



Quality of Relationships Between Residential Staff and Youth: A Systematic Review

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Abstract

Regardless of the type of residential care context, entering in care is an impactful event that involves the separation of young people from their relatives, as well as the need to adapt to a new context. This adaptation might be facilitated by the quality of relationships with professionals in these settings, which in turn may positively impact young people's psychological adjustment.

Purpose: The current systematic review aims to identify the factors that might be associated with quality relationships in residential homes (i.e., generalist care, therapeutic care, juvenile justice settings) at different ecological levels.

Method: A systematic electronic search was conducted in eight databases: Academic Search Complete, APA PsycArticles, APA PsycINFO, Psychology and Behavioral Sciences Collection, ERIC, MEDLINE, Web of Science and Scopus, using a combination of words related with quality relationship, residential care, children, and adolescent. Based on the *PRISMA* statement, 919 manuscripts were yielded, and thirteen studies met the inclusion criteria.

Results: Child (e.g., gender or age), professionals (e.g., professionals' characteristics, behaviors, and skills), organizational (e.g., Ratios of children to professionals on staff) and cross-cutting factors (e.g., time spent together, length of relationship) were found to be associated with quality relationships between professionals and young people in care.

Discussion: The residential care settings should be able to provide appropriate resources and services which address young people's complex needs. Practical implications are discussed.

Keywords Relationship quality · Staff · Residential care · Young people

Children and adolescents in residential care (RC) are particularly vulnerable to poor mental health outcomes, namely, higher psychological, behavioral, and social difficulties (Assouline & Attar-Schwartz, 2020; Costa et al., 2020; Jozefiak et al., 2016; Magalhães & Calheiros, 2017; 2020), when

compared with young people living with their biological families (Attar-Schwartz, 2008; Costa et al., 2020). These mental health problems may be related with young people's previous experiences, such as child maltreatment and the placement history in out-of-home care (Jansen, 2010; Magalhães & Calheiros, 2020). These young people are also at higher risk of social disadvantage and exclusion compared to their peers (Campos et al., 2019; Indias et al., 2019; Golding, 2020), including social discrimination, prejudice, and stereotyped social images (Arpini, 2003; Delgado et al., 2019; Garrido et al., 2016; Lopes et al., 2017). For all these reasons, looking at how the residential care context can buffer these psychological and social difficulties is critical.

Residential childcare settings may differ worldwide on the type of services provided (Quiroga & Hamilton-Giachritsis, 2014). In this review, we assume that the residential care settings either provide temporary or long-term placements and aim to address young people's needs (e.g., safety, well-being, and development) in the child protection system

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(e.g., generalist care, therapeutic care) or juvenile justice system (e.g., juvenile correction settings) (Silva et al., 2021; Marsh et al., 2010). Young people in these different types of residential care settings show similarities in terms of risk factors and mental health problems. Further, the quality of relationships with professionals is key to the success of the intervention for all these youth (Gutterswijk et al., 2022; Jonson-Reid & Way, 2001; Magalhães & Calheiros, 2017; Mota et al., 2018).

Regardless of the type of residential care context, entering in care is an impactful event that involves the separation of young people from their relatives as well as the need to adapt to a new context (Mota & Matos, 2015). This adaptation might be facilitated by the quality of relationships and social support provided by professionals in these settings, which in turn may positively impact young people's psychological adjustment (Assouline & Attar-Schwartz, 2020; Ferreira et al., 2020; Magalhães & Calheiros, 2017; Silva et al., 2021). For this reason, it is important to identify what factors are associated with quality relationships in these settings. This systematic review aims to identify the factors that might be associated to quality relationships between professionals and young people in residential care at different ecological levels.

Quality Relationships in Residential Care

Residential care settings should be able to provide appropriate resources and services which address young people's complex needs (Calheiros et al., 2011; Rodrigues et al., 2013). This group of young people show the greatest complexity of needs which arises from their maltreatment experiences, mental health needs, and the placement itself either in the child protection or juvenile justice system (Erol et al., 2010; Magalhães & Calheiros, 2017). As such, the transition to the residential facility is an opportunity to establish new meaningful affective relationships (Mota et al., 2018), which might buffer previous risks and foster young people's positive adaptation. Evidence exists suggesting that adolescents in care identify the staff/frontline caregivers as important sources of support and as significant others with whom they may share their problems (Arteaga & Del Valle, 2003).

The quality of residential care services depends on the staff's ability to establish quality relationships with young people. A quality relationship includes a close, supportive, affective, trustworthy and warmth relationship between young people and staff in care (Harder et al., 2012; Magalhães et al., 2021; Moore et

al., 2018; Silva et al., 2021). The staff plays a significant role as primary caregivers in residential settings, and for that reason the quality of these relationships strongly predicts young people's adaptive outcomes and psychological functioning (Costa et al., 2020; Silva et al., 2021).

