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Facets of Care in Youth: Attachment, Relationships with Care Workers and the Residential Care Environment

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ABSTRACT

According to the attachment theory, early experiences with primary caregivers are the foundation of the expectations and beliefs about the self, others, and the world. It becomes particularly relevant in youth living in Residential Care (RC) settings, due to their past adversities. In this context, care workers can provide emotional healing experiences by acting as secure base figures and fostering conditions for youth's revision of their internal working models. The main aim of the present study was to explore the relationship between youth attachment dimensions and satisfaction with the residential caregiving environment, as well as, to analyze the potential mediator effect of the relationship quality with care workers in RC settings in the prior association. The sample was composed of youth, aged 12 to 18 ($M = 15.54$; $SD = 1.66$) living in RC settings in Porto district, Portugal ($N = 248$), that responded to three self-report measures. Results showed that attachment dimensions were associated with youth satisfaction with their caregiving environment, being this association mediated by the relationship quality with care workers. This study highlights the importance of investing in good relational experiences for youth satisfaction with the RC caregiving environment.

KEYWORDS

Attachment; quality of relationship; satisfaction with caregiving environment; adolescence; residential care

According to the attachment theory, early experiences with caregivers are the foundation of expectations and beliefs about the self, others, and the world – internal working models – and the lenses that people use to perceive the world and their future relationships (Ainsworth et al., 1978; Bowlby, 1988). Primary caregivers who are readily available and responsive to the child's needs allow them to grow a sense of emotional security (Bowlby, 1988). On the contrary, insecurity is associated with a lack of trust and putting up barriers in the relationship with others, which, in turn, makes the child less likely to adopt approach behaviors or seek

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proximity toward others (Bifulco et al., 2003). High levels of insecurity are also typically associated with less external exploration, as well as more difficulties in social relationships, which seems to be associated with a decrease in proximity-seeking behaviors. Although internal working models tend to remain stable throughout life, they are open to reorganization (Ainsworth et al., 1978). Impacting life experiences, particularly negative life events, stand out as important factors that may influence change to insecure attachment relationships over time (McConnell & Moss, 2011). The contrary is also possible – good relational experiences, with affectionate and responsive caregivers may also influence change to more secure attachment patterns over time (Carlson et al., 2003; Joseph et al., 2014; Rodrigues & Barbosa Ducharne, 2017; Smith et al., 2013).

Nurturing and responsive caregivers could serve as important figures for inspiring the revision of youth internal working models in a way that makes them see themselves, the world, and others in a more positive way (Mota & Matos, 2010). This is particularly relevant when it comes to youth living in RC settings due to their past of adversity, with experiences such as maltreatment, neglect, and/or physical, emotional, and/or sexual abuse (Calcing & Benetti, 2014; Farruggia & Germa, 2015). Moreover, these experiences may lead to further exposure to a significantly higher number of stressors and traumatic events (Franz, 2004; Liu et al., 2015). Additionally, they could compromise the development of secure and trustful relationships, namely with primary caregivers (Lionetti et al., 2015). Entering into RC itself is a difficult experience that involves the separation from, or loss of their birth parents or other familiar caregivers (M. Van IJzendoorn et al., 2011), which tends to result in feelings of abandonment and solitude (Mota & Matos, 2010). In turn, this can increase stress in youth, as it implies discontinuities in their relational world (Forslund et al., 2021; Sala Roca et al., 2009). Additionally, a high child-to-care worker ratio and high turnover among care workers can negatively impact care workers' ability to establish meaningful relationships with institutionalized youth (Attar-Schwartz, 2008; Franz, 2004; MacLean, 2003; R. McCall, 2013; Rodrigues & Barbosa Ducharne, 2017). Although there are complex dimensions associated with RC outputs, such as multiple drivers for children entering institutions or variations in the quality of care provided, institutionalization has been found to have detrimental effects on developmental (M. H. van IJzendoorn et al., 2020).

However, research shows that RC can also have a positive impact on the development of youth (Steels & Simpson, 2017), having the potential to improve youth's well-being (Franz, 2004; Leipoldt et al., 2019; Magalhães & Calheiros, 2020; Mota & Matos, 2015). Care workers in RC settings are important agents of youth support network (Costa et al., 2019; Mota & Matos, 2015), being of paramount importance for their psychosocial

adaptation and development (e.g., Calheiros et al., 2013; Costa et al., 2020; Mota & Matos, 2010). The support and care provided by them can also positively impact children's emotional development (Steels & Simpson, 2017), allowing them to heal from their past and develop further (Smith et al., 2013). In turn, these relational experiences can offer opportunities for youth to feel worthy of love and affection, having an important role in the revision of their internal working models. In some cases, care workers might even act as secure bases for youth (Bowlby, 1988; Costa et al., 2020; Rodrigues & Barbosa Ducharne, 2017; Steels & Simpson, 2017).

Consequently, the relationships established can positively impact their sense of confidence and security, as well as a sense of belonging (Mota & Matos, 2008). This is particularly important in adolescence, as it is a developmental stage associated with greater biological and psychological risk (Campos et al., 2019; Morais et al., 2022; Steinberg, 2016). The plasticity that occurs in this period of life (Moretti et al., 2018) provides good opportunities for youth to reorganize and revise their internal working models (R. B. McCall & Groark, 2015). Relationship quality developed between youth and RC care workers seems to be influenced by contextual factors, such as child-to-caregiver ratio, facilities dimension, as well as professional individual characteristics with attachment dimensions playing an important role in the development of these relations (Costa et al., 2020). Zegers et al. (2006) emphasized this association by stating that attachment representations, formed through early experiences with attachment figures can partially explain the quality of relational experiences of youth living in RC settings. Youth who had been previously exposed to insecure attachment relationships tended to avoid contact and proximity with their care workers more often than those who had been exposed to secure attachment relationships. In turn, attachment relationships have been consistently associated with individual well-being and satisfaction and a positive social climate (Leipoldt et al., 2019), which, in turn, has been considered an important factor contributing to the well-being of youth in RC (Magalhães & Calheiros, 2020). There is still scarce knowledge concerning the association between youth satisfaction with the residential caregiving environment and previous constructs (Harder et al., 2012; Llosada-Gistau et al., 2015; Mota & Matos, 2015). These findings may be a result of the unexplored nature of the satisfaction with caregiving environments, namely through aspects such as feeling safe, having a sense of normality, support, and comfort, as well as the level of participation in decision-making (Southwell & Fraser, 2010). There is also a lack of instruments for assessing youth's satisfaction with the caregiving environment (Lee et al., 2019), particularly considering their point of view (Emond, 2003; McDowall, 2013). Furthermore, there is scarce literature concerning integration processes and relational

