

Repositório ISCTE-IUL

Deposited in *Repositório ISCTE-IUL*:

2026-04-10

Deposited version:

Accepted Version

Peer-review status of attached file:

Peer-reviewed

Citation for published item:

Calheiros, M. M., Silva, C. S. & Patrício, J. N. (2020). Maltreatment and youth self-representations in residential care: the moderating role of individual and placement variables. *Children and Youth Services Review*. 116, 1-12

Further information on publisher's website:

10.1016/j.childyouth.2020.105230

Publisher's copyright statement:

This is the peer reviewed version of the following article: Calheiros, M. M., Silva, C. S. & Patrício, J. N. (2020). Maltreatment and youth self-representations in residential care: the moderating role of individual and placement variables. *Children and Youth Services Review*. 116, 1-12, which has been published in final form at <https://dx.doi.org/10.1016/j.childyouth.2020.105230>. This article may be used for non-commercial purposes in accordance with the Publisher's Terms and Conditions for self-archiving.

Use policy

Creative Commons CC BY 4.0

The full-text may be used and/or reproduced, and given to third parties in any format or medium, without prior permission or charge, for personal research or study, educational, or not-for-profit purposes provided that:

- a full bibliographic reference is made to the original source
- a link is made to the metadata record in the Repository
- the full-text is not changed in any way

The full-text must not be sold in any format or medium without the formal permission of the copyright holders.

Maltreatment and youth self-representations in residential care: The moderating role of individual and placement variables

Abstract

The objective of this study was to explore the effects of previous maltreatment on current self-representations (i.e., the attributes used to describe oneself) of youth in residential care and the moderating role of gender, age, number of previous placements and length of placement in residential care. The sample was composed of 809 adolescents and youths in residential care. The youth completed the self-representation questionnaire for youths in residential care (SRQYRC). In order to analyze the impact of previous maltreatment on self-representation, retrospective accounts of previous maltreatment experiences were used, and a set of multiple regression analyses were conducted. Results of multiple regressions suggest previous experiences of maltreatment contribute to youth's self-representations. Specifically, youth that experienced sexual abuse reported higher levels of negative self-representations (i.e., negative valence attributes, such as aggressive, sad, misfit, neglected) while youth that experienced physical and psychological abuse, emotional and educational maltreatment, and neglect in terms of physical provision reported less positive self-representations (i.e., positive valence attributes, such as nice, intelligent, cherished). Some of these associations were moderated by gender, age, number and length of placements in residential care. These results underline that the type of maltreatment has a differential impact on youth's self-representation dimensions and that placement stability (i.e., without moving the youth other residential care placements), and the continuity of care in the same residential care unit may protect the self-representations of youth with previous experiences of abuse and neglect.

Keywords: youth in care, residential care, neglect, abuse, self-representations, placement stability

Introduction

Early childhood experiences and children's interpersonal relationships are crucial to their psychological development and mental health throughout life. The continuous relationship between caregivers and the child, characterized by synchrony, mutuality, stimulation, positive attitude and emotional support, are related to well-being (Bakermans-Kranenburg, Van Ijzendoorn, & Juffer, 2003). That responsiveness and safety in childhood predicts later social behavior and mental health (Stronach, Toth, Rogosch, Oshri, Manly, & Cicchetti, 2011). On the other hand, maltreated children and youth who were removed from their families and continue to experience relatively little emotional care in residential care facilities, have developmental problems of various kinds throughout life (Cho & Jackson, 2016; Gabrielli, Jackson, Tunno, & Hambrick, 2017; Jackson, Gabrielli, Fleming, Tunno, Makanui, 2014).

Studies consistently identify that youth (i.e., young people between 10 and 24 years old) in residential care have more mental health problems and psychopathology than the general population. They present a relatively high prevalence of conduct disorder, attention-deficit hyperactivity disorder, depression, post-traumatic stress disorder, and generalized anxiety disorder (Abram, Teplin, McClelland, & Dulcan, 2003; Gabrielli, et al., 2017; González-García, Bravo, Arruabarrena, Martín, Santos, & Del Valle, 2017; Jozefiak et al., 2016; Tarren-Sweeney & Vetere, 2013). These adjustment problems may be partially explained by pre-care experiences of inconsistent or inadequate parenting (e.g., abuse, neglect) (Baams, Beek, Hille, Zevenbergen, & Bos, 2013; Lehmann, Havik, Havik, & Heiervang, 2013; Taussig, 2002), the removal of children from their natural life context or by during-care experiences (e.g., placements and repeated breakdowns, turnover of caregivers) (Attar-Schwartz, 2009; Neagu & Sebba, 2019). The combination of multiple risks in the family with multiple risks in the residential care facilities has a severe and cumulative impact on youths' relationships with peers, and are associated with behavioral problems and mental health problems (Attar-Schwartz, 2009; Cho & Jackson, 2016; Gabrielli, et al., 2017; Lewis, Dozier, Ackerman & Sepulveda-Kozakowski, 2007).

Research has also indicated that youth in residential care typically perceive and evaluate themselves in a worse way than youth in general (Magalhães & Lopes, 2011; Martínez-Martínez, Castro-Sánchez, Rodríguez-Fernández, Zurita-Ortega, Chacón-Cuberos, & Espejo-Garcés, 2018; Nsabimana, Rutembesa, Wilhelm, & Martin-Soelch, 2019), youth in adoptive families, or youth who have grown up with their biological families in socially disadvantaged areas (Sánchez-Sandoval, 2015).

Research on self-representations is especially important in this group, given their pivotal role on mental well-being. For instance, negative self-representations in different domains (e.g., academic, social, physical appearance, behavioral conduct, sports) have been shown to predict depressive symptoms in children and adolescents (Cole, Jacquez, & Maschman, 2001). Prior research has also shown that negative social self-representations predict peer victimization and rejection (Caldwell, Rudolph, Troop-Gordon, & Kim, 2004; Salmivalli & Isaacs, 2005). Moreover, positive self-representations in the domains of school ability, peer acceptance, physical appearance, and physical abilities have been respectively associated with better school achievement, peer relations, and eating and exercise behavior (Harter, 2015; Marsh & Craven, 2006; Tatlow-Golden & Guerin, 2017). Therefore, considering the heightened vulnerability of these youth regarding the development of mental health problems, positive and adaptive self-representations, in different domains, might potentially function as a protective factor leading to better mental health and social behavior (Oyserman, 2015) and acting as a buffer against the impact of negative influences (Harter, 2015; Mann, Hosman, Schaalma, & Vries, 2004). However, to our knowledge, research focused on self-representations of youth in residential care has been scarce, particularly regarding the association between previous maltreatment experiences and current self-representations. Thus, in this study, we aimed to address this gap in the literature by exploring the associations between different types of previous maltreatment and self-representations of youth in residential.

Self-representations

In contemporary social psychology theory and research, the self is defined as a multidimensional and dynamic system in which information is organized in context and domain-related self-representations that collectively comprise one's self-concept (Harter, 2015; Higgins, 1987; Linville, 1987; Markus & Wurf, 1987; Schütz, Fehn, & Baumeister, 2018; Talaifar & Swann, 2018). It is a dynamic system, given that self-representations are dynamically constructed in context throughout individuals' development (Diehl, Youngblade, Hay, & Chui, 2011; Oyserman, Lewis, Yan, Fischer, O'Donnell, & Horowitz, 2017). In the socio-cognitive perspective of the self, self-representations are conceived as self-schemas, that is, "cognitive generalizations about the self, derived from past experience, that organize and guide the processing of the self-related information contained in an individual's social experience" (Markus, 1977, p.1). Within this perspective, self-representations (i.e., the set of attributes that individuals use to describe themselves) integrate different temporal perspectives (past, present and future) and aspirations and desires (e.g., the 'ideal self' and 'ought self', Higgins, 1987, the 'undesired self', Ogilvie, 1987; 'possible selves', Markus & Nurius, 1986). Any specific self-representation may become more prominent because of situational or contextual cues (i.e., characteristics of the current situation or context) combined with individual needs and motivations, which can increase or decrease the relevance of specific self-representations in that situation or context (Harter, 2015; Linville & Carlston, 1994; Markus & Wurf, 1987; Oyserman, 2015). Moreover, the notion that individuals have of themselves develops within interactions with others and by reference to the social and cultural contexts in which individuals interact (Swann & Bosson, 2010). Thus, social interactions are key to the development of self-concept (Oyserman, Elmore, & Smith, 2012), since it is in the context of past and current interactions with others that individuals build and transform their self-representations.

The construction of self-representations is particularly relevant during adolescence, which is perceived as stage of identity construction and self-concept exploration (Steinberg, 2013; Salley, Vannatta, & Gerhardt, 2010). Indeed, in this stage there is the acquisition of cognitive skills that allow

greater abstraction and diversification in the way teenagers think about themselves; and allow the definition and reorganization of the multiple self-representations that (Damon & Hart, 1988; Harter, 2015; Steinberg, 2013). There are also social changes in terms of the contexts in which adolescents participate (Meeus, 2011). There is an expansion of the number of roles and relationships available, a growing autonomy from family and educators in general, a growing importance of the relationship with peers, and exposure to different social expectations and pressures (Harter, 2015; Harter & Monsour, 1992).

Self-representations of youth in residential care and the effect of previous maltreatment

Despite the large amount of existing research on the broad area of the self, the study of self-representations in specific groups of adolescents, such as youth in residential care, and the relationship between these youth's self-representations and previous childhood maltreatment remains unexplored. The few studies focused on self-related variables (e.g., self-concept, self-esteem) with this specific population indicate that youth in residential care have a worse self-concept, especially on the intellectual, academic and behavior dimensions, and a worse self-esteem, when compared with youths in general (Magalhães & Lopes, 2011; Martínez-Martínez, et al., 2018; Nsabimana, et al., 2019). Furthermore, youth in care have more difficulties in developing a positive self-concept as a result of the stigmatization of being in care (Neagu & Sebba, 2019; Kools, 1997; Authors 2015, 2016).

