examine how relative status moderates the relation between representations of superordinate categories (simple vs. complex) and relative ingroup prototypicality in situations where such higher-order categories are positively and negatively valued.

- For higher status groups a more complex representation of a positively valued superordinate category is expected to decrease relative ingroup prototypicality, whereas for lower status groups a more complex representation of such higher-order category is expected to increase relative ingroup prototypicality.
- For negatively valued superordinate categories it is expected, in turn, that complexity decreases perceptions of relative ingroup prototypicality for lower status groups and increases it for higher status groups.

In general, it is, therefore, expected that complexity promotes a greater consensus in terms of prototypicality perceptions between both higher and lower status groups.

### **4. Empirical overview**

The current work comprises five studies. All of them studied the relation between two groups with asymmetric social status within the context of a superordinate category encompassing both subgroups. The first three studies, one correlational field study and two experiments, examined whether complexity effects on relative ingroup prototypicality depend on relative ingroup status within positively valued superordinate categories, whereas two further experiments were dedicated to study additionally the role of valence of the superordinate category.

Study 1 aimed to test the moderation hypothesis for positive superordinate categories by using real-life groups: “People living in Portugal” was involved as the superordinate category; white-Portuguese as the higher status subgroup and immigrant groups (Brazilians and Cape-Verdeans) as two lower status sub-groups. After that, two experiments are reported (Studies 2 and 3) in which relative group status and complexity of the representation of the superordinate category were manipulated. These two experiments used artificial groups with anonymous group membership in

order to avoid confounding status differences with differences in group history, belief systems and ideologies. Thus, in both studies participants were allocated to an allegedly high emotionally intelligent group (superordinate category) in the first part of each experiment, and to one of two sub-groups in a second part of each experiment.

Studies 4 and 5 aimed at analysing again the moderating role of status asymmetries (higher vs. lower status) but also of valence of the superordinate category (negative vs. positive) in the relation between the representation of the superordinate category (simple vs. complex) and relative ingroup prototypicality. In both experiments, status was varied as a quasi-experimental variable and complexity of the superordinate category was manipulated. Study 4 examined how the complexity effect on relative ingroup prototypicality depends on relative ingroup status in the context of a natural intergroup relation involving a usually negatively evaluated superordinate category (criminals living in Portugal). In Study 5 undergraduate students from public Portuguese Universities was the superordinate category; Social Sciences students (lower status group) and Exact Sciences students (higher status group) were the two sub-groups involved. Both the valence of the superordinate category (positive vs. negative) and its representation (simple vs. complex) were experimentally manipulated.

## **5. Organization of the dissertation**

The present thesis encompasses four Chapters. Following the General Introduction, Chapter 1 reviews the literature concerning how minority or lower status groups cope with their social situation. The Chapter starts by analysing the process of categorizing social stimuli and its impacts on social perceptions and on intergroup relations. Considering our goals it will describe a set of theoretical approaches that have attempted to explain ongoing status inequalities, particularly Social Dominance Theory and System Justification Theory, and other approaches that have been addressing strategies in which lower status groups might engage in order to change their relative inferiority – concretely Social Identity Theory and the Ingroup Projection Model. The Chapter also briefly describes and distinguishes psychological approaches and norms that address intergroup tolerance either by deemphasizing groups'

differences (e.g., Brewer & Miller, 1984; Gaertner & Dovidio, 2000a, 200b) or by recognizing such groups' differences (e.g., Deschamps & Doise, 1978; Crisp & Hewstone, 2007; Gaertner & Dovidio, 2000a, 2000b; Park & Judd, 2005; Wolsko et al., 2000). Furthermore, it discusses how minority and majority groups display differential preferences on those approaches. The Chapter also aims to address the bridge between those approaches and the literature on acculturation (Berry, 1997) as well as on social identity complexity (Brewer & Pierce, 2005; Roccas & Brewer, 2002).

The empirical section follows the theoretical overview and it is divided into two Chapters – Chapters 2 and 3. These two empirical Chapters have the format of empirical articles as they correspond to a large degree to two manuscripts that were submitted for publication. In brief, Chapter 2 contains the first three studies mentioned earlier, and Chapter 3 the last two experiments. Finally, and corresponding to Chapter 4, a general discussion is presented including reflections on limitations and suggestions for future studies.



## Chapter 1

### **The psychological understanding of intergroup relations: Intergroup processes and social reality**

*“It is easier – and probably cheaper – to smash an atom than a prejudice” (Allport, 1954)*

#### **1.1. Categorization and its impact on prejudice and discrimination**

Research in intergroup relations has generally defined prejudice – an intense dislike or a hostile attitude toward a person based on erroneous and inaccurate information – as the main problem within this field as it is the basis of enduring conflict and hostility between groups that otherwise could live in peace and mutual acceptance with each other (Allport, 1954; Park & Judd, 2005). Therefore it is not surprising that many theories have emerged identifying different causes and providing different explanations for this phenomenon. Simpson and Yinger (1985), for example, postulate three main levels of determinants of prejudice – cultural, group and individual. From an historical perspective and particularly along the XX century, Duckitt (1992) identified seven distinct periods in the psychological understanding of prejudice: the first psychological understanding about prejudice was close to the idea of racial differences and, in this sense, in the 1920’s prejudice was considered as a natural response to “inferior people” (Duckitt, 1992, p. 1184). Due to the critic that such race differences particularly in mental ability were reductionist, the focus of research about prejudice changed during the 1920’s and the 1930’s, particularly in United States. Rather than focusing on Black inferiority, the core issue became explaining the stigmatization of minorities as an irrational and unjustified attitude, mainly of White people. From the 1930’s until the cognitive revolution in the 1980’s several different paradigms dominated the study of prejudice. First, psychodynamic theory provided a framework for identifying universal processes underlying prejudice during the 1930’s and the 1940’s. As a result, prejudice was mainly understood as an unconscious mechanism, or the display of aggression resulting from frustration

(Dollar, Doob, Miller, Mowrer, & Sears, 1939). After World War II such explanations by a universal intra-psychic process shifted to an individual-differences paradigm where prejudice was understood as the outcome of particular personality structures (Adorno, Frenkel-Brunswik, Levinson, & Sanford, 1950). But this latter paradigm declined at the end of the 1950's and a social cultural perspective became the dominating view along the 1960's and the 1970's. Blumer's group position model (1958), for example, postulated that "feelings of competition and hostility emerge from historically and collectively developed judgments about the positions in the social order that ingroup members should rightfully occupy relative to members of an outgroup" (Bobo & Hutchings, 1996, p. 956). Relative groups' social position can be defined according to four elements: 1) The belief about ingroup superiority; 2) the perception of members of the outgroup as different (outgroup stereotyping); 3) relative group position implies claiming rights and privileges (entitlements for the ingroup); 4) at the same time, outgroup members desire to share such rights and privileges. With the Civil Right Movements, particularly in United States in the 1960's, normative explanations for prejudice became popular (Pettigrew, 1991, 1997). Giving the example of South Africa and particularly *apartheid*, Pettigrew (1991) argued that although individual differences can explain part of prejudice between Blacks and Whites, they cannot account for the racial practices existing in that country. Much of racism is rather due to social conformity.

The psychological interest in the study of more fundamental psychological processes underlying intergroup relations – relevant for the purpose of the current work – only emerged at the end of the 1970's. Tajfel (1970) work and the minimal group paradigm<sup>8</sup> (Tajfel, Flament, Billig, & Bundy, 1971) became one of the most important influential theoretical contributions for understanding prejudice and for the establishment of a social cognitive perspective in intergroup dynamics: Although since the publication of *The Nature of Prejudice* by Allport (1954) particular attention was already given to categorization, the findings from the minimal group paradigm provided an important empirical basis for the assumption that social categorization per

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<sup>8</sup> In brief, the minimal group paradigm consists in randomly assigning people to artificial groups without a history of relations between them.



se was an important determinant of intergroup bias, particularly ingroup favouritism, and discrimination.

Categorization consists of placing stimuli into categories. Similarly, social categorization consists of placing people into social categories (e.g., fat/thin, young people/old people), and involves a differentiation of the self and others into meaningful categories (e.g., Abrams & Hogg, 1998; Oakes & Turner, 1990). At a group level, it helps to divide the social world into ingroups and outgroups.

According to Rosch (1978), social categories in particular, are usually represented as fuzzy sets of attributes (Mervis & Rosch, 1981) where category coherence is based on members' "family resemblance" (Hogg, 2001, p. 207). The prototype of a social category represents the most representative member of that category; members of a certain social category vary in the degree to which they match the prototype. Prototypes can also correspond to stereotypes when we are dealing with social categories (Crisp & Turner, 2007). Although social categorization helps to simplify the social world and turn it more predictable, it has also been shown to impact intragroup behaviour and to be the basis of prejudice and other pervasive biases and intergroup phenomena such as ingroup favouritism (national, racial, political, and religious), stereotyping (e.g., Bar-Tal & Teichman, 2005; Judd, Park, Ryan, Brauer, & Kraus, 1995; Zarate & Smith, 1990), social discrimination, dehumanization (e.g., Haslam, 2006) or infra-humanization (e.g., Leyens, Demoulin, Vaes, Gaunt, & Paladino, 2007), tokenism (e.g., Wright, 1991) and other.

Research has been showing that categorization impacts ingroup/outgroup relations at three different levels: cognitive, emotional and behavioural. A great body of research has been conducted on the cognitive consequences of categorization. For example, consistent with Tajfel's (1982) assumption that people tend to magnify differences between members of different groups and minimize differences between members of the same groups, several findings have shown that categorization is related with an asymmetric cognitive construal of groups (e.g., Lorenzi-Cioldi, 1988; Lorenzi-Cioldi & Dafflon, 1999; Mullen & Hu, 1989; Simon, 1992); that is, ingroups tend to be cognitively constructed as a heterogeneous aggregate of separate individuals, whereas outgroups are usually constructed as homogeneous units, which is often related to stereotyping (Hogg, 2001). Another line of research on categorization processes has

studied illusory correlations (e.g., Chapman, 1967; Hamilton & Gilford, 1976), that is an erroneous tendency to associate two categories of events that may not be related at all. For example, for a certain group of people (often devalued minorities) the prevalence of negative characteristics or attributes is overestimated. Such illusory correlations can occur only because both the group and such attributes have an infrequent or unusual occurrence or feature, which makes them distinctive events. As a result, people believe that both events should go together. According to Hamilton and Guilford (1976) the typical white observer, for example, would infer that blacks and undesirable (vs. desirable) behaviours co-occur more frequently than they actually do.

With respect to the affective consequences of categorization, a significant amount of research has shown that in average people tend to experience more positive than negative affect towards ingroup members than towards outgroup members, as the latter tend to elicit more negative affective reactions than the former (see Brewer & Brown, 1998, for a review; Smith, 1993). Behaviourally, an important set of studies including the first experiments with minimal groups (Tajfel et al., 1971) showed that categorizing people into ingroup and outgroups is related with allocating more resources to members of the ingroup than to members of the outgroup. Social discrimination based on gender differences at workplaces is well documented (Ellemers & Barreto, 2009). Women in average receive lower wages and worse work facilities than men. Other findings suggest that ingroup members usually display less helping behaviours toward members of the outgroup compared to members of the ingroup (e.g., Dovidio, Gaertner, & Saguy, 2009; Gaertner, Dovidio, & Johnson, 1982).

The first studies conducted by Tajfel and colleagues (1971) were pivotal for understanding the categorization process and its cognitive, affective and behavioural consequences, and particularly its role in the development and maintenance of intergroup biases. However, and using the minimal group paradigm as well, several findings on positive-negative asymmetry of social discrimination showed that the conditions that elicit social discrimination are not the same when negative resources (e.g., unpleasant tasks) rather than positive ones are allocated between groups, or when negative attributes (e.g., negatively valued dimensions) rather than positive are assigned between groups (e.g., Mummendey et al., 1992; Mummendey & Otten, 1998;

Otten, Mummendey, & Blanz, 1996). In conditions with negative stimuli there is less discrimination against the outgroup, than under conditions where those stimuli are positive. At the same time, these findings are not conclusive as there is some empirical evidence showing that with real-life groups people do discriminate the outgroup on negative dimensions (see Mummendey & Wenzel, 1999). Recently, Park and Judd (2005) argued that much of the research linking categorization and intergroup bias is mainly correlational, which means that the causal relation between both variables cannot be demonstrated. Furthermore, such findings suggest that answering to the question of which conditions are necessary or sufficient for the occurrence of outgroup antagonism and outgroup discrimination is not straightforward and needs further understanding (Park & Judd, 2005). As Wenzel et al. (2003) put it, “we assume that members do not simply react to mere categories but rather to the meaning of categories, to the attributes, to the values, and beliefs that they perceive to be the content of these categories. When they perceive the outgroup’s differing attributes, values or beliefs to be norm-deviating and negative they regard it as legitimate to devalue and disadvantage the outgroup” (p. 462). This idea will be discussed within the Ingroup Projection Model that we will describe further below.

## **1.2. The importance of social reality: Status asymmetries and its impact on intergroup phenomena**

So far, we have focused on how categorization impacts intergroup phenomena. As we mentioned previously, the process of social categorization helps people to differentiate between ingroup and outgroups. In real-life contexts groups are sometimes differentiated according to their relative status and/or power positions resulting from a history of interactions that influences how these groups perceive themselves and how they are perceived (Verkuyten, 2000); we can, then, distinguish between groups that are considered as having a higher status position and groups that hold a lower status position. Usually the former are perceived as valued, dominant or powerful groups, whereas the latter are usually considered as devalued, disadvantaged or powerless groups. Such status and power asymmetries can also co-vary with groups’ size as they can be used as a criterion for defining minority-majorities

memberships (Tajfel, 1982). In this regard, minorities are usually (though not always) related to lower status, whereas majorities are usually related to higher status. Such social reality characterized by status and/or power asymmetries impacts ongoing prejudice and discrimination (Saroglou, Lamkaddem, van Pachterbeke, & Buxant, 2009) and may constrain the use of ethnocentric standards (e.g., Ellemers et al., 1997; Turner & Reynolds, 2001). For members of lower status groups, Tajfel (1978b) argued that a *continuum* can be defined in their behaviour and attitudes, where acceptance of inferiority and rejection of own group's status can be considered the two extremes. In fact, the literature has been providing evidence for both: On one hand, there is some evidence for the fact that members of devalued groups seem to accept group-based inequalities, and the relative superiority of members of higher status groups, endorsing system-justification ideologies that legitimize group-based inequalities (e.g., Jost, Banaji, & Nosek, 2004; Major & Schmader, 2001; Sidanius & Pratto, 1999). On the other hand, accepting relative inferiority does not mean that lower status groups cannot at the same time display "reality-constrained ingroup favouritism" (Ellemers et al., 1997, p. 188), that is, using more subtle ways of achieving ingroup positive distinctiveness. They can also engage in concrete collective actions, such as collective protest (e.g., Deaux et al., 2006; Tajfel & Turner, 1979; Taylor & McKirnan, 1984; Wright, Taylor, & Moghaddam, 1990; see Wright & Lubensky, 2009, for a review). Social movements such as the African-American Civil Rights Movements during the 1950's and the 1960's are classic examples of how disadvantaged groups can act collectively in an attempt to improve the status of the ingroup as a whole. In brief, intergroup processes seem to be less straightforward for members of lower status groups than for members of higher status groups.

### **1.3. Theoretical contributions to the understanding of intergroup relations**

As we have been highlighting throughout this work several theoretical attempts have been made in order to explain intergroup relations, particularly between higher and lower status groups. Different approaches have been analysing these issues according to different levels of analysis: Individual, intergroup and societal levels (Doise, 1982). Some of these approaches have focused mainly on analyzing why

devalued groups internalize their social inferiority even if that implies violating their self or group interests, and the maintenance of social inequalities (Huddy, 2004). System Justification Theory (Jost & Banaji, 1994) and Social Dominance Theory (Sidanius, 1993; Sidanius & Pratto, 1999) are examples of theories within this line of research. Other theoretical approaches, such as Social Identity Theory (Tajfel & Turner, 1979) and Self-Categorization Theory (Turner et al. 1987), played a leading role in explaining intergroup conflict in social stratified societies and particularly for understanding conditions that foster social competition and ingroup bias (Turner & Reynolds, 2001). Social Identity Theory had mainly analysed this issue from the point of view of members of devalued groups. Its ideas influenced, in turn, other promising approaches, and particularly the Ingroup Projection Model (Mummendey & Wenzel, 1999) that had also provided explanations for intergroup conflict. We will describe these approaches further below.

### **1.3.1. Social Dominance Theory and System Justification Theory**

Social Dominance Theory (Sidanius, 1993) and System Justification Theory (Jost & Banaji, 1994) focus on ideologies that people share, that is, they understand ideologies as collective representations socially shared within a society or a culture (Moscovici, 2006). Social Dominance Theory has also paid particular attention to interindividual differences. In the following paragraphs the specificities of each approach will be described.

Social Dominance Theory corresponds to an evolutionary and socio-biologically based approach as it assumes that ethnocentrism and tendencies to preserve status differences are part of “human nature” and therefore “inevitable”, “adaptative” (Sidanius, 1993; Sidanius & Pratto, 1999) and can be considered as a survival strategy adopted by hominoids. This theory has been focussing mainly on identifying the specific processes or mechanisms that are responsible for the creation and maintenance of such group-based social hierarchies and the manner in which these processes interact. Group-based social hierarchies can be distinguished from an individual-based social hierarchy in the sense that the former refers to “that social power, prestige and privilege that an individual possesses by virtue of his or her

ascribed membership in a particular socially constructed group such as race, religion, (...) lineage, (...) or social class” (Sidanius & Pratto, 1999, p. 32). For example, high-status positions are usually held by males (Sidanius, 1993) and concretely by older white males. According to this approach, human societies are stratified by three different systems: age, gender and group (or *arbitrary-set systems*). Prejudice, in its different forms (racism, sexism, nationalism, etc.), or other forms of group conflict and oppression correspond to a manifestation of such social stratification.

Group-based social hierarchies are elicited and maintained by different mechanisms by which individuals and institutions interact (Huddy, 2004): 1) individual and private acts of discrimination, 2) institutional discrimination, and 3) *systematic terror*, that particularly refers to the use of violence or threats against members of subordinate groups. The theory also postulates the existence of a *behavioural asymmetry* mechanism between dominant and subordinate groups; such asymmetry can be an *asymmetrical ingroup bias*, *outgroup favouritism*, *self-debilitation* and *ideological asymmetry*. It is assumed, for example, that dominant groups tend to display greater ingroup bias than subordinate groups, and in some conditions the latter can even favour the dominant outgroup over their own ingroup (i.e., outgroup favouritism).

Social Dominance Theory also suggests that societies hold certain ideologies that promote intergroup bias: *Legitimizing myths*, defined as ideologies, beliefs, values or groups’ stereotypes that provide moral or intellectual support for social inequalities, are considered as key processes for the justification of the stability of standing social systems (e.g., paternalistic myths). But the theory also postulate the existence of *Hierarchy-attenuating myths*, which are, in turn, ideologies that people can hold to contest or attenuate inequalities (Pratto, Sidanius, Stallworth, & Malle, 1994; Sidanius et al., 2001). The stability of a certain social system, for example, partiality depends upon the “hierarchical equilibrium” (Sidanius et al., 2001, p. 311) between these two opposite ideologies.

Research on Social Dominance Theory has paid particular attention to societal-level factors as it considers that the processes that help to establish these group-based social hierarchies are similar across different societies (Sidanius & Pratto, 1999). But at the same time it has devoted particular attention to interindividual differences,

developing a social dominance orientation (SDO) scale. Overall, it corresponds to a personality variable that helps to predict individuals' social and political attitudes. Three different versions of Social Dominance Theory can be distinguished (Rubin & Heswtone, 2004): SDO was firstly defined as a general attitudinal orientation toward the preference for one's group to dominate and to be superior when compared to outgroups (Sidanius, 1993). A second version of this theory (Sidanius, Pratto, & Bobo, 1994) postulated a dual conceptualization of SDO that includes two needs – the need for ingroup domination (*specific SDO*), and the need for intergroup hierarchies in general (*general SDO*). Latter on the distinction between a specific and a general SDO was excluded and SDO was defined as “a general desire for unequal relations among social groups, regardless of whether this means ingroup domination or ingroup subordination” (Sidanius et al., 2001, p. 312).

In sum, Social Dominance Theory can be defined as a personality theory of discrimination, as it has devoted particular attention to interindividual differences (Huddy, 2004), although little or no attention has been given to the development of such differences. In this line, it can be also highlighted that this approach does not provide an explanation on how the same individual can show different degrees of discrimination in different contexts or situations (Rubin & Hewstone, 2004; Reicher, 2004). Although Sidanius and Pratto (1999) highlighted that members of subordinate groups are not perceived as passive groups in such systems, the theory does not address how members of subordinate groups attempt to create instability and therefore to actively change their inferior position in such stratified systems.

System Justification Theory can be considered as a social-cognitive theory of intergroup relations. It has devoted particular empirical attention to the link between outgroup favouritism displayed by disadvantaged groups and related phenomena, such as ingroup derogation, and the ideological processes that help to justify and legitimize existing status inequalities (Jost, Burgess, & Mosso, 2001).

Similar to Social Dominance Theory, System Justification Theory postulates a general ideological motive – *system-justifying motive* – by which people justify and rationalise the standing social system and thereby the *status quo*, internalizing inequality (e.g., Jost & Hunyady, 2002). Although this posits a conflict for disadvantaged groups, they have to face simultaneously the need to justify their

standing inferior status and the motives to enhance ingroup status position. Jost and Banaji (2009) argued that people, particularly disadvantaged groups, need and want to see prevailing social systems as fair and just. Following this assumption, Kay and colleagues (2009) tested the system justification motive in four different experiments: overall, they found what they called an *injunctification tendency*, that is, people are motivated to view their standing status as the most desirable, fair and reasonable state of affairs. According to System Justification Theory, this tendency is partially due to people's desire to justify the socio-political systems in which they are included. As a result, rather than attributing their social outcomes to prejudice or discrimination, members of disadvantaged groups tend to blame themselves for their disadvantage.

In sum, *legitimizing appraisals* – defined as “subjective perceptions of the fairness or justice of the distribution of socially distributed outcomes” (Major & Schmader, 2001, p. 180) – are considered as key factors to understand how disadvantaged groups construe their social outcomes, that is, status, power or other differences between their group and a dominant outgroup. These appraisals can occur at different levels that can be interrelated to one another: system (e.g., fairness of existing status hierarchies), group (e.g., fairness of the position of the ingroup relative to a certain outgroup) and an individual level (e.g., perceptions of justice about his or her outcomes). System Justification Theory attempts to examine how perceived legitimacy applies to the extent to which outcomes of individuals or groups are believed to be based on actual differences between groups, in particular inputs such as abilities or traits, or on factors for which people are responsible for such as their effort.

Similar to Social Dominance Theory, System Justification Theory has been criticized in several ways (e.g., Reicher, 2004; Rubin & Hewstone, 2004). For example, it has been argued that this approach still needs to show that members of lower status groups are not only responsive toward the social systems to which they belong, and that they behave actively. As mentioned previously, from the perspective of System Justification Theory legitimacy is considered as a key variable to explain how disadvantaged groups support persisting social inequalities. Nonetheless Huddy (2004), for example, argued that it is possible to identify alternative explanations for persisting social inequalities, namely early socialization and institutional barriers.



Overall, both System Justification Theory and Social Dominance Theory have been criticized for adopting a static view of intergroup relations that do not consider the existence of moderating variables that might contribute to the explanation of the tension between stability and social change of social systems (e.g., Reicher, 2004; Rubin & Hewstone, 2004). Huddy (2004) also stressed that both perspectives do not explain why some members of higher status groups reject ingroup members that have a lower status, within the ingroup, or why members of higher status groups can accept immigrant groups. As a result, it can be concluded that these theoretical approaches have less explanatory power than Social Identity Theory (Tajfel & Turner, 1979) in the explanation of intergroup relations and particularly intergroup discrimination. We will describe Social Identity Theory in the following section.

### **1.3.2. Tajfel's legacy: Social Identity Theory and identity management strategies**

Social Identity Theory (Tajfel & Turner, 1979) was developed in order to provide a theoretical explanation of intergroup relations, and particularly of how the simple categorization into social categories (ingroup and outgroup) fosters ingroup favouritism and outgroup discrimination, as well as of social change. According to Social Identity Theory, individuals can act in terms of self or in terms of group. In this regard, social identity was defined as “that part of 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 to that membership” (Tajfel, 1978a, p.63). The theory combines insights from both Social Comparison Theory (Festinger, 1954) and Lemaine's (1978) positive distinctiveness. In this sense, social comparisons between groups are important for establishing *positive ingroup distinctiveness* (i.e., distinguish the ingroup positively from relevant outgroups). It is the need for positive social identity that is assumed to drive the search for *positive distinctiveness*. Thus, the *positive (intergroup) distinctiveness* process elicits intergroup discrimination (see also Turner & Reynolds, 2001).

An important part of Tajfel's work was focused on the dynamics of intergroup relations and particularly the psychological effects of being assigned to devalued

groups or to groups with a lower status position (Tajfel, 1978b; Tajfel & Turner, 1979). Following the core assumption that people are motivated to reach or maintain a positive social identity, Tajfel's extensive research has addressed which psychological and behavioural strategies – *identity management strategies* – minority members might use to face or to change their (negative) social position (Blanz et al., 1998; Ellemers, 2001). According to Tajfel and Turner (1979) the adoption of such strategies is dependent on several socio-structural variables: The *permeability* of group boundaries, the *stability* of group status (or the social system in general) and the *legitimacy* of status relations. Permeable group boundaries allow an individual to move from one group to another, whereas impermeable group boundaries do not allow such individual movements. Boundaries between groups can be impermeable (vs. permeable) either due to physical characteristics such as gender and race that are not easily changed or masked, or to characteristics such as legal barriers (e.g., migration policies), or practical barriers (e.g. financial costs). Impermeable boundaries can also be due to psychological barriers: For example, if some individuals cannot imagine themselves to leave their ingroup (Wright & Lubensky, 2009). Stability corresponds to the perception that status relations are stable over the time, and, consequently, the value ascribed to the groups is unlikely to be changed. Perceived illegitimacy of status differences can mean that normative alternatives are imaginable and things are far from how they should be (i.e., “ought to be”). In this regard, status relations are said to be *insecure* when they are viewed as illegitimate or unstable (Tajfel & Turner, 1986), and *secure* when they are viewed as stable and legitimate.

Considering such socio-structural variables it is possible to distinguish between individual-based and collective-based strategies (Tajfel & Turner, 1979; Ellemers, 1993): The *social mobility strategy* is an example of the former strategy and is usually adopted when groups' boundaries are permeable; such permeability enables a particular individual to leave his (her) ingroup and find a more satisfactory one. This strategy aims to improve an individual's social identity as it corresponds to an upward mobility (Wright, 1991). Following Ellemers and Barreto (2009), upward mobility has, however, important consequences at a group-level: The success of isolated members of minority groups in their upward mobility maintains, for example, the illusion that

society is meritocratic and, consequently, it decreases the probability of collective action (see also Pratto, Stallworth, Sidanius, & Siers, 1994).

Another possibility is to adopt group-based strategies. Contrary to individual-based, group-based strategies aim to achieve a group-level social identity improvement. The collective strategies postulated by Social Identity Theory correspond to *social creativity* and *social competition* (Tajfel & Turner, 1979). Social creativity refers to a cognitive strategy and it is usually adopted in conditions where status hierarchies are perceived as stable and legitimate. Being able to take different forms, it can consist of a) choosing another outgroup for comparison, particularly one or more groups with equal or inferior relative status (Alexandre, Monteiro, & Waldzus, 2007); b) redefining the existing group characteristics and turning them more attractive (or positive), or change comparison dimensions that favour the ingroup. In the same line of thought, Crocker and Major (1989) also suggested that devaluing dimensions selectively, that is, valuing more the dimensions where the outgroup is better, is related to higher levels of self-esteem. In political terms, the use of creativity strategies can imply rejecting mainstream norms and therefore differentiating one's group from more privilege groups and norms (e.g., Schmitt & Branscombe, 2002). Researchers studying ego-defense (e.g., Crocker & Major, 1989) or ego-justification perspectives (see Major & Schmader, 2001) also postulated that members of devalued groups tend to devalue domains in which their own group has poor or negative outcomes (e.g., showing academic disengagement). Overall, social creativity strategies are motivational-based as they attempt to reduce the impact of lower status groups' (stable) negative social identity (Rubin & Hewstone, 2004).

When group boundaries are perceived as impermeable and the intergroup status as unstable and illegitimate it is expected that individuals endorse a social competition strategy. Perceiving status relations between the ingroup and a relevant outgroup as unstable provides an opportunity to think in alternatives to the present status quo of the ingroup; at the same time perceptions of illegitimacy are related with the notion that their should be, in fact, an alternative to the present situation of the ingroup (Mummendey et al., 1999). Thus, social competition refers mainly to mobilizing members of the ingroup to engage in overt collective action, for example, intended to produce (actual or future) changes in intergroup relations favoring the ingroup as a

whole (e.g., Blumer, 1958; Scheepers, Spears, Doosje, & Manstead, 2006). Collective action and social protest (Wright & Lubensky, 2009; Wright et al., 1990) can be considered examples of this strategy. Mummendey and Schreiber (1984) suggested that individuals engage in social competition only when there is no alternative for establishing a positive social identity. In this regard, social competition leads to intergroup conflict only when groups agree about the (societal) value of intergroup behaviour (Tajfel, 1982; Turner, 1985; see also Rubin and Hewstone, 2004). Social Identity Theory also postulated that identification with the ingroup mediates the relation between socio-structural variables and identity management strategies. Mummendey et al. (1999), for example, showed that ingroup identification is positively related to collective strategies and negatively related to individual strategies.

Overall, Social Identity Theory provides a theoretical explanation for social change based on a particular belief system: Particularly the ideology of social change is related with perceptions of impermeability of group boundaries (e.g., Turner & Reynolds, 2001). Since Tajfel's early work (Tajfel, 1978a, 1978b) until nowadays, research has been testing and giving support to the existence and relevance of such socio-structural variables and strategies in which individuals engage in order to improve their (individual or group) social standing. Whereas insecure status relations induce collective action (e.g., Ellemers, van Knippenberg, de Vrie, & Wilke, 1988; Ellemers et al., 1993; Simon, Glassner-Bayerl, & Stratenwerth, 1991; Wright, 2001; Wright & Tropp, 2002), perceptions of status differences as stable and legitimate decrease social action (e.g., see Bettencourt, Dorr, Charlton, & Hume, 2001, for a review; Ellemers, 1993; Ellemers et al., 1993; Hogg & Abrams, 1988).

Following Rubin and Hewstone (2004), Social Identity Theory is characterized by three main components: a *social-psychological* component, a *system* component and a *societal* component. With regard to the first component, it corresponds to the cognitive and motivational processes that we already described as being responsible for intergroup discrimination and explains *why* people show intergroup discrimination. The system component relates to the socio-structural variables described previously and explains *when* or under which conditions people particularly endorse social competition. The societal component corresponds to the particularities of the social context – its historical, cultural, political and economic features – and, therefore, to the

*social reality* of intergroup situations, characterized by the two main aspects of societal norms and societal values.

Social Identity Theory has also been criticized. Abrams (1996), for example, stated that Social Identity Theory did not determine which of the categorizations in which individuals might engage would become the basis for social identity. Also Huddy (2004), as well as Rubin and Hewstone (2004), for example, highlighted that by giving attention mainly to characteristics of the groups this theory has devoted little or no attention to the origins of interindividual differences in intergroup behaviour, particularly in the process of identity acquisition and the development of outgroup antipathy. Also, Niens and Cairns (2003) pointed out that it is not clear in Social Identity Theory whether identity management strategies are only endorsed when groups hold a negative social identity, which is usually experienced by lower status groups. Furthermore, the same authors also highlighted that the predictors of identity management strategies postulated by such theory do not seem sufficient for explaining the different strategies that lower and higher status groups might endorse. Mummendey et al. (1999), for example, tested the predictive power of Social Identity Theory in comparison to Relative Deprivation Theory<sup>9</sup> (Runciman, 1966), in the explanation of variance in identity management strategies and found that, overall, Social Identity Theory is a better predictor of individual strategies whereas Relative Deprivation is a better predictor of collective ones.

Despite such criticisms, Social Identity Theory is a pivotal theoretical contribution for analysing and explaining intergroup conflict and intergroup behaviour, and particularly how people act in behalf of the ingroup, by emphasizing belief structures of social change. Moreover, based on the individual and collective identity management strategies suggested by Tajfel and Turner (1979, 1986), other researchers have attempted to specify a broader taxonomy of such strategies. Blanz et al. (1998), for example, proposed six identity management strategies: *Individual mobility* and *recategorization at a higher level*, which are considered *individual strategies*; *social*

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<sup>9</sup> The main idea underlying Relative Deprivation Theory is that feelings of deprivation are a consequence of the difference between expectations of attainment that arise from a comparison process with other individuals or social groups and actual achievements (see Niens & Cairns, 2003; see Walker & Smith, 2002, for a discussion). Or, in other words, feelings of relative deprivation arise when people notice that they want more than what they have and that they have less than they feel entitled to (see Mummendey et al., 1999).

*competition* (competing for social evaluation) and *realistic competition* (competing for material resources), which correspond to *collective strategies*, and creativity strategies, particularly *preference for temporal comparison* (i.e., perceiving a comparison between two different time-sets of the ingroup as being more important than a comparison between the ingroup and an outgroup) and *re-evaluation of the material dimension* (i.e., devalue the material comparison dimension between the ingroup and the outgroup).

In sum, research has been supporting the assumption that group members may adopt different identity management strategies in order to cope with their negative social identity and, consequently, to raise their self-esteem. One of the aims of the current work is to study structural characteristics, particularly a complex (mental) representation of superordinate categories that may influence people's belief-systems on social structural variables and identity management strategies that lower status groups may adopt. Promoting complex representations of superordinate categories might be a way to allow for consensual re-evaluation of status differences and/or support challenging the status quo. In the following section we will outline superordinate categories and their relevance for understanding and explaining intergroup relations, particularly from the point of view of two main theoretical approaches: Self-Categorization Theory (Tajfel & Turner, 1979) and the Ingroup Projection Model (Mummendey & Wenzel, 1999). We will then characterize complex (mental) representations of superordinate categories and their role for lower and higher status groups.

### **1.3.3. Self-Categorization Theory**

Similar to Social Identity Theory (Tajfel & Turner, 1979), Self-Categorization Theory (Turner, 1985; Turner et al., 1987) was rooted on social interactionism as it assumes that psychological processes are in continuous interaction with social reality and that both, people's place in the social context, that is their identity, and the social context itself, are socially constructed. Intergroup relations emerge from an interaction between the social life, social processes and how they reflect on peoples social psychological processes. Also, both approaches attempt to explain and predict

intergroup behaviour, although Self-Categorization Theory was particularly concerned with psychological group formation – how people become a group and the psychological basis of group processes – rather than with ethnocentrism and discrimination (Turner & Reynolds, 2001). In this sense self-categorization can be considered as complementary within the broader theoretical perspective of Social Identity Theory (Mummendey & Wenzel, 1999; Turner & Oakes, 1989).