dimensions in RC settings (e.g., Harder et al., 2012; Mota & Matos, 2015). This study is even more relevant in a country that has one of the highest rates of youth in out-home care in RC settings (86.3%) (Delgado & Gersão, 2018; Instituto de Segurança Social, 2021). In Portugal, nowadays, 5785 children/youth are in non-therapeutic RC settings, the majority of those aged between 12 to 17 years old (52.31%) (Instituto de Segurança Social, 2021). Length of stay is very heterogeneous since there is still a lack of responses that could ultimately decrease this period. Currently, the mean regarding the length of stay is 3.4 years (Instituto de Segurança Social, 2021).

Current Study

This study aims to explore the relationship between youth attachment dimensions and satisfaction with caregiving environments, as well as the potential mediator effect of relationship quality with care workers in RC settings in this prior association. More specifically it is expected that the insecurity attachment dimension will negatively impact the satisfaction youth experience with their caregiving environment and that the inverse will happen with proximity-seeking. Quality of relationships is expected to have a mediational effect on the relationship between attachment dimensions and youth's satisfaction with their caregiving environment.

Method

Participants

The sample consists of 248 youth living in 21 generalized RC settings in Portugal, more particularly in the Porto district, aged 12 through 18 years old ($M = 15.54$; $SD = 1.66$), of whom 111 were male (44.8%) and 137 were female (55.2%). The length of the institutionalization ranged from 1 week to 16 years (192 months; $M = 35.58$; $SD = 38.60$). Additionally, 78 lived in other RC settings (31.5%) before the current one, and for 169 youth it was the first experience (68.1%). These adolescents live in residential care due to abandonment or parental neglect. The institutions and residential care included in this study do not refer to children and adolescents who were institutionalized due to mental disabilities/disorders, or additional motives of deviant behaviors (conduct disorders or substance abuse). This sample does not include adolescents in rehabilitation and therapeutic care, kinship care, emergency shelter, residential schools, psychiatric hospitals, or other mental health facilities, to avoid residential care settings and adolescents with specific conditions.

Measures

Sociodemographic Questionnaire

The sociodemographic questionnaire collected information regarding participants' age and sex, as well as other indicators concerning their path in the Protection System, such as the total length of their stay in RC and if they had ever lived in previous RC settings. All measures were collected at the same time point.

Relationship with Significant Figures Questionnaire

The Relationship with Significant Figures Questionnaire (Mota & Matos, 2005) is a self-report measure used to assess the perception of youth about the relationship quality with significant adults outside the family. It is composed of 28 items originally, on a 6-point Likert Scale, from (1) "Strongly Disagree" through (6) "Strongly Agree." Although items could be aggregated into 3 dimensions (Teachers, School staff, and care workers in the RC setting) only the dimension related to the *care workers of the RC settings* were used (14 items, e.g., *I feel close to some care workers of the residential care setting I live in*). An item was removed (*I get bored when nobody pays attention to me*) due to its low loading level. The dimension presents an adjusted internal consistency value $\alpha = .924$. The Confirmatory Factor Analysis (CFA) revealed acceptable adjustment indices, $\chi^2(62) = 180.375$; $p < .001$, $\chi^2/df = 2.909$; CFI = .936; RMSEA = .088.

Vulnerable Attachment Style Questionnaire

The Vulnerable Attachment Style Questionnaire (VASQ) (Bifulco et al., 2003) was preliminary used for screening vulnerable and insecure attachment dimensions concerning clinical disorders in adults and adolescents. It is a self-report tool that aims to capture global representation "on the way people feel about themselves in relation to others" (Bifulco et al., 2003, p. 1102), not focusing on specific relationships. This questionnaire was validated against the Attachment Style Interview – ASI (Bifulco et al., 2003). It comprises 22 items on a 5-point Likert Scale, from (1) "Strongly Disagree" through (5) "Strongly Agree." The items reflect behaviors, emotions, and attitudes relating to attachment organized into two subscales – Insecurity (12 items, e.g., *It's best not to get too emotionally close to other people*) and Proximity-Seeking (10 items, e.g., *I rely on others to help me make decisions*). Scores for each subscale are calculated by summing related items. A cutoff of 30 or more indicates a high level of insecurity, and a score of 27 or more indicates a high level of proximity seeking. The VASQ does not derive attachment styles, but the insecurity dimension was highly correlated to both fearful and angry-dismissive

attachment styles and high proximity-seeking to enmeshed styles (Bifulco et al., 2003). This questionnaire was not previously validated nor translated to the Portuguese population. The translation/adaptation was conducted in the scope of the current study according to the International Test Commission guidelines (2017). The internal consistency in the present sample was $\alpha = .828$ for the Insecurity dimension and $\alpha = .700$ for the Proximity-Seeking dimension. Items 1, 11, 14, and 15 were removed after the CFA due to their low weight to the model, except for item 15 which did not have a significant p level. Removing the items resulted in a better fit of the model. Furthermore, the contents evaluated by the removed items are present in those that remained. The CFA revealed acceptable adjustment indices, $\chi^2(128) = 273.765$; $p < .001$, $\chi^2/df = 2.139$; CFI = .852; RMSEA = .068.