Other factors that can be related to these youth's self-representations are their previous care experiences, such as maltreatment. Maltreatment is broadly defined as broadly conceptualized as any act of commission (i.e., to do something) and/omission (i.e., failure to do something) by a parent or caregiver which causes or potentially results in serious physical or emotional harm, sexual abuse or exploitation (McCoy & Keen, 2013; Rivera, Fincham, & Bray, 2018). These acts of commission and omission respectively constitute the two broad categories of maltreatment: child abuse and child neglect (Authors, 2019; McCoy & Keen, 2013). A considerable body of research has shown that maltreatment experiences are particularly detrimental to children's and adolescents' development of

their sense of self (i.e., their descriptions and evaluations of themselves) (Authors, 2020; Berzenski, Madden, & Yates, 2019; Harter, 2015). According to several studies, maltreated individuals have worse representations of themselves (Authors, 2020; Taussig, 2002; Toth, Cicchetti, Macfie, & Emde, 1997), and this may be explained by the internalization of negative messages resulting from abusive and/or neglectful experiences (Cicchetti, 2016; Harter, 1998, 2015; Stronach et al., 2011).

Indeed, the family is one of the relational contexts with greater importance in the development of self-concept, since it is in that context of interactions with significant others that the individual builds the first representations of their skills, abilities and feelings about themselves (Authors, 2016, 2018, 2020; Cross & Markus, 1990; Harter, 2015; Stronach et al., 2011). The appraisals and evaluations that significant others communicate about the child's behavior, performance and appearance, are progressively internalized by the child, thereby forming the basis for the formation of their self-representations (Carmichael et al., 2007; Paulus et al., 2018). Thus, if youth experienced maltreatment in the family context previously, this may lead to worse self-representations latter on (Arslan, 2016; Çelik & Odacı, 2012; Oshri, Carlson, Kwon, Zeichner, & Wickrama, 2017; Turner, Shattuck, Finkelhor, & Hamby, 2017). Such worse self-representations may also be related with the pattern of losses experienced by children and youth in residential care (loss of family, peer relationships, and community) (McMurray, Connolly, Preston-Shoot, & Wigley, 2010; Ashford & LeCroy, 2013; Neagu & Sebba, 2019).

The relationship between previous maltreatment experiences and current self-representations may be moderated by individual variables, such as gender, age, and number and/or length of placements in care. Regarding gender, some studies have found differences in specific domains, such as competence, behavior and maintaining close friendships. Boys tend to have better self-representations in physical appearance and athletic competence dimensions (Davidson & McCabe, 2006; Eccles et al. 1993; Marsh et al. 1998; Wood, Becker, & Thompson, 1996) while girls tend to have better self-representations in behavior and social dimensions (Authors, 2016b; Harter, 2015).

Overall boys tend to have a slightly more positive global self-concept than girls (Bolognini, Plancherel, Bettschart, & Halfon, 1996; Wilgenbusch & Merrell, 1999), but most studies indicate that gender differences are related to specific self-concept domains. In the context of residential care, previous research has shown that girls perceive themselves as less competent and as having more behavior and, mainly, emotional problems, and globally presented more negative self-representations than boys (Authors, 2016).

With regard to age differences, several studies have shown that self-complexity increases with age (Evans, 1994; Linville & Carlston, 1994; Oosterwegel & Oppenheimer, 2002), indicating that self-concept becomes increasingly multidimensional and differentiated (Harter, 2006). Self-representations also become increasingly abstract, that is, former concrete self-representations in the form of behavior exemplars (e.g., “I run very fast”, “I swim very well”) are progressively abstracted into trait summaries (e.g., athletic) (McConnell, 2011). Moreover, as age increases, individuals gradually integrate in their self-concept attributes (or trait summaries) that refer more to interpersonal and emotional characteristics, and integrate contradictory attributes (e.g., extrovert in some situations, but introvert in others) (Harter, 2015; Steinberg, 2013). Studies also indicate a decline in positive self-representations in early adolescence and a recovery in middle adolescence (Sánchez-Sandoval, 2015).

The number of placements and the length of stay in the current residential care unit indicate the stability and continuity of care. Regarding these variables, some studies indicate that length of stay may have some protective effects (Attar-Schwartz, 2009; Ringle, Ingram, & Thompson, 2010), if it is stable. Indeed, children with multiple placements have significantly more problems with the justice system due to delinquency and criminal behavior (Johnson, Browne, & Hamilton-Giachritsis, 2006). The stability in placement, without ruptures or replacements has been associated with less impulsivity and oppositional behavior (Lewis et al., 2007; Olsson, Egelund, & Høst, 2012). Some studies indicate that the longer children remain in care, the more placements they are likely to have and the greater the risks to their overall health and well-being (Barbell & Freundlich, 2001). Other studies indicate that

the stability of placement is also related to the type of previous maltreatment suffered, showing that physical and sexual abuse are associated with more placement instability (James, Landsverk, & Slymen, 2004; Osborn, Delfabbro, & Barber, 2008). Therefore, the number of placements and length of stay in care may be moderators of associations between previous maltreatment and youth's self-representations.

Given the lack of research focused on the associations between previous maltreatment experiences and self-representations of youth currently in residential care, the present study aims to explore these associations, considering the potential moderating role of individual (i.e., youth's age and gender) and placement variables (i.e., number of placements and length of stay in residential care). This study further adds to the research literature in this field, by analyzing youth's self-representations as cognitive structures, focusing on their specific cognitive content (Markus & Wurf, 1987; Oosterwegel & Oppenheimer, 2002). Moreover, this study also expands past work by considering the multidimensional nature of both maltreatment experiences and youth's self-representation. Given that the consequences of different types of maltreatment on children and youth can be heterogeneous (Brumley, Brumley, & Jaffee, 2019; English, Bangdiwala, & Runyan, 2005), different self-representation domains may be differentially associated to different types of previous maltreatment experiences. Thus, analyzing the specific associations between different types of maltreatment and different domains of youth's self-representations will contribute to better unravel the relation between previous maltreatment experiences and self-representations of youth in residential care, and potentially provide useful inputs for the development of tailored interventions aimed at preventing the negative consequences of maltreatment in this specific population.

Method

Research Context

This study was carried out in Portuguese residential youth care settings. Residential care is a temporary or long-term out-of-home response prescribed by the child care protection system, aiming

to ensure the safety, well-being, and development of children and youth at risk (e.g., orphaned, abandoned, deprived of adequate family environment, subject to abuse and/or neglect). The present study was developed in standard residential care units (i.e., not including emergency, therapeutic, or correctional care, see Whittaker et al., 2016), in which most youth older than 12 years old (84.3%) in out-of-home care are placed (Instituto da Segurança Social, 2019). In Portugal, the protection measure of residential care may last until the age of 21 years old. However, the Portuguese residential care system can accommodate youth older 21 years, who have not yet achieved complete independence, and/or do not have any household or support system, providing the support those youth need to become autonomous and independent. Youth in standard residential care are assisted by multidisciplinary teams, which usually include social workers, psychologists, and caregivers (i.e., educators) who work with the youth with the aim of ensuring that their needs are appropriately addressed and met.

Participants

The sample was composed of 809 youths (45.7% females) from 70 residential care institutions, with ages between 11.90 and 25.36 years old ($M = 16.22$, $SD = 2.22$). Most youth were up to 21 years old; only 10 youth (1.2%) were in the 22 to 25 age range (seven were 22, one was 23, and another was 25). The majority of these youth were Portuguese (88.9%) and the remaining were Guineans (2.5%), Cape Verdeans (1.6%), Angolan (0.7%), Brazilians (0.5%), San Tomeans (0.2%), Guatemalan (0.2%), German (0.2%), Romanian (0.2%), Ukranian (0.2%), Spanish (0.1%), and Moroccan (0.1%). Despite these diverse nationalities of a small proportion of participating youth, all of them spoke Portuguese. These youths were placed in the current residential care institution for 0.01 to 20.84 years ($M = 3.71$, $SD = 3.68$) and 38.7% were in other institutions before. The number of previous placements in residential care varied between 1 (29%) and 7 (0.1%): two placements (6.7%), three placements (2.0%), four placements (0.2%), and five placements (0.1%). Thus, most participants (60.8%) had not been placed in other residential care setting previously, and, among those who had, most (75.1%) had

only one. Considering the total length of stay in residential care (i.e., considering the current and previous placements), these youth were in care for 0.01 to 20.84 years ($M = 5.32$, $SD = 4.46$).

Participants also included 196 (81.1% female) case managers (i.e., the residential care professionals responsible for evaluating youth's specific situation and defining and implementing their respective promotion and protection process), aged between 24 and 53 years old ($M = 34.40$, $SD = 5.90$). Case managers were included as participants in the study to evaluate youth's previous maltreatment experiences, thereby avoiding the recall bias concerns and socially desirable responses associated with the self-report approach of previous maltreatment assessment (Author, 2016; Dubowitz et al., 2005; Jackson et al., 2019). Most case managers were psychologists (35.2%), followed by social work professionals (34.2%), educators (29.1%; e.g., social educators, teachers), and sociologists (1.5%). The amount of time that case managers were working in their respective residential care varied between 0.17 (i.e., two months) and 22 years ($M = 6.83$; $SD = 4.29$).

The residential care institutions hosted between 3 and 53 youth ($M = 24.33$, $SD = 12.98$) and had 0 to 4 case managers ($M = 2.45$, $SD = 0.94$) and between 0 and 15 caregivers ($M = 7.68$, $SD = 3.52$). The mean ratio was of 4.69 youth per caregiver ($SD = 8.18$, $Min = 1$, $Max = 41$).

Instruments

Self-representation. To measure youth's self-representations, we used the Self-Representation Questionnaire for Youth in Residential Care (SRQYRC; Authors, 2015). The questionnaire is composed of 23 items in the form of attributes, organized in six first-order dimensions: Social (four attributes; i.e., nice, friendly, helpful, funny); Competence (four attributes; i.e., intelligent, hard-working, committed, competent); Relational (three attributes; i.e., cherished, protected, loved); Behavioral (six attributes- aggressive, recalcitrant, misbehaving, conflicting, problematic, stubborn); Emotional (four attributes; i.e., depressed, traumatized, sad, lonely); and Misfit (two attributes; i.e., misfit, neglected). These dimensions further load onto two second-order factors: Globally Positive Self-representations (composed by the social, competence and relational dimensions) and Globally

Negative Self-representations (composed by the behavioral, emotional and misfit dimensions), which respectively reflect youth's self-representations of positive social, competence, and relational attributes, and on negative behavioral, emotional, and misfit attributes. Participating youth were asked to rate each attribute on a 5-point Likert-scale, indicating how each attribute was descriptive of themselves, from 1 (i.e., I am definitely not like that) to 5 (i.e., I am totally like that). This measure has showed a good model fit ($\chi^2/df = 2.031$, CFI = .927, TLI = .916, RMSEA = .050), adequate reliability except on misfit dimension (social $\alpha = .81$, competence $\alpha = .75$, relational $\alpha = .72$, globally positive self-representation $\alpha = .84$, behavioral $\alpha = .80$, emotional $\alpha = .75$, misfit $\alpha = .55$, globally negative self-representation $\alpha = .81$), and adequate construct validity (related to mental health dimensions) (Authors, 2016).

