



# The Role of Attachment in the Life Aspirations of Portuguese Adolescents in Residential Care: The Mediating Effect of Emotion Regulation

Catarina Pinheiro Mota<sup>1,2</sup> · Tatiana Gonçalves<sup>1</sup> · Helena Carvalho<sup>2,3</sup> · Mónica Costa<sup>2,3</sup>

Accepted: 6 February 2022

© The Author(s), under exclusive licence to Springer Science+Business Media, LLC, part of Springer Nature 2022

## Abstract

Quality of attachment relationships developed within an institutional environment may be a risk or protective factor for the creation of life aspirations and for emotion regulation abilities among adolescents in residential care contexts. The present study aims to analyze the predictive role of attachment on life aspirations for adolescents in a residential care context, as well as to test the mediating effect of emotion regulation difficulties in this association. The sample included 296 adolescents living in Residential Care facilities in Portugal, with ages ranging between 12 and 18 ( $M = 15.30$ ,  $SD = 1.76$ ), being 71.6% female. Self-report measures included the *Experiences in Close Relationships*, the *Difficulties in Emotion Regulation Scale*, the *Aspiration Index*, and a sociodemographic questionnaire. Attachment figure negatively predicts the importance of life aspirations, while difficulties in emotional regulation mediate the association between attachment and life aspirations. Associations of length of institutionalization and age of entrance on residential care were tested and discussed. Practical implications were considered highlighting the importance of intervention with young people, the family, and caregivers in residential care.

**Keywords** Attachment · Emotion regulation · Life aspirations · Residential care · Adolescents

## Residential Care Framework in Portugal

Residential care (RC) is a non-family-based group setting, that together with foster care is one of the most used forms of alternative care for at risk children (Li et al., 2017). Portugal has nowadays one of the highest rates of children and youth under this type of measure in Europe (Delgado & Gersão, 2018). Although we assist in the last decade to a decreasing trend on the number of children and youth on RC settings in Portugal, currently, 86,3% of children and adolescents (6706) with non-naturalistic measures, are living in residential generalist care facilities (Morais et. al, 2022; National Institute Social Security [ISS], 2021).

## Attachment Theory and RC

Attachment theory stresses the crucial role of the emotional connection between child and the “caregiver”, in guiding the child’s affective, cognitive, and social development (Ainsworth, 1969; Bowlby, 1969). Bowlby (1969) argues that the presence of stable affectional bonds with primary caregivers, commonly parental figures, promotes the development of confidence and safety in the child. Thus, attachment theory attributes an important role to the ability of parental figures to provide a secure base, favoring the adaptive emotional development of the child and, later, of the adolescent (Bowlby, 1969). The concept of attachment has growing importance for adolescents who live in RC contexts, where their transition into a new environment can, in many cases, constitute situations of risk and vulnerability (Gorrese & Ruggieri, 2012; Laible, 2007; Mota et al., 2016). The transition to institutional context is a process that can enhance feelings of loss, abandonment and loneliness (Lemos, 2017; Lino & Nobre-Lima, 2017; Shaw, 2014; Yunes et al., 2004). Additionally, the negative impacts of RC on youth development, have been associated to unstable staffing patterns, deficits in physical resources and inadequate caregiver-child

✉ Catarina Pinheiro Mota  
catppmota@utad.pt

<sup>1</sup> Department of Education and Psychology, University of Trás-os-Montes e Alto Douro, Escola de Ciências Humanas e Sociais, Polo I, 5000-801 Vila Real, Portugal

<sup>2</sup> Centre for Psychology at University of Porto, Porto, Portugal

<sup>3</sup> Faculty of Psychology and Sciences Education, University of Porto, Porto, Portugal

interactions (e.g., Thoburn & Featherstone, 2019; van Ijzendoorn et al., 2011). Nevertheless, there seems to be an important variability in the quality of care and protection provided by RC and consequent outcomes (e.g., Costa et al., 2019). In this sense, caregiver's role in RC could be extremely important for creating relational dimensions for inspiring adolescents psychosocial adaptation processes (Carvalho et al., in press; Gaspar et al., 2015; Mota & Matos, 2015; Siqueira et al., 2006).

Although life aspirations are little addressed in RC research (Kasser & Ryan, 1996; Kasser et al., 2014), some studies point to the importance of controlling for variables inherent to the sex and age of the entrance in the institution (Mota et al., 2016; Nurmi, 1991), as well as length of institutionalization (Mota & Matos, 2015; Mota et al., 2016). Thus, although few gender related differences have been found (e.g., Conceição & Carvalho, 2014; Derks & Krabendam, 2014; Rose & Rudolph, 2006; Sulimani-Aidan & Benbenishty, 2011), some studies have found that boys seem to privilege external personal goals such as power, strength and fame (Zeira & Dekel, 2005), while girls show greater aptitude for aspirations linked to self-fulfillment (Seginer, 2009). Less explored has been the implication of age, and length of institutionalization in life aspirations of adolescents living in RC. Research regarding the effect that length of residential care has on youth, have been producing contradictory results (Baker et al., 2005; Dell'Aglio & Hutz, 2004; Ringle et al., 2010). While it is found that a long period in residential care can have a negative effect on youth development (Dell'Aglio & Hutz, 2004), some studies stress this dimension as a protective factor (Costa et al., 2019; Ringle et al., 2010) since length of stay could promote increasing opportunities for building closer relationships (Baker et al., 2005; Fernandes & Oliveira-Monteiro, 2016). Thus, creating closer emotional bonds could affect how youth project themselves in the future and shape their life aspirations.

## Emotional Regulation on RC

The presence of significant, responsive figures can meet the needs of adolescents, promoting the development of ER mechanisms and feelings of personal competence, and reinforcing a positive representation of themselves and others (Benavente et al., 2009; Costa, et al., 2019; Mota & Matos, 2008; O'Connor et al., 2000). For adolescents in RC, this reality can become increasingly important, given that significant figures could become active figures in the ER process (Cassidy, 1994; Dalbem & Dell'Aglio, 2005; Mota & Matos, 2008). According to Thompson (1994), ER involves intrinsic and extrinsic processes, responsible for monitoring, evaluating and modifying emotional reactions, particularly their intensity and temporality. Adolescents in RC contexts

tend to exhibit difficulties in terms of their ER abilities (Baker et al., 2005; Pinhel et al., 2009). The development of ER abilities occurs within the relational context, starting with attachment relationships with primary caregivers (Franco et al., 2015; Hughes et al., 2005; Kim & Cicchetti, 2010).