In line with the distinction made by Social Identity Theory (Tajfel & Turner, 1979) between interpersonal and intergroup behaviour, Self-Categorization Theory postulates that self-perception can vary between a personal and a social identity (i.e., a distinction between the “I” and the “we”). People create cognitive categories to represent themselves at different levels of abstraction or inclusiveness, for instance, as an individual different from other individuals, as someone from a certain region (e.g., Lisbon), within a certain country (e.g., Portugal) within a certain higher order cultural space (e.g., Europe). Such social categories have a hierarchical relation to each other that is the basis of intergroup evaluations. With other words, social categories (e.g., Portuguese and Spanish) are compared to each other on the basis of their shared next more inclusive social category (e.g., Iberia or Europe); the evaluation of self-categories derives from a comparison process with other relevant social categories. Such comparison implies that categories should be comparable, which is possible to the extent that they both share a higher-order or superordinate category (Turner, 1987). Thus, categories are comparable on dimensions that define and characterize a shared inclusive category. As we highlighted at the beginning of this Chapter, categories are usually defined by prototypes (e.g., Hogg, 2006). At a group level, a group prototype corresponds to a (mental) representation of the most typical or the ideal member/group of a certain category (Hogg, 2006; Rosch, 1978; Wenzel et al., 2007). Therefore, group members are usually compared and evaluated according to their similarity to the prototype of that category. Considering that usually superordinate categories are positively valued groups (Turner et al., 1987), the more similar a group member is to the prototype of the shared superordinate category the more positive his/her evaluation will be. In this sense prototypicality can be considered as a source of a positive self-esteem (Waldzus, 2009).

In sum, according to the Self-Categorization Theory (Turner et al., 1987), a self-relevant superordinate category that includes the ingroup and an outgroup is considered to be on the basis of intergroup evaluations as it provides the reference dimensions and norms for intergroup comparisons.

Research on the impact of social categorization on intragroup phenomena has concentrated on interpersonal relations or the behaviour of individuals within groups, particularly on conformity, normative behaviour, group cohesiveness and attraction, deviance and leadership (Giessner & van Knippenberg, 2007; Hogg, 2006). Less attention has been devoted to the study of social categorization applied to intergroup relations between subgroups within a social category (Wenzel et al., 2007). In this regard, the Ingroup Projection Model (Mummendey & Wenzel, 1999) has however contributed substantially to this particular field. In the following section we will describe it in more detail.

#### **1.3.4. The Ingroup Projection Model**

As we highlighted already in Chapter 1, the Ingroup Projection Model (Mummendey & Wenzel, 1999) was mainly derived from Self-Categorization Theory. Two concepts are central for this theoretical approach: Inclusion and prototypicality. The Ingroup Projection Model adopts Self-Categorization Theory's assumption that the evaluation of intergroup similarities and differences are possible if both (sub)groups (ingroup and a self-relevant outgroup) are compared with respect to a broader superordinate category in which both groups are included. As such, inclusion furnishes a baseline for intergroup comparisons and evaluative judgements. Waldzus and Mummendey (2004), for instance, manipulated inclusion in two different studies: In the first study, conducted with Germans (ingroup) in a comparison context with Poles (outgroup), inclusion was manipulated by making salient either Europe (Poles' inclusion condition) or Western Europe (Poles' exclusion condition). In a second study single parents participated in the experiment; *single parenting women* corresponded to the ingroup and *single parenting men* to the outgroup; the inclusive superordinate category was single parents, whereas the not inclusive superordinate category was mothers. In both studies a moderation effect of inclusion was found: The relationship



between outgroup evaluations and relative similarity (typicality) of the ingroup to the given superordinate category was negative in the conditions in which the outgroup was included but disappeared in the condition in which the outgroup was not included.

Such findings are, however, inconsistent with research on the Common Ingroup Identity Model (Gaertner & Dovidio, 2000). Although both the Ingroup Projection Model and the Common Ingroup Identity Model are rooted in Social Identity Theory (Tajfel & Turner, 1979, 1986), they postulate different hypotheses on the implication of superordinate categorization for intergroup relations. In contrast to the Ingroup Projection Model, the Common Ingroup Identity Model predicts that the inclusion in a common inclusive category improves intergroup relations. In this case ingroup favouritism is considered to be generalized to outgroup members when they are perceived as belonging to a common superordinate category that is simultaneously an ingroup at a higher-order level of inclusiveness. The Ingroup Projection Model makes the opposite prediction because superordinate categories may trigger ethnocentric intergroup comparisons that render the outgroup more negative: In line with Self-Categorization Theory the Ingroup Projection Model assumes that the prototype of a (positive) superordinate category provides the norm or (positive) standards according to which the (sub)groups are compared and evaluated. Relative ingroup prototypicality is defined as “the degree to which the ingroup is perceived to be more (or less) prototypical for a given superordinate group than the outgroup” (Wenzel et al., 2007, p. 336). Because “self-categories tend to be positive” (Turner, 1987, p. 58-59), Mummendey and Wenzel (1999) postulate that the more similar a (sub)group is to the prototype of the superordinate category the more positively evaluated it will be. This assumption at an intergroup level goes in line to what has been found at an interpersonal level within groups: Individuals that are more typical for their ingroup are evaluated more positively than less typical ones (e.g., Hogg, 2001). Also, Marques and Paez (1994) showed that ingroup deviants are evaluated particularly negatively (*Black sheep effect*). Thus, deviation from an ingroup prototype leads to negative evaluations. In accordance to Social Identity Theory’s (Tajfel & Turner, 1979) assumption that groups tend to strive for a positive social identity, Mummendey and Wenzel (1999) hypothesise that group members tend to perceive the ingroup as being more prototypical of a (positively valued) superordinate category than they are seen by

outgroup members (Wenzel et al., 2003). This tendency means that group members tend to *project* ingroup attributes onto the inclusive category and therefore the ingroup (its attributes and values) is considered to be more similar to the prototype of the (positive) inclusive category than the outgroup (*ingroup projection*). This motivational hypothesis is close to the idea of positive distinctiveness (Tajfel & Turner, 1979) and goes in line with Turner's (1987) argument that "ethnocentrism (...) depends upon the perceived prototypicality of the ingroup in comparison with relevant outgroups (relative prototypicality) in terms of the valued superordinate self-category that provides the basis of the intergroup comparison" (p. 61). As a result, outgroups that are different from ingroups will be negatively evaluated, 1) if they are included in a superordinate category that makes ingroup and outgroup comparable; and 2) if group members show a tendency of ingroup projection, that is, a tendency to perceive increased relative ingroup prototypicality. Thus, while the Common Ingroup Identity Model emphasizes the generalization of ingroup favoritism to all members of the superordinate category (or, in the terminology of the model, the common ingroup), the Ingroup Projection Model emphasizes the potential of superordinate categories to trigger group serving intergroup comparisons.

Ingroup projection is similar to the false consensus effect<sup>10</sup> (Mark & Edward, 1995; Ross, Green, & House, 1977), but it is a phenomenon at a group-level, and differs from *social projection* not only theoretically but also empirically (Bianchi, Machunsky, Steffens & Mummendey, 2009; Machunsky & Meiser, 2009). Whereas ingroup projection describes a generalization process that is made from the ingroup to the superordinate category (of attributes and values) with important implications for intergroup evaluation, social projection implies a generalization of the individual self to the ingroup (see also Waldzus, 2009) and is relevant for the representation of an ingroup's prototype. In other words, ingroup projection refers to a projection process between different levels of self-categories, and consequently it focuses on an intergroup level, whereas social projection focuses on an interpersonal level (Bianchi et al., 2009).

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<sup>10</sup> The false consensus effect corresponds to the tendency to overestimate consensus for one's attitudes and behaviors. At a group level it corresponds to an overestimation of ingroup prototypicality (Kessler & Mummendey, 2009).

Ingroup projection is not an automatic process which means that not every group perceives itself to be more prototypical than a comparison outgroup. Several predictors of ingroup projection have been identified, particularly social identification (e.g., Wenzel et al., 2003), the (mental) representation of a given superordinate category (e.g., Waldzus et al., 2003; Wenzel et al., 2003), as well as its valence (Wenzel et al., 2003, Study 3). Some preliminary studies (Waldzus, 2004, Study 3) also showed that ingroup projection is affected by reality constraints, that is, by status and power asymmetries between groups. We will come to these topics further below. As a further predictor, Sindic and Reicher (2008) have identified the functionality of relative ingroup prototypicality for political interests of the ingroup.

Available evidence for ingroup projection comes from studies either showing divergent perspectives on relative prototypicality of two (sub)groups in a same intergroup situation or different views of the same (sub)group in different intergroup contexts. Regarding the former type of evidence (perspective divergence), Wenzel et al. (2003, Study 1) found that the common inclusive category (students in general) was ethnocentrically construed by both sub-groups (psychology and business students), which was indicated by the fact that both groups held diverging perspectives in terms of relative prototypicality of their respective ingroup. Psychology students saw themselves as more prototypical than business students whereas business students saw themselves to be equally prototypical with psychology students. Such disagreement in terms of relative prototypicality perceptions was also shown by Waldzus et al. (2004, Studies 1 and 2). In Study 1 both chopper-bikers and sport-bikers perceived their ingroup to be more prototypical than the outgroup for the shared superordinate category (biker group in general). In Study 2 these findings were replicated using two sub-groups of teachers in Germany – primary-school teachers and high-school teachers. Apart from perspective divergence in a particular intergroup situation, Waldzus et al. (2005) yielded empirical support for ingroup projection by comparing data from members of one and the same group but in different intergroup situations: In this experiment researchers kept the ingroup (Germans) constant and manipulated the frame of reference by asking participants to compare the ingroup with different outgroups (British and Italians) that were included in the same superordinate category (Europe). As expected, members of the ingroup (Germans) maintained their relative

ingroup prototypicality across the two different intergroup conditions. The attributes used to define the ingroup in the different intergroup comparisons were context dependent. For instance, when compared to Italians, Germans saw their ingroup members more as orderly and reserved than when compared to the British; when compared with British they saw their ingroup members more as open and sociable. Most importantly, these shifts in the self-stereotype of Germans were projected to the superordinate category (Europe): The stereotype of Europeans depended in a corresponding manner on the comparison outgroup of the German subgroup. This result was replicated with German and Italian participants by Bianchi et al. (in press), who used an implicit measure of relative prototypicality.

#### ***1.3.4.1. Consequences of ingroup projection***

For Self-Categorization Theory (Turner et al. 1987) ingroup favouritism and social discrimination depend upon group's relative prototypicality for an inclusive superordinate category. Moreover, according to Mummendey and Wenzel (1999), as mentioned previously, ingroup projection increases perceptions of relative ingroup prototypicality which is related with increased levels of ingroup bias. Thus, ingroup projection is related with a more positive evaluation of the ingroup, with the entitlement to better outcomes and with the legitimacy of holding a higher status position (Weber, Mummendey, & Waldzus, 2002). Similar to the findings at an interpersonal level (e.g., Hogg, 2001), at an intergroup level group members that consider their ingroup to be prototypical for a given (positively valued) superordinate category, display prejudice against (outgroup) members that are perceived as less prototypical for such common higher-order group. The reason is that a less prototypical outgroup tends to be perceived as deviating from the prototype of a given common superordinate category, and therefore it is considered non normative, inferior and less deserving. Research has shown that being less prototypical is related with negative evaluations toward the outgroup (e.g., Waldzus & Mummendey, 2004; Wenzel et al., 2003). Recent findings from a longitudinal study with German participants (ingroup) in which immigrants living in Germany corresponded to the outgroup (Kessler et al., in press; superordinate category was "people living in

Germany”) showed that prototypicality predicts prejudice, intergroup anxiety, resentment and competitive behavior. Moreover, the findings of this study speak for the existence of a “belief system” (Kessler et al., in press, p. 10) in which relative ingroup prototypicality, intergroup emotions and prejudice are reciprocally related. In other words, the more prototypical the ingroup (Germans) was perceived, the less positive emotions they felt towards immigrants, the more they felt deprived, and the more prejudice they displayed against outgroup members.

From the perspective of the Ingroup Projection Model, social discrimination corresponds to “an attribution that stems from a disagreement between two groups about their relative prototypicality and the implied difference in value” (Wenzel et al., 2007, p. 338). In line with this reasoning and considering how ingroup projection affects outgroup evaluations we propose that it may be possible to reduce intergroup discrimination by promoting consensus about both groups prototypicality (Waldzus et al., 2003, 2004). Further below we will outline some of the possibilities to promote such consensus.

#### ***1.3.4.2. Measures of relative prototypicality***

The tendency for claiming greater ingroup than outgroup prototypicality has been found using different methods. Some of the measures of relative prototypicality imply ratings of both subgroups (ingroup and outgroup) and/or the superordinate category on given or self-generated attributes. Concretely, in some experiments (e.g., Wenzel et al., 2003, Study 1; Waldzus et al., 2004, Study 2, Waldzus et al., 2005) prototypicality was measured by a *profile dissimilarity measure across attribute ratings*: Participants are asked to rate members of the ingroup, of the outgroup members, and of the superordinate category on a list of several different attributes. Profile dissimilarity between the attribute ratings of the superordinate category and each sub-group is calculated<sup>11</sup>; prototypicality of a (sub)group is indicated by low dissimilarity of the subgroup profile with the profile of the superordinate category. A *self-generated prototypicality measure* (e.g., Waldzus et al., 2003; Waldzus et al., 2004, Study 1) has also been used as a measure of prototypicality: Participants are first

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<sup>11</sup> A further explanation will be given in the empirical section.

asked to write down a maximum of four attributes that characterize the ingroup in comparison to the outgroup and the outgroup in comparison to the ingroup, and then asked how much these attributes from the ingroup and from the outgroup fit the superordinate category. In other studies prototypicality is measured by using a *pictorial measure* (e.g., Waldzus & Mummendey, 2004): Based on graphical images, participants see seven pictures (corresponding to seven opinions similarly to a Likert scale) in which a small circle representing the outgroup (or the ingroup) varies in its horizontal distance to a big circle that symbolizes the superordinate category. The seven different pictures are usually presented vertically with increasing closeness/overlap towards the bottom. Participants then rate how they perceive the similarity or prototypicality of the outgroup and of the ingroup with the superordinate category by ticking the pictures best representing their opinion. Other more *direct measures* have also been used (e.g., Waldzus et al., 2003; Kessler et al., in press): Participants are directly asked to rate how typical or prototypical both the outgroup and the ingroup are of a superordinate category. Apart from these direct measures, Bianchi et al. (in press) showed recently that it is also possible to use an implicit measure of relative prototypicality by using subliminal superordinate category primes in a semantic word recognition task.

#### ***1.3.4.3. Determinants of relative ingroup prototypicality***

As we mentioned previously, ingroup projection is not an automatic process. Research has been showing that it depends on social identification, on superordinate category representation as well as on its valence (Wenzel et al., 2007). Other predictors have been also tested although it is not our purpose to discuss them deeply: Intergroup threat (Ullrich, Christ, & Schlueter, 2006), conditions of information processing (e.g., Machunsky & Meiser, 2009), and group goals (Sindic & Reicher, 2008).

Regarding social identification, the Ingroup Projection Model (Mummendey & Wenzel, 1999) postulates that identification with both the ingroup and a given superordinate category promote ingroup projection. According to Self-Categorization Theory (Turner et al., 1987) this may be due to the fact that highly identified members feel more committed to the norms of both ingroups (the one at a sub-group level and

the other at a higher-order level of inclusiveness). Wenzel et al. (2003), for example, found empirical support for this hypothesis in different intergroup contexts: Concretely, either with students (Study 1) or with Europe (Study 2) as superordinate categories. Participants who simultaneously identified strongly with the subgroup and with the superordinate category perceived higher relative ingroup prototypicality than other participants. Waldzus et al. (2003, Study 2) replicated these findings by showing that dual identifiers (German respondents) had a stronger tendency than other participants to perceive the ingroup to be more prototypical than the outgroup (Poles) for the given superordinate category (Europeans). Identifying with both categories – the ingroup and the common superordinate category – is assumed to elicit intergroup differentiation regarding the superordinate prototype and, consequently, conflict with respect to the definition of that prototype. Moreover, increased relative ingroup prototypicality is also related with more negative attitudes toward the outgroup.

Although such predictions derived from the Ingroup Projection Model are supported by empirical evidence, they are in a certain way at odds with the ones postulated by the Common Ingroup Identity Model (Gaertner, Dovidio, Anastasio, Bachman, & Rust, 1993), particularly in its second formulation, the Dual Identity Model (Gaertner & Dovidio, 2000). The Dual Identity Model predicts that being identified with both an ingroup and a superordinate category reduces intergroup bias as it involves simultaneously the recognition of similarity with the outgroup (a sense of *being the same* due to their common superordinate ingroup), which increases attraction towards outgroup members, and a process of sub-group differentiation or distinctiveness (e.g., Monteiro, Guerra, & Rebelo, 2009), which minimizes identity threat that could otherwise prevent people from re-categorizing on the superordinate level. These predictions are also in line with Hornsey and Hogg's (2000) Integrative Model of Subgroup Relations, and they have also found some empirical support. For example, in a multiethnic school context, it was showed (see Gaertner, Rust, Dovidio, Bachman, & Anastasio, 1996) that students who describe themselves simultaneously as members of the superordinate category and as a member of their ethnic group displayed less bias toward outgroup members than those who only described themselves based on their (sub)group identity. However, research has also shown, however, that the effectiveness of dual identity for the improvement of intergroup

attitudes is moderated by the nature of the intergroup context (e.g., Brewer & Gaertner, 2001). Whereas positive intergroup outcomes of dual identity were found in the high school context, in the context of stepfamilies (Banker et al., 2004) and in a corporate merger context (Gaertner et al., 1993) the outcomes were rather negative. Considering the organizational merger example in particular, the primary goal of a merger is a cooperative interdependence between two groups (the ingroup and the outgroup) that share a common inclusive category; it also implies a change in the cognitive representation of the categories or, in other words, on the salience of the levels of the involved groups as a new category is involved – the merger group that corresponds to the common organization. In two studies Giessner and Mummendey (2008) tested and found that keeping salient or being strongly identified with the pre-merger sub-group in a merger process increased intergroup bias, fostered less trust and less intergroup cooperation.

Although it is not our purpose to deeply discuss this issue, attempts are being made in order to understand such contradictory results and to reconcile the different predictions for ingroup favouritism by the two models – the Ingroup Projection Model and the Common Ingroup Identity Model by studying moderating variables (Waldzus, Popa-Roch, & Lloret, 2010).

#### ***1.3.4.4. Perceptions of relative prototypicality for lower and higher status groups***

As we have been highlighting since the beginning of this work, research has supported the general hypotheses postulated by the Ingroup Projection Model (Wenzel et al., 2007, for a review). Nonetheless, with only a few exceptions (e.g., Waldzus et al., 2004, study 3; Weber et al., 2002), research on relative ingroup prototypicality has neglected how status or power asymmetries impacts relative prototypicality. In this regard, and quoting Wenzel et al. (2007), “(...) it is minorities in particular who are likely to find social reality to be a stumbling block for claims prototypicality” (p. 364). Generally, in an intergroup comparison situation, group members become aware of the status position of the ingroup relative to the comparison outgroup. For lower status groups, the desire of perceiving the ingroup in a positive manner is restricted by the



awareness of outgroup's superiority (Ellemers et al., 1997). Within ingroup projection research being a member of a lower-status group means being different, at least from the point of view of the higher status or advantaged group: Members of lower status groups are often seen as deviants from norms taken for granted by members of higher status groups who dominate a certain society, culture or a higher order social group in general (Turner, 1985). These social asymmetries may lead to an intergroup consensus in terms of prototypicality perceptions, as both low and high status groups may agree that lower status groups are less prototypical for a common superordinate category than members of the higher status groups, and therefore inferior. Results found by Waldzus et al. (2004) support the hypothesis that prototypicality judgements of disadvantaged groups are constraint by the groups' standing social reality (e.g., intergroup differences in size, status, or power). In one study with East and West Germans (Study 3), members of both groups agreed that the group of West Germans was the more prototypical (sub)group for the superordinate category Germans. Such findings suggest that ingroup projection can be viewed as an adaptive perception that takes into account social reality asymmetries. Interestingly, in this study Waldzus and colleagues also showed that there was still a perspective divergence between both (sub)groups: Although the constraints posited by social reality lead members of the lower status group to recognize the relative superiority of the outgroup, groups disagreed about the difference in typicality between East Germans and West Germans for Germans in general. As such, ingroup projection might also elicit intergroup conflict even in situations where an intergroup consensus might exist. Overall, such findings open the door for an important discussion about the importance of considering the perspective of both higher and lower status groups for fully understanding the ingroup projection phenomenon. Furthermore, although lower status groups need to take into account social reality in their claims for relative prototypicality, disagreement about such aspects can produce a change in social discourse and may promote social change or certain social action that benefits lower status groups' identity. As Waldzus et al. (2004, pp. 397-398) highlighted, "we assume that strategic concerns about the positive identity, status and power of one's group should render claims for prototypicality an argument in a discourse, be it with ingroup members, outgroup members or external observers".

#### ***1.3.4.5. The valence of superordinate categories: Impact of positively and negatively valued categories on prototypicality judgements***

Prototypes of social categories representing ingroups are usually relatively positive (Hogg, Cooper-Shaw, & Holzworth, 1993) and although self-categories “tend to be evaluated positively and that there are motivational pressures to maintain this state of affairs” (Turner et al., 1987, p. 57) it is true that sometimes people can belong to social categories that have a negative connotation. Such negative groups can be not just membership, but also reference groups (Allport, 1954) even if they are negative, and they can also be used as a comparison frame for intergroup evaluations. In fact people do not only identify with positively valued categories but they can also under circumstances identify with social categories that are negatively evaluated (e.g., Mlicki, & Ellemers, 1996). For example, being assigned to a category like criminals has an overall negative connotation. Also, after the 9/11 terrorist attack countries with a strong Islamic influence were more negatively than positively evaluated by North Americans and Western Europeans as they were associated with terrorists. What can we expect in terms of prototypicality judgements when more inclusive categories have a negative connotation? As far as we know only a few studies addressed this issue: particularly Wenzel et al. (2003) suggested that when inclusive categories are negatively evaluated the meaning of prototypicality changes. As we highlighted previously, with regard to positively valued categories ingroup prototypicality is related to (positive) social identity, or to the establishment of the ingroup’s positive distinctiveness; this is due mainly to the fact that being prototypical has a strong normative value; in other words, similarly to the general motivational assumption in Social Identity Theory that groups strive for a positive social identity, considering the ingroup as more prototypical than the outgroup for a positively inclusive category is also a form of ingroup favouritism (Mummendey & Wenzel, 1999). With regard to negatively valued categories, being prototypical should have, in turn, negative implications for the ingroup. Considering that people tend to hold a positive self-image (Steele, 1988) and to regard ingroups in a positive manner (Brewer, 1979; Gaertner, Iuzzini, Witt, & Orina, 2006), the tendency might be to distance the ingroup from a

negative inclusive category; this can mean that members of a certain (sub)group will claim less ingroup prototypicality and more outgroup prototypicality in order to maintain the standing social situation. In a computer-based experiment, where an inclusive category (Europe) was primed either positively or negatively, Wenzel et al. (2003, study 3) found support for these hypotheses, as they showed that the evaluation of the reference standard moderated relative ingroup prototypicality perception. In this study Wenzel et al. (2003) manipulated the valence of Europe (superordinate category) by asking German participants to type into an open text-field their thoughts about either the positive or the negative aspects of Europe. In the positive condition they found the usual positive and negative relations of relative ingroup prototypicality with ingroup identification and attitudes towards the outgroup, respectively. In the negative condition, however, these relations were reversed. The less German participants identified with Germans, the more they saw them relatively prototypic, and the more they saw them as prototypical, the more positive were their attitudes towards Poles. Additionally, Bianchi et al. (2009, Study 2) showed recently that ingroup projection depends not only on the valence of the superordinate category as Wenzel et al. (2003) previously demonstrated, but also on the valence of the ingroup: Participants (German students) were firstly asked to think about Germans in general, then, the positivity of the image of such category was manipulated. Following Schwarz, et al., 1991, participants were asked, in the more positive ingroup image condition, to write down three positive aspects of Germans, and in the less positive ingroup image condition to write down twelve positive aspects of the same group (Germans). Overall, results showed that participants displayed more ingroup projection in the more positive ingroup image condition than in the less positive image condition.

In sum, ingroup projection research has shown evidence that projection varies depending on the valence of the assigned category. Overall, the role of status asymmetries on prototypicality judgments when an inclusive category has a negative connotation has been widely neglected, and this constitutes an important limitation. As we have been stressing, belonging to a group that holds less privileges and that is socially devalued or stigmatized is related with a greater internalization of other's negative perceptions towards own group; therefore, usually disadvantaged members assume negative ingroup stereotypes (e.g., Burkley & Blanton, 2008) as they usually

see their own group through the eyes of dominant group members (Allport, 1954). Therefore, and considering the existence of a hierarchical social order we might expect that in a context where the superordinate category is negatively evaluated devalued groups' members might perceive themselves to be more prototypical than the advantaged outgroup. As has been shown by Wenzel et al. (2003), highly identified members of higher status groups should display, in turn, outgroup projection, as it is consistent with own group interests. In the current dissertation these hypotheses were empirically tested by analysing prototypicality judgements of both advantaged and disadvantaged groups under the conditions of positively and negatively evaluated (common) superordinate categories.

#### ***1.3.4.6. Superordinate category representation: Definition and implications for prototypicality judgments***

So far, we highlighted that superordinate categories can be positively and negatively valued, and depending on their valence groups will project more or less ingroup attributes onto a given superordinate category that they share with a self-relevant outgroup. Such perceptions of relative prototypicality may vary according to the status that groups hold within that more inclusive superordinate category. In natural settings groups usually hold different status and power positions and such differences in status constrain intergroup perceptions and judgements (Ellemers et al., 1997). Following this reasoning, we may assume that a higher status group may tend to perceive the ingroup as being more prototypical for a positive superordinate category, when compared to a lower status group, whereas lower status groups may tend to perceive their own group as being more prototypical than a higher status group for a negative superordinate category. One important question that we also addressed with the current research was whether in particular conditions groups achieve a greater consensus in terms of their relative prototypicality judgements – one of such conditions can be particular types of superordinate category representations.

Like social categories in general, superordinate categories are mentally represented, at least partly, as prototypes (Turner et al., 1987). The prototype of a category can be described as «those members of a category that most reflect the

redundancy structure of the category as a whole» or «the clearest cases of category membership defined operationally by people’s judgements of goodness of membership in the category» (Rosch, 1978, pp. 36-37). As we mentioned previously, superordinate categories tend to be ethnocentrically construed. Mummendey and Wenzel (1999) argued that relative ingroup prototypicality may be, however, dependent upon the definability or the representation features of the superordinate category. A relative undefined prototype, for example, can undermine ingroup projection as it does not provide a sufficient basis for claims of high prototypicality. Under circumstances superordinate categories can be assumed to be relatively weakly defined (Rosch, Mervis, Gray, Johnson, & Boyes-Braem, 1976), and they can vary in their degree of clarity (Hogg et al., 1993) or definition. Apart from low clarity or vagueness, Mummendey and Wenzel (1999) postulated that three other properties may contribute to an undefined prototype: Small scope, broadness, and complexity. A small or a narrow scope of the prototype corresponds to the idea that prototypicality positions are defined only on a few set of dimensions, while broadness refers to the acceptance of variance around normative positions.

In the current research, the focus was on the remaining condition that can contribute to less defined prototypes of superordinate categories: Complexity. Mummendey and Wenzel (1999) outlined that the representation of a certain superordinate can be *complex*, if the “distribution of representative members on the prototypical dimension is (...) multimodal” (p.167); that is, “distinctive positions on the dimensions of the prototype can be perceived as equally prototypical or normative” (Mummendey & Wenzel, 1999, p. 168; Waldzus, 2003). If superordinate categories are complex, they are explicitly diverse and different groups can be considered prototypical and normative for that category (Mummendey & Wenzel, 1999; Waldzus et al., 2003; Waldzus, Meireles, Dumont, & O’Sullivan, 2009). Such a group representation is considered to be multifaceted meaning that the superordinate category is represented not by just one but by multiple prototypes (Waldzus, in press, 2009). Thus, a complex or multimodal representation mitigates the existence of a simple or clearly defined prototype (e.g., Machunsky, Meiser, & Mummendey, 2009).

In order to develop valid operationalizations of complexity, it is necessary to specify more concretely under which conditions people may hold such multimodal

distributions that Mummendey & Wenzel (1999) refer to. Some theoretical clarifications come from social cognition and differential psychology. Complexity as it has been defined within the ingroup projection research (Waldzus et al., 2003; Waldzus, 2009) corresponds to a situational characteristic derived from social cognition research on the representation of social categories (Waldzus et al., 2009). On the other hand, cognitive complexity as an interindividual difference variable has been studied in personality psychology (see also Waldzus, in press). Both situational varying complex representations and cognitive complexity as a concept describing interindividual differences in people's way of thinking share some structural characteristics. Cognitive complexity has been defined as the "the degree to which the entire and/or sub-segment of cognitive semantic space is *differentiated* and integrated" (Streufert & Streufert, 1978, p. 17). Differentiation in both, cognitive complexity research and research on social cognition refers to "the number of dimensions and the number of categories within dimensions that are used by individuals in the perception of the physical and social environment" (Hooijberg, Hunt, & Dodge, 1997, p. 377; see also Goldstein & Blackman, 1978; Judd & Lusk, 1984; Scott, 1962). Besides a more dimensional complexity, the definition of Streufert and Streufert (1978) also refers to integration, which encompasses the idea that the used dimensions are taken into account as non-redundant or orthogonal dimensions, that is it point out to the degree of mutual independence (vs. redundancy) among different dimensions (Scott, 1962; Linville, 1982). According to Linville (1982), the greater the redundancy of the dimensions the smaller is the number of independent categories that will be used and consequently the less complex the representation will be. Recently, Waldzus et al. (2009; see also Meireles, 2007) adopted this conceptualization of complexity also for representations of superordinate categories in research on ingroup projection. In two studies, which will be described in more detail below, the authors manipulated the number and orthogonality of dimensions by a procedural priming procedure and found effects on ingroup projection. That means that a complex superordinate category that has an impact on ingroup projection depends on situational variables, such as mindsets. The question of whether cognitive complexity as inter-individual difference variable also has an impact on people's representation of superordinate categories and, in turn, ingroup projection is still not well understood. Interestingly, Meireles (2007) found in

an online study that individuals high in cognitive complexity showed even slightly more ingroup projection than those low in cognitive complexity. Further research is necessary on this subject, but goes beyond the purpose of this thesis.

Complexity as it was conceptualized within ingroup projection research should also be distinguished from *diversity* as it is defined in organizational science (e.g., van Knippenberg, de Dreu, & Homan, 2004): Generally, (work-group) diversity refers to two major aspects: *social category diversity*, that is, differences in visible attributes (e.g., gender, race/ethnicity, age), and *informational/functional diversity*, that refers to less detectable attributes (e.g., educational background). Diversity in that sense corresponds to characteristics of the members, which is closer to the idea of variability or heterogeneity (e.g., Judd et al., 1995; Park & Judd, 1990). It implies differences between (sub)groups rather than a particular representation of a given superordinate category (e.g., organization).

Finally, complexity as it has been defined within ingroup projection research should also be distinguished from *multicultural ideologies* (e.g., Wolsko, Park, Judd, & Wittenbrink, 2000; Wolsko, Park, & Judd, 2006; Verkuyten, 2004, 2005; Verkuyten & Brug, 2004). Whereas complex representations correspond to a cognitive representation of a given group, multicultural ideologies refer to belief systems about a given society as a whole (Waldzus, in press)<sup>12</sup>.

#### ***1.3.4.7. Impacts of superordinate category representations on ingroup prototypicality and attitudes toward outgroup members***

Ingroup projection research has been testing whether some of the properties of the superordinate category, particularly low clarity/undefined prototype, narrow scope, and complexity, impact prototypicality judgements. In one experiment Waldzus et al. (2003, Study 1) tested whether a more or less definable prototype affected ingroup projection. In this experiment the representation of the superordinate category was manipulated using false ingroup consensus information about the prototypical representation of the superordinate category (Europe): German participants were first

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<sup>12</sup> That does not exclude the possibility that endorsing a multicultural ideology may lead to more complex representations of superordinate categories or vice versa. Again, research on this issue is necessary but goes beyond the purpose of this thesis.

asked to rate the superordinate category on nine attributes. False feedback about opinions of other respondents from other similar experiments was then given to participants using graphs of profiles of alleged ratings. In the high consensus condition respondents' profiles (participant profile and profiles of other respondents) were close to one another; in contrast in the low consensus condition heterogeneous feedback was given indicating a low level of consensus among participants of other experiments as well as with participants' own responses. Thus, the latter feedback suggested an undefined definition of Europe. As expected, an unclear prototype reduced ingroup projection. For purposes of interventions that aim to reduce ingroup projection, inducing an unclear prototype of the superordinate category might however be not unproblematic. First, in the mentioned study a reduction of ingroup projection was not found for dual identifiers (identification with Germany and Europe). Second, the implementation of unclear prototypes might be technically difficult because, as Waldzus (in press) pointed out, "completely undefined categories might become useless and people may resist or have difficulties to implement unclear category definitions on their self-concept" (p. 10)<sup>13</sup>.

As we described previously, scope of the prototype is another property of the superordinate categories' prototypes and corresponds to the number of dimensions used for its definition (Mummendey & Wenzel, 1999). A narrow-scope (vs. broad-scope) prototype corresponds to a prototype that is only defined on very few dimensions. Although it can be compared to an unclear prototype, as prototypical positions remain undefined on many dimensions, it always implies a certain minimal degree of definition (Waldzus, in press). Recently Waldzus et al. (2009) tested how narrow-scope prototypes impact ingroup projection. But, because they tested narrow-scope as well as complexity we will describe their experiments further below in more detail.

Complex representations of superordinate categories have been tested in several experiments. In an internet-based experiment Waldzus et al. (2003, Study 2) tested whether such property impacts ingroup projection. A complex representation (vs. simple representation) of the superordinate category was manipulated by asking

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<sup>13</sup> Pages of the final manuscript.



participants to define the diversity of Europe (vs. the unity of Europe). Participants' task was to type in, then, their ideas into an open text-field. As expected a complex representation of the superordinate category, which is assumed to allow multiple prototypical representations, decreased ingroup projection. In another internet-based experiment conducted by Waldzus et al. (2005) a similar task was used to manipulate complexity. German participants were allegedly participating in a European survey for examining people's opinions about Europeans (superordinate category), Germans (ingroup) and other Europeans (Italians and British - outgroups). In the complex condition (vs. non-complex condition) participants were asked to imagine that they need to explain to someone the diversity (vs. unity) of Europe. Similarly to the previous experiment, participants could then type their ideas into an open text-field. As expected, results provided empirical support for the hypothesis that complexity decreases ingroup projection and, in turn, leads to more positive attitudes towards the outgroup.

Following definitions of cognitive complexity from personality and social psychology (e.g., Scott, Osgood, & Peterson, 1979; Bieri, 1971; Judd & Lusk, 1984), recently, Waldzus et al. (2009) tested the hypothesis that both complexity and small scope can reduce ingroup projection. They assumed that both scope and complexity of a representation of a given superordinate category depend upon the number and relatedness or orthogonality of the dimensions used in such representation. Representations with only few dimensions (narrow representations either with orthogonal or correlated dimensions) and more complex representations (representations with many independent, i.e., orthogonal dimensions), were expected to reduce ingroup projection. Representations that have correlated dimensions should lead, in contrast, to a well-defined prototype of the superordinate category and consequently to greater ingroup projection. In one study, conducted in South Africa, psychology students (of Fort Hare University) were asked to make prototypicality judgments about the ingroup (Psychology Students) and the outgroup (Law Students) within the superordinate category of Fort Hare Students. Before, the number of dimensions (few vs. many) as well as the relatedness of the dimensions (orthogonal vs. correlated) used by participants for category representation were manipulated by a mindset priming in a task referring to a context unrelated to the target groups. The

intergroup context was introduced immediately after as a supposedly unrelated study. Overall, results supported the hypothesis that using many correlated dimensions lead to more ingroup projection than using many independent (i.e., complex representation of the superordinate category) or just a few dimensions (i.e., small scope representation).