Quality Relationships and Youth Psychological Functioning

Stable and significant relationships in residential care can enhance young people's feelings of being cared and loved, enabling them to rely on trustful professionals to receive the support needed (Moore et al., 2018; Mota et al., 2016). For that reason, supportive and positive relationships between professionals and young people are associated with young people's resilient outcomes (Houston, 2010; 2011; Mota & Matos, 2015; Pinheiro et al., 2021), such as greater happiness (Maurović et al., 2014), pro-social behaviors (Aguilar-Vafae et al., 2014), well-being (i.e., subjective and psychological well-being; Ferreira et al., 2020; Magalhães & Calheiros, 2017), quality of life, perceived self-efficacy and self-competence (Ferreira et al., 2020).

There is also evidence that suggests that these positive and supportive relationships are associated negatively with psychopathology (i.e., lower emotional and behavioral problems or post-traumatic stress disorders; Assouline & Attar-Schwartz, 2020; Cordovil et al., 2011; Gearing et al., 2015; Magalhães et al., 2021; Mota et al., 2016). In fact, when young people in residential care perceive that they are valued by caregivers they tend to show better positive outcomes of psychological functioning (e.g., life satisfaction and psychological well-being) (Magalhães & Calheiros, 2017), given that these caregivers may help them to successfully deal with their difficulties (Arteaga & Del Valle, 2003). However, it is still unclear which factors are associated with this quality of relationships, and this review aims to address this gap in the literature.

Developing quality relationships is a key factor for effective interventions involving young people in care (Cahill et al., 2016) and requires additional efforts to identify facilitators of quality relationships in residential care. Previous evidence suggests that the quality relationships in residential care may depend on both the individual characteristics of professionals (e.g., personal attributes and skills – to be warm, empathic, supportive, sensitive, available, and responsive; Andersson & Johansson, 2008; Ferreira et al., 2020; Silva et al., 2021) and organizational factors (e.g., climate, culture, and work attitudes; Glisson et al., 2008; Silva et al., 2021). We know that a social climate involving

organizational support, high role clarity and low role conflict may provide adequate conditions to these caregivers to effectively develop positive relationships with young people in residential care (Bakker & Demerouti, 2017; Colton & Roberts, 2007). Despite these important insights, there is no systematized evidence to demonstrate the nature of factors associated with quality relationships that informs organizational policies and practices.

Current Systematic Review

The literature on quality relationships has mostly focused on the role of these relationships in terms of young people's outcomes (Pinheiro et al., 2021; Schofield et al., 2016). Further efforts are required to systematize the evidence on factors that are associated with the quality of relationships in residential care. As such, the current study aims to fill this gap in the literature by 1) conducting a systematic review to identify factors at different ecological levels that might be related to quality relationships in residential homes (i.e., generalist care, therapeutic care, juvenile justice settings); 2) describing and discussing the methodological characteristics of the studies included. Specifically, the research problem was formulated based on the *SPIDER* strategy (*Sample, Phenomena of Interest, Design, Evaluation and Research design*; Cooke et al., 2012): a) Sample - Children older than six years old in residential care and residential care alumni reporting their past experience in care; b) Phenomena of Interest – the quality of relationships between professionals and young people during their experience in care; c) Design - Empirical longitudinal or cross-sectional studies; d) Evaluation – factors that are associated with the quality of relationships between professionals and young people in care; and e) Research Design: quantitative, qualitative, and mixed methods.

Therefore, this systematic review aims to address the following research question: Which factors are associated with quality relationship between professionals and young people in residential care? To ensure this review is as comprehensive as possible, all types of residential care settings (e.g., generalist, therapeutic, juvenile correction system) are included. The findings from this systematic review may contribute to the identification of critical implications for practice and policy, which might help states and organizations to foster professionals' qualification in care. Qualified staff in residential care settings could enhance the

quality of these services and their potential to positively influence young people's outcomes.