Caregiving Environment Satisfaction Questionnaire

The Caregiving Environment Satisfaction Questionnaire (McDowall, 2013 adapted by Santos et al., 2019) is a self-report instrument developed for assessing youth's satisfaction with their residential setting as they perceive it. It is a unidimensional instrument, composed of 7 items on a 4-point Likert scale, from (1) Strongly Disagree to (4) Strongly Agree. Five out of the 7 items were adapted from McDowall's (2013) report on Experiencing Out-of-Home Care in Australia. These items reflected the youth's vision of various aspects of the RC settings, such as privacy (*I have the privacy I need*), material needs (*I have the material things I need (clothes, books . . .)*), as well as aspects more related to caregiving (*I feel safe and secure; People care about me*). Two additional items were added by the team to capture the youth's satisfaction with the caregiving environment (*Do you like the residential setting you live in?*), and another one concerning their view on how much their opinion is heard in the decision-making of the RC (*Is your opinion taken into consideration in the decision-making process of the Residential setting you live in?*). The internal consistency in the present sample was $\alpha = .866$. The scale revealed acceptable adjustment indices, $\chi^2(11) = 29.08$; $p = .002$, $\chi^2/df = 2.643$; CFI = .975; RMSEA = .081.

Procedures

The present study is part of a larger longitudinal project: CareME - *Efficacy of an attachment-based intervention in Residential Care: a randomized controlled trial on the effects of the caregivers' relational skills and the adolescents' psychosocial adaptation*. This project aims to develop, implement, and assess an attachment-based intervention with care workers in the context of residential care, and its implications on the youth living in this context. This research project was approved by the Ethical Committee of the Faculty of Psychology and Education Sciences of the University of Porto and was also approved

locally by each RC institution's directors. The project was presented to all RC facilities that work in the Porto district. Of the 24 facilities that were approached, 21 agreed to participate in the study. The general objectives of the study were presented to the youth and standardized instructions were given regarding the assessment procedure. All ethical procedures regarding informed consent, confidentiality, anonymity, and the voluntary nature of participation in the study were guaranteed. All participants that agreed to participate in the study signed informed consent forms and, for youth under 16 years old, the case manager signed the assent form. To prevent social desirability and assure that informed consent was clearly understood by adolescents and conducted in the institution (free participation, no compensation or loss of rights, confidentiality, and anonymity) data was collected by two researchers in loco without any interference from staff. No financial compensation was involved. Participants were also informed that participation could be interrupted at any time during the project. In fact, there was a decrease considering the number of youngsters that agreed to participate during the project presentation and the number of youngsters that did participate. Motives for not participating included being on vacation/family, being tired, or not being "in the mood" for the task. Data collection occurred between November 2019 and January 2020. Youth with severe cognitive deficits or that were considered by RC psychologists as being more emotionally vulnerable at the collection time was not invited to participate in the study.

Data Analysis

The present study has a quantitative and cross-sectional approach. The data were analyzed using *IBM SPSS (Statistical Package for Social Sciences)*, version 27 for *Windows*, as well as using *IBM SPSS AMOS*, version 27 for *Windows*. The missing data was between 0 and 2% for all the variables in the study. They were imputed by the mean of their respective dimensions. Participants identified as outliers were not included in the statistical analyses. The normality of the distribution was tested, indicating no deviance from normality in all questionnaires. Correlations, means, and standard deviations were calculated.

Mediation analyses were conducted by estimating direct and indirect effects using bootstrap resampling procedures. Bias-corrected 95% confidence intervals (Cis) for the unstandardized effects were obtained based on 5000 bootstrap samples (MacKinnon et al., 2004). A Structural Equation Model (SEM) was carried out, assessing the direct effect of attachment dimensions of youth on their perceived caregiving environment satisfaction and the mediational effect of the quality of relationships with care workers in this prior relationship. The mediation model used to estimate unknown parameters was the maximum likelihood. All results were analyzed and interpreted from a significance level of $p < .05$.

Table 1. Normality of the study variables ($N = 248$).

Variables	Skew	Kur
1. Caregiving Environment Satisfaction	-.323	-.511
2. Quality of Relationships with Care workers	-.955	.715
3. Proximity-Seeking (VASQ)	-.301	.437
4. Insecurity (VASQ)	-.003	-.241

Table 2. Correlation between study variables, mean and standard deviation ($N = 248$).

Variables	1	2	3	4
1. Caregiving Environment Satisfaction	-			
2. Quality of Relationships with Care workers	.641**	-		
3. Proximity-Seeking (VASQ)	.338**	.414**	-	
4. Insecurity (VASQ)	-.340**	-.245**	.028	-
Cutoff	2.88	4.46	33.10	35.16
M			3.31	2.93
SD	.71	1.08	.72	.76

Note: **. Correlation is significant at the 0.01 level (2-tailed).

Results

Descriptives Analysis

Both VASQ subscales are above the threshold values (insecurity 35.10 and proximity seeking 33.10). The current sample presents high scores on insecurity and proximity seeking. Descriptive statistics are presented in [Table 1](#).

Correlations Between Attachment, Caregiving Environment Satisfaction, and Quality of Relationships with Care Workers

To verify if the assumptions of normality of the data were assumed, the values of skewness and kurtosis were calculated. Violation of normality was not found for the variables under study (Kline, 2015; skewness (<3); kurtosis ($<8-10$); [Table 2](#)).

Observed results show that the attachment dimension Proximity-Seeking was significantly and positively associated with Caregiving Environment Satisfaction ($r = .338$; $p < .001$). On the other hand, Insecurity was significantly and negatively correlated to youth Caregiving Environment Satisfaction ($r = -.340$; $p < .001$). The Quality of Relationships with care workers was positively and significantly associated with Proximity-Seeking ($r = .414$; $p < .001$), and youth Caregiving Environment Satisfaction ($r = .641$ $p < .001$), and negatively and significantly associated with Insecurity ($r = -.245$; $p < .001$; [Table 2](#)).