***1.3.4.8. Combining effects of complexity and valence of the superordinate category on prototypicality judgements for lower and higher status groups<sup>14</sup>***

Properties of the superordinate categories have been mainly tested without considering the moderating role of status. As we mentioned previously, a preliminary test of the moderation of complexity effects by group status has been recently advanced by Waldzus et al. (2009, Study 2). In this experiment status was quasi-experimentally varied by collecting data from a higher (Business Management students from a Portuguese polytechnic school) and a lower status group (Accountancy and Administration of the same school). The design used in this experiment was the same used in Study 1, described in the previous section, but crossed by group status (low vs. high); the procedural priming was also the same as the one used in that particular Study, but adapted to the different intergroup context. It was hypothesised and found that relative ingroup prototypicality depends on the number and orthogonality of dimensions but only for members of the higher status group, as relative ingroup prototypicality for the lower status group should be already low due to reality constraints (Ellemers et al., 1997). For the latter group, the mindset priming had no effect on prototypicality judgments. However, despite its relevance, this research does not allow for conclusions about effects of complexity for lower status groups, because members of this minority group did perceive equal rather than lower status of the ingroup. Thus more systematic research is needed.

For a more elaborated understanding of the role of complex representations for lower status groups one has to take into account several particularities that apply only to lower status groups. First, one might reason that members of lower status groups desire to be considered as prototypical as higher status, because low prototypicality contributes to their ongoing disadvantaged position; complexity can give them the

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<sup>14</sup> Parts of the following text belong to papers submitted for publication.

possibility of claiming more (ingroup) prototypicality and consequently of achieving equal prototypicality with members of higher status groups that belong to the same inclusive category (e.g., Cheryan & Monin, 2005). Similarly to what has been found with multiculturalism ideologies (Verkuyten, 2004), a complex representation of a self-relevant superordinate category may challenge the legitimacy of a single well-defined prototype based on attributes of the dominant group, and help lower status groups to value group differentiations positively.

Second, and as we have been highlighting throughout this thesis, lower status groups cannot ignore social reality constraints (Ellemers et al., 1997; Spears et al., 2001). Such reality constraints may have their basis in shared beliefs within the shared inclusive category, common ground or a discourse dominated by the higher status group. Therefore, they often share to a far degree the assumption that they are less prototypical than the higher status groups (e.g., Waldzus et al., 2004, Study 3). As a more complex representation undermines the ethnocentric perception of the common inclusive category by higher status groups, it can release such established “reality constraints” for lower status groups and allow them to claim greater prototypicality. Consequently, such a complex representation of a common superordinate category, made up of different prototypes, may serve a specific function for lower status groups’ members in the standing asymmetric intergroup context: A diverse representation of the inclusive category might be seen as a strategy of social promotion, and an opportunity for social change (Spears et al., 2001).

These assumptions can be suggested for superordinate categories with a positive value. Another important question – particularly relevant for the purpose of our work – is whether the impact of a complex representation does not only depend on relative status, but also on the valence of the superordinate category. That is, what can be expected with regard to ingroup prototypicality perceptions for superordinate categories with a clear negative connotation? Generally, one might argue that a complex representation can help (sub)groups to decrease their perspective divergence in terms of prototypicality perceptions: For higher status groups it can be expected that a more complex representation leads them to increase their relative ingroup prototypicality judgements compared to a situation where the representation of that inclusive category was made less complex; this tendency can imply the search of

exemplars of the negative superordinate category within their own group (“they are more prototypical but maybe we are as much prototypical as they are”). Similar to positive superordinate categories, in lower status groups, complexity within negative superordinate categories can offer a way to achieve a more positive social identity, which, in this particular context, could mean claiming less relative ingroup prototypicality. Complexity can offer such lower status groups the possibility of decreasing the power of social reality inequalities and the consequent negative stereotypes that are usually strongly linked with devalued groups. Again, this expected decrease on prototypicality judgements can mean the search for parity perceptions (“we are prototypical but not more prototypical than higher status groups”).

#### **1.4. Theoretical contributions to the understanding of intergroup tolerance**

Ingroup projection research provided empirical evidence supporting the hypothesis that an undefined or complex prototype of a superordinate category reduces ingroup projection, and consequently fosters greater intergroup tolerance. But several other theoretical approaches have been developed in order to improve intergroup tolerance. We will briefly describe those main approaches.

The contact hypothesis (Allport, 1954) was one of the first important contributions in this field; developed in the context of interracial relations in the United States, it postulated that interpersonal contact reduces hostility and discrimination. Allport suggested, however, that certain conditions need to be met. The contact situation should promote: 1) The achievement of equal status between groups in the context of contact, 2) common goals, 3) cooperative and personalized interaction, and 4) social and institutional support (Brewer & Gaertner, 2001; Pettigrew & Tropp, 2000). Also Sherif (1967) emphasised and tested in his classical Robbers cave experiment the role of two of those conditions for the reduction of conflict and for the promotion of cross-group friendship: Common goals and interdependence (i.e., cooperative interaction).

Overall, during the last 50 years an important body of research has provided evidence for the hypothesis that positive contact is related to more positive attitudes towards outgroup members (Pettigrew & Tropp, 2006). Nonetheless, generalisation

remains an unsolved problem of this approach as outgroup members that are perceived in a more positive regard are also seen as exceptions or non typical members of their groups of belonging (Brewer & Gaertner, 2001). Vala, Brito and Lopes (1999) also showed that contact is more effective when an affective component is involved. Other findings suggest that the effects of intergroup contact are stronger for majorities than for minorities (Pettigrew & Tropp, 2006); as such, more research is needed in order to understand how intergroup contact impacts minority groups (see also Vonofakou et al., 2008).

The consequences of enduring contact between a host society or a dominant group and a given ethnic minority group have been called *acculturation*. At an individual level acculturation can be defined as "*behavioural and psychological changes in an individual that occur as a result of contact between people belonging to different culture groups*" (Berry et al, 1989, p. 5). Berry's acculturation model (1997) postulated the existence of four modes of acculturation – integration, assimilation, separation and marginalization, which correspond to different attitudes towards acculturation and consequently to different adaptation strategies for intergroup relations. The first, *integration*, corresponds to a preference of maintaining one's group culture at the same time as adopting the values of the host community. *Assimilation*, in turn, is characterized by a preference for the adoption of the culture of the host community without the wish to maintain their culture of origin. In contrast, *separation* corresponds to the preference for the maintenance of the original culture while avoiding the culture of the host community. Finally, *marginalization* refers to a lack of involvement with both cultures, the sub-group and the main culture (Berry, 1997). Research has been examining how such strategies impact intergroup relations. Overall, integration has been related with more positive intergroup attitudes (e.g. Zagefka & Brown, 2002).

Other models that combine the contact hypothesis with self-categorization and social identity were developed. The overall question underlying these approaches, is how intergroup contact can be structured in order to change cognitive representations that are involved in negative evaluations of the outgroup. Usually, such models address the role that categorization has in the evaluation of social stimuli. For instance, the Decategorization Model (Brewer & Miller, 1984) corresponds to a personalization

perspective of the contact situation which encourages the creation of conditions where outgroup members are perceived as individual persons rather than members of groups. However, people do tend to categorize and the process of decategorizing turns to be unstable and difficult to maintain (Gaertner & Dovidio, 2000). Based on Social Identity Theory (Tajfel & Turner, 1979) as well as on Self-Categorization Theory (Turner et al., 1987), particularly on the assumption that social categorization is a basic process of intergroup bias, Gaertner and Dovidio (2000) developed the Common Ingroup Identity Model. In its first step, the model assumes that in order to decrease intergroup bias, groups can be recategorized into a single superordinate category. Such process implies altering perceptions of intergroup boundaries in a sense that ingroup and outgroup boundaries are redefined and individuals are induced to perceive themselves and former outgroup members in a single category (common ingroup). This model has received important empirical support in different contexts and cultures (e.g., Gaertner, Bachman, Dovidio, & Banker, 2001; Houlette et al., 2004; Monteiro, Guerra, & Rebelo, 2009). At the same time it raises several questions: A sense of a superordinate category is difficult to be maintained over time, and in some conditions rather than reducing bias it can exacerbate it (see Dovidio et al., 2009).

The recategorization approach can be compared with the endorsement of a colour-blind or an assimilationist ideology as it emphasizes the reduction or elimination of sub-group memberships and the existence of a one-group representation (i.e., the dominant group). Wolsko et al. (2000, Study 1), for example, examined the impact of colour-blindness (vs. multiculturalism) on intergroup judgements by giving participants statements advocating either one or the other type of ideology. They then measured warmth and ethnocentrism. Overall they found that participants in the colour-blind ideology condition were more pro-white biased when compared to participants of the multiculturalism ideology. Also Wolsko et al. (2006, Study 1) showed that white participants endorsing assimilation reported more positive sentiments toward whites and their European heritage than towards ethnic groups. On the contrary, ethnic minorities endorsing assimilation expressed less evaluative preference for their ethnic group when compared to outgroups. Using implicit and unobtrusive reaction time measures for assessing racial attitudes, Richeson and Nussbaum (2004) found that colour-blind ideologies are related with greater racial bias

in both explicit and implicit measures. In sum, research has been showing that either recategorization, at an individual level, or the endorsement of colour-blindness ideologies posit several limitations to prejudice reduction. On the contrary, a multiculturalism ideology, which values subgroup identities and differences and the recognition of ethnic diversity, has been related with less interracial bias (Wolsko et al., 2000; Richeson & Nussbaum, 2004).

Within their Mutual Differentiation Model, Hewstone and Brown (1986; Brown & Hewstone, 2005) also stressed the maintenance of the original ingroup-outgroup boundaries, and, thus, the groups' mutual differentiation, but in a context of intergroup cooperation. In such a context differences can be recognized and valued. Empirical research supports this approach. Deschamps and Doise (1978), for example, showed that when groups worked separately maintaining different (vs. equal) roles more positive attitudes toward outgroup members were displayed.

In a more developed version of the Common Identity Model – the Dual Identity Model – Gaertner and Dovidio (2000) combine the Mutual Differentiation Model with the proposal of a common ingroup identity and postulated that groups do not need to forsake their original group identity. This Dual Identity Model assumes that being identified with both an ingroup and a superordinate category reduces intergroup bias as it involves simultaneously the recognition of similarity with the outgroup (a sense of *being the same* due to shared membership in the common superordinate category), which increases attraction towards outgroup members, and a process of sub-group differentiation or distinctiveness (e.g., Gaertner & Dovidio, 2005; Monteiro et al., 2009), which also minimizes identity threat<sup>15</sup>. Such predictions are also in line with Hornsey and Hogg's (2000) Integrative Model of Subgroup Relations. Some empirical evidence supports the dual identity approach. For example, in a natural multiethnic school context (see Gaertner et al., 1996) showed that students who describe themselves simultaneously as members of the superordinate category and of their ethnic subgroup displayed less bias toward outgroup members than those who only described themselves based on their subgroup identity. According to Brewer (2000),

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<sup>15</sup> Overall, both the Mutual Differentiation Model as well as the Common Ingroup Identity Model highlight the importance for subgroups to keep their identities, but hold different arguments: the former stresses that keeping their identities helps subgroup members to avoid threat deriving from a loss of distinctiveness, whereas the latter stresses that such retention of subgroup identities promotes generalization to other subgroup members outside a given contact situation (Park & Judd, 2005).

dual identity works well in “many group contexts (...), teams (...) and many organizational structures (...) characterized by differentiation into functional departments (...) that are united in a common organizational umbrella” (p. 167). Research has also been showing, however, that the effectiveness of dual identity on intergroup attitudes is moderated by the nature of the intergroup context (e.g., Brewer & Gaertner, 2001): Concretely, whereas positive intergroup outcomes were found in high-school contexts, in the context of stepfamilies (Banker et al., 2004) and in corporate merger contexts (Gaertner et al., 1993) the outcomes are rather negative. Considering the organizational merger example in particular, the primary goal of a merger is a cooperative interdependence between two groups. It also implies a change in the cognitive representation of the categories or, in other words, changing the salience of the levels of the involved groups (Giessner & Mummendey, 2008). At least three different categories are involved, the ingroup and the outgroup, which are the pre-merger sub-groups, and the merger group that corresponds to a common organization (i.e., one-group representation). In two studies Giessner and Mummendey (2008) found that keeping salient or being strongly identified with the pre-merger sub-group in a merger process increased intergroup bias, fostered less trust and less intergroup cooperation. Thus, dual identity can also be related to greater bias and conflict.

Considering the complexity of human societies, individuals need to be seen as members of multiple social categories (Brewer & Gaertner, 2001). In this regard, crossed categorization corresponds to the possibility of belonging to different social categories across different domains of the social life (Crisp & Hewstone, 2007). Cross-cutting social categories appear as one way of undermining the cognitive processes implied in intergroup bias for many reasons: It can reduce or minimize the accentuation of intergroup differences (Deschamps & Doise, 1978). Social categorization becomes more complex: It opens the possibility of perceiving the outgroup as consisting of different subgroups where individuals can be classified according to multiple dimensions (Hewstone, Rubin, & Willis, 2002). In order to understand the structure of such multiple social identities at an individual level, Brewer and Pierce (2005) introduced the concept of *social identity complexity*. It corresponds to “the way in which individuals subjectively represent the relationship



among their multiple ingroup memberships” (p. 428). Low social identity complexity members will perceive their ingroups as highly overlapping, whereas high social identity complexity members differentiate their multiple ingroup memberships. Several studies tested and found that social identity complexity is related with intergroup tolerance (Brewer, 2000, 2007; Pierce & Brewer, 2005; Roccas & Brewer, 2002).

Overall, different approaches have been attempting to explain how intergroup tolerance can be achieved. They focus either on individual differences, ideological beliefs, or socio-structural variables. Some of these approaches have in common the fact that they follow Self-Categorization Theory (Turner et al., 1987) assumptions, but differ in terms of which factors they emphasize. Most of them highlight the importance of categories’ boundaries and their relation with ingroup bias. The focus on representations (complex vs. simple) of the superordinate category can be seen as a complementary approach as it emphasizes cognitive aspects related with the prototype of that category, how it can be mentally represented, and how this process impacts the projection of characteristics of the groups involved onto that category.

However research usually focused on the understanding of those processes without taking into account the role of variables such as group status. As Dovidio et al. (2009) stated, intergroup relations are relational. Distinguishing how these processes are understood by majorities and minorities is crucial for understanding when intergroup tolerance might be achieved. Following this reasoning we propose that it is of great relevance to understand how the representation of a superordinate category impacts groups’ prototypicality perceptions and therefore intergroup judgements. In particular, complex representations of the superordinate category seem to be beneficial for intergroup consensus within a broader superordinate category, which can be seen as a challenging aspect in the promotion of diversity in modern societies.



## **Chapter 2**

### **Ingroup projection in asymmetric status relations for positive superordinate categories**

#### **2.1. Overview and hypotheses**

Intergroup relations usually occur between groups differing in power and social status (e.g., Sachdev & Bourhis, 1987). Such asymmetries raise intriguing questions, particularly concerning how disadvantaged groups position themselves and cope with their relative social position within a superordinate category shared with another group with a higher status position. From ingroup projection research some preliminary findings suggested the existence of a partial consensus between a higher and a lower status group about higher status groups' greater prototypicality of a shared superordinate category (Waldzus et al., 2004). Such tendency may reflect how social reality and particularly how negative stereotypes affect intergroup perceptions (Ellemers et al., 1997; Major & O'Brien, 2005). Members of lower status groups are aware that they are usually perceived in a less positive regard or even stigmatized by members belonging to a higher status group. As such, they are usually perceived to be relatively inferior and therefore less prototypical than members of the higher status group (e.g., Weber et al., 2002). Considering that being prototypical is related with a more positive image and social value (e.g., Kessler & Mummendey, 2009), such constraints may limit possibilities for social change or for engaging in social creativity strategies in order to achieve a (more) positive social identity (e.g., Jackson et al., 1996; Mummendey, Klink, et al., 1999; Terry, Carey, & Callan, 2001). Thus, one important question that can be raised consists in how lower status groups deal with these social reality constraints or, with other words, with their lack of prototypicality. Such issue has been however particularly neglected.

The current research attempts to go beyond previous studies as it aims at identifying socio-cognitive conditions that may enable members of lower status groups to claim a greater ingroup prototypicality in order to achieve a greater equality with a self-relevant higher status group.

To answer the question which factors can increase the prototypicality of a lower status group, we focus on cognitive aspects of ingroup projection. As we described in Chapter 2, groups or social categories can be mentally represented in different ways. More concretely, a complex or multimodal representation (Mummendey & Wenzel, 1999) implies that different positions on relevant dimensions can be perceived as prototypical and normative and, therefore, there is no single prototype for the category. As it was shown by Waldzus et al. (2004), lower status groups only partially agree with higher status group greater prototypicality and there exists a perspective divergence between them in the sense that the difference between prototypicality of the higher and the lower status group is perceived to be bigger by higher status groups than by lower status groups. In this regard, one might argue that in situations where a complex representation is primed, one might expect that such representation can release established “reality constraints” for lower status groups and allow them to claim greater prototypicality, than in situations where such representation is simple. Research has already shown that such complex representations undermine the ethnocentric perception of a common superordinate category by higher status groups (e.g., Waldzus et al., 2003) but with only a few exceptions (Waldzus et al., 2009) no research has been devoted to test empirically such issue for lower status groups.

Overall we hypothesized that the effect of complex representations of a self-relevant superordinate category on relative ingroup prototypicality is moderated by status. More specifically, for higher status groups a more complex representation is expected to decrease relative ingroup prototypicality. In turn, for lower status groups a more complex superordinate category is expected to increase relative ingroup prototypicality.

The hypotheses were tested in three experiments. Study 1 examined real life groups: White Portuguese as the higher status group and two groups of immigrants living in Portugal (Cape Verdeans and Brazilians) as lower status groups. Studies 2 and 3 examined artificial groups with anonymous group membership in order to avoid confounding status differences with differences in group history, belief systems and ideologies. In Study 1, status was quasi-experimentally varied and complexity was

measured, whereas in Studies 2 and 3 status and complexity were manipulated experimentally.<sup>16</sup>

## **2.2. Study 1**

As we mention previously, in this experiment we aimed at studying the role of complex representations of a self-relevant superordinate category in perceptions of relative ingroup prototypicality for higher and lower status groups. We tested the hypothesis that higher complexity of a common superordinate category decreases relative ingroup prototypicality for the higher status group but increases it for the lower status group. This hypothesis was tested for natural groups in a real life social context.

### **2.2.1. Method**

#### ***Design***

Relative ingroup status was varied quasi-experimentally (lower status immigrant group vs. higher status White-Portuguese group) and the complexity of the representation of the inclusive category was measured.

#### ***Participants and Procedure***

The total sample was composed by 192 participants from different groups: Cape Verdeans ( $N = 58$ ), Brazilians ( $N = 79$ ) and White-Portuguese ( $N = 55$ ). The mean age was 32 ( $SD = 9.9$ ); 111 were female and 77 male (4 participants did not indicate their sex).

Participants were recruited in different neighbourhoods with a high concentration of immigrant population within and around Lisbon. The researcher

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<sup>16</sup> All the measures from the three studies of Chapter 2 can be found in Appendix A (one example of each questionnaire per Study). They are part of a larger paper-pen questionnaire belonging to the research project “Inclusão e prototypicalidade: Os determinantes dos comportamentos intergrupais das minorias”, financed by the Fundação para a Ciência e Tecnologia (POCI/PSI/61915/2004 and PPCDT/PSI/61915/2004).

invited participants to individually fill in a questionnaire about social groups that live in Portugal. In this study the shared inclusive category was the “group of people living in Portugal”. The inclusive category was chosen based on results of a set of interviews that we conducted previously with experts of different minority groups living in Portugal<sup>17</sup>.

Participants were asked to give their opinion about different social groups. In every case, minority groups were asked to compare themselves with members of the higher status group (White-Portuguese) while White-Portuguese participants were asked to compare themselves with one of the lower status groups, that is, either with Cape Verdeans ( $N = 25$ ) or with Brazilians ( $N = 30$ ). At the end participants were rewarded with a voucher worth 5 Euro.

### ***Measures***

*Representation of the superordinate category.* Participants were asked to rate on five-item Likert scales how complex they perceive the inclusive category to be (e.g., “One of the characteristics of Portugal is its diversity”). Responses were provided on a seven-point scale ranging from 1 (*Completely disagree*) to 7 (*Completely agree*). Two items were reversed-coded (e.g., “When thinking of people living in Portugal, one type of person comes easily to my mind”). A scale score was created by averaging the responses on all five items ( $\alpha = .60$ ). A higher score indicated a complex representation of the superordinate category.

*Relative ingroup status and ingroup power perceptions.* Four pictorial measures were developed to measure intergroup status and power perceptions. Each pictorial measure consisted of a graphical image: A vertical arrow pointing to the top, with seven horizontal lines. For the measures of status perceptions, the bottom line represented the lowest and the upper line the highest status position either of the ingroup (one pictorial measure) or the outgroup (another pictorial measure). For measuring power, two equivalent pictorial measures were used but with power instead

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<sup>17</sup>The purpose of those interviews was to obtain contextualized and ecologically valid operationalizations of our main variables such as representation of the superordinate category, relative prototypicality, intergroup attitudes, identification measures, and ingroup promoting actions.

of status positions symbolized by the different lines. Participants were asked to indicate on each of the vertical seven-point scales for each group their perceptions of status and power. A score of relative ingroup status (power) was created as a difference score of ingroup status (power) and outgroup status (power). Positive values correspond to the perception of higher relative ingroup status and higher relative ingroup power.

*Relative ingroup prototypicality.* Three different measures were used. 1) *Pictorial measure.* This measure was based on graphical images and it was originally used by Waldzus and Mummendey (2004). In a first step, participants were shown seven pictures in which a small circle, representing the outgroup, varies in its distance to a big circle, symbolizing the superordinate category. Pictures were ordered vertically on the screen with increasing closeness/overlap towards the lower end of the screen. Participants rated how they perceived the similarity of the outgroup with the superordinate category by ticking the picture best representing their opinion. Pictures were coded 1 (*Low prototypicality*) to 7 (*High prototypicality*) according to the closeness/overlap of the circles. In a second step, typicality of the ingroup was measured in the same way. A relative ingroup score was calculated as the difference between ingroup prototypicality and outgroup prototypicality. 2) An *explicit ingroup prototypicality measure* composed by three items (e.g., “When I think of the ‘true’ people that live in Portugal I think of the...”); the items had to be answered on seven-point scales, with 1 indicating *Outgroup as the most prototypical* and 7 *Ingroup as the most prototypic*. Responses were averaged across the three items ( $\alpha = .78$ ). 3) A *profile dissimilarity measure*. This indirect measure has been adapted from the profile dissimilarity across attribute ratings used by Wenzel et al. (2003). The attributes correspond to self-generated attributes from another empirical study that we conducted before this one with the same groups. In that study, participants had named a maximum of 4 items that characterize either ingroup or outgroup members. The 8 attributes most frequently mentioned (4 typical for the ingroup and 4 typical for the outgroup) were used for developing the profile dissimilarity measure of the current study. The attributes used in this measure were different depending on whether participants were describing Brazilian (*happy, closed-minded, hard-working, serious, cold, extroverted, unpleasant, funny*) or Cape-Verdean (*happy, quarrelsome,*

*aggressive, cultural, irresponsible, hard-working, intelligent, racist*) immigrants in comparison with White-Portuguese. The content of the attributes was chosen in order to cover ecologically relevant comparison dimensions. Note, however, that what is important for the measure itself is not the content of the attributes but rather the extent to which these attributes apply to the different social categories. Participants were asked to indicate on a seven-point scale (1 = *Doesn't apply at all*; to 7 = *Applies totally*) the extent to which each attribute applied to the ingroup, then to the outgroup and, lastly, to the inclusive category. Using an Euclidian metric, that is the square root of the mean of squared differences between the attribute ratings of each subgroup and the superordinate category, profile dissimilarity scores were calculated: One representing the dissimilarity between the ingroup profile and the superordinate category profile and the other representing the dissimilarity between the outgroup profile and the superordinate category profile. A relative ingroup prototypicality score was calculated by subtracting the profile dissimilarity of the ingroup from the one of the outgroup.

At the end a Factorial Analysis with the three different measures was performed. Using a *maximum likelihood extraction* and allowing for *oblimin rotation* (Gorsuch, 1983) only 1 factor was retained with an eigenvalue of 1.36 explaining 21.8% of the variance. The factor score was used as indicator of relative ingroup prototypicality with higher values indicating higher ingroup and lower outgroup prototypicality.

### **2.2.2. Results**

As we did not expect differences between the two minority groups, we created a new variable labelled 'relative group status' with two categories representing membership in either the group of white-Portuguese (1) or in one of the immigrant groups (0). However, in order to control for eventual differences between the two intergroup contexts, another categorical variable labelled 'intergroup context' was created and coded 0 for participants who were Brazilian immigrants or white-Portuguese comparing themselves with Brazilians and coded 1 for participants who



were Cape-Verdean immigrants or white-Portuguese comparing themselves with Cape Verdeans.

### ***Check of status differences***

In order to check the expected status and power asymmetries between both groups a 2 (relative group status: White-Portuguese vs. immigrant group) x 2 (intergroup context: Cape Verdeans vs. Brazilians) multivariate GLM with the two indexes of perceived relative ingroup status and power as dependent measures was performed. Results showed the expected significant main effect of relative group status on perceived relative status,  $F(1, 180) = 115.60, p < .001, \eta_p^2 = .39$ , and on perceived power,  $F(1, 180) = 163.80, p < .001, \eta_p^2 = .48$ . As expected immigrant participants perceived the ingroup as having a lower relative status position ( $M = -1.0, SD = 1.9$ ) and as having relatively less power ( $M = -1.8, SD = 1.9$ ) than participants of the White-Portuguese group did ( $M = 1.9, SD = 1.6$ , and  $M = 2.3, SD = 2.1$ , respectively). We also found a main effect of intergroup context on relative status,  $F(1, 180) = 6.50, p = .012, \eta_p^2 = .03$ , but not for power,  $F(1, 180) = 0.15, ns$ , and a marginal interaction effect between both factors on relative status,  $F(1, 180) = 3.70, p = .06, \eta_p^2 = .02$ . This effect means that Brazilians perceived the ingroup as having a better status position ( $M = -0.47, SD = 2.1$ ) than Cape Verdeans did ( $M = -1.7, SD = 1.4$ ). Despite the difference between the two immigrant groups, however, they both perceived the ingroup as having a lower status than the higher status group (White-Portuguese).

### ***Testing the moderation hypothesis***

In order to test our hypothesis, hierarchical multiple regressions were performed. Following Aiken and West (1991) we included in the first step the following predictors: the measure of complexity of the inclusive category (centered), relative group status (dummy coded), intergroup context (dummy coded). In the second step we entered the two-way interactions (product scores) and in the third step the product of all three predictors. The prototypicality factor score was introduced as the criterion variable. Results showed that model 1, which included the three

predictors, accounted for 34.2% of the variance of the RIP measure,  $F(3, 178) = 31.72$ ,  $p < .001$ . More importantly, model 2, adjusted  $R^2 = 0.41$ ,  $F(6, 175) = 20.17$ ,  $p < .001$ , that included the two-way interactions of the predictors increased significantly the variance explanation,  $\Delta R^2 = .06$ ,  $F_{change}(3, 175) = 5.97$ ,  $p = .001$ . Both ingroup status ( $\beta = .56$ ,  $p < .001$ ) and perceived complexity ( $\beta = .18$ ,  $p = .022$ ) were significant predictors. More importantly, in line with our hypothesis, the interaction between the measured complexity and relative group status was highly significant,  $\beta = -.27$ ,  $p < .001$ . As expected, the final model (model 3) did not account for a significant increase in the variance,  $F_{change}(1, 180) = 1.90$ , *ns.*,  $\Delta R^2 < .01$ .

In order to interpret the interaction between the measured complexity and relative group status we performed separate linear regressions for the higher and the lower status groups with measured complexity as the only predictor of RIP. The results were in line with our hypothesis: For higher status group's members a more complex representation of the common inclusive category was negatively related with their relative ingroup prototypicality,  $\beta = -.31$ ,  $p = .022$ , whereas for lower status groups' members a complex representation was positively related with it,  $\beta = .34$ ,  $p < .001$ . The latter applied to both, Brazilian ( $\beta = .27$ ,  $p = .025$ ) and Cape-Verdean participants ( $\beta = .47$ ,  $p < .001$ ).

### **2.2.3. Discussion**

The results confirm previous findings that have shown a positive link between relative status and relative ingroup prototypicality (Weber et al., 2002) and low prototypicality scores of minority groups (Devos & Banaji, 2005; Devos et al., 2010; Waldzus et al., 2004). More importantly, Study 1 aimed to test our hypothesis that the relation between the complexity of the representation of a superordinate category and relative ingroup prototypicality is moderated by relative ingroup status. The correlational analysis revealed the expected pattern of results; the relation between more complex perceptions of the inclusive category and relative ingroup prototypicality perceptions was positive for lower status group's members and negative for higher status group's members.

As the results were obtained in a relevant natural intergroup context with two different immigrant groups and results were not moderated by type of immigrant group, the results might be considered as having some external validity. However, this study had the serious limitation that the data had correlational character. That means that the results do not allow for causal interpretations. For instance, a third variable could be responsible for both, variation in complexity perceptions and perceptions of relative ingroup prototypicality, leading to spurious correlations.

Moreover, as one of the prototypicality measures plotted ingroup against outgroup prototypicality, we could only combine it with the other prototypicality measures by building difference scores of these measures. Though in line with the theoretical concept of relative ingroup prototypicality, such use of difference scores for statistical analysis has been criticized recently, for instance because it does not allow to distinguish between effects on ingroup and outgroup prototypicality separately (Ullrich, 2009). These limitations and, of course, the general requirement of replication made it necessary to run an experimental study.

### **2.3. Study 2**

The second study was conducted in order to test our hypothesis with artificial groups. More precisely participants were made believe to be members of an artificial ingroup and an artificial superordinate category, which also included an artificial outgroup. Relative group status and complexity of the representation of the superordinate category were manipulated and perceptions of ingroup and outgroup prototypicality were measured.

#### **2.3.1. Method**

##### ***Design***

This study was a 2 (relative ingroup status: High vs. Low) X 2 (representation of the superordinate category: Simple vs. Complex) X 2 (subgroup categorization: IE-

SI vs. IE-OUTROS)<sup>18</sup> between-subjects design with participants randomly assigned to the six conditions. Relative ingroup status and the complexity of the representation of the superordinate category were manipulated as factors. Belonging to either one or the other subgroups – that is, to the IE-SI or to the IE-OUTROS – was entered as control variable. Therefore in each of the two complexity conditions (i.e., simple vs. complex), 4 situations were possible: lower status IE-SI; higher status IE-SI; lower status IE-OUTROS; higher status IE-OUTROS.

### *Participants and Procedure*

A total of 106 university students of the ISCTE – Lisbon University Institute (IUL) participated in this experiment. Participants were mainly female (73.6%; 26.4% were male). At the end we controlled if participants understood to what sub-group they belong and if they took the experiment seriously. All participants remembered their sub-group and indicated to have taken the study seriously. However, two participants were outliers as they had extreme values (deviating more than three standard deviations from the mean) on one of the main dependent variables. Their data were removed from the main analysis. Part of the participants was recruited by distributing flyers in the university, and the other part were undergraduate students from a pool of participants that receive course credits for participating in experiments. Thus, as an incentive, participants received either a 5-euro gift card or course credits for participating, respectively. The study was announced as being a study about emotional intelligence and skills for job related success. The study was run in sessions of 2 to 10 participants in the psychology laboratory of ISCTE-IUL. Each participant was invited to sit in front of one computer, in order to participate individually; participants used the keyboard of the computer to carry out the different tasks that were presented.

At the beginning of the study participants were told to participate in an Emotional Intelligence Test in order to learn about their Emotional Intelligence Quotient (EIQ). The alleged test was simulating a real EI test, but only used similar, not real EI items. After the test participants received a false feedback stating that they have a high EIQ, and some information was given in order to reinforce their

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<sup>18</sup> Such labels will be explained further below.

identification in the group of people with a high EIQ (e.g., “Generally speaking, people with a high IQE know how to work with team spirit, they adapt easily to changes and know how to deal with frustrating issues...”). The high EIQ group was the superordinate category in this study. In order to assign participants to one of two sub-groups of this category, they were then invited for a second Emotional Intelligence Test. This second test was allegedly designed to test whether they are members of either the so called IE-SI group or the IE-OUTROS group. The names of the groups were Portuguese acronyms for “emotionally intelligent – self” and “emotionally intelligent – others”, and it was explained that members of the IE-SI group were more competent in dealing with their own emotions whereas members of the IE-OUTROS group were more competent in dealing with the emotions of other people. Again, a false feedback was given to participants, allocating them allegedly to one of the two subgroups. The allocations to the IE-SI and the IE-OUTROS groups were, in fact, made randomly. The manipulation of status was introduced after the information that was provided. After the manipulation of status participants were presented with information that served as the manipulation of the complexity of the representation of the superordinate category. All dependent measures and the items of the manipulation-check were presented afterwards. At the end participants were asked to indicate on a single item if they took the research seriously, to leave an e-mail address in order to receive the debriefing later on and received their gift or course credit certification. After the study was completed, participants were debriefed by email.

### ***Manipulations***

*Status manipulation.* In the lower status condition participants were given the following information: “Only a few emotionally intelligent people belong to the same subgroup (IE-SI, or IE-OUTROS) as you; some findings also indicate that (outgroup members) compared to (ingroup members) have better job opportunities”. In the higher status condition participants were given different information: “Most of the emotionally intelligent people belong to the same subgroup (IE-SI, or IE-OUTROS); some findings also indicate that the (ingroup members) have better job opportunities than (outgroup members)”.

*Manipulation of the representation of the superordinate category.* Similar to Waldzus et al. (2003, Study 2) in the complex [simple]condition a more complex [simple] representation was primed by asking participants to produce a brief description of the shared inclusive category. Concretely, in the complex [simple] condition participants read the following instruction: “Imagine that you have to explain to another person the diversity of the group of high EIQ people [how the high EIQ group is]. Which are the main characteristics that you think that you need to mention? Even if this diversity idea is not an important issue for you or even if you do not have a very clear idea of the diversity of this group, think for a while about which characteristics you think you should mention in order to describe the diversity of people with a High EIQ.”[“Even if you do not have a very clear idea about this issue, think for a while about which characteristics you think you should mention in order to describe how this group is”]. After the instructions, participants could write down their answers in an open-text field.

### ***Measures***

*Manipulation check of the representation of the superordinate category.* Four of the five items used in Study 1 (two reversed coded) measured the complexity of the superordinate category but were adapted to this particular intergroup context. Again, responses were provided on a seven-point scale, where 1 corresponded to *Completely disagree*, and 7 corresponded to *Completely agree*. Higher scores indicate a more complex representation of the inclusive category. However, the consistency was not satisfactory ( $\alpha < .50$ ). As such results have to be interpreted with caution.

*Status perceptions.* A single item was introduced in the study in order to check whether the manipulation of status was successful (“Compared to the... [outgroup], the [ingroup] has a...”). Participants needed to click the most fitting option on a seven-point Likert scale (1= *Lower status* to 7 = *Higher status*, with 4= *Equal status*).