Method

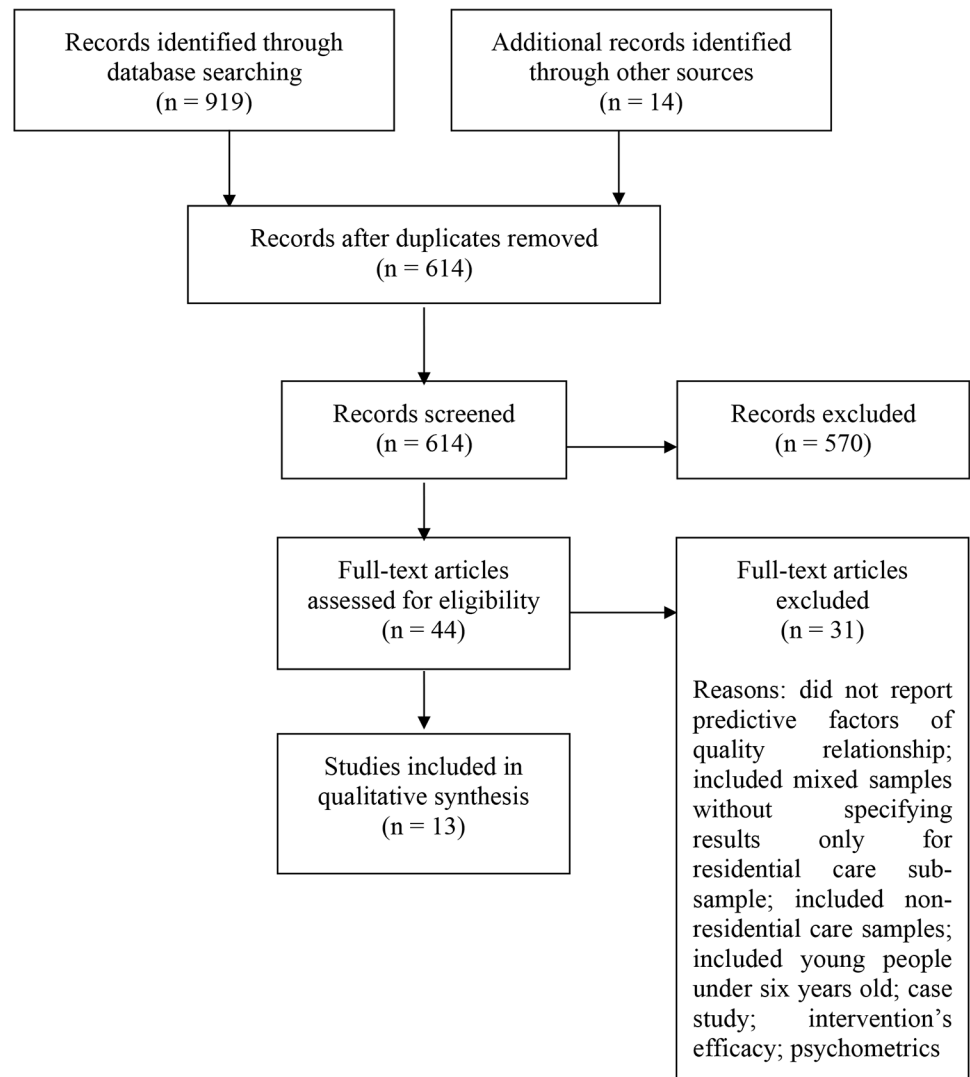
Literature Search Strategy

An *a priori* protocol was developed for this systematic review, defining the procedures and search strategy. Specifically, a literature search was conducted in December 2020, in eight databases: Academic Search Complete, APA PsycArticles, APA PsycINFO, Psychology and Behavioral Sciences Collection, ERIC, MEDLINE (through the EBSCOhost website), Web of Science and Scopus. A boolean search term was used to search in the EBSCOhost website, and then a different search was done in the Web of Science site and also on Scopus. The studies were identified through the combination of the following words: (a) Quality relation* OR Caregiver relation* OR Staff relation* AND (b) Institution OR Residential Care OR Residential home OR Group home AND (c) Child OR Adolesc* OR Youth, without selecting a specific field (e.g., text, author, title, abstract) in the databases. The search was limited to English, Spanish and Portuguese languages, and peer-reviewed journals. The combinations of search terms identified potentially relevant papers from each database: EBSCOhost (n = 882), Web of science (n = 14) and Scopus (n = 23). To avoid failures in the inclusion of the papers that satisfied the inclusion criteria, a manual search was performed based on the references of relevant papers and previous reviews on this field, to capture potential eligible papers that were not identified on the electronic databases.

Inclusion and Exclusion Criteria

Eligible studies for this systematic review must meet the following criteria: (1) studies carried out with children older than six years old and currently in residential care; (2) residential care alumni that report the experience retrospectively while in care; (3) qualitative, quantitative, or mixed methods studies. On the other hand, (1) literature reviews, case studies or theoretical articles; (2) studies that included children younger than six years old or alumni reporting their post-care experience; (3) studies carried out in foster care and (4) studies assessing intervention's efficacy or psychometric properties of scales were excluded.

Fig. 1 Flow diagram based on PRISMA (Liberati et al., 2009)



Study Selection and Data Extraction

As illustrated in the Fig. 1, the step-by-step guidelines of *PRISMA Statement – Preferred Reporting Items for Systematic Reviews* (Liberati et al., 2009) were adopted to screen the title, abstract and full-text. Furthermore, methodological quality and risk of bias were assured following the 27 items of PRISMA 2020 checklist (McInnes et al., 2018). Methodological quality of studies included in this review was analyzed following APA standards for qualitative, quantitative and mixed-methods designs (JARS, APA 7^a ed) (Tables 1, 2 and 3).