Attachment and Caregiving Environment Satisfaction – Mediation Role of Quality of Relationship with Care Workers

Firstly, the association between attachment dimensions – Insecurity and Proximity-Seeking – and Caregiving Environment Satisfaction was

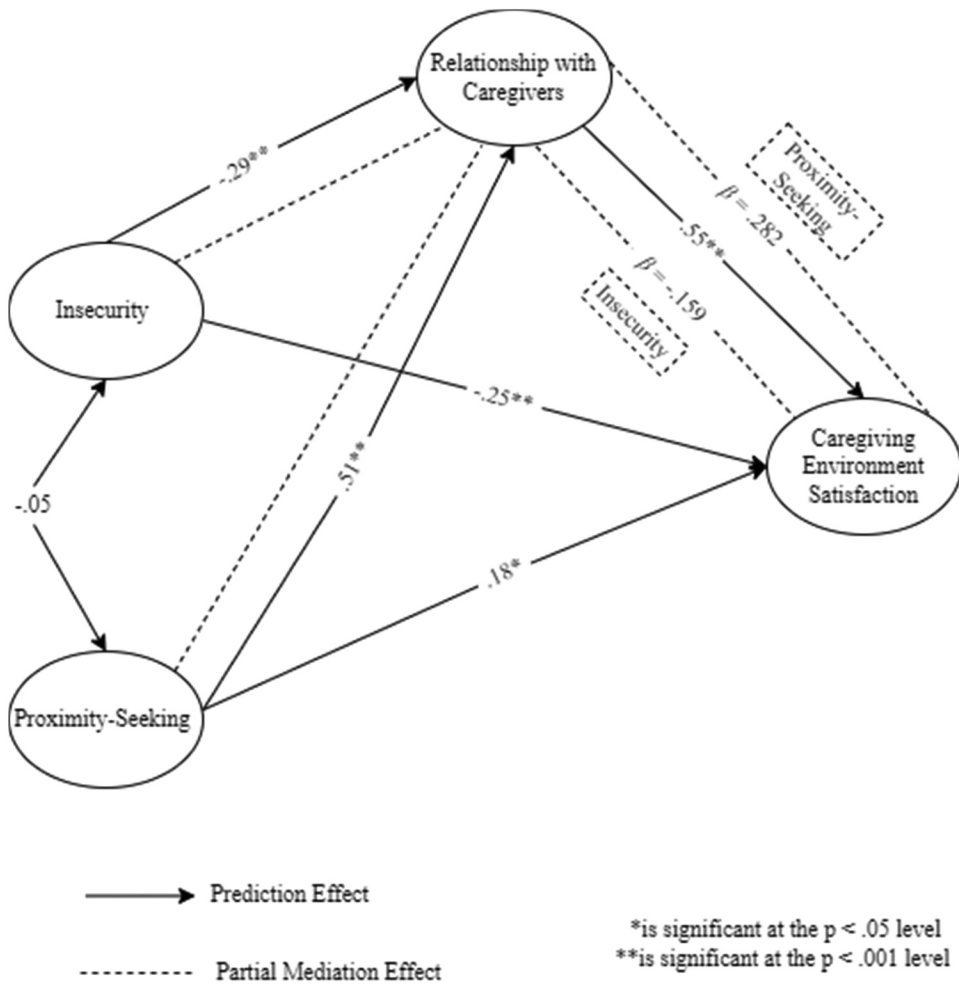


Figure 1. A mediational model of the quality of relationships with caregivers in the association between attachment and youth satisfaction with the caregiving environment.

tested. Both dimensions of attachment showed significant associations with youth's Caregiving Environment Satisfaction, with Insecurity presenting a standardized direct negative effect of $\beta = -.394$ ($p < .001$) on Caregiving Environment Satisfaction. Proximity-Seeking presented a standardized direct effect of $\beta = .456$ ($p < .001$) on the Caregiving Environment Satisfaction. Secondly, a mediation model was developed for exploring the mediational role of the quality of the relationship that youth develop with care workers in RC in the association between attachment dimensions and youth's satisfaction with their residential setting (Figure 1).

After the insertion of the mediational variable Quality of Relationships with care workers, both attachment dimensions maintain significant relationships with the youth's Caregiving Environment Satisfaction, with Insecurity

presenting a standardized negative effect of $\beta = -.250$ ($p < .001$) and Proximity-Seeking presenting a standardized direct effect of $\beta = .183$ ($p < .001$).

A significant model was presented using this variable as the mediator. A partial mediation was observed between the attachment dimension Insecurity and Caregiving Environment Satisfaction with a standardized indirect effect of $\beta = -.159$ ($p < .001$). A partial mediation was also observed between the attachment dimension Proximity-Seeking and Caregiving Environment Satisfaction, with a standardized indirect effect of $\beta = .282$ ($p < .001$). The model has showed adjusted fit indexes, $\chi^2(695) = 1375.64$; $p < .001$; $\chi^2/df = 1.979$; CFI = .831; TLI = .820; RMSEA = .063. The adjusted model accounts for 60% of the variability of Caregiving Environment Satisfaction (Figure 1).

Discussion

The purpose of the present study was to explore the relationship between youth attachment dimensions considering relationships globally and satisfaction with the residential caregiving environment, as well as the potential mediator effect of the relationship quality with care workers in RC settings in this prior association.

Firstly, both attachment dimensions assessed in this study were highly correlated to youth's perceived satisfaction with the caregiving environment. Insecurity was negatively associated with Caregiving Environment Satisfaction, which means that youth who perceived themselves as more insecure in their relational experiences, reported less satisfaction with their caregiving environment. This result could be due to the fact that insecure attachment relationships developed with primary caregivers and past experiences of adversity and neglect, could inspire less secure expectations of others as able to provide love and protection (e.g., Calcing & Benetti, 2014; Farruggia & Germa, 2015; Lionetti et al., 2015). In this sense, these early experiences may contribute to the development of internal working models of the world as a dangerous place, and others as untrustworthy (Bowlby, 1988). Consequently, this can result in more distanced relationships, marked by feelings such as anger or hurt, and putting up barriers (Bifulco et al., 2003). These internal working models can negatively affect their transition into RC settings (Sala Roca et al., 2009), imposing additional challenges in this difficult process, and possibly influencing the representations of the caregiving environment. Research has been stressing that children with prior insecure attachment relations that go through a change in the caregiving environment often present more difficulties in adaptation to the requirements of the new situation than those with a history of secure relationships (Tucker & MacKenzie, 2012). The perceived quality of social relationships is a result of past relational

experiences, which are, at least partly, explained by attachment dimensions (Ainsworth et al., 1978; Bowlby, 1988; Zegers et al., 2006).