*Relative ingroup prototypicality.* This variable was assessed by two different measures: 1) A *profile dissimilarity measure*, and 2) a *pictorial measure*. Both of them were already described in Study 1, and were adapted for this particular experiment. Regarding the former, before running this experiment, 30 undergraduate students were

asked to list attributes characterizing highly emotionally intelligent people. From the list of collected attributes we chose the six most frequently cited positive and the 6 most frequently cited negative attributes. This set of attributes was then used in this measure. Participants were asked to indicate on a seven-point scale (1 = *Doesn't apply at all*; to 7 = *Applies totally*) the extent to which each attribute applied to the ingroup, then to the outgroup and, lastly, to the superordinate category. As in Study 1, using an Euclidian metric profile dissimilarity scores were calculated: One representing the dissimilarity between the ingroup profile and the superordinate category profile and the other representing the dissimilarity between the outgroup profile and the superordinate category profile. Different from Study 1, in order to be able to analyze effects on ingroup and outgroup prototypicality separately we did not create difference scores of relative prototypicality. Instead, the profile dissimilarity of the ingroup and the outgroup were subtracted from seven, creating an ingroup prototypicality and outgroup prototypicality index, respectively, both with a theoretical range from 1 (*Low prototypicality*) to 7 (*High prototypicality*). 2) *Pictorial measure*. This measure was the same as the one used in Study 1. The only exception is that groups' names were changed according to the groups implied in this experiment (subgroups: IE-OUTROS, IE-SI; superordinate category: Highly emotionally intelligent people). Again, we kept ingroup and outgroup prototypicality separate for the analyses.

### **2.3.2. Results**

#### ***Manipulations check***

In order to check whether the status manipulation was successful, a 2 (representation of the superordinate category: simple vs. complex) x 2 (status: low vs. high) x 2 (subgroup categorization: IE-SI vs. IE-OUTROS) Univariate GLM with status perceptions as the dependent variable was performed. Contrary to what we expected results showed no significant main effect of status manipulation on the status manipulation check,  $F(1, 98) = 1.3, ns$ . Instead an unexpected main effect of subgroup categorization was found,  $F(1, 98) = 10.1, p < .05, \eta_p^2 = .09$ , showing that participants allocated to the IE-OUTROS subgroup perceived the ingroup as having a higher status

( $M = 4.3$ ,  $SD = 0.76$ ) than participants allocated to the IE-SI subgroup ( $M = 3.98$ ,  $SD = 0.63$ ). Results also showed a significant interaction effect between subgroup categorization and status,  $F(1, 98) = 5.5$ ,  $p < .05$ ,  $\eta_p^2 = .054$ . Bonferroni corrected pairwise comparisons indicated that for participants allocated to the IE-OUTROS group there were no significant differences between participants that were allocated to the higher status condition ( $M = 4.2$ ,  $SD = 0.72$ ) or the lower status condition ( $M = 4.2$ ,  $SD = 0.61$ ),  $t(98) = 0.93$ , *ns.* (one-tailed); among participants allocated to the subgroup IE-SI, Bonferroni corrected pairwise comparisons indicated that those belonging to the higher status condition perceived themselves to have higher status ( $M = 4.4$ ,  $SD = 0.69$ ) than those allocated to the lower status condition ( $M = 3.7$ ,  $SD = 0.52$ ),  $t(98) = 2.4$ ,  $p < .01$ ). In sum, the manipulation of status did not work properly; in fact, if we look carefully to the results we found that although our intention was to have 2 conditions, high and low status, in the status manipulation check almost 60% of participants reported that both groups have the same status.

In order to check whether the manipulation of the representation of the superordinate category was successful a 2 (representation of the superordinate category: simple vs. complex) x 2 (relative ingroup status: lower vs. higher) x 2 (subgroup categorization: IE-SI vs. IE-OUTROS) Univariate GLM with manipulation check of the representation of the superordinate category index as the dependent variable was performed. Results showed that the main effect of the manipulation check of the representation of the superordinate category, was not significant,  $F(1, 98) = 0.06$ , *ns.* That means that the manipulation was not successful at all.

Taking these limitations into account, we tested the hypothesis that complexity decreases relative ingroup prototypicality of higher status groups and increases ingroup projection for lower status groups by correlational analysis using measured complexity and status as predictors and moderator, respectively, instead of the manipulations.

### ***Correlational analyses***

As we mentioned previously, the status manipulation was not successful and a great amount of participants reported that both subgroups hold an equal status. Moreover, only three participants reported values higher than 5, all other participants



scored either with 3 (lower status), 4 (equal status) or 5 (higher status). Considering this result a new status perception variable was developed and used in further analyses; this variable had only 3 levels: the first level aggregated ratings below the scale midpoint of 4 (low ingroup status perceptions), a second level with ratings equal to 4 (equal intergroup status perceptions), and a third level with ratings above 4 (high ingroup status perceptions).

The hypothesis that for minority members a more complex representation of the superordinate category is expected to increase relative ingroup prototypicality, whereas for majority members it is expected to decrease relative ingroup prototypicality was tested by performing a mixed model GLM with the new status variable as between subjects factor, measured complexity as continuous predictor, the interaction between status and complexity as further predictor. Prototypicality (ingroup vs. outgroup) and type of measure (profile similarity vs. pictorial measure) were included as within subjects factors. Effects on relative ingroup prototypicality were indicated by interactions with the prototypicality factor (ingroup vs. outgroup) and differential effects on the two measures were indicated by interactions with the type of measure factor. Prototypicality (ingroup vs. outgroup) interacted with the status variable,  $F(2, 98) = 3.85, p = .025, \eta_p^2 = .07$ . More importantly, as predicted this interaction was qualified by a three-way interaction with complexity,  $F(2, 98) = 3.37, p = .039, \eta_p^2 = .06$ . No other effect was significant, that means that the predicted effect did not differ significantly between the two measures of prototypicality. The relation between complexity and ingroup vs. outgroup prototypicality differed as predicted between higher and lower status groups (Tables 1 and 2).

Table 1  
*Parameter estimates for main effects and interactions on ingroup prototypicality measures. Redundant parameters (set to zero) are omitted.*

Dependent variable	Predictors	<i>B</i>	<i>SE</i>	<i>t</i>	<i>p</i>
IG pictorial	Intercept	5.94	1.08	5.50	.000
	lower status	-1.79	2.75	-0.65	.517
	higher status	0.41	1.93	0.21	.832
	equal status	.	.	.	.
	complexity	-0.18	0.23	-0.78	.439
	lower status * complexity	0.39	0.62	0.63	.529
	higher status * complexity	-0.15	0.41	-0.37	.715
	equal status * complexity	.	.	.	.
	IG profile dissimilarity	Intercept	5.73	0.43	13.42
lower status		-2.05	1.09	-1.88	.063
higher status		2.45	0.76	3.20	.002
equal status		.	.	.	.
complexity		0.04	0.09	0.39	.696
lower status * complexity		0.45	0.24	1.82	.071
higher status * complexity		-0.58	0.16	-3.51	.001
equal status * complexity		.	.	.	.

Complexity decreased relative prototypicality for higher status participants but increased it for lower status participants. Moreover, although effects were consistent between measures according to the GLM analysis, the predicted three-way interaction was mainly due to differential effects of complexity on ingroup prototypicality measured by the profile similarity measure.

Table 2

*Parameter estimates for main effects and interactions on outgroup prototypicality measures. Redundant parameters (set to zero) are omitted.*

Dependent variable	Predictors	<i>B</i>	<i>SE</i>	<i>t</i>	<i>p</i>
OG pictorial	Intercept	5.91	1.05	5.61	.000
	lower status	-0.90	2.69	-0.34	.738
	higher status	-2.14	1.88	-1.14	.258
	equal status	.	.	.	.
	complexity	-0.23	0.23	-1.03	.305
	lower status * complexity	0.12	0.60	0.19	.847
	higher status * complexity	0.28	0.40	0.70	.484
	equal status * complexity	.	.	.	.
OG profile dissimilarity	Intercept	5.97	0.45	13.39	.000
	lower status	-0.28	1.14	-0.24	.809
	higher status	-1.04	0.80	-1.31	.195
	equal status	.	.	.	.
	complexity	-0.07	0.10	-0.72	.475
	lower status * complexity	0.03	0.26	0.11	.910
	higher status * complexity	0.16	0.17	0.94	.351
	equal status * complexity	.	.	.	.

### 2.3.3. Discussion

Our aim was to test the hypothesis that the effect of a complex representation of a superordinate category on relative ingroup prototypicality was moderated by status. This hypothesis was tested in a laboratory setting with artificial groups. Unfortunately, both manipulations – the representation of the superordinate category (High IEQ people) as well as status manipulation had important limitations. Regarding the status manipulation, we found several problems: The information given was about the ingroup in the condition in which the ingroup had relatively high status, but it was about the outgroup in the condition in which the ingroup had relatively low status. This

confound may have interfered with the intended status manipulation. At the same time the subgroups' names involved in this experiment may have induced different social connotations as results showed that participants allocated to the IE-OUTROS subgroup perceived the ingroup as having a higher status than did participants allocated to the IE-SI subgroup. IE-OUTROS, compared to IE-SI, were made believe to be more competent in dealing with the emotions of other people, which can have a more positive value than being more competent in dealing with own emotions (which was the description of the IE-SI subgroup).

The manipulation check of the representation of the superordinate category indicated that the manipulation of this variable did not succeed, although the manipulation was the same used in previous studies (e.g., Waldzus et al, 2003).

Given the unsuccessful manipulations, we relied in the analyses on the results of correlational data involving measured complexity and relative groups' status. These correlational analyses were however consistent with our hypothesis, as a more complex perception of the (valued) superordinate category was positively related to relative ingroup prototypicality perceptions for members of the lower status group; on the contrary, for members of the higher status group complexity was negatively related to relative ingroup prototypicality. Statistical analysis did not indicate significant differences of this effect between measures, but the findings were stronger when relative ingroup prototypicality was measured using a profile dissimilarity measure than when using a pictorial measure. This pattern of result was also found by Meireles (2007) and can be due to the fact that the pictorial measure is more explicit than the profile dissimilarity measure, which can foster socially desirable answers.

Overall, and combining these results with the findings from Study 1, we can argue that they support the assumption that complexity has a different meaning for prototypicality of higher and lower status groups, and may be seen as a strategy to enhance one's group status particularly for lower status groups. However, although replicating correlational evidence from Study 1, the unsuccessful manipulations made it impossible to overcome in Study 2 the main limitation of Study 1, namely the lack of experimental evidence for the predicted moderation. Moreover, results from this study must also be interpreted with caution due to low reliability of the complexity measure

in this study. To overcome these limitations, we run another experiment, that is, a third study testing the same hypotheses.

## **2.4. Study 3**

In this experiment the design and the hypotheses were the same as in Study 2. It was an online study and due to the limitations found in Study 2, subgroups' names, status manipulation, as well as the status manipulation check were changed.

### **2.4.1. Method**

#### ***Design***

Participants were randomly assigned to one of eight conditions of a 2 (relative ingroup status: Lower vs. Higher) X 2 (complex representation of the inclusive category: Simple vs. Complex) X 2 (subgroup categorization: Inductive vs. Deductive); all factors were between-subjects.

#### ***Participants and Procedure***

The study was conducted online. Participants were recruited on a voluntary basis; an announcement of the study including a small description of the study and the link to the respective webpage was sent to several electronic mailing lists (e.g., distribution lists for undergraduate students). The webpage received 316 visits and 135 Portuguese visitors completed the study. From this sample we excluded the data of those participants who indicated in the end that they did not take the study serious and of those participants who did not identify with either the superordinate category or the subgroup indicated by identification ratings that were not higher than the scale midpoint. This decision was based on Mummendey and Wenzel's (1999) assumption that identification with the subgroup and with the superordinate category are necessary for ingroup projection (see also Waldzus et al., 2003; Wenzel et al., 2003). The final sample consisted of 76 participants with a mean age of 30.1 years ( $SD = 9.90$ ), 64.5 % female.

The study was announced as being on emotional intelligence and skills predicting success on the job market. Overall the study was very similar to Study 2. In a first step, participants were asked to participate in an alleged test in order to learn about their Emotional Intelligence Quotient (EIQ). After answering the alleged test items, they were informed in a false feedback that they are members of the group of people with high EIQ. This group was used as the shared superordinate category in the study. After a brief and general description of this category, a second alleged emotional intelligence test was performed. The aim of this test was to introduce the subgroup categorization and to manipulate the subgroups' relative status. The two subgroups were called Inductive Emotional Intelligent group and Deductive Emotional Intelligent group, each of them characterized by high test-scores of a particular relevant sub-component of emotional intelligence. After reading some preliminary information about the two subgroups, participants learned by false feedback on the second alleged test about their membership in one of the subgroups. Immediately after, relative ingroup status and the cognitive representation of the shared inclusive category were manipulated.

The dependent measures as well as the manipulation checks were presented after the last manipulation. At the very end of the computer inquiry participants were asked if they took the study serious and left an e-mail address in order to receive the debriefing by e-mail. As an incentive participants were informed that they would all have a chance to win a 150,00-euro gift card on a lottery basis. After the study finished, all participants were debriefed via email and the gift card was handed over to a randomly selected participant.

### ***Manipulations***

*Relative ingroup status manipulation.* After receiving feedback from the second alleged emotional intelligence test about their membership in one of the subgroups (inductive/deductive subgroup), participants were informed about the relative status of their group. In the higher status condition participants read the following text: "A great majority of people belongs to the same subgroup. We have also been verifying that people belonging to the (ingroup) are socially more valued than (outgroup) members;

as a consequence the likelihood of being selected in job interviews is higher and (ingroup) members more frequently achieve leadership positions”. In the lower status condition participants were instructed that: “Only a few numbers of people belong to the same subgroup. We have also been verifying that people belonging to the (ingroup) are socially less valued than (outgroup members); as a consequence the likelihood of being selected in job interviews is lower and (ingroup) members achieve less frequently leadership positions.”

*Manipulation of the representation of the superordinate category.* The manipulation was the same used in Study 2.

### ***Measures***

*Manipulation check of relative ingroup status.* A set of 4 items was developed in order to check whether participants understood the relative status of their group; responses were provided on a seven-point scale (e.g., “In comparison to [outgroup] members, the status of [ingroup] members is...”; 1 - *Clearly lower*; to 7 - *Clearly higher*; “In terms of social value, in comparison to [outgroup] members, [ingroup] members have...”; 1 - *Clearly less social value*; to 7 - *Clearly much more social value*.) An index was computed by recoding the reversed items and averaging responses ( $\alpha = .69$ ).

*Manipulation check of the representation of the superordinate category.* The items were the same used in Study 2 (two reversed coded). Consistency was again not high, but this time sufficient for comparisons of experimental conditions ( $\alpha = .50$ ). Responses were provided on a seven-point scale ranging from 1 (*Completely disagree*) to 7 (*Completely agree*). Higher scores indicate a more complex representation of the inclusive category.

*Relative ingroup prototypicality.* Ingroup prototypicality and outgroup prototypicality were assessed by three different measures: 1) A *profile dissimilarity measure*, 2) a *pictorial measure* – already described in previous studies – and 3) a *pictorial interactive measure*. Regarding measure 3, the measure itself was very similar to the pictorial measure described before but used a more interactive technique. A big circle, symbolizing the superordinate category was presented on top of the right

extreme of a seven-point scale; every time that participants clicked one of the options of the seven-point scale, a small circle symbolizing the outgroup (ingroup) appeared. The distance to the circle of the superordinate category varied according to the point of the scale that was clicked on; that is with repeated clicks participants could move the outgroup (ingroup) circle towards or away from the inclusive circle. By doing this they could visualize the distance of the outgroup (ingroup) from the inclusive category. After visualizing several or all the options participants decided for the most adequate option of the seven-point scale.

Assuming that the three different measures have specific errors due to the different response format but share common variance of a latent prototypicality factor, two separate factor analyses were performed with the 3 measures of ingroup prototypicality and the three measures of outgroup prototypicality; using a *maximum likelihood extraction* a single factor was extracted in both factor analyses (Gorsuch, 1983). The factors had eigenvalues of 1.72 and 2.00 and explained 41.1% and 57.44% of the variance of ingroup and outgroup prototypicality, respectively. The factor scores of these common factors were used as indicators of ingroup and outgroup prototypicality with higher scores indicating higher prototypicality.

*Subgroup identification.* Three items measured subgroup identification (e.g., “Being [ingroup] member is not an important part of my identity”, reversed coded). The answers were provided on a seven-point Likert scale from 1 (*Completely disagree*) to 7 (*Completely agree*). An index with the 3 items was computed by recoding the two reversed items and averaging responses ( $\alpha = .68$ ).

*Identification with the superordinate category.* The same items that measured ingroup identification were adapted to measure identification with the superordinate category (e.g., “I feel that I belong to [inclusive category]”). Again, answers were given on a seven-point Likert scale (1 – *Completely disagree*; to 7 - *Completely agree*). An index with the 3 items was computed by recoding the reversed items and averaging responses ( $\alpha = .74$ ).



## 2.4.2. Results

### *Manipulation checks*

Although our manipulation of the representation of the superordinate category has previously been used (Waldzus et al., 2003, 2005), one might consider the possibility that it affected rather heterogeneity between subgroups rather than the complexity (i.e., a more complex dimensional structure) of the superordinate category. Therefore, before checking whether the manipulation of the representation of this inclusive category was successful, we aimed to rule out this possibility by analyzing the content of participants' answers written on the open-text field. Two researchers rated independently each answer according to two categories: 1) whether the answer contained the distinction between different sub-groups and 2) whether the answer listed attributes and psychological dimensions that characterized the superordinate category representation. Following Landis and Koch (1977)<sup>19</sup>, agreement on the two dichotomous categories (yes vs. no) was almost perfect between researchers (Cohen's kappa  $k = .85$  for subgroup distinction and  $k = .94$  for listing of attributes and/or psychological dimensions,  $p < .01$ ; Fleiss & Cohen, 1973). Overall 96% of participant's answers were rated by both researchers as describing attributes and psychological dimensions that characterized the superordinate category representation, whereas only 10% of the answers emphasized distinction between sub-groups. In 99% of the cases sub-grouping was also accompanied by the description of attributes and dimensions of the superordinate category.

In order to check whether the manipulation of the representation of the inclusive category was successful, a 2 (complex representation of the inclusive category: simple vs. complex) x 2 (relative ingroup status: low vs. high) x 2 (subgroup categorization: inductive vs. deductive) univariate GLM was performed. The manipulation-check of the complex representation of the inclusive category was entered as the dependent variable. The only significant result was the expected main effect of the manipulation of the representation of the inclusive category,

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<sup>19</sup> According to Landis and Koch (1977) values of kappa can be poor (<0%), slight (0–20%), fair (21–40%), moderate (41–60%), substantial (61–80%), and almost perfect (81–100%).

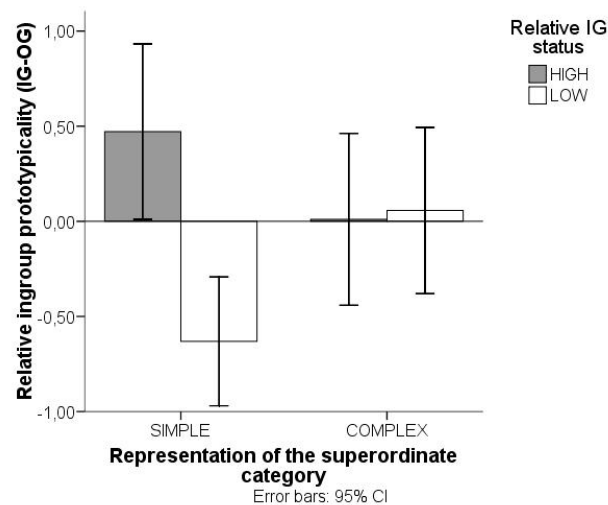
$F(1, 68) = 7.17, p = .009, \eta_p^2 = .10$ : In the complex condition participants perceived the shared inclusive category as being more complex ( $M = 4.16, SD = 0.66$ ) than in the simple condition ( $M = 3.71, SD = 0.75$ , indicating successful manipulation).

Additionally, for verifying whether the manipulation of relative ingroup status was successful a similar univariate GLM was performed but with status manipulation-check as the dependent variable. The only significant result was the expected main effect of status,  $F(1, 68) = 22.1, p < .001, \eta_p^2 = .24$ , meaning that participants allocated to the higher status condition perceived the ingroup as having a higher status ( $M = 4.44, SD = 0.66$ ) than participants allocated to the lower status condition ( $M = 3.74, SD = 0.67$ ), again indicating successful manipulation.

***The effect of the representation of the superordinate category on relative ingroup prototypicality for higher and lower status groups***

When looking at relative ingroup prototypicality, that is, the difference between ingroup and outgroup prototypicality, the pattern is consistent with our hypothesis that the relation between the complexity of the inclusive category and relative ingroup prototypicality is moderated by status (Figure 2).

*Figure 2.* Relative ingroup prototypicality (difference between ingroup and outgroup prototypicality) according participants in the different experimental conditions



In order to avoid statistical problems with difference scores, we tested our hypothesis in a mixed 2 (prototypicality: ingroup vs. outgroup) x 2 (representation of the superordinate category: simple vs. complex) x 2 (relative ingroup status: low vs. high) x 2 (subgroup categorization: inductive vs. deductive) GLM with prototypicality as within subject factor. Effects on relative ingroup prototypicality are indicated by interactions with the prototypicality factor. Prototypicality interacted with relative ingroup status,  $F(1, 68) = 5.27, p = .02, \eta_p^2 = .07$ . More importantly, we found the predicted significant interaction between relative ingroup status, the complex representation of the inclusive category and prototypicality (ingroup vs. outgroup),  $F(1.68) = 8.93, p = .004, \eta_p^2 = .12$ . No other effect was significant.

Running separate GLMs, we found that the interaction between status (high vs. low) and prototypicality (ingroup vs. outgroup) was, as predicted, only significant in the simple condition,  $F(1.33) = 14.69, p = .001, \eta_p^2 = .31$ , but not in the complex condition,  $F(1.68) < 1, ns$ . Simple mean comparisons (Bonferroni adjusted) showed that in the simple condition members of the lower status group perceived the ingroup ( $M = -0.28, SD = 0.63$ ) as being less prototypical ( $p = .013$ ) and the outgroup as being more prototypical ( $M = 0.35, SD = 0.65, p = .096$ ) than members of the higher status group did (ingroup  $M = 0.29, SD = 0.67$ , outgroup  $M = -0.18, SD = 1.10$ ). As predicted, in the complex condition these differences disappeared (lower status: ingroup  $M = 0.08, SD = 0.74$ , outgroup  $M = 0.03, SD = 1.13$ ; higher status: Ingroup  $M = -0.13, SD = 1.18$ , outgroup  $M = -0.14, SD = 1.00; ps > .50$ ). Moreover, whereas in the simple condition the ingroup was seen as being more prototypical than the outgroup by the higher status group ( $p = .022$ ) and as being less prototypical than the outgroup by the lower status group ( $p = .002$ ), no differences between ingroup and outgroup prototypicality were found in the complex condition for either group ( $ps > .50$ ). Interpreting the predicted three way interaction in a different way, separate GLMs for the two status conditions revealed a marginal interaction between the complexity manipulation and prototypicality (ingroup vs. outgroup) for the higher status group,  $F(1.36) = 3.41, p = .073, \eta_p^2 = .09$ . As predicted, this interaction was reversed and significant for the lower status group,  $F(1.32) = 6.05, p = .02, \eta_p^2 = .16$ .

Finally, analyzing the effect of the manipulations separately for ingroup and outgroup prototypicality, we found that the two way interaction between the two

manipulations came close to significance for ingroup prototypicality,  $F(1, 68) = 3.96$ ,  $p = .051$ ,  $\eta_p^2 = .06$ , and was reversed, but was weaker and not significant for outgroup prototypicality,  $F(1, 68) = 0.91$ ,  $p = .34$ ,  $\eta_p^2 = .01$ . That means, although it seems that the predicted interaction effect on relative ingroup prototypicality (as indicated by the highly significant three way interaction above) was more driven by variation in ingroup than in outgroup prototypicality, our hypotheses holds only for relative ingroup prototypicality (differences between ingroup and outgroup prototypicality), not for prototypicality of each group separately.

To sum up, results support our hypothesis that higher status groups see their ingroup as being more prototypical (compared to the outgroup) than lower status groups do, but that inducing a more complex representation of the more inclusive superordinate category eliminates differences between ingroup and outgroup prototypicality for both, lower and higher status groups.

### **2.4.3. Discussion**

Similarly to Study 2, Study 3 used artificial groups to test whether relative status moderates the effect of a complex representation of a common inclusive category on the perception of relative ingroup prototypicality. The findings support our general hypothesis and replicate the correlational results obtained in our previous studies and particularly for natural groups (Study 1). Increasing the complexity of the representation of a shared inclusive category had the opposite effect on perceptions of relative ingroup prototypicality for the lower as compared to the higher status group. We conclude from this result that if a simpler representation of the inclusive category is made salient, lower status group members conform to the social status hierarchy assuming low ingroup prototypicality, which can reflect how social reality affects groups holding inferior status positions (Ellemers et al., 1997; Major & O'Brien, 2005). In contrast, when a more complex representation of that inclusive category is activated, perception of relative ingroup prototypicality increases among lower status group members. Therefore, a complex representation changes the social context for prototypicality comparisons and lower status groups may use such complex representations as an opportunity to claim more equality in relative prototypicality.

This implies, in turn, the possibility of a more advantaged social position for the ingroup and consequently holding their ingroup in a more positive regard (Tajfel & Turner, 1979). Furthermore, a more complex representation lead to a greater consensus between the higher and lower status group members insofar as both groups shifted their views towards higher equality in terms of relative prototypicality.

## **2.5. Conclusions**

The purpose of the three studies reported in this Chapter was to test whether the relation between a complex representation of a given superordinate category and prototypicality perceptions is moderated by groups' status. While previous research had shown that such a complex representation reduces ingroup projection of higher status groups and leads to a less ethnocentric view of relative ingroup prototypicality, the three studies reported here show that a different but complementary process can be observed for lower status groups. Overall, the correlational results of two studies and the experimental effects of the last study support the general hypotheses that were tested. We found that complex representations of a common superordinate category, to which both a higher and a lower status group belong, tend to increase perceived relative ingroup prototypicality of lower status members. At the same time, results showed that, although inducing a complex representation of a given superordinate category had opposite effects for the higher and the lower status groups in terms of their relative ingroup prototypicality, they converge towards a more equal perception of prototypicality and, thus, a higher consensus between both groups. Several historical developments that led to more equal status positions, such as reduction in institutionalized racism and sexism and the emancipation of homosexuals in several societies can be understood from such a perspective (e.g., Subasic, Reynolds, & Turner, 2008). However, for such far-reaching conclusions more research is necessary that does not only measure relative prototypicality but also intergroup attitudes, emotions and behaviour.

Although more research is needed, the results that we found for lower status groups can be broadly understood from a social identity perspective (Tajfel & Turner, 1979). We assume that complex inclusive categories can have a particular function in

the identity management of lower status groups that helps to overcome what has been discussed as so called reality constraints. One might argue that making salient that groups share an inclusive category can help lower status groups' members to believe that there might be a chance for enhancing their social position or to accentuate the connection to the higher status group (e.g., Ellemers, Doosje, van Knippenberg, & Wilke, 1992).

Although the use of different groups and methods in the three studies may allow a certain generalization of our results, several limitations require additional research on the role of complexity of superordinate categories. In our study with natural groups, we did not manipulate the representation of the superordinate category, and in Study 2 the manipulation did not succeed. Thus, it is not possible to generalize causality that was found in Study 3 particularly to natural contexts. It is, therefore, not clear whether strongly interiorized negative self-stereotypes of lower status natural groups can actually be changed by subtle manipulations such as the one used in our experiments. Manipulating complexity can be a difficult task when social representations between groups are well established and difficult to change. We also did not address the question whether higher and lower status groups hold already by default different representations of superordinate categories. Several recent studies suggest such differences. For instance, adopting Berry's (1984) cultural relation model, Dovidio and colleagues (2009) report several studies that show that majority members usually prefer a one-group model (assimilation), whereas minority members hold a more pluralistic integration representation of that category (see also Leach, Brown, & Worden, 2008). One could speculate that complex representations may only have a potential to change intergroup relations if they are consensually shared by both, the higher and the lower status group.

A further limitation is that although we assumed that in the three studies the superordinate categories were positively valued, we did not include an explicit measure that might help us to argue that such superordinate categories are clearly positively valued. At the same time although it is reasonable to assume that people tend to identify more with positive groups, it is not impossible and previous research has shown it, that superordinate categories can be negative reference groups (Wenzel et al., 2003). Relations between relative prototypicality and other variables, such as

ingroup identification, attitudes towards the outgroup and legitimacy of high social status have been shown to be reversed in this case (Weber et al., 2002, Wenzel et al., 2003). Moreover, lower status groups may often be seen as more prototypical to such negative reference categories than higher status groups. It seems reasonable to assume that higher complexity of superordinate negative categories may also contribute to more consensual views. However, our data do not allow for such a generalization so far (see however Chapter 4).

Overall we consider that the current research contributes to a larger framework that has recently been developed to study the advantages that complex representations and identities can have when searching for ways to prevent intergroup discrimination and conflict, such as research on identity complexity (e.g, Brewer et al., 2005; Roccas et al., 2002) or multiple categorizations (e.g., Crisp, Walsh, & Hewstone, 2006; Hall & Crisp, 2005). The findings from this current empirical section allow for some optimism in the sense that such approaches might overcome difficulties of previous approaches: Complexity seems to carry the potential for consensus on a higher order societal level, a constructive answer to the challenge of increasing diversity in our society. This question will be further discussed after presenting the next empirical section.





## Chapter 3

### The moderating role of valence in the relation between complexity and prototypicality perceptions for higher and lower status groups

#### 3.1. Overview and hypotheses

According to the Ingroup Projection Model (Mummendey & Wenzel, 1999) the value and status of groups are derived from their relative similarity to the prototype of a superordinate category, that is, intergroup evaluations depend on the prototypicality of the ingroup and of the outgroup of that superordinate category. The better a (sub)group matches the prototype the more positively it is evaluated. According to Mummendey and Wenzel (1999), groups engage in *ingroup projection*, that means they have a biased tendency to project or generalize ingroup attributes onto the shared superordinate category (Waldzus et al., 2005). As a result groups usually hold divergent perspectives on their prototypicality, as each group perceives the ingroup as being more prototypical for the superordinate category than it is seen by the outgroup (e.g., Waldzus et al., 2004; Wenzel et al., 2003). For instance, both Italians and Germans associate more stereotypical attributes of their respective ingroup with the term Europeans than the other group does (Bianchi et al., 2009).

Research has widely supported the hypotheses of Mummendey and Wenzel (1999) and their theoretical approach, the Ingroup Projection Model (Waldzus, 2009; Wenzel et al., 2007). However, and as we highlighted elsewhere (Chapter 2) one aspect has not yet found sufficient attention within this research field: How valence of a self-relevant superordinate category impacts ethnocentric prototypicality perceptions. In fact, not all the superordinate categories to which groups belong are positively evaluated; in some situations individuals can be ascribed to categories that tend to be negatively evaluated.

As we referred earlier (Chapter 2) members of dominating groups may be able to distance themselves from such negative superordinate categories; nonetheless that distancing is more complicated for lower status groups as they need to face social reality constraints: In social contexts with an established social hierarchy of a higher status group and a lower status group the two involved groups may partly share the

assumption that the former group is the more prototypical sub-group of a usually positive superordinate category. The lower status group is seen by others, but often also by its own members, as less prototypical than the higher status group. Such consensual assumptions may be a result of a heuristic use of social or numerical status as prototypicality cues, they may be part of influential legitimizing ideologies or they may have been simply imposed by the more powerful group or by powerful other parties (e.g., Jost et al., 2004; Major & Schmader, 2001; Sidanius & Pratto, 1999). In general, they reflect so called reality constraints (e.g., Ellemers, Barreto, & Spears, 1999; Ellemers et al., 1997; Spears et al., 2001), which means that lower status groups have less possibilities than higher status groups to frame and interpret social reality according to their particular needs and interests. Irrespective of the origin of such shared views, within positively valued superordinate categories prototypicality is not granted for lower status groups in the same way as it is for higher status groups (e.g., Cheryan & Monin, 2005; Devos & Banaji, 2005; Devos, Gavin, & Quintana, 2010).

We assume that, when comparisons are made in terms of negative standards, lower status groups also face reality constraints. They also share to a certain degree the higher status members' view, but the difference is that in this view they are seen as prototypical for negatively evaluated superordinate categories. While higher status groups distance themselves from negatively evaluated inclusive categories and project rather outgroup attributes than ingroup attributes (Wenzel et al., 2003), lower status groups are targets of negative stereotyping (Fiske, 1998). They can hardly ignore that they are seen as prototypical if members of the dominating group hold strong stereotypes. For example, when America is characterised as a country with relatively high crime rate, African Americans have to deal with the fact that many see them as more prototypical of criminals than European Americans (Correll, Park, Judd, & Wittenbrink, 2002). By "default" some groups are more likely to be perceived as more prototypical of certain superordinate categories than others; for example, Eberhardt, Goff, Purdie and Davies (2004) showed that priming the concept of crime induced an attentional bias toward black faces (when compared to white faces).

Another particularity of negative comparison contexts is that the superordinate self-categories that provide the backdrop of sub-group comparisons can be, but often are not entirely inclusive ingroups. For instance, the superordinate category of

criminals or “terrorists” represents rather what most people think they are not, than of what they are. Nevertheless, whether the superordinate category is a negatively evaluated ingroup or a negatively evaluated outgroup, we hypothesise that both groups might partially agree that lower status members are more prototypical than higher status members for that negative category. The current research tests whether this is actually the case.

One condition might however reconcile such prototypicality differences: The existence of a more complex representation of the self-relevant superordinate category. A complex representation can be defined as a representation of the inclusive group with several positions on underlying comparison dimensions that are considered prototypical (Mummendey & Wenzel, 1999). Ingroup projection towards positively evaluated categories can be reduced by making the representation of these categories more complex. For instance, German participants who considered Germans to be more prototypical Europeans than Poles in the control condition expressed equal prototypicality of the two groups when they were asked before to describe the diversity of Europe (Waldzus et al., 2003; Waldzus et al., 2005).

What is not clear, however, is whether this effect of complexity can also be expected for negative superordinate categories. To test such a generalization was another aim of the following experiments. We argue that the effect of complexity can be generalized insofar as it leads to more equal attributions of prototypicality towards all involved sub-groups. However, complexity of negative superordinate categories will have the opposite effects for prototypicality perceptions of higher and lower status groups than complexity of positive superordinate categories. The reason is that normally for such negative categories a lower status group is seen as more prototypical than the higher status group. That means that the point of departure is reversed. For lower status groups, complexity can offer a way to achieve a more positive social identity by claiming *less* relative ingroup prototypicality for a negatively evaluated category than is usually ascribed to them. Complexity could give them the opportunity to conform less to the established social hierarchy and stereotypes ascribed to them, and to claim a more advantaged social position by expressing a more equal prototypicality (“we are prototypical, but not more than the higher status group”). For members of the higher status group, a complex negative superordinate category can be

related to more outgroup tolerance in the sense that it implies the possibility that ingroup members can be perceived as prototypical too (“they are prototypical, but we are as well”).

In sum, our research aimed to 1) analyse the moderating role of status asymmetries for relative ingroup prototypicality in contexts in which a superordinate category is negatively as compared to contexts in which it is positively valued; 2) analyse the differential effect of complex representations of a self-relevant negative – as compared to a positive – superordinate category for both lower and higher status groups.

We hypothesised that (H1) members of lower status groups will agree with the dominant outgroup in prototypicality judgements: Both groups will consider the lower status group to be less prototypical than the higher status group when the superordinate category is positive but to be more prototypical when the inclusive category is negative; (H2) priming a more complex representation should lead to more equal perceived prototypicality, that is, it should increase relative prototypicality of the lower status group for a positive superordinate category but reduce it for a negative superordinate category.

In order to test these hypotheses two experiments involving higher and lower status groups were conducted. In the first experiment we manipulated the cognitive representation of a natural negative superordinate category (criminals) used as reference for comparisons between groups of different status (white-Portuguese and Black-Portuguese). In the second experiment we manipulated the valence of a superordinate category as well as its cognitive representation in order to test the overall hypotheses<sup>20</sup>.