The concept of ER becomes particularly relevant in the case of adolescents in RC, as they may have experienced episodes of abuse, lack of affection and emotional instability (Pietromonaco & Barrett, 2000; Robinson et al., 2009). Negative childhood experiences may lead to the development of insecure attachment with primary caregivers, which will enhance greater reactivity, emotional detachment and difficulty in expressing emotions (Morris et al., 2007; Oriol et al., 2014). Therefore, the possibility for these adolescents to develop safe affectional bonds within the institution's caregivers and peers becomes fundamental for the process of ER and psychosocial integration (Mota & Matos, 2010; Oriol et al., 2014). The quality of previous relationships can also be relevant in life trajectories, specifically concerning future aspirations (Beal & Crockett, 2010; Mota & Matos, 2010). The discontinuity of care from significant figures may contribute to reduce stimulation regarding the construction of life aspirations (Cuevas et al., 2017; Gross & John, 2003). Life aspiration is associated with the idealized expression of objectives and the establishment of goals for the future. This construct includes an intrinsic domain, associated with aspiration which are likely to satisfy psychological needs (Kasser & Ryan, 1996; Kasser et al., 2014); and extrinsic domain, which is focused on external issues as positive evaluations by others and on the acquisition of rewards (Kasser & Ryan, 1996; Kasser et al., 2014). Adolescents tend to outline their life aspirations according to their personal characteristics, previous experiences, and the opportunities or difficulties felt in their environment (Cuevas et al., 2017; Massey et al., 2008; Nurmi et al., 2009).

Experienced risk and vulnerability during childhood may impose additional challenges to goal setting and commitment, restraining life aspirations, promoting a loss of interest in life and existential emptiness (Cuevas et al., 2017; Diener, 2000; Gonçalves et al., 2013). Social support is an integral part of the context for the development of plans for the future, objectives and guidelines for adolescents (Batki, 2018; Creed et al., 2011; Mota & Oliveira, 2017; Silva et al., 2016). In addition to attachment relationships, other factors have also been identified as relevant for goal setting, among adolescents in RC contexts, namely ER abilities (D'Aroz & Stoltz, 2012; Neves et al., 2016; Silva et al., 2016). ER involves intrinsic and extrinsic processes, responsible for regulating emotions towards the achievement of goals (Freire & Tavares, 2011; Neves et al., 2016). The presence of significant figures in the lives of these adolescents, capable of offering them guidance, counseling, as well as support,

could promote development of adolescent's life aspirations (Ahrens et al., 2011; Courtney et al., 2007; Galinha, 2010). These relational contexts could be responsive to youth needs, inspiring positive model of adolescent's self-value and enhancing future life aspirations (Sulimani- Aidan & Benbenishty, 2011).

## Purpose of the Present Study

As noted above, the literature in RC field tends to be more focused on negative outcomes and less in adaptive functioning, and emotional issues. Furthermore, to the best of our knowledge, no study within a RC context has analyzed life aspirations and emotional regulation, controlling the age of entrance in the institution and length of institutionalization.

To address this gap, the present study aims to analyze the role of attachment in the life aspirations of adolescents in RC contexts. It also intends to test the mediating role of ER difficulties in the previous association. Sex, age of entrance in the first institution, age of entrance in the current institution and the length in the institution were controlled on youth's life aspirations.

## Method

### Participants

The present study includes 296 adolescents living in 21 generalist RC facilities in Porto district (Portugal), randomly recruited between the institution that accept to participate being 212 (71.6%) females and 84 (28.4%) males, with ages ranging from 12 and 18 ( $M = 15.30$ ;  $SD = 1.761$ ). Some young people change between institutions throughout adolescence for several reasons as transference from temporary care institutions to close geographic zone, disruptive behavior, or even undesired pregnancy. Regarding age of the first institutionalization (ranging from 1 and 18 years,  $M = 11.90$ ;  $SD = 3.89$ ), 25 (8.4%) entered when they were between 1 and 6 years, 82 (27.7%), between 7 and 12 years, and 123 (41.6%) between 13 and 18 years of age. The length of institutionalization range from 0 to 17 years ( $M = 2.70$ ;  $SD = 3.28$ ), and the age of entrance on the current institution ranged between 1 and 18 years old ( $M = 12.62$ ;  $SD = 3.31$ ). Reasons for institutionalization ranged between parental neglect or abandonment, education right and risk behaviors. The institutions and RC included in this study do not refer to children and adolescents who were institutionalized because of mental disabilities/disorders, or additional motives of deviant behaviors (conduct disorders or substance abuse). Thus, we did not include RC related to corrective situations, rehabilitation and

therapeutic care, kinship care, emergency shelter, residential schools, psychiatric hospitals or other mental-health facilities, to avoid RC settings and adolescents with specific conditions.

## Measures

Self-report measures included: a sociodemographic questionnaire (gender, age and the first institution entry age), *Experiences in Close Relationships Scale* (ECR), *Difficulties in Emotion Regulation Scale* (DERS) and the *Aspiration Index Scale* (AI).

The *Experiences in Close Relationships Scale* (ECR) brief version (Fraley et al., 2011, Portuguese version by Moreira et al., 2015) aims to evaluate attachment dimensions using a 7-point Likert scale: anxiety (3 items,  $\alpha = 0.83$ ) and avoidance (6 items,  $\alpha = 0.77$ ). A confirmatory factor analysis of the instrument revealed adequate model fit indices:  $\chi^2(24) = 79.352$ ,  $\chi^2/df = 3.30$ ;  $p = 0.000$ ; GFI = 0.95; AGFI = 0.90; NFI = 0.94; CFI = 0.96; RMSEA = 0.09 and SRMR = 0.01.

The *Difficulties in Emotion Regulation Scale* (DERS) was originally developed by Gratz and Roemer (2004), and adapted to the Portuguese population by Coutinho et al. (2010). This instrument aims to assess clinically significant difficulties in ER using a 5 point Likert scale. In the present study, 14 items will be used, being the dimensions under study: (limited access to emotion regulation) Strategies (8 items,  $\alpha = 0.86$ ) and (lack of emotional) Consciousness (6 items,  $\alpha = 0.82$ ). The confirmatory factor analysis showed adequate values for the model:  $\chi^2(62) = 190.262$ ,  $\chi^2/df = 3.06$ ;  $p = 0.000$ ; GFI = 0.91; AGFI = 0.87; NFI = 0.88; CFI = 0.91; RMSEA = 0.08 and SRMR = 0.09.