Pre-care parental maltreatment. To measure pre-care parental maltreatment the case manager of each youth completed the Child Maltreatment Questionnaire (CMQ; Authors, 2019), based on youth's case file reports. This questionnaire was specifically developed to be used by professionals working with maltreated children and adolescents and is composed of 19 items that are organized into four dimensions: Neglect – lack of physical provision, Physical and psychological abuse, Emotional and educational maltreatment, and Neglect – lack of supervision. Each item has 4 descriptors of increasing severity levels and the professional must indicate if any of the descriptors was present for that youth prior to placement in care. Thus, each item can be listed on a 1 to 5 scale (1 if none of the descriptors was present, 2 if the first level of severity is present (minimally severe), 3 if the second level of severity is present (moderately severe) 4 if the third level of severity is present (highly severe), and 5 if the fourth level of severity is present (extremely severe). This questionnaire has shown good psychometric properties, namely adequate model fit ($\chi^2/df = 3.52$, CFI = .905, GFI = .905, TLI = .886, RMSEA = .072) and reliability (Neglect – Lack of provision $\alpha = .76$, Neglect – Lack of supervision $\alpha = .84$, Emotional and Educational Maltreatment $\alpha = .76$, and Physical and Psychological abuse $\alpha = .81$) (Authors, 2019).

Pre-care sexual abuse. Youth's previous sexual abuse experiences were also assessed by the case managers, based on youth's case file reports, with the use of four descriptors with different severity (Authors, 2019). Previous studies have shown that these descriptors have good internal consistency ($\alpha = .75$), thus ensuring homogeneity and supporting the use of a composite variable of sexual abuse composed with these descriptors (Authors, 2019).

Procedures

Following approval from the Ethics Committee of the University (Blind for review), all the residential care units (381) registered in a social services' online database were invited to participate in this study. From these, 39.9% residential care units replied, of which 93 (61%) accepted to participate in the project and 59 (39%) declined (38 justified that they did not have young people 12 or older; 17 justified that they were overloaded with work and had no time to participate; 1 was closed; and 3 gave no reason to decline). From the 93 institutions that accepted to participate in this study 4 quit due to the amount of data that was necessary to collect, one was excluded because it did not have a technical team (i.e., a multidisciplinary case manager team) as legally required, 17 institutions were not available to conduct the study until after the project data collection term, and one was excluded after the data collection because the questionnaires were not properly filled. Thus, a set of 70 long-term (for placements longer than 6 month) or temporary (for placements shorter than six month) standard (i.e., not including emergency, therapeutic, or correctional care, see Whittaker et al., 2016) residential care units were included in the study. Young people from these institutions with 12 years and older were included in the study, with exception of young people with major cognitive difficulties (information given by the residential unit director) or those who declined to participate in the study. Overall, youth participation ranged from 13.33% to 100% ($M = 64.09$, $SD = 21.82$) across institutions. Data collection with the youth was conducted in groups of 3 to 20 participants from the same residential care unit (mean of 10 youth by group and a ratio of at least 1 researcher for 10 youth at all times), in a room with the necessary conditions to ensure privacy in filling out the survey.

Participating youth and case managers were informed about the goals of the research, that their participation was voluntary, and they could choose not to participate or quit their participation at any time if they desired. They were also assured that their anonymity would be preserved, and that the data would only be used for research purposes. All participants signed an informed consent form prior to their participation. The goals of the study and instructions to fill out the survey were explained to the youth by the researcher at the beginning of the data collection. Then, the youth who accepted to participate signed an informed consent form. Consent for the youth's participation was also obtained from the directors of the residential care units, since in Portugal they are considered the legal guardians of these youth regarding all routine decisions in which they are involved. During the data collection, the researcher was always present to answer to doubts and help the youth when it was necessary. Since all participating youth spoke Portuguese, all of them undertook the survey in Portuguese language. To ensure confidentiality, at the end of their participation, youth handed their anonymized questionnaires directly to the researcher, by putting them in a sealed box destined only to the research team. The case managers filled the questionnaires to evaluate youth's previous maltreatment experiences and other personal information about the youth (e.g., sex, age, length of placement, prior placements). To ensure data anonymity, a code-system was created allowing to match up the que protocols of the youth and respective case manager. Data were collected between 2015 and 2016.

Data analyses

We used SPSS (Version 20) to analyze the data. First, descriptive statistics and bivariate correlations among the study variables were analyzed. Next, an independent samples t-test analysis was conducted to explore potential gender differences in the study variables. Then, correlations and multiple regression analyses were conducted to estimate the association between previous maltreatment experiences and current youth's self-representation. To examine the interaction effects of maltreatment experiences and youth's age, gender, number of placements and length of current

placement, the regression models were conducted with the interaction variables added to the model. Variables were centered and multiplied to create the interaction terms (Aiken & West, 1991). Regarding the variable ‘number of placements’, since most participants (60.8%) only had one placement in residential care (i.e., the current one), and given that, among those who had previous placements, most (75.1%) had only one, this variable was specified as dichotomous (i.e., one placement/more than one placement).

Results

Descriptive statistics and correlation analysis

Table 1 presents the descriptive statistics of the dimensions of previous maltreatment experiences and of current self-representations. Regarding maltreatment, we verified that all the dimensions demonstrated adequate variance with values ranging from 1 to almost 5. However, the skewness showed that all the dimensions tend to have a positive asymmetry, particularly Sexual Abuse and Physical and Psychological Abuse dimensions with a skewness higher than 2. The criterion for univariate normality was a skewness of 2 or -2 (Curran, West, & Finch, 1996). The means are between 1 and 2, indicating that in this sample the previous maltreatment tend to be mostly minimally severe. Regarding self-representation, we verified that all the dimensions demonstrated adequate variance with values ranging from about 1 to almost 5. The means are between 1 and 2 in the negative self-representation dimensions and between 3 and 4 in the positive self-representation dimensions, indicating that in this sample the youth describe themselves mostly with a positive self-representation.

[INSERT TABLE 1]

The correlation analyses (Table 2) indicate that there are few and weak correlations between previous maltreatment experiences and current youth self-representation. Nevertheless, youth with more neglect experiences, in terms of lack of provision, describe themselves with less social, relational and globally positive self-representations. Youth with more emotional and educational maltreatment experiences describe themselves with less positive social self-representations. Lastly,

youth who experienced sexual abuse describe themselves as having more emotional problems, misfit and globally negative self-representations. Regarding the correlation with the moderator variables, we verified that the older youth describe themselves with more competence and globally positive self-representations and have less previous neglect in terms of lack of supervision. The youth in care for longer periods of time describe themselves with more competence self-representations and as having fewer behavioral problems and less globally negative self-representations. They tend to have more previous neglect in terms of physical provision but less previous emotional and educational maltreatment. The youth with higher number of placements are the ones with more previous experiences of physical and psychological abuse. Finally, regarding the correlations between the moderators, the length of stay in the current care institution is negatively related to the number of previous placements ($r = -.146$).

[INSERT TABLE 2]

Gender differences in model variables

As for gender differences in the model variables, females typically presented higher scores in the Behavioral, $t(807) = -3.076, p = .002$, Emotional, $t(806) = -7.065, p < .001$, and Global Negative self-representations, $t(807) = -5.064, p < .001$. That is, they tended to describe themselves as having more behavioral and emotional problems, and overly more negative self-representations. Females also presented higher levels of previous experiences of sexual abuse, $t(797) = -3.319, p = .001$, and lower levels of previous experiences of Physical and psychological abuse, $t(807) = 1.994, p = .046$, Neglect in terms of lack of supervision, $t(807) = 2.574, p = .010$, and Emotional and educational maltreatment, $t(807) = 4.632, p < .001$, than males. Finally, results of these analyses showed that females were significantly older than males, $t(772) = -2.251, p = .025$. Based on these results, the moderator variables and the interaction terms were added at the same time in the regression models, in order to control for possible spurious relations.

Multiple regression analyses

The result of the multiple regression analyses shown in Table 3. Linearity and normality assumptions were poor, nevertheless residual plots, tolerance and VIF values suggest no serious violation of the normality and homoscedasticity assumptions. The regression model was significant for the Social, $F(5,792) = 3.152, p = .008$, Relational, $F(5,793) = 2.896, p = .013$, and globally positive, $F(5,793) = 2.276, p = .045$, self-representation dimensions, and explained 1.3% ($R^2 = .013$), 1.2% ($R^2 = .012$) and 0.8% ($R^2 = .008$) of these dimensions, respectively.

[INSERT TABLE 3]

Specifically, higher levels of Emotional and Educational Maltreatment predicted more negative Social self-representations, $\beta = -.124$, and higher Neglect levels, in terms of Lack of provision, predicted more negative Relational, $\beta = -.119$, and worse Globally Positive ($\beta = -.100$) self-representations. Contrary to what was expected, higher Neglect levels, in terms of Lack of supervision, predicted more positive Relational, $\beta = .130$, and Globally Positive, $\beta = .100$, self-representations. Finally, higher levels of Sexual Abuse predicted higher scores on the Emotional, $\beta = .090$, Misfit, $\beta = .078$, and Globally Negative, $\beta = .103$, dimensions of self-representations. In sum, the contribution of previous maltreatment experiences on self-representations are weak and act differently according to the type of maltreatment and of the self-representation dimension measured.