### **3.2. Study 4**

In this study we particularly aimed to test the effect of status asymmetries and of cognitive representations of a negative superordinate category on judgments of

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<sup>20</sup> All the measures included in the two studies of the current Chapter can be found in Appendix B (an example of one questionnaire per Study). They are part of a larger paper-pen questionnaire belonging to the research project “Inclusão e prototipicalidade: Os determinantes dos comportamentos intergrupais das minorias”, financed by the Fundação para a Ciência e Tecnologia (POCI/PSI/61915/2004 and PPCDT/PSI/61915/2004).

relative ingroup prototypicality. As these questions have been addressed in positive contexts already in previous studies (see previous Chapter), Study 4 focussed particularly and entirely on a negative context. In this study a clearly negative superordinate category was used: Criminals that live in Portugal. Several studies suggested that an ambiguous behaviour performed by an African-American is seen as more threatening than when performed by a white-American (e.g., Correll et al., 2002). This tendency seems to be related with the general stereotype that African-Americans are more violent than white-Americans (e.g., Duncan, 1976; Sagar & Schofield, 1980).

This study was conducted soon after the following critical public event had made the stereotype of “black criminals” very salient in Portugal: A group of about 30 young Black-Portuguese went to a well known Portuguese beach. Noticing such a big group some people who were already at the beach called the police as they thought that there was going to be a collective assault. The rumour of this event was not only spread in Portugal but around the world almost immediately; usually serious news channels talked about a collective assault committed by about 500 criminals at a Portuguese beach. Some days after the police rectified this news and declared that such a collective assault had never happened and that no complains were received at the police station on that day or the day after. Despite the public rectification by the police, people in general believed that this collective assault had happened.

On the backdrop of these events, we measured similarity of Black and White-Portuguese to the prototype of the superordinate category “criminals that live in Portugal”. We are aware that this intergroup setting has not the complete nested structure that is usually used in studies on ingroup projection, because most Black and White Portuguese are actually not members of the superordinate category of “criminals”. However, one characteristic of stereotypes is that they are generalized across their logical borders. Similarly to what has been found in the American context (e.g., Correll et al., 2002), in the described event people considered the Black adolescents arriving at the beach as criminals, even if they were not committing any crime. In debates soon after this event, this category was also used as a frame for racial comparisons. Therefore we assumed that it might nevertheless be used as a self-relevant superordinate category for comparisons between Black and White Portuguese,

as they share membership with the members of the subgroups of Black or White criminals.

### **3.2.1. Method**

#### ***Design***

The experiment had a 2 [relative ingroup status: Lower (black-Portuguese) vs. Higher (white-Portuguese)] X 2 (representation of the inclusive category: Simple vs. Complex) design, all between-subjects. Status was quasi-experimentally varied. The second factor was experimentally manipulated. Participants were randomly assigned to one of the two conditions.

#### ***Participants and Procedure***

Two hundred and sixty three undergraduate students from different universities in Lisbon (168 white-Portuguese and 95 black-Portuguese) were invited to individually fill in a questionnaire about criminality in Portugal. As we mentioned previously, the inclusive category was “criminals that live in Portugal”. The manipulation of the representation of the inclusive category was first introduced, followed by its manipulation check. Two measures of ingroup and outgroup prototypicality were presented afterwards, followed by other dependent measures (e.g., political ideology) as well as socio-graphic information (e.g., gender, age). At the end participants were thanked and after the data collection was finished they were debriefed by email. Data of participants who declared that they have been personally a victim of an assault were excluded from the data analyses. The final sample consisted of 163 participants (91 white-Portuguese and 72 black-Portuguese) with a mean age of 21 ( $SD = 4.8$ ); 69% of the participants were female.

## ***Manipulations***

*Manipulation of the representation of the superordinate category.* A task was introduced in which participants had to think about and describe either the *differences that exist between different groups of delinquents in Portugal* (complex condition) or the *typical Portuguese delinquent* (simple condition).

## ***Measures***

*Manipulation check of the representation of the superordinate category.* A scale of six items (four reversed coded) was used to measure complexity of the representation of the superordinate category: three new items and three items adapted from Study 1 (e.g., “It is easy to describe a typical criminal”;  $\alpha = .63$ ). Answers were given on a seven-point Likert scale from 1 (*Completely disagree*) to 7 (*Completely agree*).

*Relative ingroup status perceptions.* A single item measured participants’ perceptions of the groups’ relative status (“Compared to black-Portuguese white-Portuguese have...”) with a scale ranging from 1 (*clearly lower status*) to 7 (*clearly higher status*). Higher values indicated that white-Portuguese are viewed as having a higher status than black-Portuguese.

*Relative ingroup prototypicality.* Relative ingroup prototypicality was measured by the two measures. The first one was the *pictorial measure* that was used in all three studies described in the previous Chapter. The second measure is *attribute based* and adopted from previous studies on complexity effects (Waldzus et al., 2003). In a first step, participants were asked to list up to four attributes that are characteristic for subgroup members belonging to the ingroup (i.e., Black Criminals for black participants and White Criminals for white criminals) as compared to the outgroup. In the second step they were asked to list up to four attributes that are characteristic for subgroup members of the outgroup as compared to the ingroup. Finally, they were asked to rate on a scale ranging from 1 (*Does not apply at all*) to 7 (*Applies absolutely*) how much these ingroup typical and outgroup typical attributes apply to members of the superordinate category (Criminals living in Portugal). The average of ratings on

ingroup typical attributes was an indicator of ingroup prototypicality and the average ratings on outgroup typical attributes was an indicator of outgroup prototypicality. As in Studies 2 and 3 we used separate indicators of ingroup and outgroup prototypicality for the data analyses in order to avoid statistical problems with difference scores.

*Political ideology.* A single item measured participants' political ideology ("What is your political preference?") on a 6-point scale (1 – *Extreme left wing* to 6 – *Extreme right wing*).

### **3.2.2. Results**

#### ***Manipulation check and relative status***

Two univariate GLMs were performed with relative status and the manipulation of the representation of the superordinate category as factors. For the manipulation check as dependent variable we found a main effect of the manipulation of representation of the superordinate category,  $F(1, 159) = 6.14, p < .05, \eta_p^2 = .37$ . No other effect was significant. Pairwise comparisons showed that measured complexity was higher in the complex condition ( $M = 3.9, SD = 0.77$ ) than in the simple condition ( $M = 3.5, SD = 0.85$ ),  $t(159) = 2.48, p = .007$  (one-tailed). For perception of relative status as the dependent variable, no differences between Black and White participants,  $F(1, 156) < 1, ns$ , and no other significant effects were found. The mean for the total sample ( $M = 4.67, SD = 1.4$ ) was significantly above the scale midpoint,  $t(159) = 6.3, p < .001$  (one-tailed), indicating higher status of White compared to Black Portuguese.

#### ***Effects of the representation of the superordinate category and of group status on relative ingroup prototypicality***

Preliminary analysis revealed that a significant number of participants had missing values on the attribute based prototypicality measures for the ingroup (31%) and for the outgroup (27%). Moreover, the missing value analysis of SPSS (15) revealed that the ratio of missing values did not depend on the experimental



manipulation. However, black and white participants differed in the degree of having missing values for ingroup prototypicality,  $\chi^2 = 8.26$ ,  $df = 1$ ,  $p = .004$ , and outgroup prototypicality,  $\chi^2 = 14.00$ ,  $df = 1$ ,  $p < .001$ . That is why we did not delete these cases, but imputed missing values for each group separately using *maximum likelihood estimation* (Little, & Rubin, 2002). To test our hypothesis we performed a mixed GLM with status (Black vs. White participants) and the manipulation of the representation of the inclusive category (simple vs. complex) as between group factors and prototypicality [ingroup (IG) vs. outgroup (OG)] and type of measure (pictorial vs. attribute based) as within-subject factors. Results showed a main effect of prototypicality (IG vs. OG),  $F(1, 155) = 5.22$ ,  $p = .024$ ,  $\eta_p^2 = .033$ , which was, as expected, moderated by status,  $F(1, 155) = 10.30$ ,  $p = .002$ ,  $\eta_p^2 = .062$ . As predicted, Black participants perceived the ingroup as being more relatively prototypical of the superordinate category than White participants did. More importantly, this effect was qualified by the expected interaction with representation of the superordinate category,  $F(1, 155) = 6.69$ ,  $p = .011$ ,  $\eta_p^2 = .041$  (Figure 3)<sup>21</sup>. This interaction was not qualified by type of measure,  $F(1, 155) = 0.37$ , *ns.* (see Table 3, for separate descriptives on the two measures).

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<sup>21</sup> The same interaction was found when we controlled for political ideology (left vs. right) as a covariate,

$F(1, 109) = 6.09$ ,  $p = .015$ ,  $\eta_p^2 = .053$ , and for the attribute based prototypicality measure only for participants without missing values,  $F(1,83) = 4.14$ ,  $p = .045$ ,  $\eta_p^2 = .048$ .

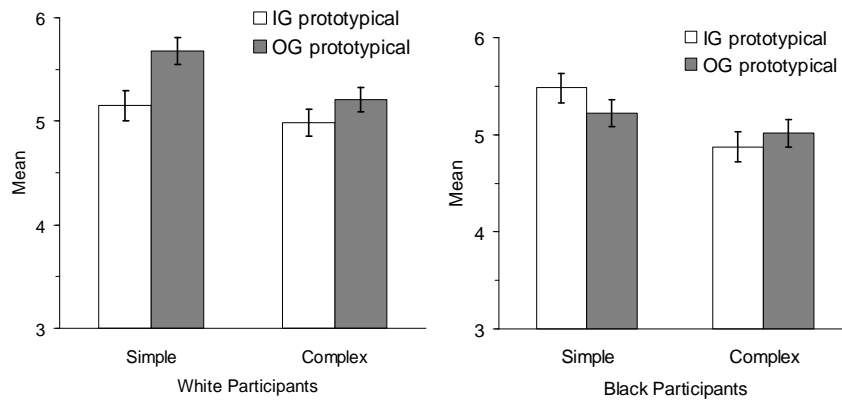
Table 3

*Ingroup and outgroup prototypicality for Black and White participants depending on manipulated complexity of the negatively valued superordinate category for the pictorial (M1) and the attribute based (M2) prototypicality measures*

		Superordinate category representation							
		Simple				Complex			
Prototypicality	Status	IG		OG		IG		OG	
		M1	M2	M1	M2	M1	M2	M1	M2
<i>White participants</i>	M	4.67	5.63	5.54	5.81	4.38	5.59	4.86	5.55
	<i>SD</i>	1.32	1.02	1.21	1.07	1.29	0.97	1.20	1.08
<i>Black participants</i>	M	5.25	5.71	5.36	5.07	4.38	5.37	4.62	5.41
	<i>SD</i>	1.78	0.64	1.59	0.81	1.84	0.73	1.60	0.73

Separated GLMs for the two experimental conditions showed that status interacted significantly with prototypicality (IG vs. OG) only in the simple representation condition,  $F(1,73) = 19.95, p < .001, \eta_p^2 = .22$ , but not in the complex representation condition,  $F(1,82) = 0.17, ns.$  Bonferroni corrected pairwise comparisons indicated that priming a more complex category reduced perceived outgroup prototypicality for White participants ( $p = .009$ ) and perceived ingroup prototypicality for Black participants ( $p = .006$ ). No other effect of the complexity manipulation was significant ( $ps > .30$ ; Figure 3).

*Figure 3.* Estimated marginal means and standard errors of perceptions of prototypicality of the ingroup (IG) and outgroup (OG) as a function of status and complex representations of a negative superordinate category (SC).



### 3.2.3. Discussion

The current study aimed to test whether the effect of complexity on prototypicality judgements can also be expected for negative superordinate categories. In this particular study a clear negative superordinate category was used. Overall, we expected that complexity of negative superordinate categories will have the opposite effects for prototypicality perceptions of higher and lower status groups than complexity of positive superordinate categories. Our findings showed that members of a lower status group perceived their own group as – in comparison with the outgroup – more prototypical of a negative superordinate category than members of the higher status group did. These results suggest that members of the lower status group internalize negative stereotypes of their own group (e.g., “Africans = criminals”, Duncan, 1976; Sagar & Schofield, 1980) which reflects on their perceptions of relative ingroup prototypicality. Again, priming a more complex superordinate category reduced these high prototypicality perceptions and provided members of the lower status group the opportunity to distance their own group from that category and from the assigned negative stereotypes (e.g., Branscombe et al., 1999).

Although we consider these results as highly relevant due to the particular social context in which the experiment took place, we are aware that this experiment has important limitations. First, even though the participants in this study share a racial identity with members of one of the subgroups but not with members of the other, they were not really members of the subgroups of the superordinate category of criminals. For such a complete design one would have to replicate such a study with actual members of clearly negatively evaluated superordinate categories, which might be difficult to realize in natural contexts, for instance with participants in prisons. Due to the difficulty of running such an experiment, we choose a different possibility by manipulating the valence of the superordinate category in the next study. Second, because we only used a negative superordinate category our findings do not allow us to clearly test whether ingroup projection is context-dependent and how complexity impacts prototypicality judgements differentially for positive or negative superordinate categories. Again, this problem will be addressed in the following study by a valence manipulation.

### **3.3. Study 5**

Similarly to Study 4, in Study 5 we aimed to test the effect of status asymmetries and of cognitive representations but of a positive and a negative superordinate category on judgments of relative ingroup prototypicality. Because Study 4 focussed entirely on a negative context, in this study the valence of the superordinate category was introduced as an independent variable. The experiment was conducted with Social Sciences students (Sociology and Psychology) and Exact Sciences students (Engineering, Physics, and Applied Mathematics) of three Portuguese public universities. In the Portuguese context there is a general tendency to attribute different status to these two groups. Accordingly, course was used as an equivalent of relative status. Social sciences students represent the lower status, exact sciences students the higher status sub-group. The superordinate category was “Undergraduate students from public Portuguese Universities”<sup>22</sup>.

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<sup>22</sup> Although this group has usually a positive valence, it is also sometimes seen as critical, and therefore we assumed that it is possible to manipulate its valence.

### **3.3.1. Method**

#### ***Design***

A 2 (representation of the superordinate category: Complex vs. Simple) X 2 (valence of the superordinate category: Positive vs. Negative) X 2 (relative ingroup status: Higher vs. Lower) between-subjects design was used. Participants from the two groups were randomly assigned to one of the four experimental conditions.

#### ***Participants and procedure***

Participants were 160 undergraduate students from different Portuguese universities, 65 from Social sciences and 95 from Exact sciences. Among participants 56.9% were female and the mean age was 22 years ( $SD = 3.0$ ).

Participants were invited to fill in a questionnaire about undergraduate students from public Portuguese universities. After some initial general questions for socio-graphic data such as sex, age, and some academic information (faculty/university and attendance year), the valence of the superordinate category was manipulated, followed by the manipulation of the representation of the superordinate category, manipulation checks and the measures of the dependent variables. At the end students were thanked and after completion of the study they were debriefed by email.

#### ***Manipulations***

*Valence of the superordinate category.* A fictive quotation from an article of a well known Portuguese newspaper was presented reflecting on the employment situation of undergraduate students and the discrepancy between what students learn at university and actual demands of the job market. After that, a task was presented: “We all know that there are different opinions about undergraduate students from Portuguese public universities. Imagine that you are the responsible person of the human resources department at a certain enterprise...”. In the condition of negative [positive] valence, participants were asked to justify in a written statement why they

would reject [choose] a student of a Portuguese public university who had applied for a job.

*Manipulation of the representation of the superordinate category.* The complexity of the representation of the superordinate category was manipulated adapting the manipulation used by Waldzus et al. (2003, 2005). Similarly to Study 1 but adapting it for this particular context, participants were asked to imagine that a tourist asks them how the undergraduate students from the public Portuguese universities are. Depending on whether a complex [simple] representation was primed, they were asked to write down how they would explain the diversity of undergraduate students [how the typical undergraduate students are] in public Portuguese universities.

### ***Measures***

*Manipulation check of valence of the superordinate category.* A single item was used (“Generally speaking, the image that I have about undergraduate students from public Portuguese universities is”...) and answers were given on a Likert-type scale ranging from 1 (*Completely negative*) to 7 (*Completely positive*).

*Manipulation check of representation of the superordinate category.* Three items (e.g., “There is not just one type of students”,  $\alpha = .57$ ), two of them reversed coded, were used measure the complexity of the representation of the superordinate category on a seven point scale.

*Relative ingroup status perceptions.* Two pictorial measures were used to measure ingroup and outgroup status perceptions. Each measure consisted of a vertical arrow pointing to the top, with seven horizontal lines, from the lowest (1) to the highest (7) status position. Participants were asked to indicate on each of the vertical scales their perceptions of status of each group. Relative ingroup status was the difference between ingroup status and outgroup status.

*Relative ingroup prototypicality.* Two different measures were used: 1) *Pictorial measure*; and 2) *Attribute based measure*. Both measures were the same as described in Study 4 and were adapted to this particular study. Similarly to previous studies we kept prototypicality scores for the ingroup and the outgroup separately.

### 3.3.2. Results

Significance tests for directed hypotheses are reported one-tailed. All other tests are two tailed.

#### *Manipulation checks*

Three univariate GLMs were performed with valence, representation of the superordinate category and group status as factors. First the valence manipulation check was introduced as the dependent variable. Results showed a marginally significant main effect of the valence manipulation,  $F(1, 152) = 3.5, p = .06, \eta_p^2 = .023$ . No other significant effects were found. Bonferroni corrected pairwise comparisons indicated that in the positive valence condition the superordinate category was evaluated more positively ( $M = 4.97, SD = 0.99$ ), than in the negative valence condition ( $M = 4.69, SD = 0.93$ ),  $t(152) = 1.88, p = .03$  (one-tailed).

A second univariate GLM with the same factors but with the manipulation check of the representation of the superordinate category as the dependent variable showed a significant main effect of the manipulation of the complexity of the representation of the superordinate category,  $F(1, 152) = 5.88, p = .02, \eta_p^2 = .037$ . No other significant effects were found. Participants in the high complexity condition tended to perceive the superordinate category as being more diverse ( $M = 5.08, SD = 0.82$ ) than participants in the low complexity condition ( $M = 4.70, SD = 1.00$ ),  $t(152) = 2.42, p = .01$  (one-tailed). Both manipulations were, therefore, successful.

In order to check whether groups had different intergroup status perceptions a third univariate analysis with the same factors was performed with relative ingroup status introduced as the dependent variable. Results showed a main effect of group status,  $F(1, 152) = 106.3, p < .001, \eta_p^2 = .41$ . As predicted, social sciences participants perceived themselves to have a lower status ( $M = -0.87, SD = 1.28$ ) than exact sciences participants ( $M = 1.72, SD = 1.7$ ).

Since group status was not an experimental, but a quasi-experimental variable, 25 participants were excluded from the further analyses because they were either from the Social sciences sample but did not perceive the ingroup as having a lower status or

from the Exact sciences sample but did not perceive the ingroup as having higher status. Moreover, the data of four other participants were excluded from the analysis because they were outliers deviating more than three standard deviations from the mean of the dependent variable.

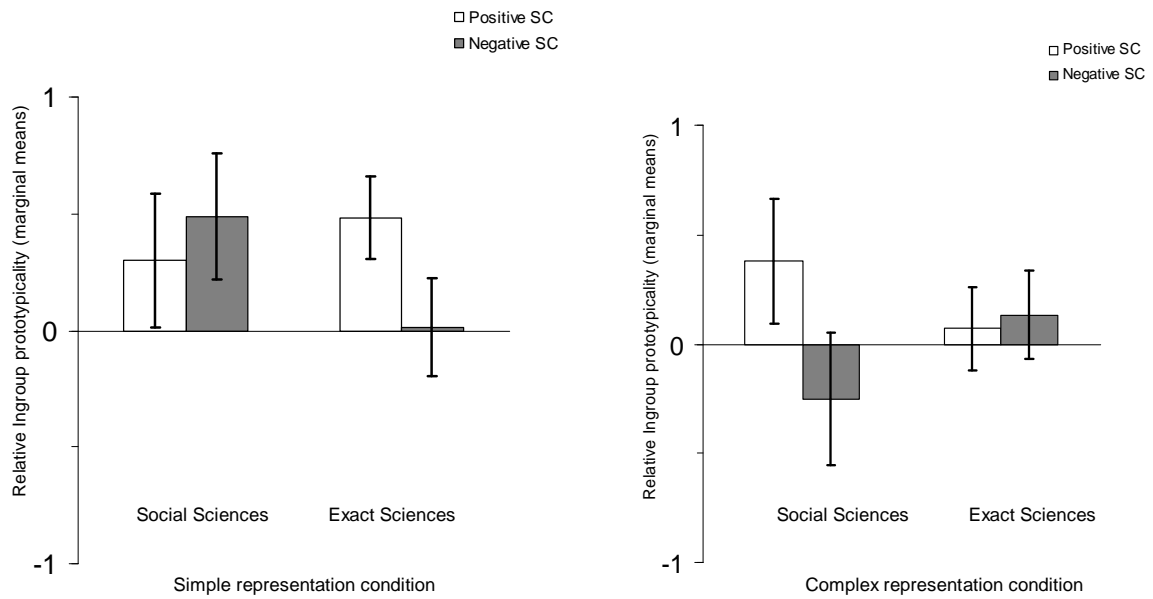
***Effects of valence, representations of the superordinate category and group status on relative ingroup prototypicality***

This hypothesis was tested in a mixed 2 (valence of the superordinate category: positive vs. negative) x 2 (representation of the superordinate category: Simple vs. Complex) x 2 (relative ingroup status: Low vs. High) x 2 (prototypicality: Ingroup vs. Outgroup) x 2 (type of measure: Pictorial vs. Attribute based) GLM with prototypicality and type of measure as the within subject factor. Again, effects on relative ingroup prototypicality would be indicated by interactions with the prototypicality factor and differential effects for the different measures would be indicated by interactions with the type of measures factor. Accordingly, we predicted to find a four-way interaction that should not interact with type of measure. Multivariate tests showed, as predicted, a significant 4-way interaction between prototypicality, representation of the superordinate category, relative ingroup status and valence,  $F(1, 117) = 7.93, p < .01, \eta_p^2 = .06$ . As expected, the 4-way interaction was not qualified by type of measure,  $F(1, 117) = 0.07, ns$ . In order to understand this effect we performed simple mean comparisons (Bonferroni adjusted).

Results showed that in the condition where a simple representation of a negatively valued superordinate category was primed members of the lower status group tend to perceive their ingroup as being more prototypical than the outgroup for such a category ( $p = .035$ , one-tailed; Figure 4). On the contrary and as expected, members of the higher status group perceived their ingroup as being more prototypical in the condition where a simple representation of a positively valued superordinate category was primed ( $p = .004$ , one-tailed; Figure 4).



*Figure 4.* Estimated marginal means (mean differences between the ingroup and the outgroup) and standard errors of perceptions prototypicality of the ingroup (IG) for higher and lower status groups as a function of the valence of superordinate categories (SC) when a more simple and complex representation of the superordinate category was primed.



No differences in prototypicality perceptions between higher and lower status groups were found for the conditions in which a complex representation of the superordinate category had been primed (Table 4).

Table 4

*Ingroup and outgroup prototypicality for social and exact sciences students depending on manipulated complexity of the negatively and positively valued superordinate category for the pictorial (M1) and the attribute-based (M2) prototypicality measures*

		Valence of the superordinate category															
		Positive								Negative							
Superordinate category representation		Simple				Complex				Simple				Complex			
Prototypicality		IG		OG		IG		OG		IG		OG		IG		OG	
		M1	M2	M1	M2	M1	M2	M1	M2	M1	M2	M1	M2	M1	M2	M1	M2
Status																	
Exact	M	4.60	4.48	4.12	3.99	4.54	4.34	4.50	4.25	4.61	4.59	4.72	4.45	5.00	4.50	4.70	4.53
Sciences																	
	<i>SD</i>	1.44	0.94	1.48	0.71	1.79	0.83	1.59	1.11	1.46	0.86	1.31	0.78	1.52	0.80	1.66	0.82
Social	M	4.20	4.15	4.30	4.67	4.70	4.68	4.60	4.02	5.54	4.86	4.91	4.52	4.77	4.61	4.89	5.00
Sciences																	
	<i>SD</i>	1.13	0.88	1.16	0.71	1.70	0.68	1.65	0.53	1.13	0.74	1.44	0.69	1.39	1.03	1.83	0.87

### 3.3.3. Discussion

Study 5 had a twofold goal: Testing the moderating role of status asymmetries for relative ingroup prototypicality in contexts in which a superordinate category is negatively as compared to contexts in which it is positively valued; and analyse the differential effect of complex (vs. simple) representations of a given negatively valued (vs. positively valued) superordinate category for both lower and higher status groups. Overall, results support our hypotheses. As expected, when the given superordinate category is positively primed members of the higher status group tended to perceive themselves as relatively more prototypical of that category, than members of the lower status group did. The pattern was reversed for the negative valence condition. Prototypicality judgments are therefore context dependent, and particularly for lower status groups, they are affected by reality constraints (e.g., Spears et al., 2001). These results replicate, but also go beyond previous research (Alexandre et al., 2009; Devos & Banaji, 2005; Devos et al., 2010; Waldzus et al., 2004) as they show such constraints for prototypicality within negative superordinate categories.

We also predicted that a more complex representation of a given superordinate category should lead to a greater consensus in terms of prototypicality perceptions between both higher and lower status groups, not only in positive (see Chapter 2; Waldzus et al., 2003, 2005), but also in negative superordinate categories. Particularly, we expected and found that a more complex representation helped members of a lower status group to claim increased relative ingroup prototypicality when a positive superordinate category was primed, but decreased prototypicality when a more negative one was primed.

Findings for the complex condition are in line with the idea that lower status groups may use complexity strategically to cope with a negative social identity (Kessler & Mummendey, 2002; Kessler et al., in press): Compared to a simple (or well defined) superordinate category, a complex representation provides them a chance to distance themselves from such a negative category (e.g., Branscombe et al., 1999; Doosje & Ellemers, 1997) and consequently of a negative group-image that confirms negative stereotypes. Moreover, in line with Sindic and Reicher (2008) one might argue that projection varies according to group interests, which in this context are

related to the valence of a self-relevant superordinate category: Claiming non-prototypicality may provide ingroup members with a better strategic position in the relevant social context (e.g., the job market).

### **3.4. Conclusions**

Studies 4 and 5 aimed to go beyond previous research as the goal was to show that relative ingroup prototypicality can be context-dependent. In real life, people do not always belong to positively valued groups. Rather, they can belong to groups that are perceived in a less positive regard; these groups can also be reference groups (Allport, 1954), and can also be used as a comparison frame for intergroup evaluations. In these particular contexts the question was what can be expected in terms of prototypicality perceptions. With regard to these particular categories, being prototypical should have, contrary to positive ones, negative implications for the ingroup. Considering that people tend to search for a positive self-image (Steele, 1988) and to regard ingroups in a more positive manner (Brewer, 1979; Gaertner et al., 2006), the tendency might be to distance the ingroup from a negative inclusive category. This assumption was already demonstrated by Wenzel et al. (2003). Nonetheless lower status groups are often more constrained by social reality than higher status groups, which means that they tend to internalize negative ingroup stereotypes. This process may impact their prototypicality judgements. Overall, our findings are in line with this assumption as members of lower status groups perceived to be more prototypical for a negatively valued superordinate category.

At the same time, and in an attempt to go beyond previous research, we showed that changing the representations of those negative categories in a way that allows for the existence of more than a single prototype for those categories lead groups to achieve a greater consensus between them and to mitigate a single representation of the superordinate category, that usually associates lower status groups with such negative categories (Duncan, 1976; Sagar & Schofield, 1980).

## **Chapter 4**

### **General discussion**

*“There is no more theoretically vibrant, and socially relevant, topic in modern social psychology than the study of intergroup relations”  
(Taylor, Caquette, Usborne, & King, 2008, p.149)*

In social psychology the quality of intergroup relations has been analysed according to different theoretical perspectives and in many of these approaches the fundamental process of social categorization has been identified as a key to understand intergroup conflict. The theoretical approach that has been the basis for the research reported in this thesis is the Ingroup Projection Model (Mummendey & Wenzel, 1999), which focuses not only on differentiation between social categories but also on differentiation in terms of prototypicality within higher order, superordinate categories. Based on classical theoretical approaches in intergroup research, such as Social Identity Theory (Tajfel & Turner, 1979) as well as Self-Categorization Theory (Turner et al., 1987), the Ingroup Projection Model assumes, similarly to what have been postulated at an interpersonal level (e.g., Hogg, 2001), that superordinate categories that include the ingroup and relevant outgroups are structured in terms of relative prototypicality of their subgroups. Most importantly, the model proposes that social groups might disagree about their relative prototypicality as they tend to generalize ingroup attributes and values onto the prototype of such a valued superordinate category. This so called ingroup projection process increases perceptions of relative ingroup prototypicality which is related with a better evaluation of one's group (Turner, 1987) and with the development of ingroup bias (e.g., Waldzus & Mummendey, 2004): Being prototypical of a valued superordinate category is related with the entitlement of better outcomes (Wenzel et al., 2000) and with the legitimacy of holding a higher status position (Weber et al., 2002). At the same time the more members see their ingroup as being relatively prototypical, the less they tend to display positive emotions towards, and the more they show prejudice against outgroup members, which are perceived as less prototypical or deviants from the prototype of that common category (e.g., Kessler et al., in press).

Although the Ingroup Projection Model has found some empirical support (Wenzel et al., 2007), as we have shown throughout this work, ingroup projection research has directed little attention to the role of groups' status and particularly to prototypicality perceptions of lower status groups. Despite the growing interest in examining minorities' perspectives (e.g., Butera & Levine, 2009; Demoulin, et al., 2009; Wright et al., 1990), as far as we know, only a few studies took into account groups' status position on perceptions of relative ingroup prototypicality (Devos & Banaji, 2005; Devos et al., 2010; Waldzus et al., 2004, Study 3).

On the basis of our theoretical analysis was the assumption that, although in some conditions lower status groups may endorse system-justification ideologies – and therefore perceive themselves as less prototypical –, they are typically motivated to enhance or improve the social position of their group (e.g. Blumer, 1958; Wright & Taylor, 2003). Considering that being less prototypical is related with a more negative image of one's group and less entitlements, one of the purposes of the current dissertation was to contribute to a deeper understanding of how minority groups deal with this lack of prototypicality. Based on the assumption that a more complex representation of a given superordinate category may impact ingroup projection (Mummendey & Wenzel, 1999; Waldzus, 2009, for a review), in this work we attempted to examine whether such mental complexity (vs. a simple representation of a given superordinate category) can be used by minority members as a means to achieve a better social position. Overall findings from one study with natural groups (Study 1) and two studies with artificial groups (Studies 2 and 3) supported the hypotheses that status moderates the relation between complexity and relative ingroup prototypicality. More precisely, the correlations in two studies were consistent with the hypothesis that perceived complexity of the superordinate category, which reduces relative ingroup prototypicality of higher status groups, is positively related with relative ingroup prototypicality for lower status groups. Moreover, Study 3 yielded stronger experimental evidence for the hypothesis as it showed that priming a complex representation of a (valued) superordinate category leads to an increase of perceptions of relative ingroup prototypicality for members of a lower status group. On the contrary, when a simple representation was primed members of the lower status group perceived the ingroup as being less prototypical than in the complex condition, and

also less prototypical than the higher status outgroup. These results are consistent with Waldzus et al. (2004, Study 3) that showed that members of lower status groups may recognize the relative superiority of members of a higher status outgroup. They are also in line with Devos and Banaji's (2005) findings that showed that participants from different groups (either from the White majority and different minorities) consistently associated a given superordinate category (Americans) with the dominant majority group (White) rather than with any ethnic minority group (e.g., Asian Americans) that shared that inclusive category (see also Devos et al., 2010).

A further contribution of the current research is the elaboration of the relation between the central concepts (complexity of the superordinate category, relative prototypicality, group status) in the context of negatively valued superordinate categories. Social categories are not always positively valued and people can belong and be identified with devalued social groups. As such, being ascribed or perceived as prototypical of a devalued superordinate category can be a basis for a negative social identity. By "default" some groups are more likely to be perceived as more prototypical of certain devalued groups (e.g., Eberhardt et al., 2004) than others. In this dissertation the question that we addressed was what can be expected in terms of prototypicality judgements – and particularly for lower status groups – when a given superordinate category has a social negative connotation? Following the same reasoning that we stressed previously, we again based the analysis on the assumption that, although lower status groups are likely to acknowledge their group's disadvantaged status (e.g., Taylor, Wright, Moghaddam, & Lalonde, 1990) or may internalize negative stereotypes toward their ingroup, they should also be motivated to engage in (cognitive or behavioural) strategies that can help them to improve or enhance the ingroup's status position (Blumer, 1958; Tajfel, 1978a). In the current work we examined whether a complex (vs. simple) representation of a negatively valued superordinate category may change perceptions of ingroup prototypicality, and particularly whether it contributes to a greater consensus between higher and lower status groups in their prototypicality judgments.

Overall, we expected to find the opposite pattern of results as in the context of positively valued superordinate categories: Making the representation of the superordinate category more complex should increase previously low relative ingroup

prototypicality for higher status groups but decrease previously high relative ingroup prototypicality for lower status groups. Data from the studies reported in Chapter 4 (Studies 4 and 5) supported our hypothesis. For negatively valued superordinate categories lower status groups were perceived to be more and higher status groups were perceived to be less prototypical only when a simple representation was primed. On the contrary, as expected, priming a complex representation of those categories lead both groups to achieve consensus in terms of more equal prototypicality perceptions (Study 5) and was used by members of the lower status group to clearly distance themselves from a negatively valued superordinate category (Study 4).

Comparing the studies in which the superordinate category was positively (Chapter 2) to those in which it was negatively valued (Chapter 3), our results support the assumption that ingroup projection is not a simple intraindividual cognitive mechanism, but depends on several identifiable social context conditions. That means, groups do not always ethnocentrically project their attributes onto a shared superordinate category; rather, ingroup projection can be dependent on group goals, and therefore have an instrumental use (Sindic & Reicher, 2009). It may also depend on shared belief systems within superordinate categories (Tajfel & Turner, 1979). As members of lower status groups are often at the same time members of a superordinate category that is dominated by the higher status outgroup, they may often hold unfavourable prototypicality perceptions. Inducing more complex representations of the superordinate category can help to overcome such unfavourable social identity aspects, both in positive and negative contexts.

#### **4.1. Theoretical and practical implications**

Our results have several theoretical and practical implications. First, they illustrate that in order to fully understand intergroup dynamics it can be useful to reframe some theoretical models that have been developed to explain attitudes and behaviours of members of advantaged groups in a way that allows to take also into account the perspective of disadvantaged group members (e.g., Deaux, 2006a, 2006b; Dovidio, Gaertner, & Saguy, 2009; Dovidio et al., 2009; Demoulin et al., 2009; Wright et al., 1990). More specifically, and in line with research on the relation between



ingroup projection and the legitimacy of status relations (Weber et al., 2002), to understand the role of relative prototypicality in intergroup relations it seems necessary to distinguish the psychological processes between higher and lower status groups.

We also showed using different groups (either artificial and natural) that inducing a complex representation of a common inclusive category had opposite effects for the higher and the lower status groups in terms of their relative ingroup prototypicality. On the higher-order social level of the intergroup relation these opposite effects converged towards a more equal perception of prototypicality and, thus, a higher consensus between both groups. If we consider that such consensus is related with greater intergroup tolerance, complexity can be seen as having similar effects as cross-cutting social categories (Deschamps & Doise, 1978), as it works as a strategy of undermining cognitive processes that are underlying intergroup bias.