The *Aspiration Index Scale* (AI) was originally developed by Kasser et al. (2014) and adapted to the Portuguese population by Costa et al. (2020). This scale was developed with the aim of evaluating extrinsic and intrinsic aspirations using a 9 point Likert scale. In the present study, 27 items will be used, with the dimensions under study being Intrinsic Aspirations: Self-Acceptance (8 items,  $\alpha = 0.86$ ), Health (5 items,  $\alpha = 0.78$ ) and Affiliation (6 items,  $\alpha = 0.79$ ); and Extrinsic Aspirations: Image (5 items,  $\alpha = 0.79$ ), Financial Success (4 items,  $\alpha = 0.73$ ) and Popularity (4 items,  $\alpha = 0.73$ ). The confirmatory factor analysis showed adequate values for the model:  $\chi^2(306) = 713.890$ ,  $\chi^2/df = 2.33$ ;  $p = 0.000$ , GFI = 0.91; AGFI = 0.87; NFI = 0.83; CFI = 0.89; RMSEA = 0.07 and SRMR = 0.06.

## Procedure

The study protocol was submitted to the authors' Faculties Ethics Committees. Subsequently, authorizations from the RC institutions were also requested. Moreover, an informed consent form was developed for the adolescents, with information regarding the voluntary nature of participation, as well as the confidentiality and anonymity of the data. Data was collected face to face in RC settings, between October 2019 and January 2020 by two experienced researchers in the field.

## Data Analysis Strategies

The present study uses quantitative and cross-sectional methodological strategies. Data was analyzed using statistical program *SPSS*—Statistical Package for Social Sciences—in its 25.0 version for the Windows system. Pre-analysis included data screening, identification and exclusion of missing values and outliers. A minimum of 10% of missing values per instrument was ensured and analyses of outliers were conducted. Statistical analysis included structural equation model. Measurements were made through *Bootstrapping* method, using the *AMOS* program (version 23.0). For the final model, composited variables to intrinsic (self-acceptance, health, and affiliation dimensions), and extrinsic aspirations (image, financial success and popularity dimensions) were constructed through the importation of each dimension, considering the respective saturation on latent variable (Bollen, 1989).

## Results

### The Role of Attachment on Life Aspirations and the Mediating Effect of ER Difficulties

A first model testing attachment and the importance on life aspirations, evidence a significant effect in which avoidance ( $\beta = -0.250$ ) negatively predicts intrinsic life aspirations.

The mediating role of ER difficulties was tested on the next step, using the two dimensions of the measure: limited access to ER Strategies and lack of emotional Consciousness. The dependent variable, importance of life aspirations, was constructed through composited variables focused on intrinsic aspirations (self-acceptance, health and affiliation dimensions) and extrinsic aspirations (image, financial success and popularity dimensions).

After introducing the mediator variable ER difficulties (strategies and consciousness), and using the bootstrapping procedure, the initial connection between the attachment dimension avoidance and intrinsic life aspirations lose magnitude ( $\beta_{\text{initial}} = -0.290$ ;  $\beta_{\text{final}} = -0.250$ ). Thus,

there was a negative partial mediation ( $\beta = -0.062$ , 90% CI  $[-0.026, -0.105]$ ) from dimension lack of emotional consciousness, with negative effect, on the association between the attachment dimension avoidance and intrinsic life aspirations (Fig. 1). There was also a negative total mediation of lack of emotional consciousness ( $\beta = -0.069$ ; 90% CI  $[-0.032, -0.122]$ ) on the association between the attachment dimension avoidance ( $\beta = 0.18$ ) and extrinsic life aspirations ( $\beta = -0.38$ ). Finally, we can observe a negative total mediation effect of limited access to ER strategies ( $\beta = -0.021$ ; 90% CI  $[-0.012, -0.80]$ ) on the association between anxiety ( $\beta = 0.22$ ) and intrinsic life aspirations ( $\beta = -0.10$ ) (Fig. 1).

Sex, age of entrance in the first institution, age of entrance in the current institution and placement length in the institution were controlled in the model. Life aspirations were predicted by sex (male) ( $\beta = -0.18$ ). Age of entrance in the current institution ( $\beta = -0.26$ ), and the length of the institutionalization ( $\beta = -0.12$ ) presented a negative effect on extrinsic life aspirations, whereas the age of entrance in the first institution ( $\beta = 0.19$ ) presented a positive effect on extrinsic life aspirations.