Next, the moderator variables and the interaction terms were added to the regression models. These regression models were significant for the Competence, $F(29,720) = 2.240, p < .001, R^2 = .048$, Relational, $F(29,720) = 1.515, p = .042, R^2 = .020$, Globally Positive, $F(29,720) = 1.529, p = .038, R^2 = .021$, Behavioral, $F(29,720) = 1.570, p = .030, R^2 = .022$, Emotional, $F(29,719) = 3.135, p < .001, R^2 = .079$, and Globally Negative, $F(29,720) = 2.429, p < .001, R^2 = .054$, self-representation dimensions. These models increased the power of explanation of the previous models, explaining 2% to 7.9% of self-representation dimensions. The Emotional self-representation dimension is the one

with higher variance explained. Results of the moderation analyses are presented in Table 4. Only significant interactions of significant models are presented.

[INSERT TABLE 4]

Specifically, significant interactions effects were found between Physical and Psychological abuse and placement length on Competence self-representations, $\beta = .111$. As shown in figure 1, youth with higher levels of physical and psychological abuse experiences present lower levels of Competence self-representations when the placement length is low, but higher levels of competence self-representations when the placement length is high.

[INSERT FIGURE 1]

Significant interactions were found between Neglect – Lack of provision and number of placements on Competence self-representations, $\beta = -.106$. As can be seen on figure 2, youth with higher levels of neglect experiences, in terms of lack of physical provision, describe themselves as less competent, especially those with than one placement. Thus, a lower number of placements and a longer length of placement in current residential care seem to be protective of competence self-representations of youth with higher levels of previous experiences of neglect in terms of provision and physical and psychological abuse.

[INSERT FIGURE 2]

Significant interactions were found between Physical and Psychological abuse and age on Competence self-representations, $\beta = -.147$; between Neglect – Lack of provision and age on Relational, $\beta = .118$, and Globally Positive, $\beta = .098$, self-representations; and between Sexual abuse and age on Globally Negative, $\beta = .084$, self-representations. As shown in figure 3, globally, youth with higher levels of neglect experiences, in terms of lack of provision, presented lower scores on relational and globally positive self-representations, especially the younger youth. On the other hand, higher experiences of physical and psychological abuse are associated with lower scores on competence self-representations, but only for the older youth. Finally, youth with higher levels of

sexual abuse experiences described themselves with more globally negative self-representations, especially the older youth. Thus, neglect experiences, in terms of provision, seems to affect especially younger youth's positive self-representations of younger youth, while physical and psychological abuse seems to affect especially older youth's competence self-representations and sexual abuse seems to affect especially older youth's negative self-representations.

[INSERT FIGURE 3]

Finally, significant interactions were found between Neglect – Lack of supervision and gender on Emotional, $\beta = -.129$, and on Globally Negative, $\beta = -.090$, self-representation dimensions. As can be seen on figure 4, male youth with higher levels of neglect experiences, in terms of lack of supervision, described themselves as having less emotional problems and globally negative self-representations. In contrast, female youth with higher levels of neglect experiences, in terms of lack of supervision, described themselves with slightly higher emotional problems and globally negative self-representations. Thus, gender seems to act as a protective factor for the construction of negative self-representations of males who suffered higher levels of neglect in terms of lack of supervision.

[INSERT FIGURE 4]

Discussion

Considering the lack of research about the associations between previous maltreatment experiences on the self-representations of youth in residential care, the main objective of this study was to explore this relationship in this specific population. More specifically, we aimed to analyze the pattern of associations between different maltreatment and youth's self-representation dimensions, considering the moderating role of individual factors (i.e., age and gender) and variables of youth's placement history (i.e., length of placement and number of previous placements). This study thus adds to the literature in the field by contributing to disentangle the several possible associations between different types of maltreatment experiences and different self-representation domains, for different youth subgroups and placement histories. By doing so, this study provides useful inputs to the

development of interventions better tailored to youth's characteristics and specificities of their residential care course.

Overall, the study results suggest that previous maltreatment experiences contribute to a relatively small percentage of the variance of current youth's self-representations, having a different effect according to: 1) the type of maltreatment and 2) the self-representation dimension measured. In addition, adding the placement length, the number of placements, and youth's age and gender to the previous models increased the total explained variance of self-representations, contributing to a variance percentage of youth's self-representations that varied between 2% to 7.9%. Indeed, the literature indicates that although all types of maltreatment are likely to affect children and youth functioning, there may be differential effects according to the type of maltreatment (Cicchetti, 2016). In this study, considering the main and the interaction effects, results can be summed up in four distinct groups of effects: 1) emotional and educational maltreatment was related to more negative social self-representations; 2) neglect in terms of lack of provision was related to more negative competence, relational and worse globally positive self-representations; 3) physical and psychological abuse was related to more negative competence self-representations; and 4) sexual abuse was related to more emotional problems, misfit and globally negative self-representations. Thus, in general, neglect, emotional and educational maltreatment, and physical and psychological abuse seem to contribute to lower levels of positive self-representations (e.g., less positive social and relational), while sexual abuse seem to contribute to higher levels of negative self-representations (e.g., more emotional problems). This diversity of findings is consistent with a previous study showing that sexually abused children manifested more negative self-representations than neglected children (Toth, Cicchetti, Macfie, & Emde, 1997). This suggests that the type of abuse may have different effects according to the self-representation domain under analysis.

Although the contribution of previous maltreatment experiences on current self-representation is relatively weak, results consistently showed that it is globally negative. This result is consistent with

previous studies demonstrating that a history of abuse is predictive of youth's current self-representations. Specifically, previous studies have found that various forms of abuse (physical abuse, sexual abuse, emotional abuse and neglect) are significantly negatively correlated with global self-perception and self-esteem (Çelik & Odacı, 2012), and with and self-representations (authors, 2019). This may be explained by the internalization of negative messages (e.g., messages of rejection and disapproval) resulting from abusive and/or neglectful experiences (Arslan, 2016; Çelik & Odacı, 2012; Oshri, Carlson, Kwon, Zeichner, & Wickrama, 2017; Turner, Shattuck, Finkelhor, & Hamby, 2017). According to Harvey, Dorahy, Vertue and Duthie (2012) review "these children might perceive themselves as unacceptable, inferior, a failure (Lumley & Harkness, 2007), or unworthy of love (Feiring, 2005)" (p.238).

Contrary to the studies above, in this study, neglect, in terms of lack of supervision, predicted higher levels of relational and globally positive self-representations. However, this effect was only significant for the male youth. This result might be related to coping strategies and inflated self-representations of the youth that suffered higher levels of lack of supervision, with the aim of maintaining a sense of control in an environment where physical basic needs are not met appropriately (Cicchetti & Toth, 2015). Indeed, the lack of protection by the caregiver may induce feelings of self-reliance to ensure self-protection that can be a source of resilience and can produce positive outcomes in adulthood (Harter, 2015). These youth might engage in a defensive processing of the information about themselves and construct their identity as survivors and self-advocates, disavowing dependence of others, instead of internalizing the negative stereotypes of foster children or adopting an identity as victim (Harter, 2015; Cicchetti & Toth, 2015). Other studies have shown that higher levels of maltreatment are sometimes related to better self-representations. Namely, prior research has documented that younger maltreated children reported better self-representations of competence and social acceptance than non-maltreated children (Barnett, Vondra, & Shonk, 1996). These authors suggested that this might be related to a tendency among young maltreated children to inflate self-

ratings, to exaggerate peer acceptance and to confuse their real and ideal self-representations (Barnett et al., 1996). Inflated self-representations may serve a self-protective role for young children, since it may act as a useful defense mechanism in the face of real or perceived parental criticism and/ or rejection (Vondra, Barnett, & Cicchetti, 1989), allowing them to increase their sense of competence,. Indeed, to make sense of their experiences and establish feelings of wholeness and well-being, youth may employ a variety of defenses to protect themselves from emotional fragmentation, such as an idealized image of their caregivers or of themselves (Duval & Vincent, 2009). This result may also be explained by the relation between lack of parental supervision and delinquency. Low parental supervision is strongly linked to delinquency and aggressiveness (Hoeve et al., 2009; Orpinas, Murray, & Kelder, 1999), and this aggressiveness may be related to a perfect or idealized self-concept. According to Hughes, Cavell and Grossman (1997) aggressive children tend to idealize and to inflate ratings of competence and relationship quality, constructing a highly positive self-view as a defensive posture.

Regarding the moderation models, results revealed moderation effects of all moderators analyzed. Specifically, concerning the moderating role of youth's placement history, results indicate that the length of placement in the current residential care unit seems to be a protective factor for competence self-representations of youth who have suffered more physical and psychological abuse. As for the number of previous placements, results suggest that fewer placements seem to be a protective factor for competence self-representations of youth with high experiences of neglect in terms of provision. Thus, placement stability, without ruptures and breakdowns, and the continuity of care in the same institution, may protect the self-representations of youth with previous experiences of abuse and neglect. These results are consistent with previous studies reflecting the importance of placement stability (Attar- Schwartz, 2009; Ringle, Ingram, & Thompson, 2010), which underline that residential care services must favor trajectories of stability more than multiple moves within the system. These moderation effects suggest that, being in residential care, and stability of care, might

have provided these youth better opportunities to develop a set of skills, thus offering information about themselves that allow them to construct positive self-representations of competence. In addition, the youth with higher levels of previous abuse and neglect experiences might feel particularly loved, cherished and protected in the residential care setting, by comparison to their previous situation in their home environment. Indeed, substitute care has the potential to compensate for negative early experiences if the caregivers understand the effects of early maltreatment on the development of the self and on the emotional regulation skills (Duval & Vincent, 2009).

With regard to the moderating role of youth's age, results suggest that previous neglect experiences, in terms of provision, especially affect younger youth's positive self-representations, while previous physical and psychological abuse especially affects older youth's competence self-representations. As for previous sexual abuse experiences, results indicate that it especially affects older youth's globally negative self-representations. Thus, while abuse experiences seem to affect mainly the older youth's self-representations, neglect experiences seem to affect mainly the younger youth's self-representation. Neglect experiences may predominantly affect younger youth since these are more dependent on adult care. Indeed, in early adolescence neglect effects are more evident and differentiated from other types of maltreatment (Hildyard & Wolfe, 2002).