At the same time these findings reinforce the relevance of endorsing multiculturalism ideologies. If priming participants with a more complex representation of a given superordinate category leads individuals to change their prototypicality perceptions, policies that value diversity and intergroup differences can count on such psychological principles, which might reinforce their desired outcomes. Moreover, from our and other social psychological research one can conclude that multiculturalism may lead to better outcomes than competing assimilation approaches. As Wolsko et al. (2006) found, ideology shapes inclusive behaviours and policies. Concretely, compared to assimilation, multiculturalism is positively correlated with support for affirmative action, and with more lenient immigration policy. Accordingly, diversity has been increasingly highlighted by politicians. In 2008 the Council of Europe of Ministers of Foreign Affairs wrote the White Paper on Intercultural Dialogue. According to it “intercultural approach offers a forward-looking model for managing cultural diversity (...). If there is a European identity to be realized, it will be based on shared fundamental values, respect for common heritage and cultural diversity as well as respect for the equal dignity of every individual” (p. 4). Although “intercultural dialogue cannot be prescribed by law” (p. 5) it invites countries to implement those principles either by promoting a political culture that values diversity, or by planning concrete actions that for example imply learning and teaching intercultural competences. In a more applied context (large care health organization),

Plaut, Thomas and Goren (2009) found that multiculturalism contributes to a positive diversity organizational climate, whereas colour-blindness leads to a negative one. Overall these different evidences increasingly reinforce the argument that ignoring intergroup differences, or in other words, sub-groups categorization, cannot be seen as a strategy to prejudice reduction and intergroup harmony (e.g., Wolsko et al., 2000).

The current research contributes to a larger framework that has recently been developed to study the advantages that diverse representations and identities can have when searching for ways to prevent intergroup discrimination and conflict, such as research on identity diversity (e.g, Brewer et al., 2005; Roccas et al., 2002) or multiple categorizations (e.g., Crisp et al., 2006; Crisp & Hewstone, 2007; Hall & Crisp, 2005). Our research demonstrates that such approaches might overcome difficulties of previous approaches: Diversity seems to carry the potential for consensus on a higher order societal level, a constructive answer to the challenge of increasing diversity in our society.

When relating the current very specific results to a broader social identity perspective (Tajfel & Turner, 1979), complexity can be seen as having a particular function in the identity management of lower status groups. In secure intergroup relations member of such groups often use social creativity strategies, as there is little chance for social change (e.g., Jackson et al., 1996; Mummendey, Klink, et al., 1999). Although we are aware that these assumptions need greater empirical evidence we argue that complex superordinate categories can have a central role for lower status groups' members in particular. As prototypicality is a basis of legitimate social status (Weber et al., 2002), group privileges, and entitlements (Wenzel, 2004), complex inclusive categories may be a way to turn a secure (stable, legitimate) asymmetric intergroup relation into an insecure one, opening the door for social change, and consequently for increasing the ingroup's social status. As such it can help to overcome constraints underlying standing social asymmetries (e.g., Ellemers et al., 1997).

Considering how complexity can lead to greater consensus between higher and lower status groups in terms of their prototypicality perceptions, one might reason that social change can be achieved by intergroup solidarity rather than by conflict. Several historical developments that led to more equal status positions, such as reduction in

institutionalized racism and sexism and the emancipation of homosexuals in several societies, can be understood from such a perspective (e.g., Subasic et al., 2008). However, for such far-reaching conclusions more research is necessary that does not only measure relative prototypicality but also evaluations and intergroup behaviour. Nevertheless, we consider our results as encouraging for the potential of complex superordinate categories to improve intergroup relations.

As Wright and Lubensky (2009) stated, research on intergroup relations has been analysing separately processes that are more linked with majority groups, such as intergroup attitudes, and with minority groups, such as social action. As a result, interventions often address only the situation of one group, for instance to reduce prejudice of higher status group members or to mobilize collective action of lower status groups. Rarely, with the exception of intended intergroup contact, interventions are developed to address complex intergroup relations as whole, targeting combined but differential effects for all involved groups. Nonetheless social psychology research needs to move in a direction where we can bridge both majorities and minorities' perspectives to fully understand intergroup relations. From our point of view the study of complexity can be a promising way to establish that bridge. Inducing complex representations of superordinate categories as an intervention into shared overall belief systems can reduce prejudice on the side of the dominating group and at the same time increase social identity of subjugated minorities. It can encourage for social change and at the same time create solidarity potential and support for such change on the side of the dominating majority.

#### **4.2. Limitations and future directions**

Despite the relevance that our findings may have within intergroup relations in general and ingroup projection research in particular, we also think that our data raised important questions that need to be addressed and answered.

Research in social psychology often uses numerical size to manipulate status, which does not always reflect real-life groups (Seyranian, Atuel, & Crano, 2008). In real-life contexts group size is often related to power and status asymmetries. That implies that those variables often tend to be confounded when studying such groups

(Simon et al., 2001). In our studies we combined numerical size with social status intentionally for reasons of simplicity. Using the terminology of Seyranian et al.'s (2008) minority/majority typology, in our studies we only addressed relations between *moral majorities* (i.e., groups that are simultaneously powerful and large) and *subjugated* (i.e., groups that are simultaneously powerless and small in number). We did not address relations between *elites* and the *powerless populace*<sup>1</sup>. The latter type of relations would need specific theorizing, which goes far beyond of what was the purpose of the current thesis. We are aware that, although social status seems to be a more central determinant of beliefs than group size (e.g., Ellemers et al., 1992; Tajfel, 1978) with regard to ingroup bias (e.g., Ellemers & Barreto, 2001; González & Brown, 2006), different effects of these two variables might be expected on relative prototypicality perceptions. Therefore, to fully understand the role of complex categories in judgments on relative ingroup prototypicality, future studies should orthogonally manipulate social status and the groups' numerical size, and thereby disentangle both variables.

We are also clearly aware that some of our analyses were correlational, which does not allow us to postulate the existence of causal relations between variables in all of the studies. Although the use of different groups and methods among our studies may allow a certain generalization of our results, several limitations require additional research on the role of complexity of superordinate categories. In our study with natural groups in the positive intergroup context (Study 1), we did not manipulate the diversity of the superordinate category. Thus, it is not possible to generalize causality that was found in Study 3, for example, to natural contexts. It is, therefore, not clear whether strongly interiorized negative self-stereotypes of lower status natural groups can actually be changed by subtle manipulations such as the one used in Study 3. Manipulating complexity can be a difficult task when social representations between groups are well established and difficult to change (Moscovici, 2006). As Deschamps (1982) stated, intergroup relations are anchored in shared symbolic systems that prevent the interchangeability of the groups' relative positions. However, an argument

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<sup>1</sup> According to the authors *elites* corresponds to powerful groups that are small in number, whereas *powerless populace* refers to large groups that hold little power.

against such concern is the fact that we were able to obtain causal effects of the complexity manipulation in a clearly negative context (Study 4).

Another limitation has to do with the manipulations of the representation of the superordinate categories. Although we tried to show, particularly in Study 3, that the manipulation of complexity was actually manipulating the complexity of the structure of the category rather than the differentiation between sub-groups, in future experiments it will be important to test other manipulations that help to disentangle complexity as it was defined by Mummendey and Wenzel (1999) and other constructs such as heterogeneity or distinctiveness. In this regard, the authors postulated that a *small scope* of the prototype of a given superordinate category should reduce ingroup projection as prototypical positions are only defined on a few dimensions; on the remaining dimensions prototypical positions are in turn not defined, which may allow outgroups to claim to be prototypical for those dimensions. Combining these assumptions and research on complex categories representations (Judd & Lusk, 1984; Linville & Jones, 1980), Waldzus et al., (2009) found recently in two studies that the use of few dimensions or of many but orthogonal dimensions (i.e. non-correlated dimensions) of a prototype (vs. the use of many correlated dimensions of a prototype) reduces ingroup projection. In a similar vein, Crisp, Hewstone and Rubin (2001) showed that undermining stereotypical category representations using multiple comparisons (i.e., making salient multiple ingroups and outgroups) can foster more positive intergroup attitudes, when compared to a simple categorization condition. Research on stereotypes and particularly on subtyping and subgrouping processes (e.g., Richards & Hewstone, 2001) also showed that they impact group representations. Considering these different findings future studies should test the predicting value of those manipulations for ingroup projection.

Throughout this theses we put particular emphasize on the potentially strategic importance of complex representations and relative ingroup prototypicality, and we claimed at several points that our results contradict a rather mechanical understanding of ingroup projection as a mere intraindividual cognitive bias. That does not, however, mean that nonspecifically motivated cognitive biases cannot play a role in both ingroup projection and its reduction by complex superordinate categories. For instance, recently Rosa and Waldzus (2010) have shown that higher status groups in secure

intergroup relations are able to mitigate their ethnocentric biases in prototypicality judgements if they have sufficient motivation and capacity for systematic and accuracy motivated information processing.

A further issue that has to be discussed is the fact that the manipulation checks of complexity also posited some limitations along our experiments due to their general rather low consistency (Cohen, 1992). In order to keep the studies manageable, we had to limit these measures to a few items, and the fact that we found effects on these measures speaks rather for the strength of the effects as low consistency usually increases Type II error. However, better measures can and should be developed which probably could include other items.

In our work we also did not address the question whether higher and lower status groups hold already by default different representations of superordinate categories. Several recent studies suggest such differences. For instance, Dovidio et al. (2009) report several studies that show that majority members usually prefer a one-group model (assimilationist), whereas minority members hold a more pluralistic integration representation of that category (see also Leach et al., 2008). Similarly, Wolsko et al. (2006) found that minorities tend to endorse the pro-diverse message that underlies a multiculturalism ideology and are more likely to support policies that acknowledge and value diversity. One could speculate that diverse representations may only have a potential to change intergroup relations if they are consensually shared by both, the higher and the lower status group.

Further research on complexity might also examine other particular aspects: 1) First, how complexity concretely impacts ingroup projection, and whether the nature of its impact differs according to groups' status. Although this particular issue deserves further investigation, one might expect that such impact may be dependent on whether complexity fosters secure or insecure status positions (Tajfel, 1978a, 1978b). For lower status groups, we argue that complexity can be perceived as a strategic tool for achieving a "usable power" (Sachdev & Bourhis, 1984) as it can allow for an insecure situation where social change might be possible (Rosa & Waldzus, 2010). Such possibility may have important political implications, as complexity can increase a more politicized collective identity (Simon & Klandermans, 2001), empower lower status groups and be a source of social influence for them. In turn, for higher status

groups it should be examined whether the positive effects of complexity have a temporal effect; in other words, we showed that complexity mitigates an ethnocentric perspective on the superordinate category – which goes in line with previous findings (Waldzus et al., 2003) –, which can also mean that outgroup stereotypes become more flexible. Nonetheless because higher status groups usually aim to maintain a secure status position, in the long run complexity can be a source of threat for the value and powerful position of the higher status groups, and consequently may impact intergroup relations. Future longitudinal studies should address this issue. 2) Second, and in line with stereotype research (e.g., Ellemers & van Knippenberg, 1997), future studies should address whether majorities allow minorities to be prototypical for irrelevant dimensions of the prototype – which can be a strategy to cope with threat – but not for relevant ones and check whether this can be the basis of intergroup conflicts. 3) Third, another important question is how complexity impacts minorities' well-being and minorities' collective behavior in general and collective and affirmative action in particular. Pault et al. (2009), for example, found in a study conducted in a health care organization that departments where white employees held multiculturalism beliefs minorities were (psychologically) more committed to those departments. Also Barreto and Ellemers (2009) highlighted that multiculturalism is at the core of healthy identities and positive intergroup relations. However, those benefits are dependent on the degree to which minorities feel recognized and respected within a given superordinate category (Bodenhausen, 2010). Also, recent findings (Saguy, Tausch, Dovidio, & Pratto, 2009) suggest that positive contact between an advantaged and a disadvantaged group undermines perceptions of intergroup inequality which consequently is related with less support for social change or collective action (see also Wright & Lubensky, 2009). In a similar vein Ellemers and Barreto (2009) showed that modern expressions of prejudice are related with perceptions of fewer inequalities between groups which consequently foster less collective action and therefore maintains intergroup inequalities.

Despite the relevance of understanding the minority perspective in a majority-minority situation, it is also true that such intergroup situation is not the most common social condition faced by many minorities. Most of Western societies are composed by a dominant group and several disadvantaged groups simultaneously. In Portugal for

example we can identify white Portuguese as the dominant group of that inclusive category, but simultaneously different minority groups such as African-Portuguese, Brazilians and Gypsies. Future research should address how prototypicality perceptions vary in conditions where more than two groups are involved and where outgroups can hold different status positions (higher vs. equal vs. lower) (e.g., Alexandre et al., 2007; Rothgerber & Worchel, 1997; White & Langer, 1999). Research on identity management strategies (e.g., Tajfel, 1978b) has shown that minority groups can use different social creativity strategies. One of them corresponds to changing the group of comparison. Future research can try to examine three-group settings, which involve intergroup comparisons between a majority group and two other groups with a lower status position, and examine how this intergroup context impacts prototypicality perceptions. Based on Similarity-Attraction Theories (e.g. Byrne, 1969; Brown, 1984), the common-enemy concept (Sherif, Harvey, White, Hood, & Sherif, 1961), Lakoff's Basic Opposition Model (1987) and other theoretical approaches (e.g., Heider, 1958; Festinger, 1954) we can expect that two minority groups will be attracted by each other. Therefore, in some conditions we can predict a coalition between both minority groups claiming the same or even higher prototypicality as the advantaged group. This increased prototypicality can be obtained by claiming a more complex representation of the inclusive category. However, it is also possible that groups can create an alternative superordinate category, represented by an anti-prototype, in which the advantaged group is perceived to be the less prototypical group. At the same time, research on the need for "group distinctiveness" (e.g., Lemaine, 1978) and on Social Identity Theory (Tajfel & Turner, 1979) has shown that minorities do not always go for coalitions but rather emphasize their positive distinctiveness from the other minority group (Alexandre et al., 2007; Brown, 1978). Thus, we can expect one alternative direction in this 3-group constellation setting. A perspective divergence between both minority groups in terms of their relative prototypicality might occur, leading members of both minorities to claim higher prototypicality for their ingroup and for the majority than for the other minority group. In other words, both minority groups will claim that their attributes are more similar to the attributes of majority group members, which they agree to be highly prototypical (an assimilation process). A similar pattern has been found for African



and Asian Americans who both associate White Americans with America, but disagree about the association between Black Americans with America (Devos & Banaji, 2005). Thus, we might predict that minority groups are motivated to differentiate the ingroup from the other minority outgroup by perceiving the attributes of this outgroup as non-normative, which might function at the same time either to perceive an increased own status position (“we have low status but compared with us you have even a lower status”) or to de-legitimize the own low status position and to legitimize demands for different entitlements (“we have the same miserable conditions as them, although we are more prototypic. We deserve more than this!”) (Wenzel, 1997; Weber et al., 2002). Apart from studying whether minority members actually use these strategies and whether relative prototypicality plays the role that we predict, it is also important to study under which circumstances one or the other strategy might be more likely. For instance, one question is when minority group members switch from a strategy like claiming higher complexity to the creation of an anti-prototype.

Intergroup relations in real life situations are dynamic rather than static, as groups have a history of expectancies that rigidifies intergroup stereotypes. Social psychological research on intergroup relations needs to capture such dynamic by understanding the perspective of the groups involved, which means, of both majority and minority groups. The findings obtained through our work are encouraging as they emphasise that complexity can foster greater consensus between groups with standing social asymmetries. In this regard, they emphasise that groups can be perceived as different without necessarily implying that one group is better than the other (Mummendey & Schreiber, 1984). These results also point to some important implications for other theoretical approaches. For instance, with regard to main assumptions of System Justification Theory, one might argue that complexity of given superordinate categories can mitigate outgroup favouritism usually displayed by minorities, and therefore help such groups to be more active and to display behaviours that undermine the legitimizing of standing social asymmetries. In a similar vein, regarding Social Dominance Theory, one could argue that fostering complex representations of higher order categories can be used as a strategy to attenuate individuals’ social dominance orientation, and, thus, might be particularly prevalent for hierarchy-attenuating ideologies.

### 4.3. Concluding remarks

Overall our findings suggest encouraging groups that are involved in undesired but pervasive intergroup inequalities to perceive the normative context where intergroup comparisons are made as multifaceted. In a recent study Sibley and Barlow (2009) examined to which extent members of two majority groups (white Europeans Australians and a comparable sample in New Zealand) considered minority groups (Aboriginal Australians and Maori, respectively) in their cognitive representations of nationhood. Similarly to other studies (e.g., Devos & Banaji, 2005; Devos et al., 2010) it was found that white European Australians automatically associate more strongly their ingroup rather than the outgroup with the superordinate category “Australia”. But more interestingly, New Zealand European participants associated both their own group as well as the minority group (Maori) to the shared superordinate category (New Zealand). These findings highlight how sociocultural differences have important implications on intergroup relations. Particularly, they show that it is possible to change the representation of a given superordinate category in a way that fosters inclusion and social recognition of minority groups. Increasing the representation of minority groups in public institutions and in the media, by promoting symbolic markers of those groups, for example, can be seen as a promising way of changing the cognitive representation of superordinate categories (Sibley & Barlow, 2009).

Despite these encouraging conclusions, our findings might have even more far reaching implications if they are combined with research on other theoretical approaches, particularly on ideological beliefs (Park & Judd, 2005), on multiple or crossed-categorization (Crisp & Hewstone, 1996; Deschamps & Doise, 1978), and on social identity complexity (Brewer & Pierce, 2005; Roccas & Brewer, 2006). In a society where individuals need to manage multiple identities, the articulation among such different perspectives is needed in order to undermine existing (negative) stereotypes and essentialist beliefs about particular minorities and stigmatized groups.

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## **Appendices**

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**Appendix A**  
**Studies 1 - 3**

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O Centro de Investigação e Intervenção Social (CIS) está a realizar um estudo sobre identidade e grupos sociais. As pessoas que o/a estão a contactar são colaboradores deste Centro.

Assim, nas próximas páginas vamos querer saber a sua opinião sobre dois grupos que fazem parte do grupo mais geral das pessoas que vivem em Portugal: o grupo de Portugueses e o grupo de Brasileiros. Neste estudo entendemos por Portugueses as pessoas que nasceram em Portugal e que são filhas de pais portugueses, e por Brasileiros o grupo de pessoas que apesar de viver em Portugal, tem origens no Brasil (ou nasceram lá ou os pais são de lá).

Lembre-se que as suas respostas são anónimas, isto é, as pessoas que participam neste estudo não são identificadas em nenhum momento. Por esta razão pedimos-lhe para **NÃO** escrever o seu nome em nenhuma parte deste questionário. Vamos-lhe só pedir alguma informação mínima como a idade, sexo e naturalidade.

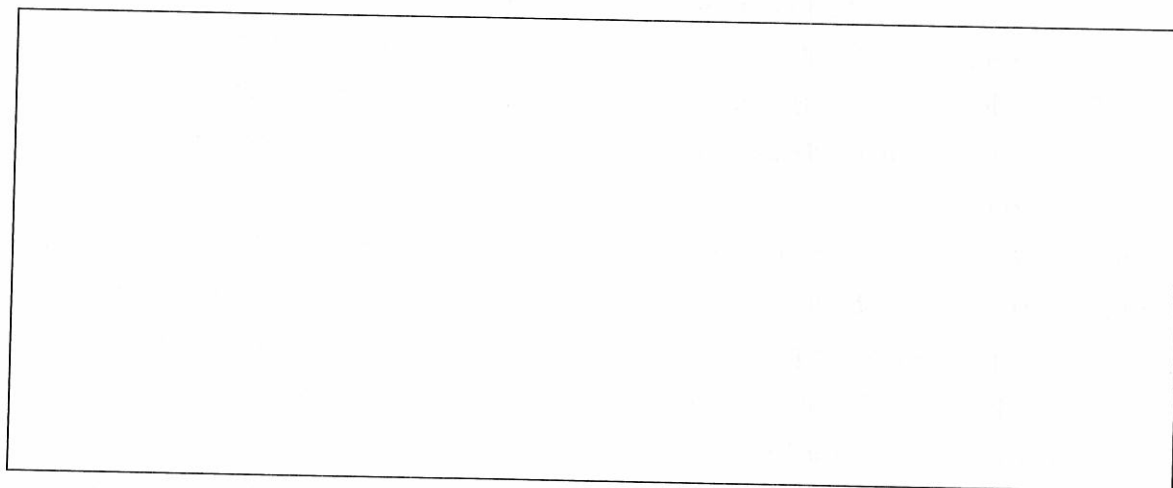
A participação neste estudo também é voluntária, o que quer dizer que pode parar de responder a qualquer momento.

Se decidir responder, pedimos-lhe que responda dando-nos a sua opinião mais sincera e honesta. É importante que siga a ordem em que essas perguntas aparecem.

Agradecemos muito a sua participação neste estudo!

Joana Alexandre  
(investigadora CIS/ISCTE- Lisboa)

**Nesta primeira parte vamos pedir-lhe para pensar no HÁBITO DE VIDA MAIS COMUM OU TÍPICO DO GRUPO MAIS GERAL DE PESSOAS QUE VIVE EM PORTUGAL. Imagine que tem de explicar a outra pessoa qual é o típico hábito de vida português. Escreva, por favor, as suas ideias. Não demore mais do que 5 minutos para responder:**



Vai encontrar agora algumas frases que as pessoas utilizam muitas vezes quando falam sobre as pessoas que vivem em Portugal. Dê-nos a sua opinião para cada uma delas. Para isso, marque com uma cruz (X) o algarismo que corresponde à sua resposta, sabendo que, 1= Não concordo nada; 2= não concordo muito; 3= não concordo; 4=nem concordo nem discordo; 5= concordo; 6=concordo muito; 7=concordo totalmente.

*Em minha opinião, as pessoas que vivem em Portugal têm poucas características em comum:*

1	2	3	4	5	6	7
Não concordo nada	Não concordo muito	Não concordo	Nem concordo nem discordo	Concordo	Concordo muito	Concordo totalmente

*Quando penso nas pessoas que vivem em Portugal, acho que elas têm mais semelhanças do que diferenças entre si:*

1	2	3	4	5	6	7
Não concordo nada	Não concordo muito	Não concordo	Nem concordo nem discordo	Concordo	Concordo muito	Concordo totalmente

*Quando penso nas pessoas que vivem em Portugal, rapidamente penso numa pessoa-tipo:*

1	2	3	4	5	6	7
Não concordo nada	Não concordo muito	Não concordo	Nem concordo nem discordo	Concordo	Concordo muito	Concordo totalmente

*Quando penso nas pessoas que vivem em Portugal, consigo pensar em muitos tipos de pessoas, muito diferentes entre si:*

1	2	3	4	5	6	7
Não concordo nada	Não concordo muito	Não concordo	Nem concordo nem discordo	Concordo	Concordo muito	Concordo totalmente

*Uma das características de Portugal é a diversidade de pessoas que vive neste país:*

1	2	3	4	5	6	7
Não concordo nada	Não concordo muito	Não concordo	Nem concordo nem discordo	Concordo	Concordo muito	Concordo totalmente

No nosso dia-a-dia conseguimos formar uma impressão geral sobre pessoas ou grupos de pessoas que não conhecemos ou que não conhecemos bem. De uma maneira geral, dentro do grupo mais geral das pessoas que vivem em Portugal podemos encontrar 2 grandes grupos: os Portugueses e os Brasileiros. Pense agora nestes 2 grupos. Sabemos que nem todos os membros de um grupo são iguais, mas muitas vezes temos uma opinião geral sobre o grupo no seu todo. Tendo isto em conta, vai encontrar um conjunto de características que nos ajudam a definir como são os Portugueses em comparação com os Brasileiros. Para cada uma dessas características diga-nos o quanto é que, em sua opinião, essas mesmas características se aplicam aos Portugueses.

*Em geral, os Portugueses são:*

Características	Não se aplica nada	Não se aplica muito	Não se aplica	Assim assim	Aplica-se	Aplica-se muito	Aplica-se totalmente
Alegres							
Fechados							
Trabalhadores							
Sérios							
Frios							
Extrovertidos							
Antipáticos							
Divertidos							

Pense novamente nos Portugueses e nos Brasileiros que vivem em Portugal. Tendo isto em conta, vai encontrar um conjunto de características que nos ajudam a definir como são os Brasileiros em comparação com os Portugueses. Para cada uma dessas características diga-nos o quanto é que, em sua opinião, essas mesmas características se aplicam aos Brasileiros.

*Em geral, os Brasileiros são:*

<b>Características</b>	<b>Não se aplica nada</b>	<b>Não se aplica muito</b>	<b>Não se aplica</b>	<b>Assim assim</b>	<b>Aplica-se</b>	<b>Aplica-se muito</b>	<b>Aplica-se totalmente</b>
<b>Alegres</b>							
<b>Fechados</b>							
<b>Trabalhadores</b>							
<b>Sérios</b>							
<b>Frios</b>							
<b>Extrovertidos</b>							
<b>Antipáticos</b>							
<b>Divertidos</b>							

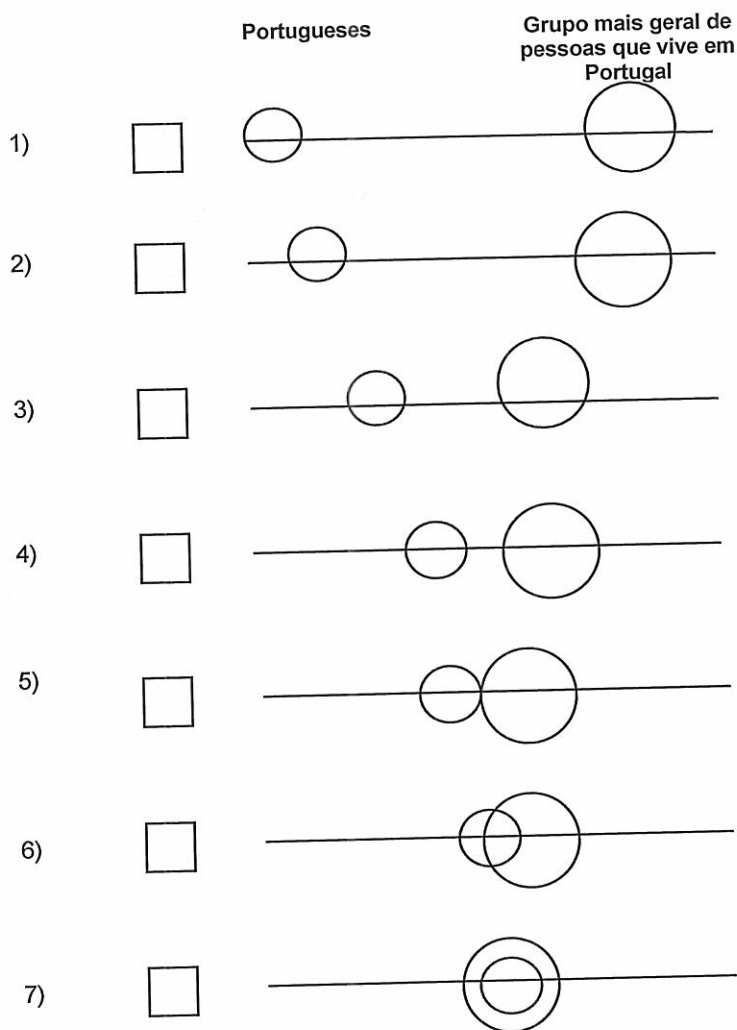
Para termos uma ideia mais geral sobre o que pensa, gostávamos de conhecer a sua opinião sobre o grupo mais geral das pessoas que vivem em Portugal. Para isso, para cada uma das características que se seguem pedimos-lhe que nos diga até que ponto elas se aplicam ao GRUPO MAIS GERAL DE PESSOAS QUE VIVE EM PORTUGAL. Para responder marque com uma cruz (X) no quadrado que corresponde à sua resposta:

*Em geral as pessoas que vivem em Portugal são:*

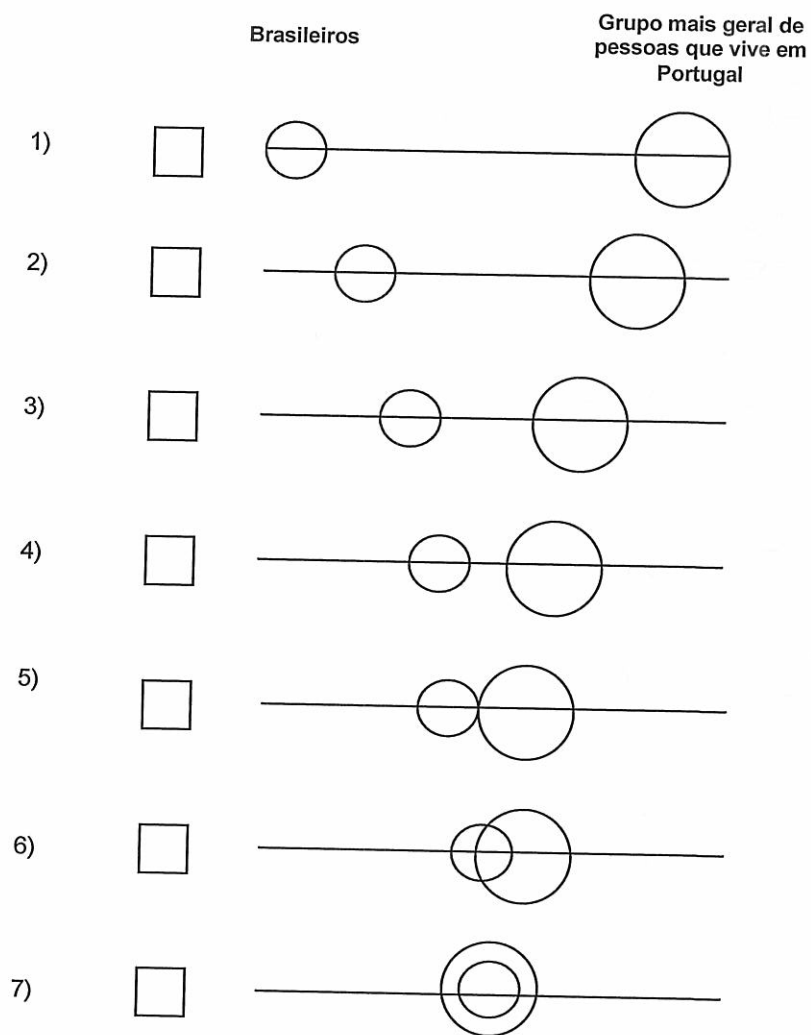
Características	Não se aplica nada	Não se aplica muito	Não se aplica	Assim assim	Aplica-se	Aplica-se muito	Aplica-se totalmente
Alegres							
Fechados							
Trabalhadores							
Sérios							
Frios							
Extrovertidos							
Antipáticos							
Divertidos							



Pense nos Portugueses, e no grupo mais geral das pessoas que vivem em Portugal. Até que ponto acha que os Portugueses são semelhantes ao grupo mais geral de pessoas que vive em Portugal? Das 7 figuras que se seguem, escolha apenas uma, ou seja, aquela que corresponde melhor à sua opinião. Para isso coloque uma cruz (X) no quadrado da figura que escolher.



Pense nos Brasileiros, e no grupo mais geral das pessoas que vivem em Portugal. Até que ponto acha que os Brasileiros são semelhantes ao grupo mais geral de pessoas que vive em Portugal? Das 7 figuras que se seguem, escolha apenas uma, ou seja, aquela que corresponde melhor à sua opinião. Para isso coloque uma cruz (X) no quadrado da figura que escolher.



Tendo em conta as frases que se seguem diga-nos até que ponto concorda ou discorda com cada uma delas. Para isso marque com uma cruz (X) o algarismo que corresponde à sua resposta:

“Quando penso no grupo mais típico do grupo de pessoas que vive em Portugal, acho que”:

1	2	3	4	5	6	7
Os <u>Portugueses</u> são o grupo <u>mais típico</u> do grupo mais geral das pessoas que vivem em Portugal						Os <u>Brasileiros</u> são o grupo <u>mais típico</u> do grupo mais geral das pessoas que vivem em Portugal

“Quando penso no grupo que representa melhor o grupo de pessoas que vive em Portugal, acho que”:

1	2	3	4	5	6	7
Os <u>Portugueses</u> representam muitíssimo melhor o grupo mais geral das pessoas que vivem em Portugal						Os <u>Brasileiros</u> representam muitíssimo melhor o grupo mais geral das pessoas que vivem em Portugal

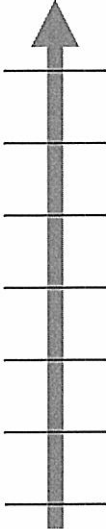

“Quando penso na “verdadeira” pessoa ou na pessoa-tipo que vive em Portugal penso...”:

1	2	3	4	5	6	7
Só num <u>Português</u>						Só num <u>Brasileiro</u>

Pense agora no estatuto social (isto é, no prestígio ou reconhecimento) que acha que os Brasileiros e os Portugueses têm. Usando a escala vertical apresentada, assinale a opção que melhor representa a sua opinião, fazendo uma cruz (X) num dos 7 traços horizontais das setas, sabendo que o traço mais acima corresponde a um estatuto muitíssimo elevado, e o traço mais em baixo a um estatuto muitíssimo baixo.

Portugueses		Brasileiros	
Estatuto muitíssimo alto		Estatuto muitíssimo alto	
Estatuto muitíssimo baixo		Estatuto muitíssimo baixo	

Estas perguntas estavam ligadas ao prestígio que os grupos têm. Mas, muitas vezes, o estatuto dos grupos é diferente do poder que cada um deles tem. Assim, se pensar no poder que cada um destes grupos tem, diria que (faça uma cruz (X) num dos 7 traços horizontais das setas, sabendo que o traço mais acima corresponde a multíssimo poder, e o traço mais em baixo a pouquíssimo poder):

Portugueses		Brasileiros	
Muitíssimo poder		Muitíssimo poder	
Pouquíssimo poder		Pouquíssimo poder	

Gostávamos de ter apenas alguma informação geral sobre si (NÃO escreva o seu nome em nenhum lado):

Idade: _____
Sexo: _____
Naturalidade: _____
Nacionalidade: _____
Há quanto tempo reside em Portugal: _____





unidade de investigação em ciências sociais / iscte

# INTELIGÊNCIA EMOCIONAL E COMPETÊNCIAS PARA UMA CARREIRA DE SUCESSO

Centro de Investigação e Intervenção Social - CIS © 2007  
"INTELIGÊNCIA EMOCIONAL E COMPETÊNCIAS PARA UMA CARREIRA DE SUCESSO"

## EMOTIONAL INTELLIGENCE TEST (EIT) - forma abreviada (1/2)

Vai encontrar de seguida um conjunto de situações. Para cada uma delas, leia cada uma das frases cuidadosamente; assinale depois a opção que melhor se aplica ao seu caso, ou escolha uma resposta que represente qual seria o seu comportamento mais provável nessa situação.

A sua pontuação será gerada assim que tiver respondido a todas as questões do teste.

**1) Está sentado num avião e repentinamente começa a ser sacudido por uma forte turbulência. Como se comporta?**

- Lê tranquilamente um livro sem dar grande importância à situação.
- Calcula a gravidade da situação, observando desesperadamente as hospedeiras.
- Tenta acalmar as pessoas que estão à sua volta.
- Tenta adormecer para não se aperceber desta situação.

**2) Apercebe-se que um dos seus colegas de trabalho se sente deprimido porque não consegue estabelecer uma relação com os restantes colegas. Como reage?**

- Mantém-se à margem deste problema porque não sabe como o poderá fazer.
- Procura uma maneira de convencer os seus colegas a interagir mais com o seu colega.
- Começa a dar-se mais com o seu colega.
- Organiza-lhe uma festa de aniversário surpresa.