The search on the databases identified 919 articles. After removing duplicates, 614 articles were screened. The Rayyan web app (Ouzzani et al., 2016) was used to conduct the screening of the title and abstracts. To avoid screening and selection errors, the assessment of the eligibility of each study was performed by one researcher who screened all

the articles and two independent raters (i.e., researchers who are familiar with the topic and the methodology) who only screened 30% of all articles. This resulted in all differences between the raters being discussed reaching an inter-agreement of 91%, the disagreements (i.e., 9%) were solved by a discussion with a fourth rater (supervisor), which resulted in 30 records for full-text screening. The manually search identified 14 new papers. After the full-text analyses of 44 articles, 31 records that did not meet the inclusion criteria were excluded. Specifically, we excluded studies that: (1) did not report factors associated with quality relationship; (2) included mixed samples without specifying results only for residential care sub-sample; (3) involved non-residential care samples; (4) included young people under six years old; (5) were a case study and/or theoretical articles and (6) assessing intervention's efficacy or psychometrics properties of scales. Finally, 13 manuscripts that describe factors

Table 1 Methodological quality of qualitative reviewed studies according to APA Standards (JARS, APA 7th ed)

| | Manso et al., 2008 | Moore et al., 2018 | Moses, 2000 | Quiroga & Hamilton-Giachritsis, 2016 | Sulimani-Aidan, 2017 |
|--|--------------------|--------------------|-------------|--------------------------------------|----------------------|
| Research Design Overview <i>Summarize the research design and provide the rationale for the design selected</i> | *** | *** | *** | *** | *** |
| Study Participants or Data Sources <i>Researcher description Provide information on the participants and other data sources Describe the researcher-participant relationship</i> | ** | ** | *** | ** | ** |
| Participant Recruitment <i>Describe the recruitment process and participant selection</i> | ** | *** | *** | *** | *** |
| Data Collection <i>State the form of data collected Describe the data collection process</i> | *** | *** | *** | *** | *** |
| Data Analysis <i>Describe in detail the data-analytic strategies Methodological integrity</i> | ** | *** | ** | *** | *** |
| Findings/Results <i>Present research findings in a way that is compatible with the study design</i> | ** | *** | *** | *** | *** |

Note. *Not; **yes, partially; ***yes, fully achieved

associated with quality relationships between young people and professionals in residential care were identified.

Coding of the Studies

A form for coding the main studies characteristics and their results (i.e., the specific factors identified in each study) was created. Specifically, we extracted the following information: bibliographical information (i.e., authors, title, year of publication), the country in which the study was conducted,

Table 2 Methodological quality of quantitative reviewed studies according to APA Standards (JARS, APA 7th ed)

| | Costa et al., 2020 | Harder et al., 2013 | Marsh et al., 2010 |
|---|--------------------|---------------------|--------------------|
| Inclusion and Exclusion <i>Report inclusion and exclusion criteria</i> | ** | ** | * |
| Participant Characteristics <i>Report major demographic characteristics and topic-specific characteristics</i> | *** | *** | *** |
| Sampling Procedures <i>Describe procedures for selecting participants Sample size, power and precision</i> | ** | ** | ** |
| Measurement <i>Measures and Covariates Data collection Quality of Measurements, instrumentation and psychometrics</i> | *** | *** | *** |
| Data Analysis <i>Data diagnostics Analytic strategies</i> | *** | *** | *** |
| Findings/Results <i>Provide information detailing statistical data, including missing data</i> | *** | *** | *** |

Note. *Not; **yes, partially; ***yes, fully achieved

sample characteristics (i.e., size, age-range and mean, type of informant/participant – adolescents or professionals), type of target-professionals (e.g., adults in general in residential care or a specific adult in residential care), type of residential care setting (e.g., generalist, therapeutic, juvenile correction setting), study design and information about the factors associated with quality relationships.

The factors were then organized following an ecologic approach, and for that reason, were categorized at child (i.e., individual characteristics), professional (i.e., individual characteristics/traits and behaviors or skills) and organizational (i.e., variables related to the residential care setting) levels. Also, some factors were considered as cross-cutting, when they cut across those different levels (e.g., time, length of relationship).

Results

Studies Characteristics

As shown in Tables 4 and 5, the selected studies were published between 2000 and 2020. Four studies were carried out in Europe (Costa et al., 2020; Harder et al., 2013; Holmqvist et al., 2007; Zegers et al., 2006), five in North of America (Izzo et al., 2014; Manso et al., 2008; Marsh et al., 2010; Moses, 2000; Rabley et al., 2014), two in Asia (Sulimani-Aidan, 2016; 2017), one in South of America (Quiroga &