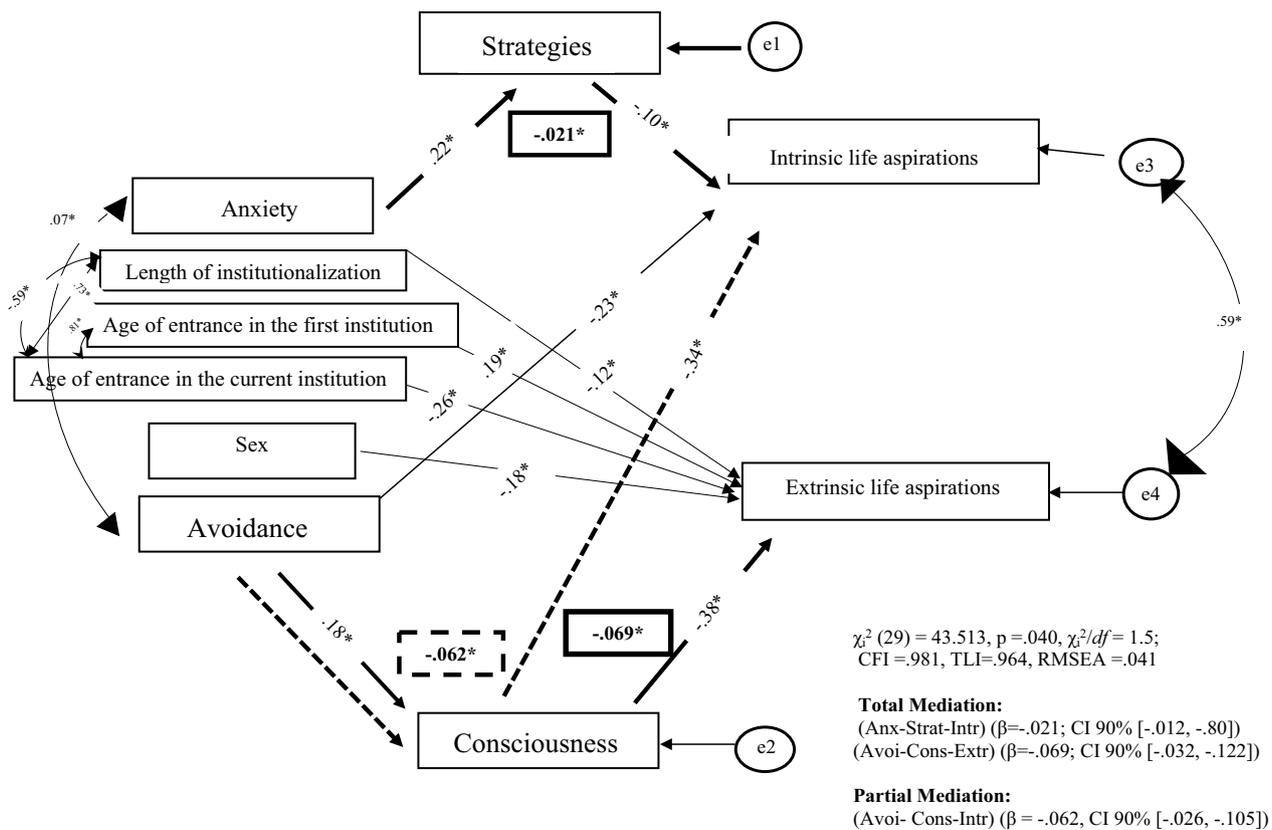
The model of the present study exhibits adequate fit indices: ( $\chi^2(29) = 43.513$ ,  $p = 0.040$ ,  $\chi^2/df = 1.5$ ; CFI = 0.981, TLI = 0.964, RMSEA = 0.041) (Fig. 1).

## Discussion

The main objectives of the present study were to analyze the role of attachment in life aspirations and the mediating effect of ER difficulties in the previous association in a sample of adolescents living in RC facilities.

The first main result addresses the predictive nature of attachment, namely the avoidance dimension on intrinsic life aspirations. The presence of attachment relationships based on high levels of avoidance seem to reduce the attribution of importance to intrinsic life aspirations. Adolescents in RC who maintain quality affectional bonds, associated with secure attachment, more easily develop positive internal models, which lead to the construction of intrinsic life aspirations (Bronfenbrenner, 1979; Mota & Oliveira, 2017). The literature has suggested that relationships established with significant figures in RC could be particularly relevant to respond to psychological needs, namely definition of life goals, plans and future guidelines (Cuevas et al., 2017; Mota & Matos, 2015). On the other hand, the RC process tends to trigger feelings of loss and difficulties in establishing significant affectional relationships (with avoidance organization), resulting in a weaker definition of future goals (Mota & Oliveira, 2017).

The second main result concerns the mediating role of ER processes between attachment and life aspirations. Lack of



**Fig. 1** Representative model of the mediating effect of emotion regulation difficulties on the association between attachment and life aspirations

emotional consciousness has a negative partial mediation on the association between avoidance and intrinsic life aspirations. Also, limited access to ER strategies has a negative total mediation on the association between anxiety attachment dimension and intrinsic life aspirations. Furthermore, it was found that the dimension lack of emotional consciousness has a negative total mediation effect on the association between the attachment dimension avoidance and extrinsic life aspirations. Thus, the presence of avoidance behaviors towards the attachment figure constitutes a process that may promote a negative self-assessment in adolescents, difficulties in regulating their emotional states, as well as lack of motivation in their competencies. Therefore, the presence of stability in the RC context, namely the consistency of care and the development of secure relationships, may constitute protective factors towards adaptive ER (e.g., Caspi, 2000; Lopes et al., 2005). Consequently, as expected, adolescents with ER difficulties have less motivation and expectations to achieve their life goals.

There is a scarcity of studies that address the relevance of attachment and ER difficulties in establishing goals or aspirations for the future, among adolescents in RC contexts. However, studies on this topic among the general population, have shown that the presence of affectional

bonds allows adolescents to have access to more adaptive ER mechanisms and facilitates access to positive results, namely regarding life goals (Mota & Oliveira, 2017; Silva et al., 2016). As such, it seems that young people tend to outline their life goals according to their ER mechanisms, as well as the opportunities and limitations perceived in their environment (Nurmi et al., 2009). Thus, adolescents who have affective relationships based on high levels of avoidance demonstrate greater lack of emotional consciousness and, consequently, assign less personal value to their intrinsic and extrinsic life aspirations (D’Aroz & Stoltz, 2012; Kim & Cicchetti, 2010; Mota & Matos, 2015). At the same time, an anxious attachment can promote the development of limited access to ER strategies, so that young people mainly in RC context see the world as threatening and unreliable (Hughes et al., 2005; Kim & Cicchetti, 2010). Limited access to emotional regulation strategies hinders young people’s internal growth (Oriol et al., 2014), life satisfaction and the expectation of intrinsic life aspirations (e.g., Mota & Oliveira, 2017). Therefore, the results seem to reflect the importance of secure attachment relationships in the development of a more adaptive ER, which gives the adolescent the opportunity to attach greater importance to their life aspirations.

Lastly, sex, age of entrance in the first and the current institution, and length in the institutionalization were also controlled in the model. There has been a scarcity of empirical studies on the life aspirations of adolescents in RC contexts (Kasser & Ryan, 1996; Kasser et al., 2014). However, the literature suggests that life aspirations of adolescents in RC contexts also vary according to sociodemographic variables, such as sex and age of entrance in the institution (Nurmi, 1991). Beal and Crockett (2010) corroborate this perspective, as they found that, in early stages of adolescence, life aspirations are vague and built based on social norms and family expectations. Nonetheless, as age advances, adolescents reveal a greater ability to define what they want, as well as refine their aspirations and expectations (Beal & Crockett, 2010). However, this reality is not always observed among adolescents in RC contexts, who, due to adverse emotional experiences and lower perceived support from others, seem to show deficiencies in the way they assess their life aspirations (Creed et al., 2011; Neves et al., 2016).