**3) Vai fazer um exame, mas ao olhar para o enunciado só lhe apetece desistir. Como reage?**

- Pensa, "paciência, vou dedicar-me a sério para ter uma boa nota no próximo exame desta cadeira".
- Fica de rastos e sai o quanto antes da sala.
- Afirma que a nota nesta disciplina não é muito importante e pensa noutras cadeiras nas quais obteve melhores classificações.
- Fala com o professor e pede-lhe para lhe dar uma segunda oportunidade.

**4) Imagine que o seu trabalho é vender um dado produto por telefone. Os 10 clientes com quem contactou recusaram a sua chamada. Pouco a pouco vai desanimando. Como se comporta?**

- Deixa o trabalho por hoje e espera ter mais sorte amanhã.
- Fica a pensar nas causas que o levam a não ter sucesso.
- Na chamada seguinte tenta empregar uma nova tática e, diz a si próprio, que não deve render-se com facilidade.
- Interroga-se se este será o trabalho adequado para si.



EMOTIONAL INTELLIGENCE TEST (EIT) - forma abreviada  
(2/2)

- 6) **Imagine que está a ter uma discussão acesa com o seu companheiro(a). O que deve fazer?**
- Propor uma pausa de 20 minutos e depois reiniciar a discussão.
  - Deixar de lhe falar pelo menos durante o resto do dia.
  - Dizer que lamenta o que está a acontecer e pede-lhe para que ele/ela lhe peça desculpa também.
  - Recuperar o controlo e reflectir durante alguns momentos, de modo a poder expor o seu ponto de vista.
- 7) **Fazendo uma análise apercebe-se que em comparação com os seus amigos você é muito tímido/a e reage com algum receio quando se encontra perante pessoas que não conhece tão bem. O que acha que poderia fazer?**
- Aceita com naturalidade o facto de ser tímido/a.
  - Procura ajuda psicológica.
  - Tenta enfrentar sozinho/a situações que lhe causem desconforto para que dessa forma possa superar os seus medos.
  - Considera que é um caso perdido!
- 8) **Em criança aprendeu alemão mas nunca mais praticou. Agora que gostava de fazer uma viagem pela Europa sente que precisa de reaprender esta língua. Qual a forma mais rápida para obter bons resultados?**
- Praticar, cada dia, a uma hora determinada.
  - Meter conversa com pessoas que falem alemão.
  - Sente que não vale a pena preocupar-se. Irá certamente recordar-se do que aprendeu quando precisar de comunicar com alguém em alemão.
  - Recorrer a ajuda de um profissional.
- 9) **Quando as coisas lhe correm mal, o que é que costuma pensar:**
- "Sou mesmo estúpido/a, não há nada que faça bem".
  - "Não te deixes ir abaixo! Para a próxima tentas fazer melhor"
  - "Sou mesmo uma pessoa falhada"
  - "Porque é que tudo me corre mal?"
- 10) **Imagine que está a falar com um amigo e percebe que tem uma nódoa enorme na sua camisola. Como reage?:**
- Acusa-se dizendo, "Que disparate, não consigo comer sem me sujar, olha para isto!"
  - Despede-se rapidamente.

### Resultados do teste de EIT



Pontuação Total: 31

O resultado do teste que realizou revela que você tem um Coeficiente de inteligência Emocional (QIE) Elevado.

Como se distinguem as pessoas com elevado QIE das pessoas com baixo QIE?

Por norma, as pessoas com um elevado QIE são pessoas que sabem trabalhar bem em equipa e demonstram boa capacidade de iniciativa, adaptam-se facilmente às mudanças e têm uma boa capacidade para superar frustrações. Além de comunicativas e solidárias, têm geralmente uma notável capacidade de assumir responsabilidades, são na generalidade pessoas leais e integram-se facilmente na dinâmica organizacional.

Tendo em conta o seu resultado, pressione o botão correspondente para continuar!

Baixo QIE

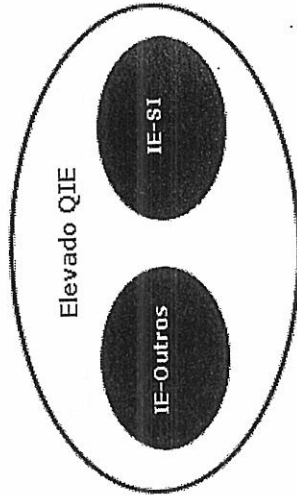
Elevado QIE

**Leia esta informação com atenção:**

Dentro do grupo mais geral de pessoas com elevado QIE podemos ainda distinguir 2 sub-grupos:

Algumas pessoas com QIE elevado são melhores na dimensão "empatia". Isto quer dizer que são pessoas que compreendem mais facilmente as emoções e sentimentos dos outros; são capazes de se colocar na pele dos outros, aspectos importantes para estabelecer relações estáveis com outras pessoas e relações de maior intimidade e lealdade. Chamamos a este grupo, o grupo IE- OUTROS.

Outras pessoas com QIE elevado são melhores na dimensão "percepção emocional de si mesmo". Isto é, são pessoas que acima de tudo conseguem identificar e expressar com maior facilidade e rapidez as suas emoções e sentimentos. Os indivíduos que possuem esta competência são, regra geral, mais comunicativos, decididos e confiantes. Chamamos a este grupo, o grupo IE-SI.



Já sabe que em termos gerais obteve uma pontuação que lhe permite dizer que pertence ao grupo mais geral de pessoas com elevado QIE. Resta saber a que sub-grupo ou sub-tipo pertence: se ao grupo IE-SI ou IE-OUTROS. Para isso, propomos-lhe que responda a um segundo teste:

[Continuar >> Segundo Teste](#)

## EMOTIONAL INTELLIGENCE TYPE TEST (EITT) - forma abreviada

Leia atentamente as afirmações que se seguem. Para cada uma delas assinale V (verdadeiro) se essa afirmação se aplicar a si ou F (falso) se a mesma não se aplicar a si.

A sua pontuação será gerada assim que tiver respondido a todas as questões do teste.

- Para mim é difícil lidar com o sofrimento dos outros.  V |  F
- Não tenho dificuldade em exprimir os meus sentimentos.  V |  F
- Sinto-me não ser capaz de dizer a alguém que a/o amo.  V |  F
- Prefiro estar sozinho do que acompanhado.  V |  F
- Sou uma pessoa com grande sentido de humor.  V |  F
- Sinto-me muitas vezes culpabilizado por coisas que fiz no passado.  V |  F
- Não me importo de chorar em frente de outras pessoas.  V |  F
- Sinto-me bem quando estou com outras pessoas.  V |  F
- Quando alguém me provoca habitualmente não reajo.  V |  F
- Sou uma pessoa amiga dos meus amigos.  V |  F

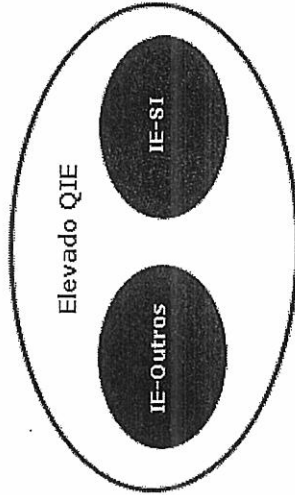
Continuar

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### Resultados do teste EITT

Os seus resultados indicam que você faz parte do sub-tipo de pessoas **IE-OUTROS**

**A grande maioria das pessoas que tem realizado este teste pertence a este mesmo sub-tipo.**  
A maior parte dos estudos mostram também que, comparativamente com as pessoas **IE-SI**, as pessoas do grupo **IE-OUTROS** mostram ter melhores indicadores de sucesso e estabilidade profissionais.



Para continuar clique no sub-tipo ao qual pertence.

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Imagine agora que tem de explicar a outra pessoa a **DIVERSIDADE** do grupo mais geral de pessoas com **elevado QIE**. Quais os principais aspectos que acha que deveria mencionar? Mesmo que a **DIVERSIDADE** deste grupo não seja um aspecto importante para si, ou mesmo que não tenha uma ideia muito clara sobre o que é a **DIVERSIDADE** deste grupo, pense durante algum tempo sobre os aspectos que acha que deveria mencionar para descrever a **DIVERSIDADE** das pessoas com elevado **QIE**.

Quando começar a escrever, a página será reencaminhada automaticamente após alguns minutos.

Continuar

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Imagine agora que tem de explicar a outra pessoa **COMO É o grupo mais geral de pessoas com elevado QIE**. Mesmo que não tenha uma ideia muito clara sobre este aspecto, pense durante algum tempo sobre este assunto e diga-nos quais os principais aspectos que acha que deveria mencionar para explicar como este grupo é?

Quando começar a escrever, a página será reencaminhada automaticamente após alguns minutos.

Continuar

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Vai encontrar de seguida algumas frases que ilustram comentários que as pessoas podem fazer sobre o grupo mais geral de pessoas emocionalmente inteligentes. Até que ponto concorda ou discorda com cada uma delas? (assinale com uma cruz o círculo que melhor corresponde à sua resposta):

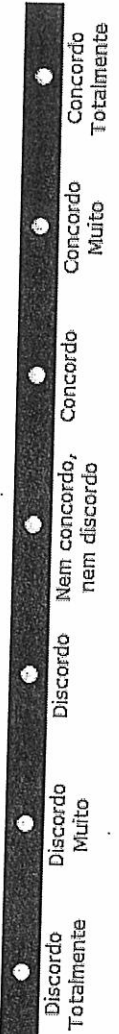
**Não acho que exista apenas um tipo de pessoas emocionalmente inteligentes**



**Em minha opinião, o grupo de pessoas com elevada inteligência emocional é muito diverso**



**São mais as semelhanças do que as diferenças entre as pessoas que são emocionalmente inteligentes**



**Quando penso no grupo de pessoas emocionalmente inteligentes rapidamente me vem à cabeça uma pessoa-tipo**



**Em minha opinião, as pessoas emocionalmente inteligentes têm poucas características em comum:**



Continuar



Vai encontrar um conjunto de características que nos ajudam a definir como são as pessoas que fazem parte do grupo IE-OUTROS, em comparação com as pessoas do grupo IE-SI. Sabemos que no nosso dia-a-dia conseguimos formar uma impressão geral sobre pessoas ou grupos de pessoas que não conhecemos ou que não conhecemos bem.

Assim, para cada uma das características que se segue, diga-nos o quanto é que, em sua opinião, essas mesmas características se aplicam ao grupo IE-OUTROS.

Em geral os membros do grupo IE-OUTROS são:

	1	2	3	4	5	6	7
	Não se aplica nada						Aplica-se totalmente
• Compreensivos	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
• Irracionais	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
• Anti-sociais	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
• Perspicazes	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
• Tranquilos	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
• Nada criativos	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
• Intolerantes	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
• Insensíveis	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
• Pensativos	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
• Dependentes	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
• Ponderados	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
• Controlados (emocionalmente)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Continuar

Vai encontrar de seguida algumas características que nos ajudam a definir o grupo mais geral de pessoas com elevado QIE. Para cada uma das características que se segue, diga-nos o quanto é que, em sua opinião, essas mesmas características se aplicam ao grupo mais geral de pessoas com elevado QIE.

Em geral os membros do grupo com elevado QIE são:

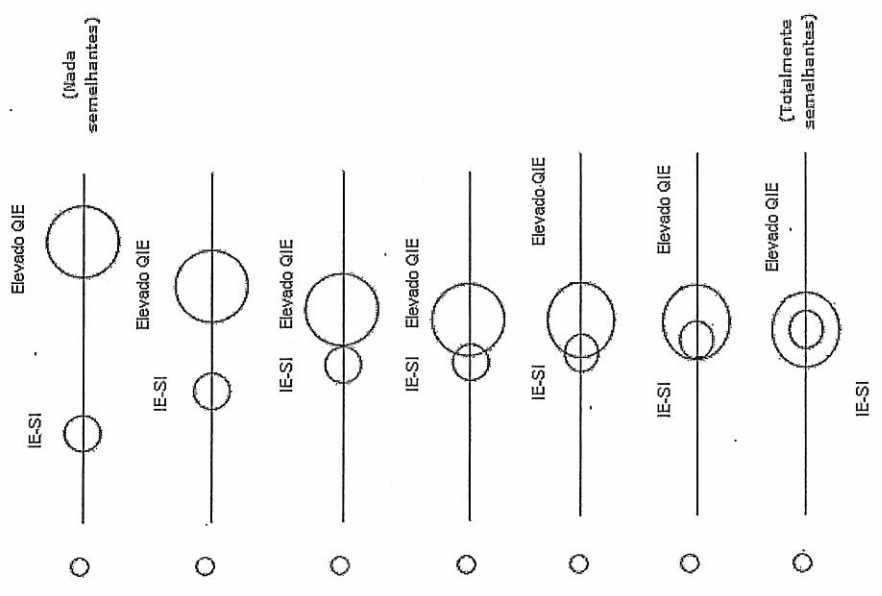
	1	2	3	4	5	6	7
	Não se aplica nada						Aplica-se totalmente
• Compreensivos	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
• Irracionais	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
• Anti-Sociais	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
• Perspicazes	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
• Tranquilos	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
• Nada criativos	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
• Intolerantes	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
• Insensíveis	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
• Pensativos	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
• Dependentes	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
• Ponderados	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
• Controlados (emocionalmente)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Continuar

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**com elevado QIE.**

Para responder tenha em atenção as figuras: o círculo grande representa o grupo de pessoas mais geral com elevado QIE e o círculo pequeno o (sub)grupo de pessoas IE-SI. Assinale depois a figura que melhor corresponde à sua opinião.



Continuar

Tente agora pensar no grau de semelhança que existe entre o grupo IE-OUTROS e o grupo mais geral de pessoas com elevado QIE.

Para responder, tenha em atenção as figuras: o círculo grande representa o grupo de pessoas mais geral com elevado QIE e o círculo pequeno o (sub)grupo de pessoas IE-OUTROS. Assinale depois a figura que melhor corresponde à sua opinião.



Continuar

A CONFAPPEI - Confederação das Associações de Pessoas Emocionalmente Inteligentes - levou a cabo algumas acções para angariar fundos para as associações desenvolverem actividades específicas com os seus membros. A CONFAPPEI pretende distribuir, no próximo mês, 1000 euros dos fundos que recolheu, por 2 associações, a associação das pessoas do tipo IE-OUTROS e a associação das pessoas do tipo IE-SI. Sabemos que não é uma tarefa fácil fazer essa distribuição, mas se fosse você a fazê-la, como distribuiria esses 1000 euros? (assinale a opção que corresponder à sua resposta ou coloque uma outra opção no quadro correspondente)

IE-SI    1000€    700€    500€    300€    0€

IE-OUTROS    0€    300€    500€    700€    1000€

Outra sugestão:

100 Caracteres Disponíveis

Para finalizar este inquérito, gostaríamos de obter apenas alguma informação adicional. Assim:

- 1) Participou num inquérito semelhante durante os últimos 6 meses?    Sim  | Não
- 2) Já tinha feito algum teste para medir o seu QIE?    Sim  | Não
- 3) Participou de forma séria no estudo aqui em causa?    Sim  | Não

Apenas para efeitos estatísticos, gostaríamos de saber alguma informação pessoal:

Idade:

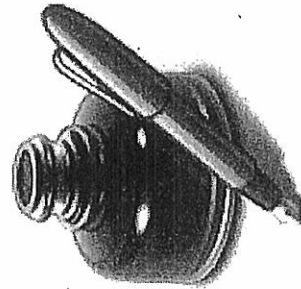
Sexo:    M     F

Nacionalidade:

Email:

(é necessário preencher o campo do email para entrar no sorteio e receber informações sobre o estudo)

[Continuar](#)







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# INTELIGÊNCIA EMOCIONAL E COMPETÊNCIAS PARA UMA CARREIRA DE SUCESSO

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## EMOTIONAL INTELLIGENCE TEST (EIT) - forma abreviada (1/2)

Vai encontrar de seguida um conjunto de situações. Para cada uma delas, leia cada uma das frases cuidadosamente; assinale depois a opção que melhor se aplica ao seu caso, ou escolha uma resposta que represente qual seria o seu comportamento mais provável nessa situação.

A sua pontuação será gerada assim que tiver respondido a todas as questões do teste.

1) **Está sentado num avião e repentinamente começa a ser sacudido por uma forte turbulência. Como se comporta?**

- Lê tranquilamente um livro sem dar grande importância à situação.
- Calcula a gravidade da situação, observando desesperadamente as hospedeiras.
- Tenta acalmar as pessoas que estão à sua volta.
- Tenta adormecer para não se aperceber desta situação.

2) **Apercebe-se que um dos seus colegas de trabalho se sente deprimido porque não consegue estabelecer uma relação com os restantes colegas. Como reage?**

- Mantém-se à margem deste problema porque não sabe como o poderá fazer.
- Procura uma maneira de convencer os seus colegas a interagir mais com o seu colega.
- Começa a dar-se mais com o seu colega.
- Organiza-lhe uma festa de aniversário surpresa.

3) **Vai fazer um exame, mas ao olhar para o enunciado só lhe apetece desistir. Como reage?**

- Pensa, "paciência, vou dedicar-me a sério para, ter uma boa nota no próximo exame desta cadeira".
- Fica de rastos e sai o quanto antes da sala.
- Afirma que a nota nesta disciplina não é muito importante e pensa noutras cadeiras nas quais obteve melhores classificações.
- Fala com o professor e pede-lhe para lhe dar uma segunda oportunidade.

4) **Imagine que o seu trabalho é vender um dado produto por telefone. Os 10 clientes com quem contactou recusaram a sua chamada. Pouco a pouco vai desanimando. Como se comporta?**

- Deixa o trabalho por hoje e espera ter mais sorte amanhã.
- Fica a pensar nas causas que o levam a não ter sucesso.
- Na chamada seguinte tenta empregar uma nova tática e, diz a si próprio, que não deve render-se com facilidade.
- Interroga-se se este será o trabalho adequado para si.



EMOTIONAL INTELLIGENCE TEST (EIT) - forma abreviada  
(2/2)

- 6) Imagine que está a ter uma discussão acesa com o seu companheiro(a). O que deve fazer?
- Propor uma pausa de 20 minutos e depois reiniciar a discussão.
  - Deixar de lhe falar pelo menos durante o resto do dia.
  - Dizer que lamenta o que está a acontecer e pede-lhe para que ele/ela lhe peça desculpa também.
  - Recuperar o controlo e reflectir durante alguns momentos, de modo a poder expor o seu ponto de vista.
- 7) Fazendo uma análise apercebe-se que em comparação com os seus amigos você é muito tímido/a e reage com algum receio quando se encontra perante pessoas que não conhece tão bem. O que acha que poderia fazer?
- Aceita com naturalidade o facto de ser tímido/a.
  - Procura ajuda psicológica.
  - Tenta enfrentar sozinho/a situações que lhe causem desconforto para que dessa forma possa superar os seus medos.
  - Considera que é um caso perdido!
- 8) Em criança aprendeu alemão mas nunca mais praticou. Agora que gostava de fazer uma viagem pela Europa sente que precisa de reaprender esta língua. Qual a forma mais rápida para obter bons resultados?
- Praticar, cada dia, a uma hora determinada.
  - Meter conversa com pessoas que falem alemão.
  - Sentir que não vale a pena preocupar-se. Irá certamente recordar-se do que aprendeu quando precisar de comunicar com alguém em alemão.
  - Recorrer a ajuda de um profissional.
- 9) Quando as coisas lhe correm mal, o que é que costuma pensar:
- "Sou mesmo estúpido/a, não há nada que faça bem".
  - "Não te deixes ir abaixo! Para a próxima tentas fazer melhor"
  - "Sou mesmo uma pessoa falhada"
  - "Porque é que tudo me corre mal?"
- 10) Imagine que está a falar com um amigo e percebe que tem uma nódoa enorme na sua camisola. Como reage?:
- Acusa-se dizendo, "Que disparate, não consigo comer sem me sujar, olha para isto!"
  - Despede-se rapidamente.

### Resultados do teste de EI



Pontuação Total: 31

O resultado do teste que realizou revela que você tem um Coeficiente de inteligência Emocional (QIE) Elevado.

Como se distinguem as pessoas com elevado QIE das pessoas com baixo QIE?

Por norma, as pessoas com um elevado QIE são pessoas que sabem trabalhar bem em equipa e demonstram boa capacidade de iniciativa, adaptam-se facilmente às mudanças e têm uma boa capacidade para superar frustrações. Além de comunicativas e solidárias, têm geralmente uma notável capacidade de assumir responsabilidades, são na generalidade pessoas leais e integram-se facilmente na dinâmica organizacional.

Tendo em conta o seu resultado, pressione o botão correspondente para continuar:

Baixo QIE

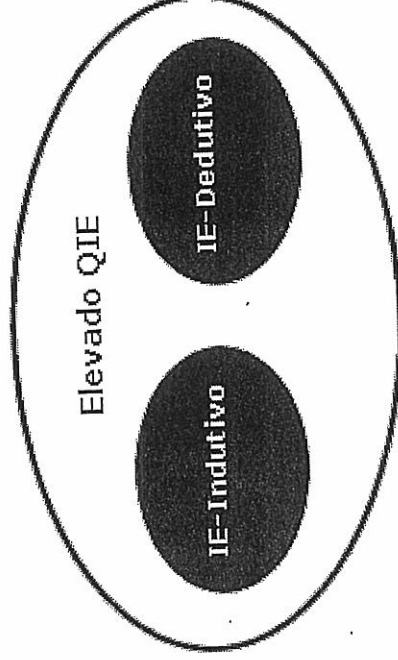
Elevado QIE

**Leia esta informação com atenção:**

As pessoas emocionalmente inteligentes têm características importantes para o estabelecimento de relacionamentos interpessoais positivos, para o bem-estar psicológico e auto-motivação. As pessoas com elevado QIE podem ainda subdividir-se em 2 grupos: as pessoas do tipo IE-Indutivo e as pessoas do tipo IE-Dedutivo.

**Subgrupo IE-Indutivo:** fazem parte deste subgrupo pessoas com **elevado QIE** que são melhores no reconhecimento de emoções, em si e nos outros, e na identificação de indicadores corporais dessas emoções.

**Subgrupo IE-Dedutivo:** fazem parte deste subgrupo pessoas com **elevado QIE** que são melhores na interpretação e na gestão de emoções, em si e nos outros.



Já sabe que em termos gerais obteve uma pontuação que lhe permite dizer que pertence ao **grupo mais geral de pessoas com elevado QIE**. Resta saber a que tipo ou subgrupo: se ao grupo **IE-Indutivo** ou **IE-Dedutivo**. Para isso, propomos-lhe que responda a um segundo teste:

[Continuar >> Segundo Teste](#)

## EMOTIONAL INTELLIGENCE TYPE TEST (EITT) - forma abreviada

Leia atentamente as afirmações que se seguem. Para cada uma delas assinale V (verdadeiro) se essa afirmação se aplicar a si ou F (falso) se a mesma não se aplicar a si.

A sua pontuação será gerada assim que tiver respondido a todas as questões do teste.

Para mim é difícil lidar com o sofrimento dos outros.  V  F

Não tenho dificuldade em exprimir os meus sentimentos.  V  F

Sinto que não sou capaz de dizer a alguém que a/o amo.  V  F

Prefiro estar sozinho do que acompanhado.  V  F

Sou uma pessoa com grande sentido de humor.  V  F

Sinto-me muitas vezes culpabilizado por coisas que fiz no passado.  V  F

Não me importo de chorar em frente de outras pessoas.  V  F

Sinto-me bem quando estou com outras pessoas.  V  F

Quando alguém me provoca habitualmente não reajo.  V  F

Sou uma pessoa amiga dos meus amigos.  V  F

[Continuar](#)

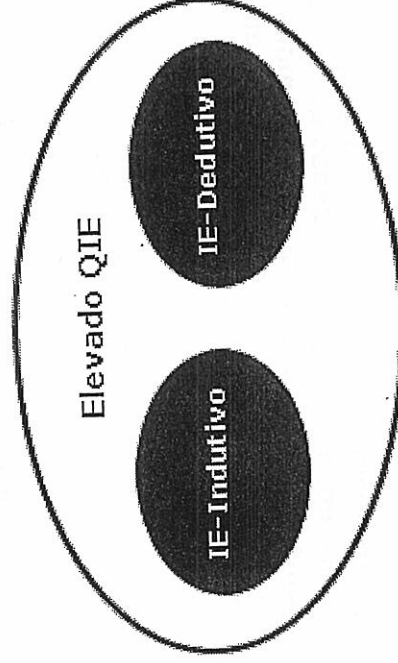
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## Resultados do teste EITT

Os seus resultados indicam que você faz parte do **subgrupo de pessoas IE-Indutivo**

Apenas um pequeno número de pessoas que tem realizado este teste pertence a este mesmo sub-tipo.

Tem-se verificado também que as pessoas do grupo IE-Indutivo são um pouco menos valorizadas socialmente do que as pessoas do grupo IE-Dedutivo, o que consequentemente faz com que, por exemplo, a probabilidade de serem seleccionadas em entrevistas de emprego ou de assumirem cargos de liderança seja menor.



Para continuar clique no subgrupo ao qual pertence.

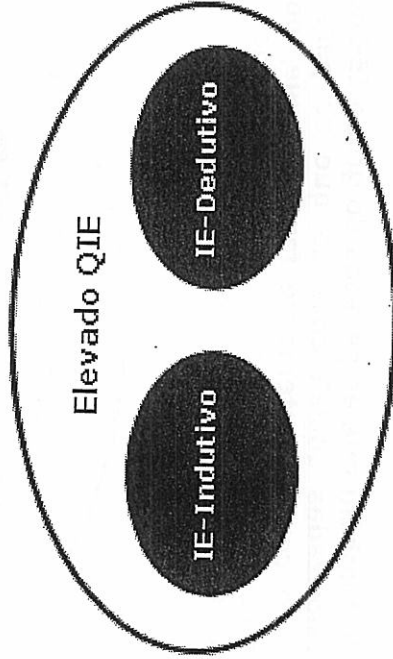
## Resultados do teste EIIT

Os seus resultados indicam que você faz parte do

### subgrupo de pessoas IE-Dedutivo

A grande maioria das pessoas que tem realizado este teste pertence a este mesmo subgrupo.

Tem-se verificado também que as pessoas do grupo IE-Dedutivo são mais valorizadas socialmente do que as pessoas do grupo IE-Indutivo, o que consequentemente faz com que, por exemplo, tenham mais facilidade em ser seleccionadas em entrevistas de emprego, ou com frequência assumam lugares de liderança.



Para continuar clique no subgrupo ao qual pertence.

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"INTELIGÊNCIA EMOCIONAL E COMPETÊNCIAS PARA UMA CARREIRA DE SUCESSO"

Imagine agora que tem de **explicar a outra pessoa a DIVERSIDADE do grupo mais geral de pessoas com elevado QIE**. Quais os principais aspectos que acha que deveria mencionar? Mesmo que a DIVERSIDADE deste grupo não seja um aspecto importante para si, ou mesmo que não tenha uma ideia muito clara sobre o que é a DIVERSIDADE deste grupo, pense durante algum tempo sobre os aspectos que acha que deveria mencionar para descrever a **DIVERSIDADE das pessoas com elevado QIE**.

Quando começar a escrever, a página será reencaminhada automaticamente após alguns minutos.

Continuar

Vai encontrar de seguida algumas frases que ilustram comentários que as pessoas podem fazer sobre o grupo mais geral de pessoas emocionalmente inteligentes. Até que ponto concorda ou discorda com cada uma delas? (assinale com uma cruz o círculo que melhor corresponde à sua resposta):

**Não acho que exista apenas um tipo de pessoas emocionalmente inteligentes**

<input type="radio"/>	Discordo Totalmente	<input type="radio"/>	Discordo Muito	<input type="radio"/>	Discordo	<input type="radio"/>	Nem concordo, nem discordo	<input type="radio"/>	Concordo	<input type="radio"/>	Concordo Muito	<input type="radio"/>	Concordo Totalmente
-----------------------	------------------------	-----------------------	-------------------	-----------------------	----------	-----------------------	----------------------------------	-----------------------	----------	-----------------------	-------------------	-----------------------	------------------------

**Em minha opinião, o grupo de pessoas com elevada inteligência emocional é muito diverso**

<input type="radio"/>	Discordo Totalmente	<input type="radio"/>	Discordo Muito	<input type="radio"/>	Discordo	<input type="radio"/>	Nem concordo, nem discordo	<input type="radio"/>	Concordo	<input type="radio"/>	Concordo Muito	<input type="radio"/>	Concordo Totalmente
-----------------------	------------------------	-----------------------	-------------------	-----------------------	----------	-----------------------	----------------------------------	-----------------------	----------	-----------------------	-------------------	-----------------------	------------------------

**São mais as semelhanças do que as diferenças entre as pessoas que são emocionalmente inteligentes**

<input type="radio"/>	Discordo Totalmente	<input type="radio"/>	Discordo Muito	<input type="radio"/>	Discordo	<input type="radio"/>	Nem concordo, nem discordo	<input type="radio"/>	Concordo	<input type="radio"/>	Concordo Muito	<input type="radio"/>	Concordo Totalmente
-----------------------	------------------------	-----------------------	-------------------	-----------------------	----------	-----------------------	----------------------------------	-----------------------	----------	-----------------------	-------------------	-----------------------	------------------------

**Quando penso no grupo de pessoas emocionalmente inteligentes rapidamente me vem à cabeça uma pessoa-tipo**

<input type="radio"/>	Discordo Totalmente	<input type="radio"/>	Discordo Muito	<input type="radio"/>	Discordo	<input type="radio"/>	Nem concordo, nem discordo	<input type="radio"/>	Concordo	<input type="radio"/>	Concordo Muito	<input type="radio"/>	Concordo Totalmente
-----------------------	------------------------	-----------------------	-------------------	-----------------------	----------	-----------------------	----------------------------------	-----------------------	----------	-----------------------	-------------------	-----------------------	------------------------



**Em minha opinião, as pessoas emocionalmente inteligentes têm poucas características em comum:**

<input type="radio"/>	Discordo Totalmente	<input type="radio"/>	Discordo Muito	<input type="radio"/>	Discordo	<input type="radio"/>	Nem concordo, nem discordo	<input type="radio"/>	Concordo	<input type="radio"/>	Concordo Muito	<input type="radio"/>	Concordo Totalmente
-----------------------	------------------------	-----------------------	-------------------	-----------------------	----------	-----------------------	----------------------------------	-----------------------	----------	-----------------------	-------------------	-----------------------	------------------------

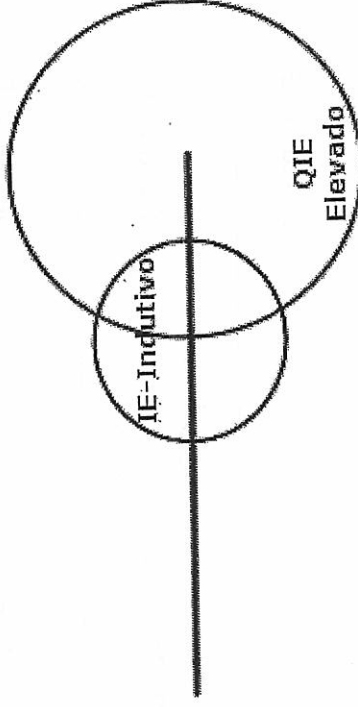
[Continuar](#)



Pense novamente no **sub-grupo IE-Indutivo** e no **grupo mais geral das pessoas com elevado QIE**.

Quão **semelhante** considera que é o **grupo IE-Indutivo do grupo mais geral de pessoas com elevado QIE**?

Antes de dar uma resposta definitiva, visualize as várias possibilidades de resposta clicando nas diferentes opções, sabendo que a 1ª opção indica que não são nada semelhantes e a última opção que são totalmente semelhantes.

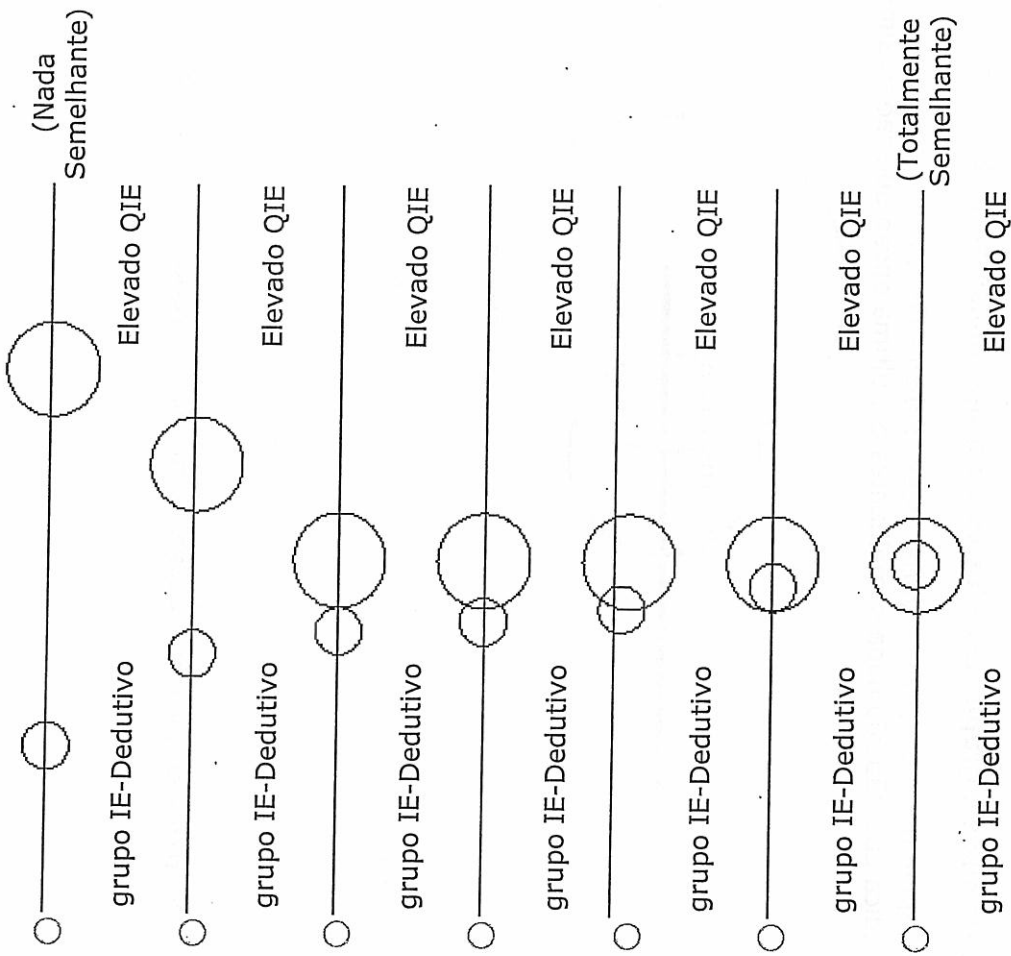


- Nada semelhantes
- 
- Totalmente semelhantes

[Continuar](#)

Tente agora pensar no grau de semelhança que existe entre o grupo IE-Dedutivo e o grupo mais geral de pessoas com elevado QIE.