Table 3 Methodological quality of mixed-methods reviewed studies according to APA Standards (JARS, APA 7th ed)

| | Holmqvist et al., 2007 | Izzo et al., 2014 | Rabley et al., 2014 | Sulimani-Aidan et al., 2016 | Zegers et al., 2006 |
|---|------------------------|-------------------|---------------------|-----------------------------|---------------------|
| Research Design Overview <i>Summarize the research design and provide the rationale for the mixed methods design</i> | *** | *** | *** | *** | *** |
| Study Participants or Data Sources <i>Researcher description Provide information on the participants and other data sources</i> | ** | ** | ** | ** | ** |
| Participant Recruitment <i>Participant sampling or selection Participant recruitment</i> | *** | *** | *** | *** | *** |
| Data Collection <i>Data collection procedures Quality of Measurements, instrumentation, and Psychometrics</i> | ** | ** | ** | ** | *** |
| Data Analysis <i>Analytic strategies Validity, reliability and methodological integrity</i> | ** | *** | *** | *** | *** |
| Findings/Results <i>Provide information detailing how mixed results or integrated</i> | ** | *** | *** | *** | *** |

Note. *Not; **yes, partially; ***yes, fully achieved

Hamilton-Giachritsis, 2016) and one in Oceania (Moore et al., 2018).

These studies included sample sizes ranging between 11 and 738 participants (i.e., adolescents' and professionals). Adolescents were aged between 8 and 26 years old, while professionals were aged between 21 and 59 years old. Most studies were based on a single informant, specifically, adolescents ($n=9$; e.g., Costa et al., 2020; Holmqvist et al., 2007) or professionals ($n=2$; Moses, 2000; Quiroga et al., 2016) and two studies included both adolescents and professionals (Harder et al., 2013; Zegers et al., 2006). Two studies included alumni who reported their experience while in care (Sulimani-Aidan, 2016; 2017). Most of the studies included both males and females ($n=10$; Costa et al., 2020; Harder et al., 2013), two studies included male participants

(Holmqvist et al., 2007; Manso et al., 2008) and one included only female participants (Quiroga & Hamilton-Giachritsis, 2016). Most studies ($n=7$) focused on young people's relationship with a specific adult in residential care (e.g., Izzo et al., 2014; Sulimani-Aidan et al., 2016; 2017), five studies focused on young people relationship with adults in general in residential care (e.g., Manso et al., 2008; Moore et al., 2018) and one study explored both adults in general and a specific adult (Holmqvist et al., 2007). Most studies were qualitative ($n=5$; e.g., Manso et al., 2008; Moses, 2000), and mixed-methods ($n=5$; e.g., Rabley et al., 2014; Sulimani-Aidan, 2016) and three were quantitative (Costa et al., 2020; Harder et al., 2013; Marsh et al., 2010). Studies designs were mostly cross-sectional ($n=10$; e.g., Costa et al., 2020; Izzo et al., 2014), and three longitudinal studies were included (e.g., Holmqvist et al., 2007; Zegers et al., 2006). In these studies, different methodologies were applied to collect data (i.e., interviews, focus group and self-reported measures).

Factors Associated with Quality Relationships in Residential Care

From an ecological perspective, the data extracted from the reviewed studies has been structured into factors at three levels: child, professional and organizational. In addition, we also identified factors that cut across these levels, which we called cross-cutting factors (see Fig. 2). Below we provide a detailed description of these findings.

Child's Level

Nine articles reported factors at a child's level (Table 5). These factors include individual characteristics (e.g., age, gender, well-being states) and conceptions and motivations for treatment. Regarding individual characteristics, we found mixed findings for age: if some studies suggested that older children tend to show more relational difficulties with professionals (Quiroga & Hamilton-Giachritsis, 2016), others reported that older youth may be more likely to endorse a set of dimensions related with quality relationships in care (e.g., engaged-available; Izzo et al., 2014). Regarding gender, girls perceived higher quality relationship (e.g., emotional closeness, engaged-available staff) (Costa et al., 2020; Izzo et al., 2014) than boys who may have more relational tensions (e.g., conflict and criticism) (Costa et al., 2020). Moreover, youth with longer stays in residential care were more likely to perceive the relationship with staff as invested but less respectful of their individuality/autonomy (Izzo et al., 2014).