Regarding the moderating role of youth's gender, results showed that it seems to act as a protective factor for negative self-representations of males that suffered higher levels of neglect in terms of lack of supervision. This finding is consistent with previous research indicating that boys tend to have slightly higher global self-concept scores than girls (Bolognini et al., 1996; Harter, 2015), which can be protective when facing negative experiences.

It is also important to highlight that the relatively weak effects of previous maltreatment experiences on self-representations of youth in residential care may be related to the fact that youth's previous maltreatment experiences were evaluated based on case file reports by the youth's case managers. Literature in this field emphasizes the importance of informative processes, suggesting that

case records must have clear information about the family and youth's situation (de Kwaadsteniet, Bartelink, Witteman, Berge, & Yperen, 2013). However, institutional records are not always systematic, nor contain all the relevant information regarding previous maltreatment (Jackson, McGuire, Tunno, & Makanui, 2019) needed to fill out all the questionnaire items and to evaluate the severity of the different parental practices, for research or intervention purposes. In case files, data regarding maltreatment experiences might often be limited to what could be proven by state authorities (Jackson et al., 2019). In addition, research has shown that there is great variability in the way professionals record case information, even in the same service (Author, 2016; Fallon et al., 2010).

Thus, evaluation in the promotion and protection system could benefit from greater clarity and accuracy of classification or a better definition of child maltreatment (Fallon, Trocmé & MacLaurin, 2011), informing both researchers and the professional practices more effectively. In addition, in this context, aiming to highlight a closer interconnection between services and a better coordination between professionals from welfare and residential care system, this need of informative processes appears to be even more important.

Additionally, some studies show that participants' perceptions of their parents' aggressive behaviors is more important to predict their overall self-concept and specific domains of self-representations, than their frequency or severity; thus, the way individuals perceive their experiences should be considered when examining the psychological effects of aggressive parental behaviors (Giant & Vartanian, 2003). Another limitation of this study is that, although it was focused on previous maltreatment experiences, it did not control other context and personal variables prior to the institutional care experience and during care that could also contribute to explain the self-representation of youth.

Finally, it is also important to discuss that previous studies have demonstrated that early maltreatment predicts adolescents' psychological and behavioral problems (Lansford et al., 2002;

Stronach, Toth, Rogosch, Oshri, Manly, & Cicchetti, 2011), and that self-representation domains may function as buffers of this relationship. Indeed, positive self-representations seem to be one of the several variables that have been identified as dispositional or personality features protecting physically or sexually abused or neglected children and adolescents (Harter, 2015; Mann, Hosman, Schaalma, & Vries, 2004). Thus, besides studying self-representations as outcomes of child maltreatment, it is important to study its moderating or even mediating role in associations between different types of maltreatment and mental health outcomes, and, as such, consider them as important variables to be targeted in interventions aimed at protecting the victims of child abuse and neglect against future maladjustment.

The removal of children and adolescents from high-conflict family situations and subsequent placement in out of home care may provide the opportunity to develop other supportive relations that can be used to develop a positive self-image (Ashford & LeCroy, 2013). Professionals should thus focus on the more positive aspects and competences of children and youth, encouraging success in the academic, professional and social spheres. Furthermore, professionals should prepare populations under care to deal and cope with negative social images (Authors, 2015), and use the identification process developed during care in a positive and mindful way, in order to enable those in care to build a secure and positive global identity (Kools, 1997; Lasson, 2002). Note also that those in care dislike caregivers to judge them or to hold negative perceptions about them based on stereotypes (Freake, Barley, & Kent, 2007). Additionally, they expect care staff to believe in them and encourage them to attain success in school and at work (Tilbury, Buys, & Creed, 2009).

Additionally, some researchers argue for the psychological benefits of having a plurality of representations (Linville, 1987). Specifically, that the variability of self-concept constituents (i.e., self-representations) and their ability to change over time and experience are adaptive in nature (Dweck & Leggett, 1988; Wilson & Ross, 2003). Thus, the quality of care experiences may act as a protective factor, since they give children and youth the opportunity to establish more stable relationships with a

safe, sensitive, responsive and supportive caregiver, which can be determinant to children's and youth's well-being (Kendrick, 2013). Considering the deleterious consequences of child maltreatment on self-representations, some authors underline the importance of the provision of relationally focused models to avoid negative developmental outcomes (Cicchetti, 2011).

In sum, despite the relatively small effects of previous maltreatment experiences on youth's self-representations in this study, we can conclude that different types of maltreatment are differentially associated to youth's self-representation dimensions, especially when analyzing the moderating role of a set of individual and placement variables. Taken together, these results suggest that interventions aimed at promoting positive and adaptive self-representations in youth in residential care should take into account the specificities of youth's previous experiences (Petrenko, Friend, Garrido, Taussig, & Culhane, 2012) as well as their individual characteristics and placement histories. Still, future studies should include more individual and contextual pre and during care variables to further expand theoretical models of youth's current self-representations and to explore the role of these variables as potential protective factors for children and youth in residential care.

References

- Abram, K. M., Teplin, L. A., McClelland, G. M., & Dulcan, M. K. (2003). Comorbid psychiatric disorders in youth in juvenile detention. *Archives of General Psychiatry*, 60(11), 1097–1108.
- Aiken, L. S., & West, S. G. (1991). Multiple regression: Testing and interpreting interactions. Newbury Park, CA: Sage Publications.
- Arslan, G. (2016). Psychological maltreatment, emotional and behavioral problems in adolescents: the mediating role of resilience and self-esteem. *Child Abuse & Neglect*, 52, 200–209.
- Ashford, J., & LeCroy, C. (2013). *Human behavior in the social environment: A multidimensional perspective* (5th ed). Belmont, CA: Brooks/Cole.
- Attar-Schwartz, S. (2009). School functioning of children in residential care: The contributions of multilevel correlates. *Child Abuse & Neglect*, 33(7), 429–440.
- Aviezer, O., Sagi, A., Resnick, G., & Gini, M. (2002). School competence in young adolescence: Links to early attachment relationships beyond concurrent self-perceived competence and representations of relationships. *International Journal of Behavioral Development*, 26, 397–409.
- Baams, L., Beek, T., Hille, H., Zevenbergen, F. C., & Bos, H. M. (2013). Gender nonconformity, perceived stigmatization, and psychological well-being in Dutch sexual minority youth and young adults: A mediation analysis. *Archives of Sexual Behavior*, 42(5), 765–773.
- Bakermans-Kranenburg, M. J., Van Ijzendoorn, M. H., & Juffer, F. (2003). Less is more: meta-analyses of sensitivity and attachment interventions in early childhood. *Psychological Bulletin*, 129, 195–215.
- Barbell, K., & Freundlich, M. (2001). *Foster care today* (pp. 1-7). Washington, DC: Casey Family Programs.
- Barnett, D., Vondra, J. I., & Shonk, S. M. (1996). Self-perceptions, motivation, and school functioning of low-income maltreated and comparison children. *Child Abuse & Neglect*, 20, 397–411.

- Berzenski, S. R., Madden, A. R., & Yates, T. M. (2019). Childhood emotional abuse characteristics moderate associations with adult psychopathology and caregiving. *Child Abuse & Neglect*, 87, 77–87.
- Bolognini, M., Plancherel, B., Bettschart, W., & Halfon, O. (1996). Self-esteem and mental health in early adolescence: Development and gender differences. *Journal of Adolescence*, 19, 233–245.
- Caldwell, M. S., Rudolph, K. D., Troop-Gordon, W., & Kim, D. Y. (2004). Reciprocal influences among relational self-views, social disengagement, and peer stress during early adolescence. *Child Development*, 75(4), 1140–1154.
- Çelik, Ç. B., & Odacı, H. (2012). The effect of experience of childhood abuse among university students on self-perception and submissive behavior. *Children and Youth Services Review*, 34, 200–204.
- Cho, B., & Jackson, Y. (2016). Self-reported and case file maltreatment: Relations to psychosocial outcomes for youth in foster care. *Children and Youth Services Review*, 69, 241–247.
- Cicchetti D., & Toth, S. L. (2015). Child maltreatment. In R. M. Lerner & M. E. Lamb (Eds.). *Handbook of Child Psychology and Developmental Science, Vol. 3: Socioemotional Processes* (7th ed., pp. 515–63). New York: Wiley.
- Cicchetti, D. (2011). Allostatic Load. *Development and Psychopathology*, 23, 723–724.
- Cicchetti, D. (2016). Socioemotional, personality, and biological development: Illustrations from a multilevel developmental psychopathology perspective on child maltreatment. *Annual Review of Psychology*, 67, 187–211.
- Cole, D. A., Jacquez, F., & Maschman, T. L. (2001). Social origins of depressive cognitions: A longitudinal study of self-perceived competence in children. *Cognitive Therapy and Research*, 25, 377–395.
- Cross, S. E., & Markus, H. R. (1990). The willful self. *Personality and Social Psychology Bulletin*, 16, 726–742.

- Curran, P. J., West, S. G., & Finch, J. F. (1996). The robustness of test statistics to nonnormality and specification error in confirmatory factor analysis. *Psychological methods, 1*, 16–29.
- Damon, W., & Hart, D. (1988). *Self-understanding in childhood and adolescence*. New York, NY: Cambridge University Press.
- de Kwaadsteniet, L., Bartelink, C., Witteman, C., ten Berge, I., & van Yperen, T. (2013). Improved decision making about suspected child maltreatment: Results of structuring the decision process. *Children and Youth Services Review, 35*, 347–352.
- Diehl, M., Youngblade, L. M., Hay, E. L., & Chui, H. (2011). The development of self-representations across the life span. In K. L. Fingerman, C. A. Berg, J. Smith, & T. C. Antonucci (Eds.), *Handbook of life-span development* (pp. 611–646). New York: Springer
- Duval, D. M., & Vincent, N. (2009). Affect regulation of homeless youth once in the child welfare system. *Child and Adolescent Social Work Journal, 26*, 155–173.
- Dweck, C. S., & Leggett, E. L. (1988). A social-cognitive approach to motivation and personality. *Psychological Review, 95*, 256–273.
- Evans, D. W. (1994). Self-complexity and its relation to development, symptomatology and self-perception during adolescence. *Child Psychiatry and Human Development, 24*(3), 173–182.
- Fallon, B., Trocmé, N., & MacLaurin, B. (2011). Should child protection services respond differently to maltreatment, risk of maltreatment, and risk of harm? *Child Abuse & Neglect, 35*, 236–239.
- Fallon, B., Trocmé, N., Fluke, J., MacLaurin, B., Tonmyr, L., & Yuan, Y. (2010). Methodological challenges in measuring child maltreatment. *Child Abuse & Neglect, 34*, 70–79.
- Freake, H., Barley, V., & Kent, G. (2007). Adolescent's views of helping professionals: A review of the literature. *Journal of Adolescence, 30*, 639–653.
- Gabrielli, J., Jackson, Y., Tunno, A. M., & Hambrick, E. P. (2017). The blind men and the elephant: Identification of a latent maltreatment construct for youth in foster care. *Child Abuse & Neglect, 67*, 98–108.