In the present study it was found that male adolescents attribute greater importance to extrinsic life aspirations related to image, financial success, and popularity. This result comes in line with previous research that found gender related differences concerning life aspirations, namely that point to greater appreciation in male adolescents for concrete and external goals, recognition from others and power (Derks & Krabbendam, 2014; Seginer, 2009; Zeira & Dekel, 2005). Nevertheless, this result should be interpreted with caution, considering nonconsensual results on this issue (e.g., Conceição & Carvalho, 2014; Rose & Rudolph, 2006; Sulimani-Aidan & Benbenishty, 2011). Additionally, considering the role that supportive relationships and access to opportunities within the adolescent environment have on life aspirations (Gonçalves et al., 2013; Massey et al., 2008; Nurmi, 1991; Nurmi et al., 2009), these dimensions should be addressed in RC.

Regarding the length of institutionalization, it was associated negatively with extrinsic life aspirations of young people. Despite scarce research on the effects of length in the context of RC, some studies point to an association between the boys' externalizing behaviors and length of institutionalization (Mota et al., 2016). In the present study, the length of institutionalization is not associated with intrinsic life aspirations, however there is a negative association with extrinsic aspirations. To this extent, length in institutionalization may constitute a protective factor for the exclusive development of extrinsic life aspirations as power, wealth, fame and recognition from others. This result can be supported with negative association with the age of entrance in current institution and positive association of the age of entrance in the first institution with extrinsic life aspirations. In Portugal, young people enter on RC increasingly later

(ISS, 2020), so living in conditions of low affective support and disorganized care could difficult the development of life aspirations inspired in a self-value and self-worth dimension. If intrinsic motivation could be increasingly associated with age (e.g., Beal & Crockett, 2010; Morgan & Robinson, 2013) lack of support could undermine the development of life aspirations (Creed et al., 2011; Neves et al., 2016), favoring greater appreciation of more material dimensions of future aspirations. Considering the implications of intrinsic life aspirations for well-being (Yamasaki et al., 2021), this result should be further explored. Future studies should address the implication of adversity experiences and pathways on development of life aspirations.

The permanence in the same institution can provide the expectation of permanence, regularity, and consistence of care, creating conditions for an affective reorganization of young people and greater willingness to work on internal issues. Indeed, significant figures are extremely relevant in the context of RC, this issue being particularly significant when children enter at very early ages. Overall, it is important to foster, from an early age, the construction of secure attachment relationships with other significant figures, among children, since these relationships offer an opportunity for appropriate emotional development (Cavalgante & Magalhães, 2017; Pietromonaco & Barrett, 2000).

Anyway, it is common knowledge that the effect of length in institutionalization and the age of entry into the institution are factors which influence may depend on several aspects, namely the previous history of the young people, the adversity of the conditions of withdrawal, and the context of the RC institutions, and therefore more research is needed in this field.

## Practical Implications

The present study has an innovative nature, given the lack of national and international studies that address the association between the variables under study. This research helps to understand the relevance of attachment relationships in life aspirations and highlights the mediating role of ER difficulties in the previous association. We believe the results obtained and conclusions drawn will contribute to a greater consciousness of the various agents who develop their practice in the context of RC, highlighting their role in emotional experiences and in the development of future life projects.

From a practical point of view, the results of this study highlight the relevance of the age of entry and length into RC on life aspiration of young people. A significant proportion enter to RC at a late age, and most young people maintain relationships with their biological family or primary caregivers. Early intervention becomes essential, either within primary caregivers, or with young people. Protecting youth also implies to invest in the family and to develop comprehensive

interventions for enhancing and restoring bonds, responsiveness and secure parenting/caregiving (namely, understanding the developmental history to assess the family/parents' role in attachment development). Thus, articulation between RC institutions and intervention with families is fundamental. It would also be interesting programming intervention with young people to strengthen aspirations such as vocational/educational planning and future independent living. Finally, caregiver's training and supervision in the intervention with the family may be relevant for the positive adaptation of young people, and the development of future life projects, in which the family may be involved.

## Limitations and Future Avenues

It is worth noting the presence of some limitations in this research, namely that this study has a cross-sectional nature, preventing the cause-effect analysis among the variables under study. In addition to the above, there is a discrepancy in the number of male and female adolescents in the sample that should be controlled. The small sample size and limited location of data collected can also be a limitation of the study. Although family dimensions weren't included in the study design, similar to other expectations studies on ER processes and attachment conducted in youth in RC, future studies should include information regarding primary contexts and relations (Melkman et al., 2016). In terms of future directions, it would be also important to analyze other relational variables, such as the quality of attachment to a sibling or romantic partner in defining the life aspirations among adolescents in RC contexts. In accordance with the law for the protection of at-risk children and adolescents, it would be relevant to include young people as active agents, developing qualitative analyses, to produce intervention guidelines in the context of RC. Finally, future studies should inform and monitor the design and implementation of intervention with caregivers in RC settings in order to prevent emotional difficulties and promote young adaptative future life projects.

## Conclusion

According to the literature secure attachment relationship is a relevant indicator of adolescent 's emotional regulation development (Franco et al., 2015; Kim & Cicchetti, 2010). In adolescents living in RC, insecure attachment, due to the experience of several stressors and/or adversity in their lives, can compromise emotional regulation and life aspirations. Despite the growing investment on RC research, little is known about what factors can contribute to the increase of this knowledge. The current research showed the centrality of relational dimensions, as attachment status, and the deleterious effect of institutionalization length on life

aspirations in adolescents living in RC. Implications of the age of entrance in the institution reinforce the importance of prevention and early intervention within primary caregivers.

The role of the caregivers, including social workers, becomes fundamental, integrating a multidisciplinary team on RC context, able to identify the difficulties in the young people's experiences, and working with the families on the young's future life project.

**Acknowledgements** This research was supported by the FCT funded project CareMe (PTDC/PSI-ESP/28653/2017).

**Authors Contribution** CPM: methodology, formal analysis, writing—review and editing, funding acquisition. TG: methodology, formal analysis, writing original draft. HC: writing—review and editing. MC: writing—review and editing.

## Declarations

**Conflict of interest** The authors declare that they have no known competing financial interests or personal relationships that could have appeared to influence the work reported in this paper.