Table 4 Study' characteristics

| Authors | Year | Country | Sample | Gender; Age (Mean; Range) | Study Design |
|--|------|-------------|--|---|--------------------------------|
| Costa, Melim, Tagliabue, Mota & Matos | 2020 | Portugal | N _{adolescents} = 326 | Female = 69.9% M = 15.37 (12–18) | Cross-sectional, quantitative |
| Harder, Knorth & Kalverboer | 2013 | Netherlands | N _{adolescents} = 135 N _{staff} = 180 | Male = 66.7% M = 16.0 (12–23) | Longitudinal, quantitative |
| Holmqvist, Hill & Lang | 2007 | Sweden | N _{adolescents} = 59 | Male = 100% M = 17 | Longitudinal, mixed-methods |
| Izzo, Aumand, Cash, McCabe, Holden & Bhattacharjee | 2014 | USA | N _{adolescents} = 738 | Male = 53.6% M = 14.3 (8–21) | Cross-sectional, mixed-methods |
| Manso, Rauktis & Boyd | 2008 | USA | N _{adolescents} = 11 | Male = 100% M = 14.8 (9–18) | Cross-sectional, qualitative |
| Marsh, Evans & Williams | 2010 | USA | N _{adolescents} = 543 | Male = 71% M = 16.46 (12–22) | Cross-sectional, quantitative |
| Moore, McArthur, Death, Tilbury & Roche | 2018 | Australia | N _{adolescents} = 27 | Male = 66.6% (10–20) | Cross-sectional, qualitative |
| Moses | 2000 | USA | N _{staff} = 25 | Female = 60% M = 33.3 (23–45) | Cross-sectional, qualitative |
| Quiroga & Hamilton-Giachritsis | 2016 | Chile | N _{staff} = 43 | Female = 100% M = 41.3 (21–59) | Cross-sectional, qualitative |
| Rabley, Preyde & Gharabaghi | 2014 | Canada | N _{adolescents} = 17 | Male = 53% M = 15.33 (13–18) | Cross-sectional, mixed-methods |
| Sulimani-Aidan | 2017 | Israel | N _{adolescents} = 20 | Male = 70% (21–26) | Cross-sectional, qualitative |
| Sulimani-Aidan | 2016 | Israel | N _{adolescents} = 60 | Male = 85% (21–26) | Cross-sectional, mixed-methods |
| Zegers, Schuengel, Ijzendoorn & Janssens | 2006 | Netherlands | N _{adolescents} = 99 N _{staff} = 33 | Adolescents Female = 73% M = 15.8 (13–20) Staff Male = 60.6% | Longitudinal, mixed-methods |

Concerning personal states of well-being, this review reveals that being upbeat and happy as well as showing higher levels of coherence (i.e., adolescents who are able to report their attachment experience in a coherent way) were positively associated with the quality of relationship (Moses, 2000; quantitative evidence from Zegers et al., 2006). Moreover, the lack of emotional awareness negatively predicted the quality of relationships (i.e., emotional closeness), and the limited access to strategies for emotion regulation and attachment avoidance positively predicted emotional closeness and relational tension, respectively (Costa et al., 2020).

Regarding the conceptions and motivations for treatment, the way young people perceive their placement in

care is also relevant given that children who perceive the residential care placement as less temporary tend to develop better relationships with professionals (Moore et al., 2018). Also, high levels of both sense of belonging (Marsh et al., 2010), motivation for treatment (Harder et al., 2013) and positive conceptions about treatment (quantitative evidence from Holmqvist et al., 2007) were associated with better relationships.

Professional's Level

The factors at professionals' level that were associated with the quality relationship include professionals' individual characteristics or traits ($n = 10$) such as being trustworthy,

Table 5 Summary of main findings of the factors associated with quality relationships between young people and professionals in RC

| Authors | Year | Type of Residential Care | Informants | Relationship | Factors |
|--|------|---|------------------------------------|---|---|
| Costa, Melim, Tagliabue, Mota & Matos | 2020 | Generalist | Adolescents | Specific adult in RC | Child - Gender |
| Harder, Knorth & Kalverboer | 2013 | Secure | Adolescents Professionals in RC | Specific adult in RC | Child - Motivation for treatment Professional <u>Skills/Behaviors</u> - Positive treatment skills |
| Holmqvist, Hill & Lang | 2007 | Residential Treatment of Criminal Adolescents | Adolescents | Adults in general in RC Specific adult in RC | Child - Positive conceptions about treatment Professional <u>Characteristics/traits</u> - Trustworthy - Helpful |
| Izzo, Aumand, Cash, McCabe, Holden & Bhattacharjee | 2014 | Generalist | Adolescents | Specific adult in RC | Child - Age - Gender - Length of stay Professional <u>Characteristics/traits</u> - Trustworthy - Genuine - Honest - Tolerant - Nice - Funny/made them laugh - Loving gentle spirit - Understanding <u>Skills/Behaviors</u> - Listen the adolescents - Meets emotional and tangible needs - Helps resolve problems/teaches - Participate in activities - Cares/Invest in the adolescents - Show equality - Give appropriate consequences for most problems - Respect the adolescents - Provides structure |
| Manso, Rauktis & Boyd | 2008 | Therapeutic | Adolescents | Adults in general in RC | Professional <u>Characteristics/traits</u> - Trustworthy - Genuine - Maturity - Self-awareness - Responsible <u>Skills/Behaviors</u> - Listen the adolescents - Helps resolve problems/teaches - Given accurate feedback - Demonstrate commitment - Establish expectations - Models managing self-control |
| Marsh, Evans & Williams | 2010 | Juvenil Correction Settings | Adolescents | Specific adult in RC | Child - Sense of belonging |

helpful or sensitive (Holmqvist et al., 2007; Izzo et al., 2014; Manso et al., 2008; Sulimani-Aidan, 2016; 2017), and professionals' skills such as, treatment skills (e.g., commitment, clarity, standing beside; Harder et al., 2013), the ability to set appropriate limits and discipline (Sulimani-Aidan,