- Giant, C. L., & Vartanian, L. R. (2003). Experiences with parental aggression during childhood and self-concept in adulthood: The importance of subjective perceptions. *Journal of Family Violence, 18*, 361–367.
- Harter, S. (2015). *The construction of the self: Developmental and sociocultural foundations*. Guilford Publication, New York.
- Harter, S., & Monsour, A. (1992). Developmental analysis of conflict caused by opposing attributes in adolescent self-portrait. *Developmental Psychology, 28*, 251–260.
- Harvey, S. M., Dorahy, M. J., Vertue, F. M., & Duthie, S. (2012). Childhood psychological maltreatment and perception of self, others, and relationships: a phenomenological exploration. *Journal of Aggression, Maltreatment & Trauma, 21*, 237–255.
- Heller, S. S., Larrieu, J. A., D'Imperio, R., & Boris, N. W. (1999). Research on resilience to child maltreatment: empirical considerations. *Child Abuse & Neglect, 23*, 321–338.
- Higgins, E. T. (1987). Self-discrepancy: a theory relating self and affect. *Psychological Review, 94*, 319–340.
- Hildyard, K. L., & Wolfe, D. A. (2002). Child neglect: developmental issues and outcomes. *Child Abuse & Neglect, 26*, 679–695.
- Hoeve, M., Dubas, J. S., Eichelsheim, V. I., van der Laan, P. H., Smeenk, W., & Gerris, J. R. (2009). The relationship between parenting and delinquency: A meta-analysis. *Journal of Abnormal Child Psychology, 37*, 749–775.
- Hughes, J. N., Cavell, T. A., & Grossman, P. B. (1997). A positive view of self: Risk or protection for aggressive children? *Development and Psychopathology, 9*, 75–94.
- Iwaniec, D. (2006). *The emotionally abused and neglected child: identification, assessment and intervention: a practice handbook*. Chichester: John Wiley & Sons.

- Jackson, Y., Gabrielli, J., Fleming, K., Tunno, A. M., & Makanui, P. K. (2014). Untangling the relative contribution of maltreatment severity and frequency to type of behavioral outcome in foster youth. *Child Abuse & Neglect*, 38(7), 1147–1159.
- Jackson, Y., McGuire, A., Tunno, A. M., & Makanui, P. K. (2019). A reasonably large review of operationalization in child maltreatment research: Assessment approaches and sources of information in youth samples. *Child Abuse & Neglect*, 87, 5–17.
- James, S., Landsverk, J., & Slymen, D. J. (2004). Placement movement in out-of-home care: Patterns and predictors. *Children and Youth Services Review*, 26, 185–206.
- Johnson, R., Browne, K., & Hamilton-Giachritsis, C. (2006). Young children in institutional care at risk of harm. *Trauma, Violence, & Abuse*, 7, 34–60.
- Jozefiak, T., Kayed, N. S., Rimehaug, T., Wormdal, A. K., Brubakk, A. M., & Wichstrøm, L. (2016). Prevalence and comorbidity of mental disorders among adolescents living in residential youth care. *European Child & Adolescent Psychiatry*, 25(1), 33–47.
- Kendrick, A. (2013). Relations, relationships and relatedness: residential child care and the family metaphor. *Child & Family Social Work*, 18, 77–86.
- Kools, S. M. (1997). Adolescent identity development in foster care. *Family Relations*, 46, 263–271.
- Lansford, J. E., Dodge, K. A., Pettit, G. S., Bates, J. E., Crozier, J., & Kaplow, J. (2002). A 12-year prospective study of the long-term effects of early child physical maltreatment on psychological, behavioral, and academic problems in adolescence. *Archives of Pediatric and Adolescent Medicine*, 156, 824–830.
- Lasson, V. (2002). Children's identity. *Child and Youth Care Forum*, 31, 177–182.
- Lehmann, S., Havik, O. E., Havik, T., & Heiervang, E. R. (2013). Mental disorders in foster children: a study of prevalence, comorbidity and risk factors. *Child and Adolescent Psychiatry and Mental Health*, 7(1), 39.

- Lewis, E. E., Dozier, M., Ackerman, J., & Sepulveda-Kozakowski, S. (2007). The effect of placement instability on adopted children's inhibitory control abilities and oppositional behavior. *Developmental Psychology*, 43, 1415–1427.
- Liem, J. H., & Boudewyn, A. C. (1999). Contextualizing the effects of childhood sexual abuse on adult self- and social functioning: An attachment theory perspective. *Child Abuse & Neglect*, 23, 1141–1157.
- Linville, P. W. (1987). Self-complexity as a cognitive buffer against stress-related illness and depression. *Journal of Personality and Social Psychology*, 52, 663–676.
- Linville, P. W., & Carlston, D. E. (1994). Social cognition of the self. In P. G. Devine, D. L. Hamilton, & T. M. Ostrom, (Eds.), *Social cognition: Impact on social psychology* (pp. 143–193). San Diego, CA, US: Academic Press.
- Linville, P. W., & Carlston, D. E. (1994). Social cognition of the self. In P. G. Devine, D. L. Hamilton, & T. M. Ostrom (Eds.), *Social cognition: Impact on social psychology* (pp. 143–193). San Diego, CA: Academic Press.
- Magalhães, E., & Lopes, J. (2011). Auto-conceito em adolescentes institucionalizadas: Um estudo exploratório. *Psicologia*, 25, 163–180.
- Mann, M. M., Hosman, C. M., Schaalma, H. P., & de Vries, N. K. (2004). Self-esteem in a broad-spectrum approach for mental health promotion. *Health education research*, 19, 357–372.
- Markus, H. (1977). Self-schemata and processing information about the self. *Journal of Personality and Social Psychology*, 35 (2), 63–78.
- Markus, H. R., & Wurf, E. (1987). The dynamic self-concept: A social psychological perspective. *Annual Review of Psychology*, 38, 299–337.
- Markus, H., & Nurius, P. (1986). Possible selves. *American Psychologist*, 41, 954–969.

- Marsh, H. W., & Craven, R. G. (2006). Reciprocal effects of self-concept and performance from a multidimensional perspective: Beyond seductive pleasure and unidimensional perspectives. *Perspectives on Psychological Science, 1*(2), 133–163.
- Martínez-Martínez, A., Castro-Sánchez, M., Rodríguez-Fernández, S., Zurita-Ortega, F., Chacón-Cuberos, R., & Espejo-Garcés, T. (2018). Violent behaviour, victimization, self-esteem and physical activity of Spanish adolescents according to place of residence: a structural equation model. *Revista de Psicología Social, 33*, 1, 111–141. DOI: 10.1080/02134748.2017.1385242
- McConnell, A. R. (2011). The multiple self-aspects framework: Self-concept representation and its implications. *Personality and Social Psychology Review, 15*(1), 3–27.
- McMurray, I., Connolly, H., Preston-Shoot, M., & Wigley, V. (2011). Shards of the old looking glass: restoring the significance of identity in promoting positive outcomes for looked-after children. *Child & Family Social Work, 16*(2), 210–218.
- Mead, G. H. (1934). *Mind, self and society*. Chicago: University of Chicago Press.
- Meeus, W. (2011). The study of adolescent identity formation 2000–2010: A review of longitudinal research. *Journal of research on adolescence, 21*(1), 75–94.
- Nsabimana, E., Rutembesa, E., Wilhelm, P., & Martin-Soelch, C. (2019). Effects of Institutionalization and Parental Living Status on Children's Self-Esteem, and Externalizing and Internalizing Problems in Rwanda. *Frontiers in Psychiatry, 10*.
<https://doi.org/10.3389/fpsy.2019.00442>
- Ogilvie, D. M. (1987). The undesired self: A neglected variable in personality research. *Journal of Personality and Social Psychology, 52*, 379–385.
- Olsson, M., Egelund, T., & Høst, A. (2012). Breakdown of teenage placements in Danish out-of-home care. *Child & Family Social Work, 17*, 13–22.

- Oosterwegel, A., & Oppenheimer, L. (2002). Jumping to awareness of conflict between self-representations and its relation to psychological wellbeing. *International Journal of Behavioral Development*, 26(6), 548–555.
- Orpinas, P., Murray, N., & Kelder, S. (1999). Parental influences on students' aggressive behaviors and weapon carrying. *Health Education & Behavior*, 26, 774–787.
- Osborn, A. L., Delfabbro, P., & Barber, J. G. (2008). The psychosocial functioning and family background of children experiencing significant placement instability in Australian out-of-home care. *Children and Youth Services Review*, 30(8), 847–860.
- Oshri, A., Carlson, M. W., Kwon, J. A., Zeichner, A., & Wickrama, K. K. (2017). Developmental growth trajectories of self-esteem in adolescence: associations with child neglect and drug use and abuse in young adulthood. *Journal of Youth and Adolescence*, 46(1), 151–164.
- Oyserman, D. (2015) Identity-based motivation. In R. Scott & S. Kosslyn (Eds.) *Emerging Trends in the Social Sciences*. John Wiley & Sons.
- Oyserman, D. (2015) Identity-based motivation. In R. Scott & S. Kosslyn (Eds.) *Emerging Trends in the Social Sciences*. John Wiley & Sons.
- Oyserman, D., Elmore, K., & Smith, G. (2012). Self, self-concept and identity. In M. Leary & J. Tangney (Eds). *Handbook of Self and Identity*, 2nd Edition (pp. 69–104). New York, NY: Guilford Press.
- Petrenko, C. L., Friend, A., Garrido, E. F., Taussig, H. N., & Culhane, S. E. (2012). Does subtype matter? Assessing the effects of maltreatment on functioning in preadolescent youth in out-of-home care. *Child abuse & neglect*, 36, 633–644.
- Ringle, J. L., Ingram, S. D., & Thompson, R. W. (2010). The association between length of stay in residential care and educational achievement: Results from 5-and 16-year follow-up studies. *Children and Youth Services Review*, 32, 974–980.