## References

- Ahrens, K. R., DuBois, D. L., Garrison, M., Spencer, R., Richardson, L. P., & Lozano, P. (2011). Qualitative exploration of relationships with important non-parental adults in the lives of youth in foster care. *Children and Youth Services Review*, 33(6), 1012–1023. <https://doi.org/10.1016/j.childyouth.2011.01.006>
- Ainsworth, M. D. S. (1969). Object relations, dependency, and attachment: Theoretical review of the infant-mother relationship. *Child Development*, 40, 969–1026.
- Baker, A. J., Archer, M., & Curtis, P. A. (2005). Age and gender differences in emotional and behavioural problems during the transition to residential treatment: The Odyssey Project. *International Journal of Social Welfare*, 14(3), 184–194.
- Batki, A. (2018). The impact of early institutional care on emotion regulation: Studying the play narratives of post-institutionalized and early adopted children. *Early Child Development and Care*, 188(12), 1801–1815.
- Beal, S. J., & Crockett, L. J. (2010). Adolescent's occupational and educational aspirations and expectations: links to high school activities and adult educational attainment. *Developmental Psychology*, 46(1), 258–265. <https://doi.org/10.1037/a0017416>
- Benavente, R., Justo, J., & Veríssimo, M. (2009). Os efeitos dos maus-tratos e da negligência sobre as representações da vinculação em crianças de idade pré-escolar. *Análise Psicológica*, 27(1), 21–31.
- Bollen, K. A. (1989). *Structural equations with latent variables*. Wiley.
- Bowlby, J. (1969). *Attachment and loss*. Penguin.
- Bronfenbrenner, U. (1979). Contexts of child rearing: Problems and prospects. *American Psychologist*, 34(10), 844–850.
- Caspi, A. (2000). The child is father to the man: Personality continuities from childhood to adulthood. *Journal of Personality and Social Psychology*, 78, 158–172. <https://doi.org/10.1037/0022-3514.78.1.158>
- Cassidy, J. (1994). Emotion regulation: Influences of attachment relationships. *Monographs of the Society for Research in Child Development*, 59, 228–283.