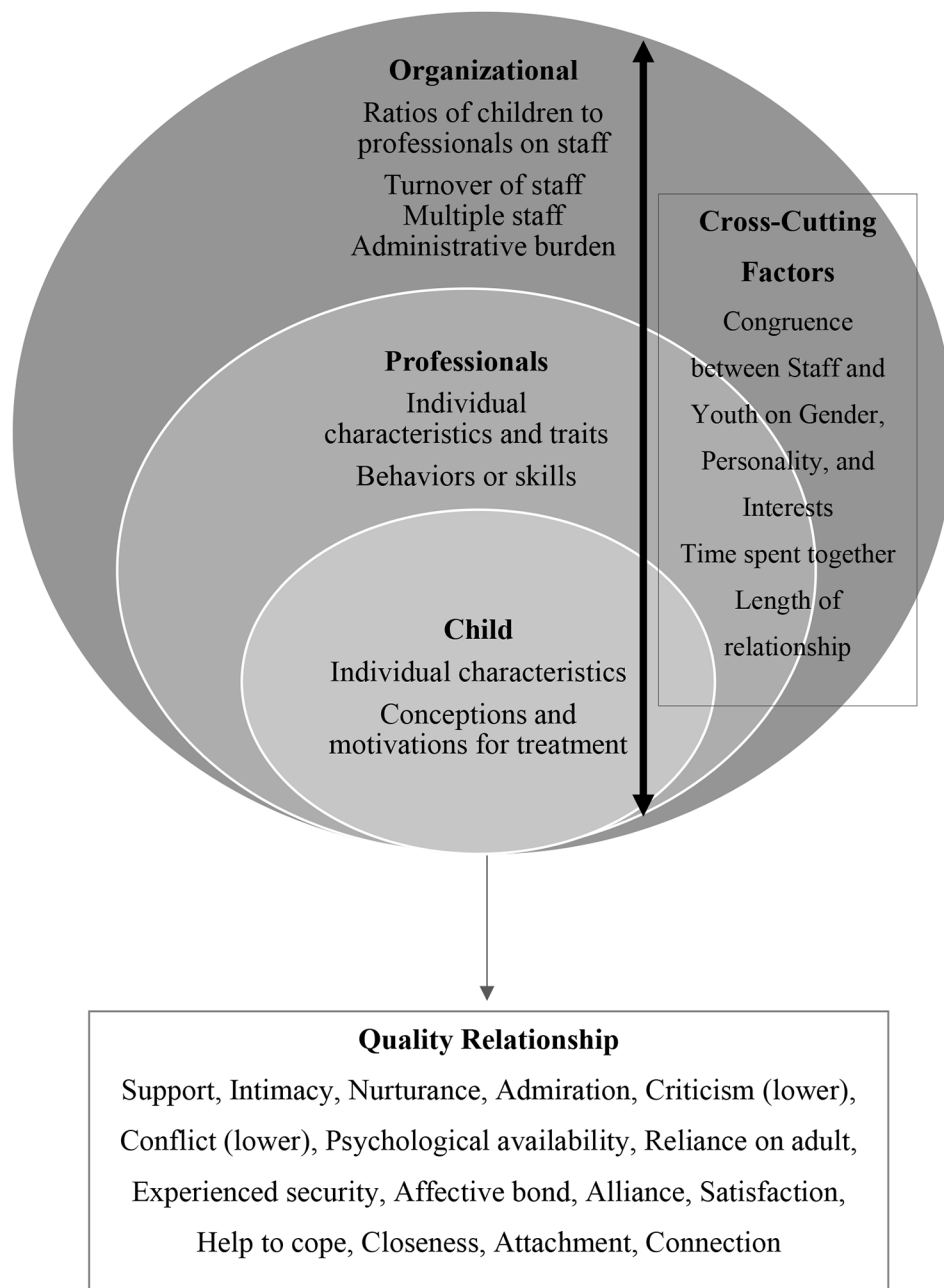
2016; 2017), as well as to provide accurate feedback to the adolescents (Manso et al., 2008) (for details see Table 5).