Salley, C. G., Vannatta, K., Gerhardt, C. A., & Noll, R. B. (2010). Social self-perception accuracy:

Variations as a function of child age and gender. *Self and Identity*, 9(2), 209–223.

Salmivalli, C., & Isaacs, J. (2005). Prospective relations among victimization, rejection,

friendlessness, and children's self- and peer- perceptions. *Child Development*, 76(6), 1161–1171.

Sánchez-Sandoval, Y. (2015). Self-perception, self-esteem and life satisfaction in adopted and non-

adopted children and adolescents. *Infancia y Aprendizaje*, 38, 144–174.

Schütz A., Fehn T., Baumeister R.F. (2018) Self. In: Zeigler-Hill V., Shackelford T. (eds)

Encyclopedia of Personality and Individual Differences. Springer, Cham

Steinberg, L. (2013). *Adolescence* (8th dition). New York: McGraw Hill.

Stronach, E. P., Toth, S. L., Rogosch, F., Oshri, A., Manly, J. T., & Cicchetti, D. (2011). Child

maltreatment, attachment security, and internal representations of mother and mother-child relationships. *Child Maltreatment*, 16(2), 137–145.

Swann, W. B., & Bosson, J. K. (2010). Self and identity. In S. T. Fiske, D. T. Gilbert, & G. Lindzey

(Eds.), *Handbook of social psychology* (5th ed., Vol. 1, pp. 589–628). Hoboken, NJ: Wiley.

Talaifar, S., & Swann, W. (2018, March 28). Self and Identity. *Oxford Research Encyclopedia of*

Psychology. Retrieved 18 Jun. 2020, from

<https://oxfordre.com/psychology/view/10.1093/acrefore/9780190236557.001.0001/acrefore-9780190236557-e-242>.

Tanaka, M., Wekerle, C., Schmuck, M. L., & Paglia-Boak, A. (2011). The linkages among childhood

maltreatment, adolescent mental health, and self-compassion in child welfare adolescents. *Child Abuse & Neglect*, 35, 887–898.

Tarren-Sweeney, M. & Vetere, A. (2013). Establishing the need for mental health services for

children and young people in care, and those who are subsequently adopted. In M. Tarren-

- Sweeney & A. Vetere (Eds.), *Mental health services for vulnerable children and young people: Supporting children who are, or have been, in foster care*, Routledge: London.
- Tatlow-Golden, M., & Guerin, S. (2017). Who I Am: The meaning of early adolescents' most valued activities and relationships, and implications for self-concept research. *The Journal of Early Adolescence*, 37(2), 236–266.
- Taussig, H. N. (2002). Risk behaviors in maltreated youth placed in foster care: A longitudinal study of protective and vulnerability factors. *Child Abuse & Neglect*, 26, 1179–1199.
- Tilbury, C., Buys, N., & Creed, P. (2009). Perspectives of young people in care about their school-to-work transition. *Australian Social Work*, 62, 476–490.
- Toth, S. L., Cicchetti, D., Macfie, J., & Emde, R. N. (1997). Representations of self and other in the narratives of neglected, physically abused, and sexually abused preschoolers. *Development and Psychopathology*, 9, 781–796.
- Turner, H. A., Shattuck, A., Finkelhor, D., & Hamby, S. (2017). Effects of poly-victimization on adolescent social support, self-concept, and psychological distress. *Journal of Interpersonal Violence*, 32(5), 755–780.
- Vondra, J., Barnett, D., & Cicchetti, D. (1989). Perceived and actual competence among maltreated and comparison school children. *Development and Psychopathology*, 1, 237–255.
- Wilson, A. E., & Ross, M. (2003). The identity function of autobiographical memory: Time is on our side. *Memory: Special issue exploring the functions of autobiographical memory*, 11, 137–149.
- Wood, K. C., Becker, J. A., & Thompson, J. K. (1996). Body image dissatisfaction in preadolescent children. *Journal of Applied Developmental Psychology*, 17, 85–100.