On the contrary, the attachment dimension Proximity-Seeking was positively associated with youth's perceived Caregiving Environment Satisfaction, which means that youth who sought proximity to their care workers more often reported more satisfaction have greater representations of the RC caregiving environment. Bifulco et al. (2003) have found that proximity-seeking was most related to ASI enmeshed attachment style, defined as individuals with high dependency needs and low self-reliance, being more prone to seeking attention and company of others (Bifulco et al., 2008). In the same way, this subscale was equally distributed in individuals with clearly secure attachments, with half of them presenting scores above the threshold (considering cutoff values) (Bifulco et al., 2003). Also, unlike the insecurity dimension, proximity seeking was not related to poor support (Bifulco et al., 2003). In this sense, the insecurity subscale could be more sensitive to capture vulnerability in attachment dimensions, namely with adolescents that share relational discontinuities or trauma.

This result addresses several cautious hypothetical explanations regarding the positive association between proximity-seeking behaviors and satisfaction with the caregiving environment. First, considering that at least part of proximity-seeking behaviors corresponds to more secure attached youth, satisfaction with the caregiving environment could be, in part, inspired by secure attachment expectations of the world and others (Ainsworth et al., 1978; Bowlby, 1988).

Also, considering the non-causality nature of the current study, quality of care could enhance feelings of safety (Mota & Matos, 2015) and fuel proximity-seeking behaviors. In this sense, the quality of relationship with care workers in RC settings can act as a protective factor (e.g., Calheiros et al., 2013; Costa et al., 2020; Mota & Matos, 2010, 2015; Rabley et al., 2014) by offering opportunities for youth to deal with past insecure experiences (Costa et al., 2019; Smith et al., 2013). In this sense, if secure base scripts could inspire proximity-seeking behaviors, the high prevalence of children and youth with insecure attachment styles in RC settings (M. H. van IJzendoorn et al., 2020) leads us to another hypothetical interpretation. Possibly for the majority of youth, these behaviors could foster psychosocial adaptation processes by offering opportunities for being cared for and functioning as an adaptive behavior in this particular context. A study conducted with foster parents showed that when children exhibited avoidant behaviors, parents seem to evaluate their behavior accordingly as if children did not need them, and resistant behaviors seem to foster non secure caregiving (Stovall McClough & Dozier, 2004). Individualize attention is often a challenging and complex task in RC settings, due to a high child-care worker ratio (e.g., M. Van IJzendoorn et al., 2011; R. McCall, 2013; Rodrigues & Barbosa Ducharne, 2017), placement

instability, large groups of youth living in the same setting, making care worker-child interactions typically limited to routine chores, with limited time for social interactions (R. B. McCall & Groark, 2015). In this sense, approach-seeking behaviors could elicit greater levels of attention and responsive care. Improving care is also to create conditions for professional and intentional care (Carvalho et al., 2022) since it is mostly up to these care workers to respond to youth's nonexplicit attachment needs, providing a secure relationship within which they could heal from past experiences (Moretti et al., 2018; Smith et al., 2013). In fact, the mediational result emphasized the role played by the relationship developed with the care worker in the satisfaction level that youth report with Caregiving Environment. This result is in line with previous research that stresses the critical role that care workers have in RC settings, namely for perpetuating or disconfirming previous relationship patterns developed with primary caregivers or resulting from previous placements (Costa et al., 2020; Törrönen, 2021; Zegers et al., 2006). From an attachment theoretical framework, responsive and nurturing behaviors are closely inspired by care workers' own experience of care, being particularly important when addressing the quality of care in child welfare settings (for a review Carvalho et al., 2022).

Lastly, considering that although the mediational model explained a great level of variance concerning satisfaction with the caregiving environment, there are still additional factors that may contribute to this evaluation. Contextual dimensions regarding RC management and care policies such as providing opportunities for increasing participation (i.e. making decisions in the RC setting, customizing their rooms, etc.), as well as place attachment (how much youth feel like they belong and feel attached to their RC setting) (Magalhães & Calheiros, 2020) could be also particularly relevant when reporting satisfaction in this particular context. Even in institutions where care workers try their best to provide the best caregiving environment possible, some structural challenges emerge that can deeply affect their ability to do so (R. B. McCall & Groark, 2015). Nevertheless, a good environment might not be enough to guarantee good quality relationships, but it can positively impact them in a way that makes them easier to occur (M. G. Quiroga & Hamilton-Giachritsis, 2017). The relationship quality established is also not only impacted by the youth's previous attachment experiences, but also by factors related to the care worker's attachment history and relationships (Carvalho et al., 2022; Mota & Matos, 2016).

In this study youth relational history, current relational experiences with care workers in RC, and satisfaction with caregiving environments are perceived by adolescents as interrelated emotional constructs that could contribute to comprehending psychosocial processes. There is a dynamic relationship between the variables in the study, as relationships established by youth in the caregiving environment and their satisfaction with it will be

much influenced by care workers' availability to act as emotionally available figures that adequately respond to their pain-based behaviors (Anglin, 2004; Costa et al., 2020; Mota & Matos, 2016). The development of secure relationships with care workers is of great importance to the reconfiguration of youth's previous attachment representations (M. Quiroga et al., 2021; Moore et al., 1997), which can result in a more positive adaptation to this new environment (Costa et al., 2020). Nonetheless, healing care could not be limited to institutional boundaries. Synchrony, nurturance, stability of care, and commitment as key determinants of care (Stovall McClough & Dozier, 2004) could not be sustained without continued and consistent relationships. This difficult and complex effort requires a systemic and comprehensive analysis of relationships from a child/adolescent-centered approach, prioritizing intervention, when possible, with parents, family, and professional caregivers.