- Cavalcante, L. I. C., & Magalhães, C. M. C. (2017). Relações de apego no contexto da institucionalização na infância e da adoção tardia. *Psicologia Argumento*, 30(68), 75–85.
- Carvalho, H., Mota, C. P., Santos, B., Costa, M., & Matos, P. M. (in press). From chaos to normalization and deconfinement: What did the pandemic unveil in youth residential care. *Child and Adolescent Social Work Journal*. <https://doi.org/10.1007/s10560-021-00808-2>
- Conceição, A., & Carvalho, M. (2014). Problemas emocionais e comportamentais em jovens: relações com o temperamento, as estratégias de coping e de regulação emocional e a identificação de expressões faciais. *Psychologica*, 56, 83–100. [https://doi.org/10.14195/1647-8606\\_56\\_5](https://doi.org/10.14195/1647-8606_56_5)
- Costa, M., Matos, P. M., & Mota, C. P. (2020). Validation of a portuguese version of the Aspiration Index for Adolescents (AI). *The Spanish Journal of Psychology*, 23, 1–10. <https://doi.org/10.1017/SJP.2020.22>
- 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*. <https://doi.org/10.1080/13575279.2019.1680533>
- Courtney, M. E., Dworsky, A. L., Cusick, G. R., Havlicek, J., Perez, A., & Keller, T. E. (2007). *Midwest evaluation of the adult functioning of former foster youth: outcomes at age 21*. Chapin Hall Center.
- Coutinho, J., Ribeiro, E., Ferreirinha, R., & Dias, P. (2010). Versão portuguesa da Escala de Dificuldades de Regulação Emocional e sua relação com sintomas psicopatológicos [The Portuguese version of the Difficulties in Emotion Regulation Scale and its relationship with psychopathological symptoms]. *Revista Psiquiatria Clínica*, 37(4), 145–151.
- Cuevas, C., Wolff, K. T., & Baglivio, M. T. (2017). Self-efficacy, aspirations, and residential placement outcomes: Why belief in a prosocial self matters. *Journal of Criminal Justice*, 52, 1–11. <https://doi.org/10.1016/j.jcrimjus.2017.06.006>
- Creed, P., Tilbury, C., Buys, N., & Crawford, M. (2011). The career aspirations and action behaviors of Australian adolescents in out-of-home-care. *Children and Youth Services Review*, 33(9), 1720–1729.
- Dalbem, J. X., & Dell'Aglio, D. D. (2005). Teoria do apego: Bases conceituais e desenvolvimento dos modelos internos de funcionamento. *Arquivos Brasileiros De Psicologia*, 57(1), 12–24.
- Dell'Aglio, D. D., & Hutz, C. S. (2004). Depressão e desempenho escolar em crianças e adolescentes institucionalizados. *Psicologia: Reflexão e Crítica*, 17(3), 351–357.
- D'Aroz, M., & Stoltz, T. (2012). O cuidado institucional na visão de adolescentes acolhidos. *Revista Brasileira Adolescência e Conflitualidade*, (6), 198–220. <https://doi.org/10.17921/2176-5626.n6p%25p>
- Delgado, P., & Gersão, E. (2018). O acolhimento de crianças e jovens no novo quadro legal: Novos discursos, novas práticas? [The residential care of children and young people in the new legal framework: New discourses, new practices?] *Análise Social*. <https://doi.org/10.31447/AS00032573.2018226.05>
- Derks, J., Lee, N. C., & Krabbendam, L. (2014). Adolescent trust and trustworthiness: Role of gender and social value orientation. *Journal of Adolescence*, 37(8), 1379–1386. <https://doi.org/10.1016/j.adolescence.2014.09.014>
- Diener, E. (2000). Subjective well-being: The science of happiness and a proposal for a national index. *American Psychologist*, 55(1), 34–43.
- Fernandes, A., & Oliveira-Monteiro, N. (2016). Psychological indicators and perceptions of adolescents in residential care. *Paidéia*, 63, 81–89. <https://doi.org/10.1590/1982-43272663201610>
- Fraleigh, R. C., Heffernan, M. E., Vicary, A. M., & Brumbaugh, C. C. (2011). The experiences in close relationships – Relationship structures questionnaire: A method for assessing attachment orientations across relationships. *Psychological Assessment*, 23(3), 615–625. <https://doi.org/10.1037/a0022898>
- Franco, M. D. G. S. D., Costa, E., & Santos, N. N. (2015). Desenvolvimento da compreensão emocional. *Psicologia: Teoria e Pesquisa*, 31(3), 339–348. <https://doi.org/10.1590/0102-3772015032099339348>
- Freire, T., & Tavares, D. (2011). Influência da autoestima, da regulação emocional e do gênero no bem-estar subjetivo e psicológico de adolescentes. *Archives of Clinical Psychiatry*, 38(5), 184–188.
- Galinha, I. C. (2010). *Bem-estar subjetivo: factores cognitivos, afectivos e contextuais*. Placebo.
- Gaspar, J. P. M., Santos, E. J., & Alcoforado, J. L. M. (2015). Desafios da autonomização: Estudo das transições segundo jovens adultos ex institucionalizados. *Psicologia Clínica*, 27(1), 59–81. <https://doi.org/10.1590/0103-56652015000100004>
- Gonçalves, J., Moura, F., Jr., Dell'Aglio, D., & Castellá Sarriera, J. (2013). Expectativas quanto ao futuro de adolescentes em diferentes contextos. *Acta Colombiana De Psicologia*, 16(1), 91–100.
- Gorrese, A., & Ruggieri, R. (2012). Peer attachment: A meta-analytic review of gender and age differences and associations with parent attachment. *Journal of Youth and Adolescence*, 41(5), 650–672. <https://doi.org/10.1007/s10964-012-9759-6>
- Gratz, K. L., & Roemer, L. (2004). Multidimensional assessment of emotion regulation and dysregulation: Development, factor structure and initial validation of the difficulties in emotion regulation scale. *Journal of Psychopathology and Behavioral Assessment*, 26(1), 41–54.
- Gross, J. J., & John, O. P. (2003). Individual differences in two emotion regulation processes: Implications for affect, relationships, and well-being. *Journal of Personality and Social Psychology*, 85(2), 348–362.
- Hughes, M. M., Blom, M., Rohner, R. P., & Britner, P. A. (2005). Bridging parental acceptance-rejection theory and attachment theory in the preschool strange situation. *Ethos*, 33(3), 378–401.
- Instituto de Segurança Social, I.P. (2020). *CASA 2019 – Relatório de Caracterização Anual da Situação de Acolhimento das Crianças e Jovens [The Children and Young People's Annual Childcare Status Report]*. ISSIP. <https://www.seg-social.pt/documents/10152/17405298/Relatório%20CASA%202019/0bf7ca2b-d8a9-44d2-bff7-df1f111dc7ee>
- Instituto de Segurança Social, I.P. (2021). *CASA 2020 – Relatório de Caracterização Anual da Situação de Acolhimento das Crianças e Jovens [The Children and Young People's Annual Childcare Status Report]*. ISSIP. <https://www.seg-social.pt/documents/10152/13200/CASA+2020.pdf/b7f02f58-2569-4165-a5ab-bed9efdb2653>
- Kasser, T., & Ryan, R. M. (1996). Further examining the American dream: Differential correlates of intrinsic and extrinsic goals. *Personality and Social Psychology Bulletin*, 22(3), 280–287.
- Kasser, T., Rosenblum, K. L., Sameroff, A. J., Deci, E. L., Niemiec, C. P., Ryan, R. M., & Hawks, S. (2014). Changes in materialism, changes in psychological well-being: Evidence from three longitudinal studies and an intervention experiment. *Motivation and Emotion*, 38(1), 1–22. <https://doi.org/10.1007/s11031-013-9371-4>
- Kim, J., & Cicchetti, D. (2010). Longitudinal pathways linking child maltreatment, emotion regulation, peer relations, and psychopathology. *Journal of Child Psychology and Psychiatry*, 51(6), 706–716.
- Laible, D. (2007). Attachment with parents and peers in late adolescence: Links with emotional competence and social behavior. *Personality and Individual Differences*, 43(5), 1185–1197.
- Lemos, S. D. C. A. (2017). Os vínculos afetivos no contexto de acolhimento institucional: um estudo de campo. *Psicologia Teoria e Pesquisa*, 33(1), 1–10.