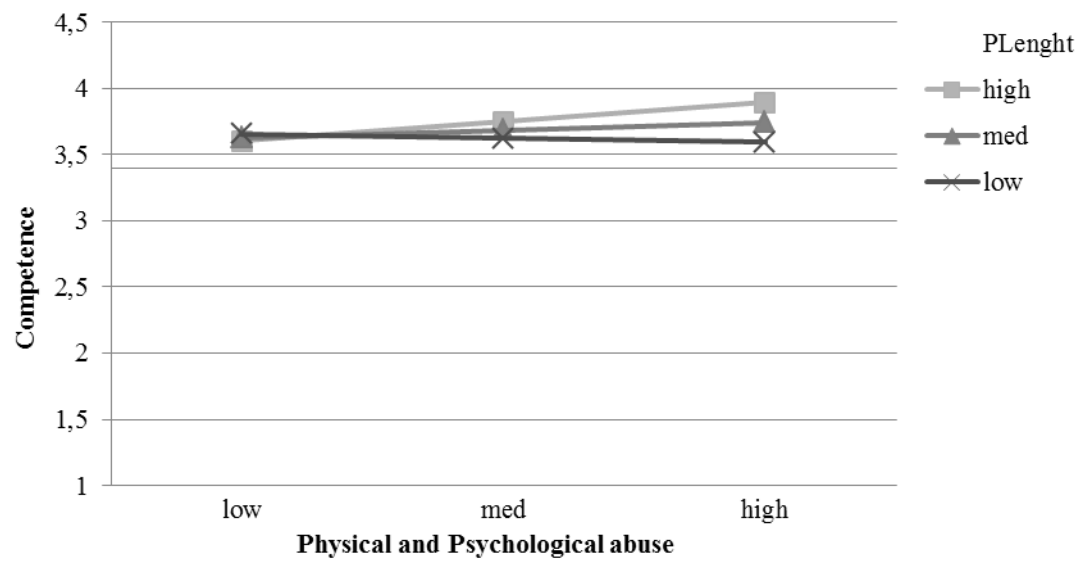


Figure 1. Interactions with length of placement in care

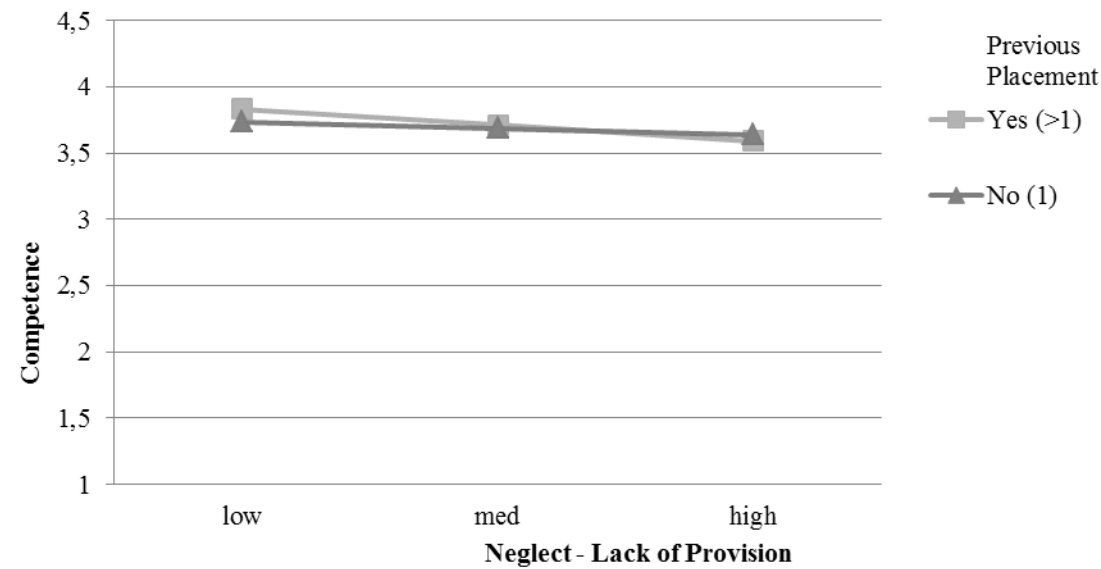


Figure 2. Interactions with number of placements in care

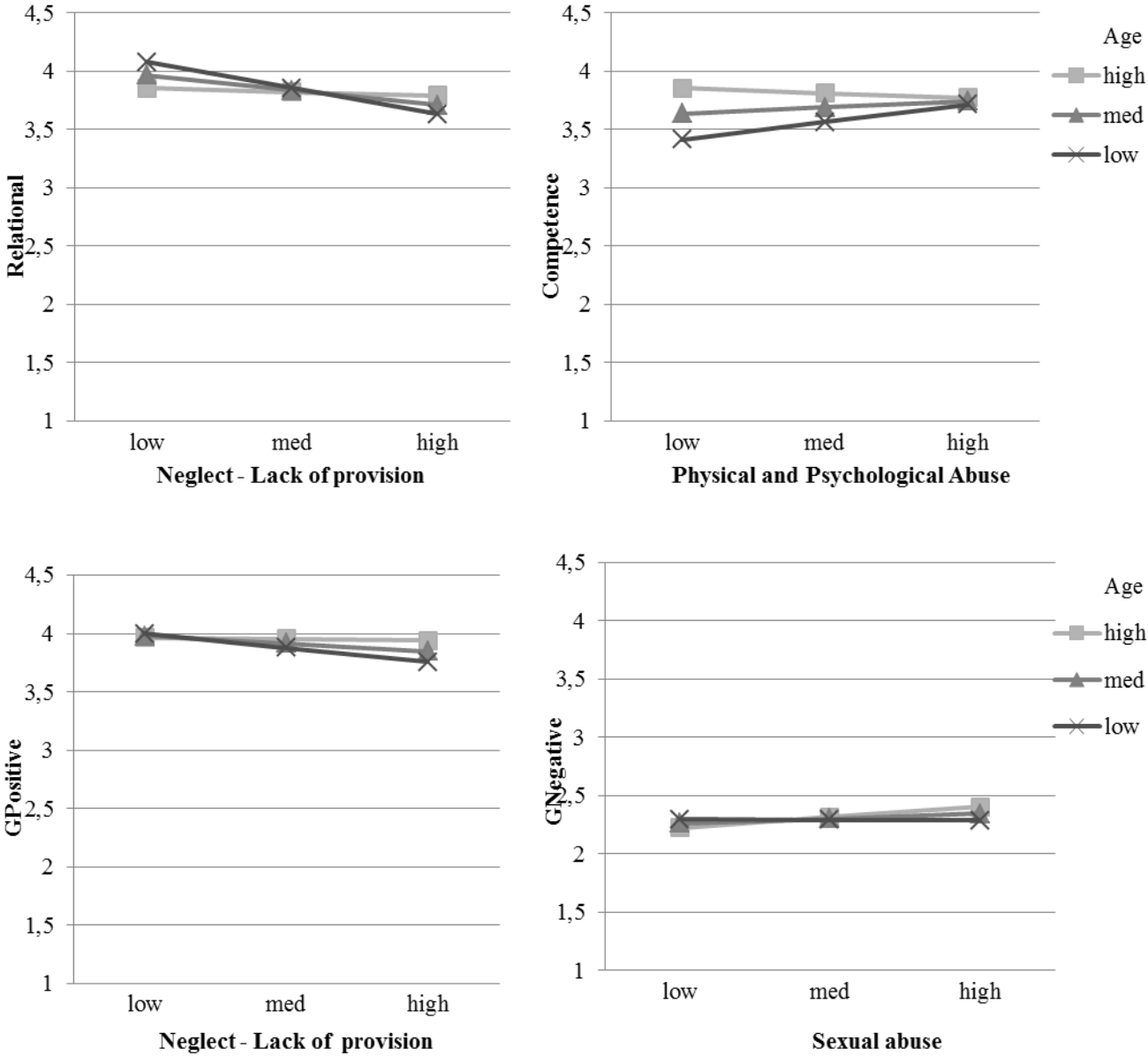


Figure 3. Interactions with age

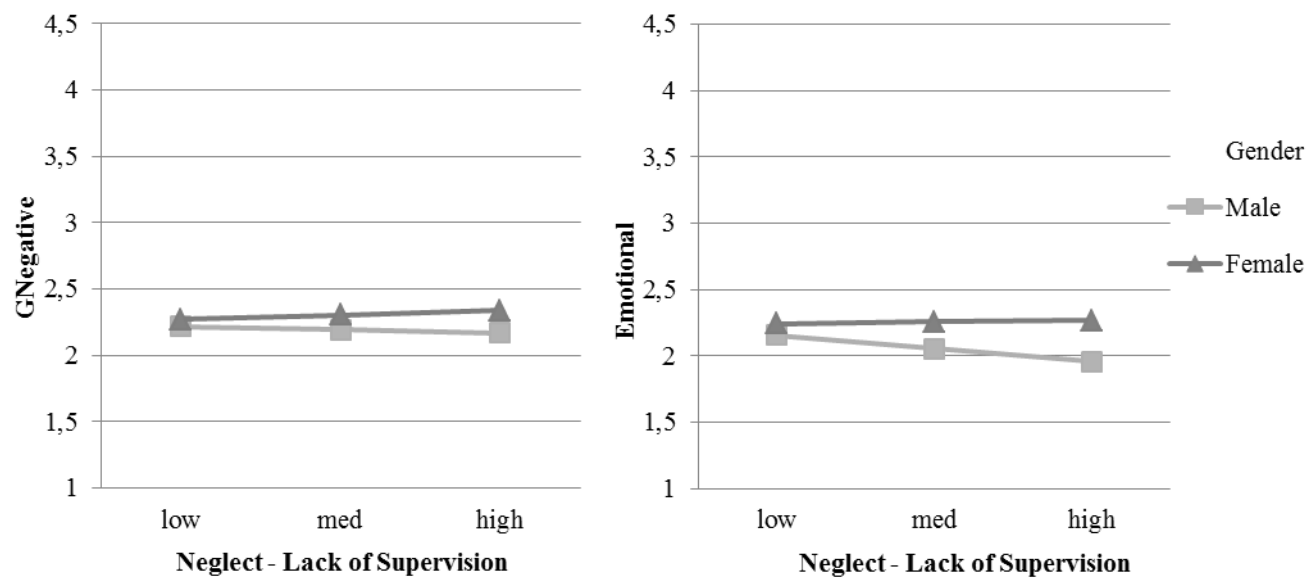


Figure 4. Interactions with gender

Table 1. Descriptive statistics of the maltreatment and self-representation dimensions

	Min	Max	Mean	SD	Ske	Kur
Previous maltreatment						
Neglect – Lack of provision	1.00	4.80	1.53	0.71	1.75	3.59
Physical and psychological abuse	1.00	5.00	1.33	0.62	2.29	5.43
Neglect – Lack of supervision	1.00	5.00	1.60	0.77	1.58	2.57
Emotional and educational maltreatment	1.00	4.67	1.78	0.71	1.07	0.91
Sexual abuse	1.00	5.00	1.23	0.80	3.88	14.45
Current self-representation						
Social	1,67	5,00	4,18	0,63	-0,55	-0,07
Competence	1,00	5,00	3,68	0,72	-0,15	0,07
Relational	1,00	5,00	3,84	0,84	-0,61	0,15
Globally Positive	1,64	5,00	3,91	0,57	-0,27	0,05
Behavioral	1,00	5,00	2,54	0,79	0,25	-0,25
Emotional	1,00	5,00	2,25	0,84	0,39	-0,19
Misfit	1,00	5,00	1,77	0,82	1,10	1,35
Globally Negative	1,00	4,60	2,32	0,61	0,28	-0,03

* p < .05, ** p < .01

Table 2. Correlations between maltreatment and self-representation dimensions and moderator variables

	1	2	3	4	5	6	7	8	9	10	11	12	13	15	16
1. Social	---														
2. Competence	,485**	---													
3. Relational	,460**	,387**	---												
4. Globally Positive	,805**	,809**	,761**	---											
5. Behavioral	-,086*	-,159**	-,006	-,110**	---										
6. Emotional	-,160**	-,067	-,148**	-,151**	,317**	---									
7. Misfit	-,192**	-,078*	-,179**	-,188**	,227**	,348**	---								
8. Globally Negative	-,177**	-,153**	-,110**	-,183**	,840**	,741**	,525**	---							
9. Neglect Provision	-,089*	-,037	-,069*	-,079*	-,042	,036	-,001	-,008	---						
10. Physical and Psychological abuse	-,066	,024	-,006	-,017	,017	-,002	-,008	,008	,259**	---					
11. Neglect Supervision	-,031	,014	,063	,023	,017	-,021	-,054	-,006	,444**	,282**	---				
12. Emotional and Educational Maltreatment	-,127**	-,009	-,016	-,060	-,007	,006	-,015	-,006	,434**	,430**	,496**	---			
13. Sexual Abuse	-,034	-,010	-,016	-,025	,064	,087*	,073*	,098**	,063	,126**	,089*	,109**	---		
14. Number Placements	-,042	,014	-,036	-,025	,038	,021	,015	,039	,012	,092**	-,012	,004	-,005	---	
15. Age	,019	,187**	-,025	,080*	-,067	,067	,028	-,005	,044	,050	-,083*	,000	-,019	,049	---
16. Placement Length	,051	,102**	,006	,066	-,107**	-,042	-,011	-,092*	,205**	-,028	,006	-,120**	-,048	-,146**	,375**

* p < .05, ** p < .01

Table 3. Multiple regression coefficients predicting self-representation

	Social			Competence			Relational			Globally Positive SR		
	B	SE	Beta	B	SE	Beta	B	SE	Beta	B	SE	Beta
Neglect – Lack of provision	-.053	.036	-.059	-.051	.042	-.051	-.142	.048	-.119**	-.077	.033	-.095*
Physical and Psychological abuse	-.004	.041	-.004	.049	.047	.041	.002	.054	.001	.017	.037	.018
Neglect – Lack of supervision	.052	.035	.063	.032	.040	.034	.143	.046	.130**	.073	.032	.097*
Emotional and Educational Maltreatment	-.111	.040	-.124**	-.016	.045	-.016	-.034	.053	-.029	-.055	.036	-.069
Sexual Abuse	-.017	.028	-.022	-.012	.032	-.013	-.018	.037	-.017	-.016	.025	-.023
	Behavioral			Emotional			Misfit			Globally Negative SR		
	B	SE	Beta	B	SE	Beta	B	SE	Beta	B	SE	Beta
Neglect – Lack of provision	-.073	.046	-.065	.057	.049	.048	.028	.048	.024	-.011	.035	-.013
Physical and Psychological abuse	.016	.051	.012	-.024	.055	-.017	-.013	.053	-.009	-.004	.040	-.004
Neglect – Lack of supervision	.036	.044	.035	-.053	.047	-.049	-.075	.046	-.070	-.006	.034	-.008
Emotional and Educational Maltreatment	-.015	.050	-.014	.006	.053	.005	.005	.052	.004	-.009	.039	-.010
Sexual Abuse	.064	.035	.065	.094	.037	.090*	.080	.037	.078*	.077	.027	.101**

* $p < .05$ ** $p < .01$

Table 4. Multiple regression coefficients of interaction terms predicting self-representation

	B	SE	Beta	t	sig
Competence					
Physical and Psychological abuse * Current placement length	.088	.039	.111	2.243	.025
Physical and Psychological abuse * Age	-.096	.034	-.147	-2.847	.005
Neglect – Lack of provision * Number of placements	-.077	.035	-.106	-2.226	.026
Relational					
Neglect – Lack of provision * Age	.098	.040	.118	2.426	.016
Globally positive					
Neglect – Lack of provision * Age	.055	.028	.098	2.004	.045
Emotional					
Neglect – Lack of supervision * Gender	-.111	.038	-.129	-2.893	.004
Globally negative					
Sexual abuse * Age	.047	.023	.084	1.991	.047
Neglect – Lack of supervision * Gender	-.057	.028	-.090	-2.008	.045

* $p < .05$ ** $p < .01$