Conclusion

The present study contributed to the production of knowledge regarding the implications of attachment dimensions on the way youth interact, establish, and develop relationships with care workers in RC. Moreover, secure relationships with care workers are a key ingredient to youth satisfaction with the caregiving environment. Although this study presents several strengths, some limitations should be acknowledged. The first limitation regards the cross-sectional nature of the study, limited to one-moment data collection. This design prevents the analysis of potential changes in terms of attachment patterns of youth in residential care and improvements/decline in the relationship quality established with care workers and/or their satisfaction with the residential care settings. In addition to that, the exclusive use of self-report measures could limit the comprehension of the complex nature underlying the development of "healing" relationships in RC settings. Another limitation to be highlighted refers to the adjustment indices of the presented mediation model, particularly the CFI and TLI values, which are slightly low ($<.90$), which may be due to the low correlation between the independent variables. Additionally, the inclusion of other key actors for addressing the relational challenges youth face in RC settings, such as care workers, families and other professionals that are involved in child welfare, could enhance a deeper knowledge of this process.

In future studies, the integration of qualitative data (i.e. interviews with care workers, naturalistic observations, etc.) could be particularly relevant for understanding complex emotional processes underlying the development of relationships in these contexts. It would be also important to include a dyadic view, pairing the perspectives of youth and care workers on their relationships, their quality, and the caregiving environment. This could be useful to understand the needs, difficulties, and positive aspects that emerge from the development of relationships in this setting. It is also noticeable the lack of

importance attributed to the involvement of youth in the decision-making processes within RC settings, as well as in the investigation itself, which are aspects linked with positive outcomes in their psychological well-being (Magalhães & Calheiros, 2020).

Finally, this study raises awareness of the importance of prioritizing the development and maintenance of secure relationships between youth and care workers in RC settings, to better meet youth's emotional needs and their satisfaction with the caregiving environment. It also emphasizes the impact that care workers can have on the reorganization of youth's previous attachment patterns, through affective and caring experiences. In this sense, there is a need to improve the work conditions of care workers, creating environments that foster the development of healing practices, informed both by care workers' interpersonal and relational dimensions as well as work/systemic characteristics (e.g., Costa et al., 2020; Mota & Matos, 2016; R. B. McCall & Groark, 2015; Rodrigues & Barbosa Ducharne, 2017).

Practice Implications

- Emphasis on the need to prioritize the development of good quality relationships between youth and care workers in RC and on the impact that care workers can have on the reorganization of youth's previous attachment patterns.
- Need to create a therapeutic institutional environment, through teamwork, with emphasis on the interpersonal and relational dimensions of care workers and the improvement of their work conditions.

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References

- Ainsworth, M. D., Blehar, M., Waters, E., & Wall, S. (1978). *Patterns of Attachment – a psychological study of the strange situation*. Lawrence Erlbaum Associates.
- Anglin, J. (2004). Creating “well-functioning” residential care and defining its place in a system of care. *Child & Youth Care Forum*, 33(3), 175–192. <https://doi.org/10.1023/b:ccar.0000029689.70611.0f>
- Attar-Schwartz, S. (2008). Emotional, behavioral and social problems among Israeli children in residential care: A multi-level analysis. *Children and Youth Services Review*, 30(2), 229–248. <https://doi.org/10.1016/j.childyouth.2007.09.009>
- Bifulco, A., Jacobs, C., Bunn, A., Thomas, G., & Irving, K. (2008). The Attachment Style Interview (ASI): A support-based adult assessment tool for adoption and fostering practice. *Adoption & Fostering*, 32(3), 33–45. <https://doi.org/10.1177/030857590803200306>
- Bifulco, A., Mahon, J., Kwon, J., Moran, P., & Jacobs, C. (2003). The vulnerable attachment style questionnaire (VASQ): An interview-based measure of attachment styles that predict depressive disorder. *Psychological Medicine*, 33(6), 1099–1110. <https://doi.org/10.1017/s0033291703008237>
- Bowlby, J. (1988). *A secure base: Clinical applications of attachment theory*. Basic Books.
- Calcing, J., & Benetti, S. P. C. (2014). Caracterização da saúde mental em crianças e adolescentes em acolhimento institucional [Description of Mental Health of children and youth in Residential Care]. *Psico*, 45(4), 559–567. <https://doi.org/10.15448/1980-8623.2014.4.13629>
- Calheiros, M., Patrício, J., & Bernardes, S. (2013). Youth participation and protection: From theory to practice. In E. Trejos-Castillo (Eds.), *Youth: Practices, perspectives and challenges* (pp. 289–307). Nova Science Publishers, Inc.
- Campos, J., Barbosa Ducharme, M., Dias, P., & Rodrigues, S. (2019). Santé Mentale d’Enfants en Accueil Institutionnel. *Configurações*, 23(23), 105–122. <https://doi.org/10.4000/configuracoes.7116>
- Carlson, E., Sampson, M., & Sroufe, L. (2003). Implications of attachment theory and research for developmental-behavioral pediatrics. *Journal of Development and Behavioral Pediatrics*, 24(5), 364–379. <https://doi.org/10.1097/00004703-200310000-00010>
- Carvalho, H. M., Mota, C. P., Santos, B., Costa, M., & Matos, P. M. (2022). Is it possible to strengthen bonds without breaking hearts? The relational paradox within residential care. *Residential Treatment for Children & Youth*, 40(1), 1–20. <https://doi.org/10.1080/0886571X.2022.2043804>
- Costa, M., Melim, B., Tagliabue, S., Mota, C. P., & Matos, P. M. (2020). Predictors of the quality of the relationship with caregivers in residential care. *Children and Youth Services Review*, 108, 104579. <https://doi.org/10.1016/j.childyouth.2019.104579>
- Costa, M., Mota, C. P., & Matos, P. M. (2019). Predictors of psychosocial adjustment in adolescents in residential care: A systematic review. *Child Care in Practice*, 28(1), 1–30. <https://doi.org/10.1080/13575279.2019.1680533>
- Delgado, P., & Gersão, E. (2018). O acolhimento de crianças e jovens no novo quadro legal: Novos discursos, novas práticas? [The institutionalization of children and youth in the new legal context: New discourses, new practice?]. *Análise Social*, 53(226), 112–134.
- Emond, R. (2003). Putting the care into residential care: The role of young people. *Journal of Social Work*, 3(3), 321–337. <https://doi.org/10.1177/146801730333004>
- Farruggia, S. P., & Germino, G. R. (2015). Problem behavior among older youth in foster care: Examining gender. *Children and Youth Services Review*, 48, 20–30. <https://doi.org/10.1016/j.childyouth.2014.11.005>