- Li, D., Chng, G. S., & Chu, C. M. (2017). Comparing long-term placement outcomes of residential and family foster care: A meta-analysis. *Trauma, Violence, & Abuse, 20*(5), 653–664. <https://doi.org/10.1177/1524838017726427>
- Lino, A., & Nobre-Lima, L. (2017). Emotional dysregulation as a predictor of peer attachment perceptions of adolescents in residential care. *Psychologica, 60*(1), 1–28.
- Lopes, P. N., Salovey, P., Côté, S., & Beers, M. (2005). Emotion regulation ability and the quality of social interaction. *Emotion, 5*, 113–118.
- Massey, E. K., Gebhardt, W. A., & Garnefski, N. (2008). Adolescent goal content and pursuit: A review of the literature from the past 16 years. *Review of Development, 28*(4), 421–460. <https://doi.org/10.1016/j.dr.2008.03.002>
- Melkman, E., Refaeli, T., & Benbenishty, R. (2016). An empirical test of a model of academic expectations among youth in residential care. *Children and Youth Services Review, 67*, 133–141. <https://doi.org/10.1016/j.chilyouth.2016.05.023>
- Morais, M. F., Santos, B., Mota, C. P., Matos, P. M., Costa, M., & Carvalho, H. (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. https://doi.org/10.5027/vol.21-issue1-fulltext-2286*
- Moreira, H., Martins, T., Gouveia, M. J., & Canavarro, M. C. (2015). Assessing adult attachment across different contexts: Validation of the Portuguese version of the experiences in close relationships – Relationship structures questionnaire. *Journal of Personality Assessment, 97*, 22–30. <https://doi.org/10.1080/00223891.2014.950377>
- Morgan, J., & Robinson, O. (2013). Intrinsic aspirations and personal meaning across adulthood: Conceptual interrelations and age/sex differences. *Developmental Psychology, 49*(5), 999–1010. <https://doi.org/10.1037/a0029237>
- Morris, A. S., Silk, J. S., Steinberg, L., Myers, S. S., & Robinson, L. R. (2007). The role of the family context in the development of emotion regulation. *Social Development, 16*(2), 361–388.
- Mota, C. P., Costa, M., & Matos, P. M. (2016). Resilience and deviant behavior among institutionalized adolescents: The relationship with significant adults. *Child and Adolescent Social Work Journal, 33*(4), 313–325. <https://doi.org/10.1007/s10560-015-0429-x>
- Mota, C. P., & Matos, P. M. (2008). Adolescência e institucionalização numa perspetiva de vinculação. *Psicologia e Sociedade, 20*(3), 367–377.
- Mota, C. P., & Matos, P. M. (2010). Adolescentes institucionalizados: O papel das figuras significativas na predição da assertividade, empatia e autocontrolo. *Análise Psicológica, 28*(2), 245–254.
- Mota, C. P., & Matos, P. M. (2015). Adolescents in institutional care: Significant adults, resilience, and well-being. *Child and Youth Care Forum, 44*(2), 209–224. <https://doi.org/10.1007/s10566-014-9278-6>
- Mota, C. P., & Oliveira, I. (2017). O suporte social e a personalidade são significativos para os objetivos de vida de adolescentes de diferentes configurações familiares? *Análise Psicológica, 35*(4), 425–438.
- Neves, S., Martins, E., Magalhães, C., Fernandes, R., & Mendes, F. (2016). Instituição, regulação emocional e satisfação com a vida numa amostra de adolescentes portugueses. In *Congresso Internacional de Psicologia da Criança e do Adolescente*, (pp. 52–53).
- Nurmi, J. E. (1991). How do adolescents see their future? A review of the development of future orientation and planning. *Developmental Review, 11*(1), 1–59.
- Nurmi, J. E., Salmela-Aro, K., & Aunola, K. (2009). Personal goal appraisals vary across both individuals and goal contents. *Personality and Individual Differences, 47*(5), 498–503.
- O'Connor, T. G., Rutter, M., Beckett, C., Keaveney, L., & Kreppner, J. M. (2000). The effects of global severe privation on cognitive competence: Extension and longitudinal follow-up. *Child Development, 71*(2), 376–390.
- Oriol, X., Sala-Roca, J., & Filella, G. (2014). Emotional competences of adolescents in residential care: analysis of emotional difficulties for intervention. *Children and Youth Services Review, 44*, 334–340. <https://doi.org/10.1016/j.chilyouth.2014.06.009>
- Pietromonaco, P. R., & Barrett, L. F. (2000). Attachment theory as an organizing framework: A view from different levels of analysis. *Review of General Psychology, 4*(2), 107–110.
- Pinhal, J., Torres, N., & Maia, J. (2009). Crianças institucionalizadas e crianças em meio familiar de vida: Representações de vinculação e problemas de comportamento associado. *Análise Psicológica, 27*(4), 509–521.
- 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*(7), 974–980. <https://doi.org/10.1016/j.chilyouth.2010.03.022>
- Robinson, L. R., Morris, A. S., Heller, S. S., Scheeringa, M. S., Boris, N. W., & Smyke, A. T. (2009). Relations between emotion regulation, parenting, and psychopathology in young maltreated children in out of home care. *Journal of Child and Family Studies, 18*(4), 421–434.
- Rose, A. J., & Rudolph, K. D. (2006). A review of sex differences in peer relationship processes: Potential trade-offs for the emotional and behavioral development of girls and boys. *Psychological Bulletin, 132*(1), 98–131.
- Shaw, J. (2014). Why do young people offend in children's homes? Research, theory and practice. *British Journal of Social Work, 44*(7), 1823–1839. <https://doi.org/10.1093/bjsw/bct047>
- Seginer, R. (2009). *Future orientation: Developmental and ecological perspectives*. Springer Science & Business Media.
- Silva, A. R., Melo, O., & Mota, C. P. (2016). Suporte social e individualização em jovens de diferentes configurações familiares. *Temas Em Psicologia, 24*(4), 1311–1327.
- Siqueira, A. C., Betts, M. K., & Dell'Aglio, D. D. (2006). A rede de apoio social e afetivo de adolescentes institucionalizados no sul do Brasil. *Revista Interamericana De Psicologia, 40*(2), 149–158.
- Sulimani-Aidan, Y., & Benbenishty, R. (2011). Future expectations of adolescents in residential care in Israel. *Children and Youth Services Review, 33*, 1134–1141. <https://doi.org/10.1016/j.chilyouth.2011.02.006>
- Thoburn, J., & Featherstone, B. (2019). Adoption, child rescue, maltreatment and poverty'. In S. A. Webb (Ed.), *The Routledge handbook of critical social work* (pp. 401–411). Routledge.
- Thompson, R. A. (1994). Emotion regulation: A theme in search of definition. *Monographs of the Society for Research in Child Development, 59*(240), 25–52.
- Van IJzendoorn, M. H., Palacios, J., Sonuga-Barke, E. J. S., Gunnar, M. R., Vorria, P., McCall, R. B., Juffer, F. (2011). Children in institutional care: Delayed development and resilience. In R. B. McCall, M. H. van IJzendoorn, F. Juffer, C. J. Groark, & V. K. Groza (Eds.), *Children without permanent parents: Research, practice and policy. Monographs of the Society for Research in Child Development, 76*(4), 8–30. <https://doi.org/10.1111/j.1540-5834.2011.00626.x>
- Yamasaki, S., Nishida, A., Ando, S., Murayama, K., Hiraiwa-Hasegawa, M., Kasai, K., & Richards, M. (2021). Interaction of adolescent aspirations and self-control on wellbeing in old age: Evidence from a six-decade longitudinal UK birth cohort. *The Journal of Positive Psychology, 16*(6), 779–788. <https://doi.org/10.1080/17439760.2020.1818809>
- Yunes, M. A., Miranda, A. T., & Cuello, S. S. (2004). Um olhar ecológico para os riscos e as oportunidades de desenvolvimento

de crianças e adolescentes institucionalizados. In S. Koller (Ed.), *Ecologia do desenvolvimento humano: Pesquisa e intervenções no Brasil* (pp. 197–218). Casa do Psicólogo.

Zeira, A., & Dekel, R. (2005). The self-image of adolescents and its relationship to their perceptions of the future. *International Social Work, 48*(2), 177–191.

**Publisher's Note** Springer Nature remains neutral with regard to jurisdictional claims in published maps and institutional affiliations.