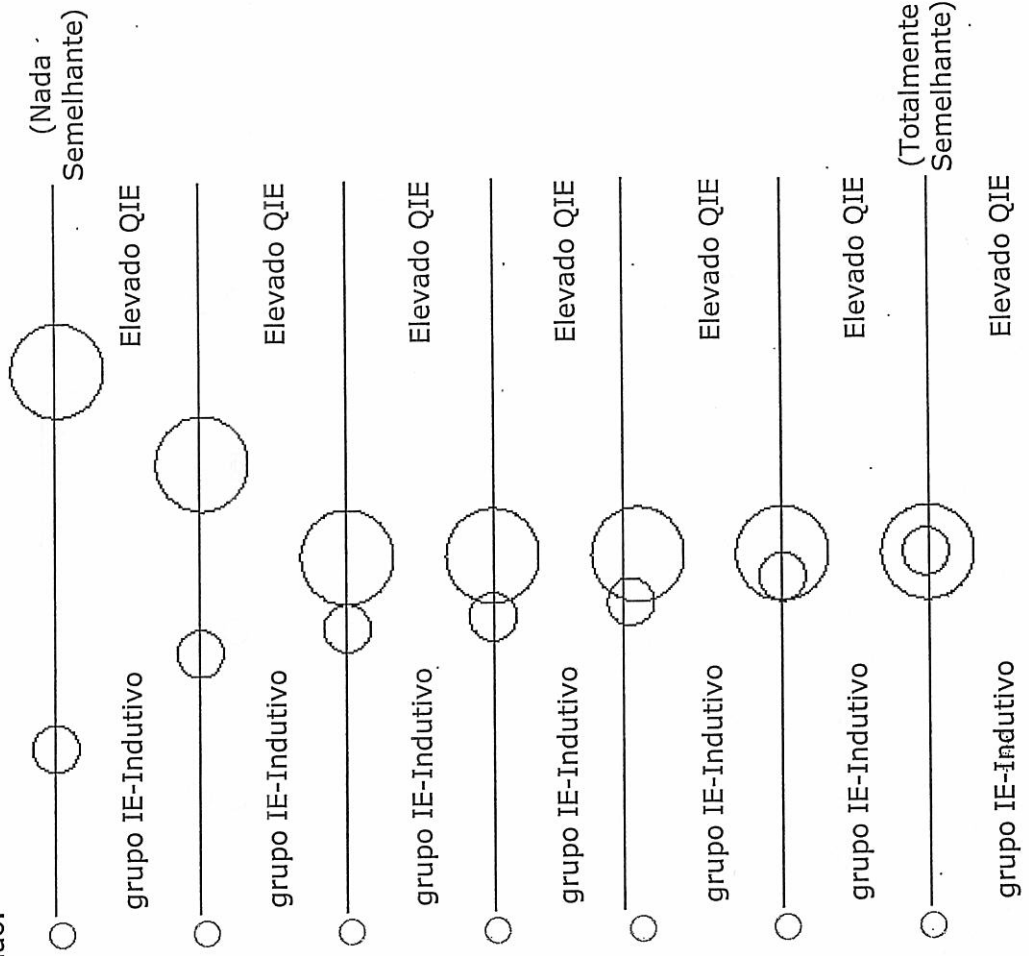
Para responder tenha em atenção as figuras: o círculo grande representa o grupo de pessoas mais geral com elevado QIE e o círculo pequeno o (sub)grupo de pessoas IE-Dedutivo. Assinale depois a figura que melhor corresponde à sua opinião.



Continuar

Tente agora pensar no **grau de semelhança que existe entre o grupo IE-Indutivo e o grupo mais geral de pessoas com elevado QIE.**

Para responder tenha em atenção as figuras: o *círculo grande* representa o **grupo de pessoas mais geral com elevado QIE** e o *círculo pequeno* o **(sub)grupo de pessoas IE-Indutivo**. Assinale depois a figura que melhor corresponde à sua opinião.



[Continuar](#)

Vai encontrar um conjunto de características que nos ajudam a definir **como são as pessoas que fazem parte do grupo IE-Indutivo**, em comparação com as pessoas do **grupo IE-Dedutivo**. Sabemos que no nosso dia-a-dia conseguimos formar uma impressão geral sobre pessoas ou grupos de pessoas que não conhecemos ou que não conhecemos bem.

Assim, para cada uma das características que se segue, diga-nos o quanto é que, em sua opinião, essas mesmas características se aplicam ao **grupo IE-Indutivo**.

**Em geral os membros do grupo IE-Indutivo são:**

	1	2	3	4	5	6	7
	Não se aplica nada						Aplica-se totalmente
• <b>Compreensivos</b>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
• <b>Irracionais</b>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
• <b>Anti-sociais</b>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
• <b>Perspícazes</b>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
• <b>Tranquilos</b>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
• <b>Nada criativos</b>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
• <b>Intolerantes</b>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
• <b>Insensíveis</b>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
• <b>Pensativos</b>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
• <b>Dependentes</b>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
• <b>Ponderados</b>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
• <b>Controlados (emocionalmente)</b>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Continuar

No nosso dia-a-dia conseguimos formar uma impressão geral sobre pessoas ou grupos de pessoas que não conhecemos ou que não conhecemos bem.

Tendo em conta este aspecto, vai encontrar de seguida algumas questões a respeito dos **sub-grupos IE-Dedutivo** e **IE-Indutivo**. Mais especificamente, vai encontrar um conjunto de características que nos ajudam a definir **como são as pessoas que fazem parte do grupo IE-Dedutivo**, em comparação com as pessoas do **grupo IE-Indutivo**.

Para cada uma dessas características diga-nos o quanto é que, em sua opinião, essas mesmas características se aplicam ao **grupo IE-Dedutivo**.

**Em geral os membros do grupo IE-Dedutivo são:**

	1	2	3	4	5	6	7
	Não se aplica nada						Aplica-se totalmente
• <b>Compreensivos</b>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
• <b>Irracionais</b>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
• <b>Anti-sociais</b>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
• <b>Perspícazes</b>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
• <b>Tranquilos</b>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
• <b>Nada criativos</b>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
• <b>Intolerantes</b>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
• <b>Insensíveis</b>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
• <b>Pensativos</b>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
• <b>Dependentes</b>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
• <b>Ponderados</b>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
• <b>Controlados (emocionalmente)</b>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

[Continuar](#)

Vai encontrar de seguida algumas características que nos ajudam a definir o **grupo mais geral de pessoas com elevado QIE**. Para cada uma das características que se segue, diga-nos o quanto é que, em sua opinião, essas mesmas características se aplicam ao **grupo mais geral de pessoas com elevado QIE**.

Em geral os membros do **grupo com elevado QIE** são:

	1	2	3	4	5	6	7
	Não se aplica nada						Aplica-se totalmente
• <b>Compreensivos</b>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
• <b>Irracionais</b>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
• <b>Anti-Sociais</b>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
• <b>Perspicazes</b>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
• <b>Tranquilos</b>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
• <b>Nada criativos</b>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
• <b>Intolerantes</b>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
• <b>Insensíveis</b>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
• <b>Pensativos</b>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
• <b>Dependentes</b>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
• <b>Ponderados</b>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
• <b>Controlados (emocionalmente)</b>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Continuar

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**"INTELIGÊNCIA EMOCIONAL E COMPETÊNCIAS PARA UMA CARREIRA DE SUCESSO"**



Vai encontrar de seguida algumas frases que ilustram comentários que as pessoas podem fazer sobre si. Até que ponto concorda ou discorda com cada uma delas? (clique na opção que corresponde à sua resposta):

**Sinto que pertença ao grupo de pessoas com elevado QIE:**

- |                       |                     |                       |                |                       |          |                       |                            |                       |                |                       |                     |
|-----------------------|---------------------|-----------------------|----------------|-----------------------|----------|-----------------------|----------------------------|-----------------------|----------------|-----------------------|---------------------|
| <input type="radio"/> | Discordo Totalmente | <input type="radio"/> | Discordo Muito | <input type="radio"/> | Discordo | <input type="radio"/> | Nem concordo, nem discordo | <input type="radio"/> | Concordo Muito | <input type="radio"/> | Concordo Totalmente |
|-----------------------|---------------------|-----------------------|----------------|-----------------------|----------|-----------------------|----------------------------|-----------------------|----------------|-----------------------|---------------------|

**Não me identifico com o grupo de pessoas com elevado QIE:**

- |                       |                     |                       |                |                       |          |                       |                            |                       |                |                       |                     |
|-----------------------|---------------------|-----------------------|----------------|-----------------------|----------|-----------------------|----------------------------|-----------------------|----------------|-----------------------|---------------------|
| <input type="radio"/> | Discordo Totalmente | <input type="radio"/> | Discordo Muito | <input type="radio"/> | Discordo | <input type="radio"/> | Nem concordo, nem discordo | <input type="radio"/> | Concordo Muito | <input type="radio"/> | Concordo Totalmente |
|-----------------------|---------------------|-----------------------|----------------|-----------------------|----------|-----------------------|----------------------------|-----------------------|----------------|-----------------------|---------------------|

**Ser emocionalmente muito inteligente não é uma parte importante da minha identidade:**

- |                       |                     |                       |                |                       |          |                       |                            |                       |                |                       |                     |
|-----------------------|---------------------|-----------------------|----------------|-----------------------|----------|-----------------------|----------------------------|-----------------------|----------------|-----------------------|---------------------|
| <input type="radio"/> | Discordo Totalmente | <input type="radio"/> | Discordo Muito | <input type="radio"/> | Discordo | <input type="radio"/> | Nem concordo, nem discordo | <input type="radio"/> | Concordo Muito | <input type="radio"/> | Concordo Totalmente |
|-----------------------|---------------------|-----------------------|----------------|-----------------------|----------|-----------------------|----------------------------|-----------------------|----------------|-----------------------|---------------------|

[Continuar](#)

Vai encontrar mais algumas frases que ilustram comentários que as pessoas podem fazer sobre si. Até que ponto concorda ou discorda com cada uma delas? (clique na opção que corresponde à sua resposta):

**Sinto que pertença ao grupo IE-Indutivo:**

<input type="radio"/>	Discordo Totalmente	<input type="radio"/>	Discordo Muito	<input type="radio"/>	Discordo	<input type="radio"/>	Nem concordo, nem discordo	<input type="radio"/>	Concordo Muito	<input type="radio"/>	Concordo Totalmente
-----------------------	---------------------	-----------------------	----------------	-----------------------	----------	-----------------------	----------------------------	-----------------------	----------------	-----------------------	---------------------

**Não me identifico com o grupo de pessoas IE-Indutivo:**

<input type="radio"/>	Discordo Totalmente	<input type="radio"/>	Discordo Muito	<input type="radio"/>	Discordo	<input type="radio"/>	Nem concordo, nem discordo	<input type="radio"/>	Concordo Muito	<input type="radio"/>	Concordo Totalmente
-----------------------	---------------------	-----------------------	----------------	-----------------------	----------	-----------------------	----------------------------	-----------------------	----------------	-----------------------	---------------------

**Ser uma pessoa do grupo IE-Indutivo não é uma parte importante da minha identidade:**

<input type="radio"/>	Discordo Totalmente	<input type="radio"/>	Discordo Muito	<input type="radio"/>	Discordo	<input type="radio"/>	Nem concordo, nem discordo	<input type="radio"/>	Concordo Muito	<input type="radio"/>	Concordo Totalmente
-----------------------	---------------------	-----------------------	----------------	-----------------------	----------	-----------------------	----------------------------	-----------------------	----------------	-----------------------	---------------------

[Continuar](#)

Até que ponto concorda ou discorda com cada um destes comentários? (clique na opção que corresponde à sua resposta):

**Em comparação com o grupo IE-Indutivo, o grupo IE-Dedutivo tem um estatuto:**

- Claramente Inferior     Bastante Inferior     Inferior     Igual     Superior     Bastante Superior     Claramente Superior

**Em termos de reconhecimento ou valorização social, em comparação com as pessoas do grupo IE-Indutivo as pessoas do grupo IE-Dedutivo são:**

- Claramente menos valorizados     Bastante menos valorizados     Menos valorizados     Nem mais nem menos valorizados     Mais valorizados     Bastante mais valorizados     Claramente mais valorizados

**Em termos de selecção em entrevistas de emprego, em comparação com as pessoas do grupo IE-Indutivo, as pessoas do grupo IE-Dedutivo parecem ter:**

- Claramente mais dificuldade     Bastante mais dificuldade     Mais dificuldade     Nem facilidade nem dificuldade     Mais facilidade     Bastante mais facilidade     Claramente mais facilidade

**Em comparação com o grupo IE-Indutivo, o número de pessoas que pertence ao grupo IE-Dedutivo é:**

- Claramente Menor     Bastante Menor     Menor     Igual     Superior     Bastante Superior     Claramente Superior

A CONFAPEI - Confederação das Associações de Pessoas Emocionalmente Inteligentes - levou a cabo algumas acções para angariar fundos para as associações desenvolverem actividades específicas com os seus membros. A CONFAPEI pretende distribuir, no próximo mês, 1000 euros dos fundos que recolheu, por 2 associações, a associação das pessoas do tipo IE-OUTROS e a associação das pessoas do tipo IE-SI. Sabemos que não é uma tarefa fácil fazer essa distribuição, mas se fosse você a fazê-la, como distribuiria esses 1000 euros? (assinale a opção que corresponder à sua resposta ou coloque uma outra opção no quadro correspondente)

IE-SI    1000€    700€    500€    300€    0€

IE-OUTROS    0€    300€    500€    700€    1000€

Outra sugestão:

100 Caracteres Disponíveis

Para finalizar este inquérito, gostaríamos de obter apenas alguma informação adicional.

Assim:

- 1) Participou num inquérito semelhante durante os últimos 6 meses?    Sim  | Não
- 2) Já tinha feito algum teste para medir o seu QIE?    Sim  | Não
- 3) Participou de forma séria no estudo aqui em causa?    Sim  | Não

Apenas para efeitos estatísticos, gostaríamos de saber alguma informação pessoal:

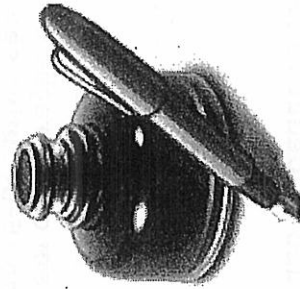
Idade:

Sexo: M  F

Nacionalidade:

Email:

(é necessário preencher o campo do email para entrar no sorteio e receber informações sobre o estudo)



**Appendix B**  
**Studies 4 & 5**

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O Centro de Investigação e Intervenção Social é uma unidade científica do ISCTE que realiza habitualmente estudos de opinião. Para a nossa pesquisa estamos interessados em saber a sua opinião sobre alguns aspectos da sociedade Portuguesa. Para tal, vai encontrar um conjunto de questões para as quais lhe pedimos que dê a sua opinião mais real e honesta. Não existem respostas certas nem erradas; é a sua verdadeira opinião que nos interessa. Note que a sua participação neste questionário é anónima e voluntária e que por isso é livre de parar a qualquer momento. Pedimos-lhe apenas que indique a seguinte informação pessoal:

Sexo:  M  F      Idade: \_\_\_\_\_

*Obrigada pela sua colaboração!*

Um dos aspectos para os quais gostávamos de saber a sua opinião tem a ver com a delinquência existente na sociedade Portuguesa. Tal como deve ter ouvido, em Junho a televisão noticiou o que foi chamado de "arrastão" na praia de Carcavelos e que, segundo a imprensa, teria sido causado por um grande número de indivíduos moradores em bairros periféricos da cidade de Lisboa. Segundo contou um agente da polícia ao Jornal Correio da Manhã, "Quando os primeiros treze polícias chegaram, ontem à tarde, à Praia de Carcavelos, não queriam acreditar no que os seus olhos viam: os assaltantes eram às centenas, a correr de um lado para o outro. E à medida que avançávamos no areal, as pessoas vinham ter connosco a dizer que lhes tinham roubado telemóveis, fios, tudo. Foi indescritível" (Correio da Manhã, 11 de Junho de 2005). Este acontecimento fez com que se começasse a falar cada vez mais da delinquência que existe em Portugal.

De uma maneira geral, facilmente construímos ideias sobre o que nos rodeia, nomeadamente sobre a delinquência, em geral, e sobre quem são os grupos de delinquentes existentes em Portugal. Por este motivo, gostávamos de saber como descreveria o típico delinquente da sociedade portuguesa. Pense naquilo que poderá ser comum a todos os sub-grupos de delinquentes para descrever o típico delinquente. Tente ter em atenção como é o típico delinquente da sociedade portuguesa. Não demore mais do que 5 minutos a pensar sobre este assunto:

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Leia atentamente as afirmações que se seguem e diga-nos o que pensa sobre cada uma delas. Para tal, basta assinalar o algarismo que corresponde à sua opinião, tendo em conta que:

1= *Discordo totalmente;*

2= *Discordo muito;*

3= *Discordo;*

4= *Nem concordo nem discordo;*

5= *Concordo;*

6= *Concordo muito;*

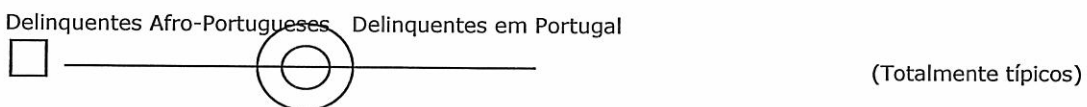
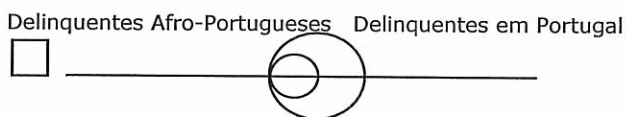
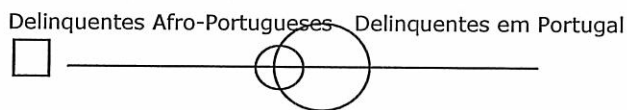
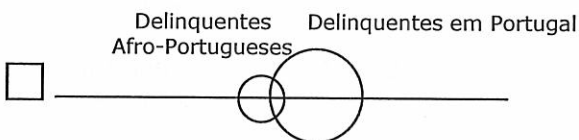
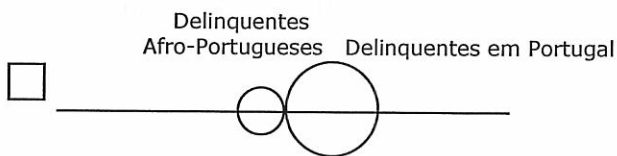
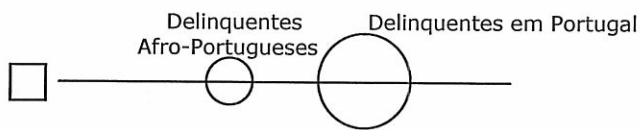
7= *Concordo totalmente*

É fácil descrever o típico delinquente	1	2	3	4	5	6	7
Existem diferentes formas de descrever um delinquente	1	2	3	4	5	6	7
Não existe um delinquente típico	1	2	3	4	5	6	7

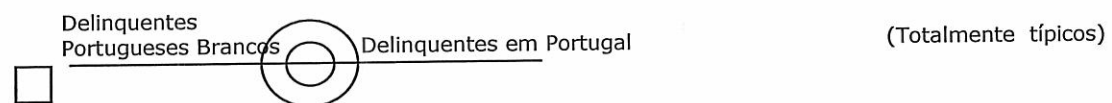
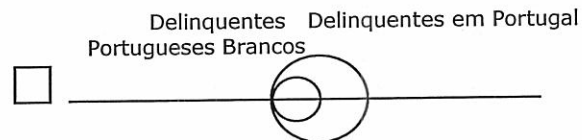
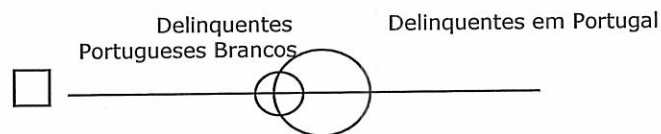
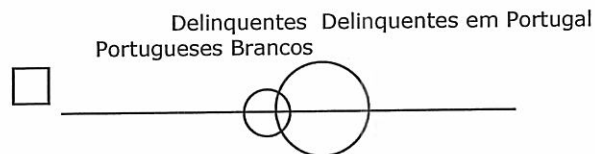
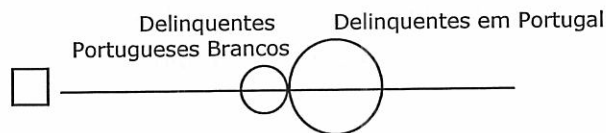
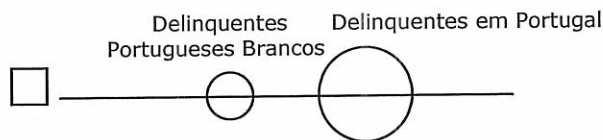
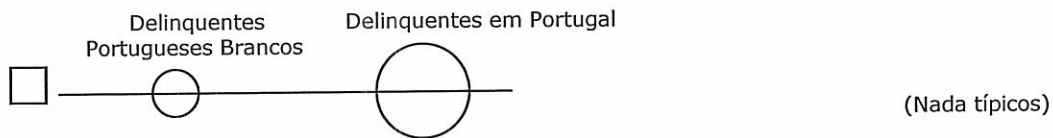
Como descreveria o grupo de delinquentes existente na sociedade Portuguesa? Para responder assinale com uma cruz o algarismo que melhor corresponde à sua opinião:

Muito diferentes entre si	1	2	3	4	5	6	7	Muito iguais entre si
Com características muito específicas entre si	1	2	3	4	5	6	7	Com características muito comuns entre si
Muito variáveis entre si	1	2	3	4	5	6	7	Muito homogéneos entre si

Tente agora pensar que dentro do grupo de delinquentes mais geral, poderá distinguir diferentes sub-grupos de delinquentes. Pense, por exemplo, no sub-grupo de delinquentes que são Afro-Portugueses. Em sua opinião, até que ponto considera os delinquentes Afro-Portugueses como os típicos delinquentes do conjunto mais geral de delinquentes em Portugal? Para responder tenha em atenção as figuras: o círculo grande representa o grupo de delinquentes mais geral e o círculo pequeno o sub-grupo de delinquentes de origem Afro-Portuguesa. Assinale depois com uma cruz o quadrado que melhor corresponde à sua opinião.



Pense agora no sub-grupo de delinquentes que são Portugueses-Brancos. Até que ponto considera que os delinquentes Portugueses-Brancos são os típicos delinquentes do conjunto mais global de delinquentes existentes em Portugal? Para responder tenha em atenção as figuras: o círculo grande representa o grupo de delinquentes mais geral e o círculo pequeno o sub-grupo de delinquentes que são Portugueses-brancos. Assinale depois com uma cruz o quadrado que melhor corresponde à sua opinião.



Comparados com os Portugueses-brancos, os Afro-Portugueses estão mais envolvidos em que tipo de crimes? (coloque até 4 tipos de crimes)

1. \_\_\_\_\_

2. \_\_\_\_\_

3. \_\_\_\_\_

4. \_\_\_\_\_

Comparados com os Afro-Portugueses, o Portugueses-brancos estão mais envolvidos em que tipo de crimes? (coloque até 4 tipos de crimes)

1. \_\_\_\_\_

2. \_\_\_\_\_

3. \_\_\_\_\_

4. \_\_\_\_\_

Em que medida os comportamentos delinquentes que mencionou antes de aplicam aos delinquentes da sociedade Portuguesa em geral? (escreva novamente esses crimes e assinale o algarismo que melhor corresponde à sua resposta, tendo em conta que pode responder de 1 = *não se aplica nada*, a 7 = *aplica-se muitíssimo*)

Crimes

1.	1	2	3	4	5	6	7
2.	1	2	3	4	5	6	7
3.	1	2	3	4	5	6	7
4.	1	2	3	4	5	6	7
5.	1	2	3	4	5	6	7
6.	1	2	3	4	5	6	7
7.	1	2	3	4	5	6	7
8.	1	2	3	4	5	6	7

Em média, comparados com os Afro-Portugueses, os Portugueses-brancos possuem um estatuto (assinale o algarismo que melhor corresponde à sua resposta sabendo que 1 = *claramente inferior* e 7 = *claramente superior*)

Claramente inferior	1	2	3	4	5	6	7	Claramente superior
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Qual a sua ideologia política? Coloque uma cruz no algarismo que corresponde à sua opção de Resposta (assinale o algarismo que melhor corresponde à sua resposta)

Extrema esquerda	Esquerda	Centro esquerda	Centro direita	Direita	Extrema direita
1	2	3	4	5	6

*Obrigada pela sua colaboração!*



O Centro de Investigação e Intervenção Social (CIS) está a fazer um estudo que tem por objectivo realizar uma caracterização dos **alunos do ensino superior público português**. O CIS está interessado em caracterizar, para além do grupo mais geral de alunos do ensino superior público, dois sub-grupos de alunos: os **alunos de Ciências Sociais** e os **alunos de Ciências Exactas**. É neste sentido que te vamos pedir que nos respondas a algumas questões. Não existem respostas certas nem erradas; estamos apenas interessados em conhecer a tua opinião mais honesta e sincera. Pedimos-te apenas que sigas a ordem das questões que te são levantadas. As tuas respostas são anónimas, por isso **NÃO** escrevas o teu nome em nenhum lado; para efeitos estatísticos estamos apenas interessados na seguinte informação geral:

Idade: \_\_\_\_\_

Sexo: F  M

Faculdade/Universidade: \_\_\_\_\_

Ano que frequenta: \_\_\_\_\_

No "Guia de estudante" de 28 de Março de 2008 do Semanário "Expresso", on-line, podia ler-se a seguinte notícia:

# Expresso

Nos últimos anos é cada vez mais comum que os alunos que acabam uma licenciatura não trabalhem necessariamente num emprego que esteja directamente ligado à sua formação académica(...). Mais do que escolher um dado licenciado, é cada vez mais frequente também para as entidades empregadoras recrutarem finalistas que tenham um conjunto de aptidões gerais (...). Outras questões preocupam no entanto estas entidades: o desfasamento existente entre as Universidades e o mundo profissional, bem como o facto dos alunos do ensino superior passarem muito tempo na universidade, faltando-lhes, conseqüentemente, experiência no mercado de trabalho.

Todos sabemos que existem diferentes opiniões sobre os alunos que frequentam o ensino superior. Imagina-te a trabalhar no departamento de recursos humanos de uma empresa. Se tivesses de justificar porque era preferível rejeitar um aluno (finalista) do ensino superior público, que desvantagens é que apontavas? **Com todos os prós e contras, e independentemente daquela que poderá ser a tua opinião, gostávamos que a tua resposta se focasse exclusivamente nas desvantagens que a tua empresa teria em empregar um aluno (finalista) do ensino superior público** (não demores mais do que 5 minutos a responder):



Imagina agora que um turista te aborda na rua e te pergunta como são os alunos do ensino superior público português. A tua resposta deve fazer referência à DIVERSIDADE DOS ALUNOS DO ENSINO SUPERIOR PÚBLICO. Quais os principais aspectos que achas que podes referir? Mesmo que não tenhas uma ideia clara sobre a diversidade deste grupo de pessoas, pensa durante algum tempo sobre que aspectos é que achas que te ajudam a definir a DIVERSIDADE do grupo de alunos do ensino superior (não demores mais do que 5 minutos a responder):

*Os alunos do ensino superior público são muito diversos porque...*

Vais encontrar agora algumas frases que as pessoas utilizam muitas vezes quando falam sobre os *alunos do ensino superior público português*. Pedimos-te que nos digas qual a tua opinião para cada uma delas (para tal assinala com uma X o algarismo que corresponde à tua resposta):

*É fácil descrever o típico aluno do ensino superior público:*

1	2	3	4	5	6	7
Não concordo nada	Não concordo muito	Não concordo	Nem concordo nem discordo	Concordo	Concordo bastante	Concordo totalmente

*Existem diferentes formas de descrever um aluno do ensino superior público:*

1	2	3	4	5	6	7
Não concordo nada	Não concordo muito	Não concordo	Nem concordo nem discordo	Concordo	Concordo bastante	Concordo totalmente

*Não há apenas um típico aluno do ensino superior público:*

1	2	3	4	5	6	7
Não concordo nada	Não concordo muito	Não concordo	Nem concordo nem discordo	Concordo	Concordo bastante	Concordo totalmente

*Globalmente a imagem que tenho dos alunos do ensino superior público é:*

1	2	3	4	5	6	7
Claramente negativa	Muito negativa	Negativa	Nem positiva nem negativa	Positiva	Muito positiva	Claramente positiva

De uma maneira geral, dentro do grupo mais geral dos alunos do ensino superior público português podemos encontrar 2 grandes grupos: os alunos de Ciências Sociais (ex., Sociologia, Psicologia, etc.), e os alunos de Ciências Exactas (ex., Engenharia, Matemática Aplicada, etc.). Pensa agora nos alunos de Ciências Exactas e nos alunos de Ciências Sociais. Sabemos que nem todos os membros de um grupo são iguais, mas muitas vezes temos uma opinião geral sobre as pessoas que dele fazem parte.

Assim, em tua opinião, como são os alunos de Ciências Exactas em comparação com os alunos de Ciências Sociais?

<i>Em comparação com os alunos de Ciências Sociais os <u>alunos de Ciências Exactas</u> são mais...</i>
A:
B:
C:
D:

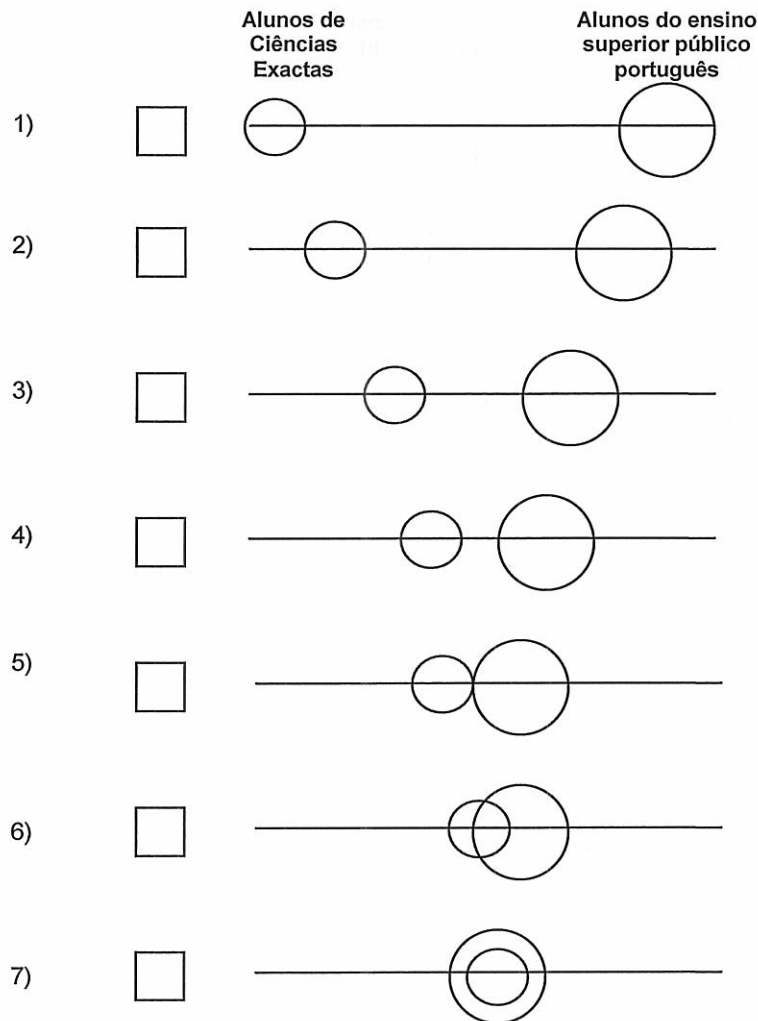
E como é que achas que são os alunos de Ciências Sociais em comparação com os alunos de Ciências Exactas?

<i>Em comparação com os alunos de Ciências Exactas os <u>alunos de Ciências Sociais</u> são mais...</i>
E:
F:
G:
H:

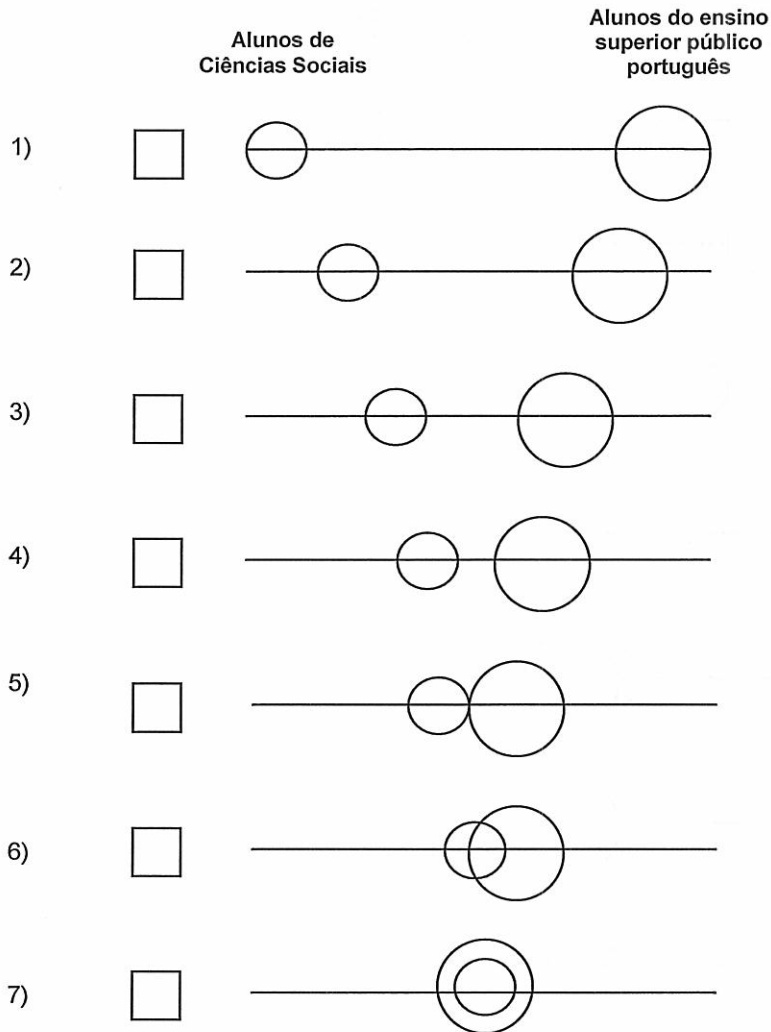
Para cada uma das características que escreveste anteriormente (A, B, C, D, E, F, G, H), pedimos-te agora que nos digas até que ponto elas se aplicam ao GRUPO MAIS GERAL DOS ALUNOS DO ENSINO SUPERIOR PÚBLICO. ATENÇÃO: as letras correspondentes a cada característica não estão apresentadas por ordem alfabética. Para responder assinala com uma cruz (X) a opção que melhor corresponde à tua resposta:

Características	Não se aplica nada	Não se aplica muito	Não se aplica	Assim assim	Aplica-se	Aplica-se muito	Aplica-se totalmente
G							
B							
A							
F							
H							
C							
E							
D							

Vais encontrar agora 7 figuras, nas quais estão representados 2 grupos: o círculo mais pequeno corresponde ao grupo de alunos de Ciências Exactas e o círculo maior ao grupo mais geral de estudantes do ensino superior público. Em termos de *semelhanças*, quão semelhantes consideras que são estes 2 grupos? Para responderes escolhe apenas uma das figuras assinalando com uma cruz (X) a tua opção, sabendo que a tua resposta pode variar de “nada semelhantes” (figura 1) a “totalmente semelhantes” (figura 7):



Vais encontrar novamente 7 figuras, nas quais estão representados 2 grupos: o círculo mais pequeno corresponde ao grupo de alunos de Ciências Sociais e o círculo maior ao grupo mais geral de estudantes do ensino superior. Em termos de semelhanças, quão semelhantes consideras que são estes 2 grupos? Para responderes escolhe apenas uma das figuras assinalando com uma cruz (X) a tua opção, sabendo que a tua resposta pode variar de “nada semelhantes” (figura 1) a “totalmente semelhantes” (figura 7):



Pensa agora no estatuto social (isto é, no prestígio ou reconhecimento social) dos alunos de Ciências Exactas e Ciências Sociais. Usando a escala vertical que se segue, assinala a opção que melhor representa a tua opinião, fazendo uma cruz (X) num dos 7 traços horizontais das setas, sabendo que o traço mais acima corresponde a um estatuto muitíssimo elevado, e o traço mais em baixo a um estatuto muitíssimo baixo.