- Forslund, T., Granqvist, P., Van Ijzendoorn, M., Sagi-Schwartz, A., Glaser, D., Steele, M., Hammarlund, M., Schuengel, C., Bakermans-Kranenburg, M. J., Steele, H., Shaver, P. R., Lux, U., Simmonds, J., Jacobvitz, J., Groh, A. M., Bernard, K., Cyr, C., Hazen, N. L., Foster, S., Duschinsky, R. (2021). *Attachment goes to court: Child protection and custody issues*. Attachment & Human Development, 24(1), 1–52. <https://doi.org/10.1080/14616734.2020.1840762>
- Franz, B. (2004). Predictors of behavioural and emotional problems of children placed in children's homes in Croatia. *Child Family Social Work*, 9(3), 265–271. <https://doi.org/10.1111/j.1365-2206.2004.00324.x>
- Harder, A. T., Knorth, E. J., & Kalverboer, M. E. (2012). A secure base? The adolescent staff relationship in secure residential youth care. *Child & Family Social Work*, 18(3), 305–317. <https://doi.org/10.1111/j.1365-2206.2012.00846.x>
- Instituto de Segurança Social, I. P. (2021). *CASA 2020 - Relatório de Caracterização Anual da Situação de Acolhimento das Crianças e Jovens [Report on the Annual Characterization of the Out-of-Home Care]*. Instituto de Segurança Social, I. P. Retrieved from <https://www.seg-social.pt/documents/10152/13200/CASA+2020.pdf/b7f02f58-2569-4165-a5ab-bed9efdb2653>
- International Test Commission. (2017). *The ITC Guidelines for Translating and Adapting Tests (Second edition)*. The International test Commission. www.InTestCom.org
- Joseph, M. A., O'Connor, T. G., Briskman, J. A., Maughan, B., & Scott, S. (2014). The formation of secure attachments by children who were maltreated: An observational study of adolescents in foster care. *Development and Psychopathology*, 26(1), 67–80. <https://doi.org/10.1017/S0954579413000540>
- Kline, R. B. (2015). *Principles and practice of structural equation modeling* (3rd ed.). Guilford Press.
- Lee, S., An, E., & Chung, I. (2019). Assessing satisfaction of children in out-of-home care: Development of Korean out-of-home care satisfaction scale. *Child Indicators Research*, 13(4), 1217–1233. <https://doi.org/10.1007/s12187-019-09688-6>
- Leipoldt, J., Harder, A., Kaye, N., Grietens, H., & Rimehaug, T. (2019). Determinants and outcomes of social climate in therapeutic residential youth care: A systematic review. *Children and Youth Services Review*, 99, 429–440. <https://doi.org/10.1016/j.childyouth.2019.02.010>
- Lionetti, F., Pastore, M., & Barone, L. (2015). Attachment in institutionalized children: A review and meta-analysis. *Child Abuse & Neglect*, 42, 135–145. <https://doi.org/10.1016/j.chiabu.2015.02.013>
- Liu, D., Chu, C., Neo, L., Ang, R., Ling Tan, M., & Chu, J. (2015). Multiple trauma exposure and psychosocial functioning in Singaporean children in out-of-home care. *Psychological Trauma: Theory, Research, Practice, and Policy*, 8(4), 431–438. <https://doi.org/10.1037/tra0000098>
- Llosada-Gistau, J., Montserrat, C., & Casas, F. (2015). The subjective well-being of adolescents in residential care compared to that of the general population. *Children and Youth Services Review*, 52, 150–157. <https://doi.org/10.1016/j.childyouth.2014.11.007>
- MacKinnon, D. P., Lockwood, C. M., & Williams, J. (2004). Confidence limits for the indirect effect: Distribution of the product and resampling methods. *Multivariate Behavioral Research*, 39(1), 99–128. https://doi.org/10.1207/s15327906mbr3901_4
- MacLean, K. (2003). The impact of institutionalization on child development. *Development and Psychopathology*, 15(4), 853–884. <https://doi.org/10.1017/S0954579403000415>
- Magalhães, E., & Calheiros, M. (2020). Why place matters in residential care: The mediating role of place attachment in the relation between adolescents' rights and psychological well-being. *Child Indicators Research*, 13(5), 1717–1737. <https://doi.org/10.1007/s12187-019-09716-5>

- McCall, R. (2013). Review: The consequences of early institutionalization: Can institutions be improved? - should they? *Child and Adolescent Mental Health*, 18(4), 193–201. <https://doi.org/10.1111/camh.12025>
- McCall, R. B., & Groark, C. J. (2015). Research on institutionalized children: Implications for international child welfare practitioners and policymakers. *International Perspectives in Psychology: Research, Practice, Consultation*, 4(2), 142–159. <https://doi.org/10.1037/ipp0000033>
- McConnell, M., & Moss, E. (2011). “Attachment across the life span: Factors that contribute to stability and change”. *Australian Journal of Educational & Developmental Psychology*, 11, 60–77. Retrieved from https://www.newcastle.edu.au/__data/assets/pdf_file/0018/100278/V11_McConnell-and-Moss.pdf
- McDowall, J. J. (2013). *Experiencing out-of-home care in Australia: The views of children and young people*. Policy and Research Unit, CREATE Foundation.
- Moore, K., Moretti, M., & Holland, R. (1997). A New Perspective on Youth Care Programs: Using Attachment Theory to Guide Interventions for Troubled Youth. *Residential Treatment for Children & Youth*, 15(3), 1–24. https://doi.org/10.1300/j007v15n03_01
- Morais, F., Santos, B., Mota, C. P., Matos, P. M., Costa, M., & Carvalho, H. M. (2022). Adolescência e saúde mental no acolhimento residencial: retrato de uma década em Portugal [Adolescence and mental health in residential care: portrait of a decade in Portugal]. *Psicoperspectivas*, 21(1). <https://doi.org/10.5027/psicoperspectivas-vol21-issue1-fulltext-2286>
- Moretti, M. M., Pasalich, D. S., & O'Donnell, K. A. (2018). Connect: An attachment-based program for parents of teens. In H. Steele & M. Steele (Eds.), *Handbook of attachment-based interventions* (pp. 375–400). Guilford Press.
- Mota, C. P., & Matos, P. M. (2005). *Questionário de Ligação a Figuras Significativas – QLPF [Relationship with Significant Figures Questionnaire]*. Unpublished manuscript. Faculty of Psychology and Educational Sciences. University of Porto.
- Mota, C. P., & Matos, P. M. (2008). Adolescência e institucionalização numa perspectiva de vinculação [Adolescence and institutionalization in an attachment perspective]. *Psicologia & Sociedade*, 20(3), 367–377. <https://doi.org/10.1590/s0102-71822008000300007>
- Mota, C. P., & Matos, P. M. (2010). Adolescentes institucionalizados: o papel das figuras significativas na predição da assertividade, empatia e autocontrolo [Institutionalized youth: the role of significant figures in the prediction of assertiveness, empathy, and self-control]. *Análise Psicológica*, 28(2), 245–254. <https://doi.org/10.14417/ap.278>
- Mota, C. P., & Matos, P. M. (2015). Adolescents in institutional care: Significant adults, resilience and well-being. *Child & Youth Care Forum*, 44(2), 209–224. <https://doi.org/10.1007/s10566-014-9278-6>
- Mota, C. P., & Matos, P. M. (2016). Caregiver’s attachment and mental health on perceived bond in institutional care. *Professional Psychology, Research and Practice*, 47(2), 110–119. <https://doi.org/10.1037/pro0000047>
- Quiroga, M. G., & Hamilton-Giachritsis, C. (2017). The crucial role of the micro caregiving environment: Factors associated with attachment styles in alternative care in Chile. *Child Abuse & Neglect*, 70, 169–179. <https://doi.org/10.1016/j.chiabu.2017.05.019>
- Quiroga, M., Urbina, C., Sepúlveda, G., Conca, B., & Miranda, J. (2021). Identidad personal en niños y adolescentes: estudio cualitativo. *Revista Latinoamericana de Ciencias Sociales, Niñez y Juventud*, 19(2), 1–24. <https://doi.org/10.11600/rlcsnj.19.3.4179>
- Rabley, S., Preyde, M., & Gharabaghi, K. (2014). A survey of adolescents’ perceptions of their relationships with nonparental caregivers in group home settings: An attachment perspective. *Children and Youth Services Review*, 40, 61–70. <https://doi.org/10.1016/j.childyouth.2014.02.012>

- Rodrigues, S., & Barbosa Ducharne, M. (2017). Residential child and youth care in Portugal: Current challenges and the need for quality care assessment. In T. Islam & L. Fulcher (Eds.), *Residential child and youth care in a developing world* (pp. 356–366). The CYC-Net Press.
- Sala Roca, J., Jariot García, M., Villalba Biarnés, A., & Rodríguez, M. (2009). Analysis of factors involved in the social inclusion process of young people fostered in residential care institutions. *Children and Youth Services Review*, 31(12), 1251–1257. <https://doi.org/10.1016/j.childyouth.2009.05.010>
- Santos, B., Babo, F., Carvalho, H., Matos, P. M., & Mota, C. P. (2019). *Caregiving Environment Satisfaction Questionnaire*. Unpublished manuscript. Faculty of Psychology and Educational Sciences. University of Porto.
- Smith, M., Fulcher, L., & Doran, P. (2013). *Residential child care in practice: Making a difference*. Bristol University Press. <https://doi.org/10.2307/j.ctt1t89d11>
- Southwell, J., & Fraser, E. (2010). Young people's satisfaction with residential care: Identifying strengths and weaknesses in service delivery. *Child Welfare*, 89(2), 209–228.
- Steels, S., & Simpson, H. (2017). Perceptions of children in residential care homes: A critical review of the literature. *British Journal of Social Work*, 47(6), 1704–1722. <https://doi.org/10.1093/bjsw/bcx107>
- Steinberg, L. (2016). *Adolescence*. McGraw-Hill Education.
- Stovall Mcclough, K. C., & Dozier, M. (2004). Forming attachments in foster care: Infant attachment behaviors during the first 2 months of placement. *Development and Psychopathology*, 16(2), 253–271. <https://doi.org/10.1017/S0954579404044505>
- Törrönen, M. (2021). Social relationships and their connection to mental health for young people who have been in the care system. *British Journal of Social Work*, 51(3), 927–944. <https://doi.org/10.1093/bjsw/bcab028>
- Tucker, D. J., & MacKenzie, M. J. (2012). Attachment theory and change processes in foster care. *Children and Youth Services Review*, 34(11), 2208–2219.
- van IJzendoorn, M. H., Bakermans-Kranenburg, M. J., Duschinsky, R., Fox, N. A., Gunnar, M. R., Johnson, D. E., Nelson, C. A., Skinner, S., Reijman, G. C. M., Zeannah, C. H., Sonuga-Barke, E. J. S., & Sonuga-Barke, E. J. S. (2020). Institutionalisation and deinstitutionalisation of children 1: A systematic and integrative review of evidence regarding effects on development. *The Lancet Psychiatry*, 7(8), 703–720. [https://doi.org/10.1016/S2215-0366\(19\)30399-2](https://doi.org/10.1016/S2215-0366(19)30399-2)
- Van IJzendoorn, M., Palacios, J., Sonuga-Barke, E., Gunnar, M., Vorria, P., McCall, R., et al. (2011). Children in institutional care: Delayed development and resilience. *Monographs of the Society for Research in Child Development*, 76(4), 8–30. <https://doi.org/10.1111/j.1540-5834.2011.00626.x>
- Zegers, M., Schuengel, C., Van IJzendoorn, M., & Janssens, J. (2006). Attachment representations of institutionalized adolescents and their professional caregivers: Predicting the development of therapeutic relationships. *The American Journal of Orthopsychiatry*, 76(3), 325–334. <https://doi.org/10.1037/0002-9432.76.3.325>