Table 5 (continued)

| Authors | Year | Type of Residential Care | Informants | Relationship | Factors |
|---|------|--------------------------|----------------------|-------------------------|--|
| Moore, McArthur, Death, Tilbury & Roche | 2018 | Generalist | Adolescents | Adults in general in RC | Child - Feelings about residential care Professional <u>Skills/Behaviors</u> - Meets emotional and tangible needs - Participate in activities - Cares/Invest in the adolescents Organizational - Ratios of children to professionals on staff - Turnover of staff and administrative burden |
| Moses | 2000 | Therapeutic | Professionals in RC | Adults in general in RC | Child - Personal well-being |
| Quiroga & Hamilton-Giachritsis | 2016 | Generalist | Professionals in RC | Adults in general in RC | Child - Age Professional <u>Characteristics/traits</u> - Empathy Organizational - Ratios of children to professionals on staff |
| Rabley, Preyde & Gharabaghi | 2014 | Therapeutic | Adolescents | Adults in general in RC | Professional <u>Characteristics/traits</u> - Genuine - Funny/made them laugh - Consistent - Fair - Gender (i.e., being female) <u>Skills/Behaviors</u> - Meets emotional and tangible needs Organizational - Multiple staff Cross-Cutting Factors - Time spent together - Length of Relationship - Congruence on gender, personality, and interests |
| Sulimani-Aidan | 2017 | Generalist | Adolescents (Alumni) | Specific Adult in RC | Professional <u>Characteristics/traits</u> - Trustworthy - Genuine - Empathic - Patient - Sensitive - Competent - Good listener <u>Skills/Behaviors</u> - Cares/Invest in the adolescents - Limits and discipline - Acting as a parent |
| Sulimani-Aidan | 2016 | Generalist | Adolescents (Alumni) | Specific Adult in RC | Professional <u>Characteristics/traits</u> - Trustworthy - Empathy - Patience - Sensitive - Competent - Good listener <u>Skills/Behaviors</u> - Cares/Invest in the adolescents - Limits and discipline - Acting as a parent |

Table 5 (continued)

| Authors | Year | Type of Residential Care | Informants | Relationship | Factors |
|--|------|--------------------------|---------------------------------------|-------------------------|--|
| Zegers, Schuengel, Ijzendoorn & Janssens | 2006 | Therapeutic | Adolescents Professionals in RC | Specific adult in RC | Child - High levels of coherence |

Fig. 2 Factors associated with quality relationship between professionals and young people

Organizational Level

In addition to the children and professionals' factors, a set of variables related to the residential care setting were identified in three articles. High ratios of children to professionals and the high turnover of professionals in residential

care were recognized as barriers for building a trustful and positive relationship with each child (Moore et al., 2018; Quiroga & Hamilton-Giachritsis, 2016). Furthermore, the high administrative burden by professionals could impact the quality of relationship between children and professionals (Moore et al., 2018) because professionals are less

available to young people in care. Furthermore, when there are multiple staff (i.e., more professionals in the residential setting), the adolescents feel that they have more possibilities to ask and establish a helpful relationship (Rabley et al., 2014).

Cross-cutting Factors

A set of factors were considered as cross-cutting when they cut across previous levels ($n=1$): congruence on gender, personality or interests, the amount of time the adolescents spend with professionals, and the length of relationship (Rabley et al., 2014). Greater personality, interests (i.e., staff who were perceived as being similar in personality or had common interests) and gender congruence between professionals and young people were identified as related with more positive relationships with professionals (e.g., *'Well the staff are like girls, and I am a girl so I dunno, it's easier sometimes. The boy staff, they would be like umm, they would say like go to a girl staff if I asked them something they didn't know or understand my problem'* (Rabley et al., 2014). Furthermore, longer relationships and more time spent together were associated with more positive relationships (Rabley et al., 2014).

Discussion

This systematic review aimed to identify factors associated with the quality of relationships between professionals and young people in residential care. Thirteen studies were included reporting these factors at three levels: child, professional and organizational levels. Also, cross-cutting factors were identified given that they cut across the three levels. Most studies described findings at the professionals ($n=10$) and child ($n=9$) levels, but less investment has been made at the organizational level ($n=3$). However, there is evidence that the organizational context influences the quality of child welfare services and young people's outcomes (Glisson et al., 2012; Glisson & Green, 2011; Williams & Glisson, 2014), which calls for ecological-oriented studies exploring simultaneously factors at different ecological levels.

Concerning individual child characteristics, the current review reveals that gender and age (Costa et al., 2020; Quiroga & Hamilton-Giachritsis, 2016) are related with the quality relationships given that girls can perceive more support, intimacy, and appreciation by professionals, while boys tend to have relationships more marked by conflict and criticism. These differences are consistent with previous evidence where female adolescents tend to report more emotional proximity to significant figures (Drapeau et al.,

2007). Gender-based socialization and stereotypes may explain these findings as empathy and behaviors oriented to others are more ascribed to women and girls (Milfont & Sibley, 2016), while boys are perceived as showing more competitiveness and dominant behaviors (Kachel et al., 2016; Strapko et al., 2016). Furthermore, if male adolescents are more involved in extracurricular activities and in their relationship with friends/peers, female adolescents may spend more time in in-home activities which may enable them to spend more time with professionals (Campos et al., 2019).

Moreover, older children seem to reveal more relational difficulties with professionals (Quiroga & Hamilton-Giachritsis, 2016), which is consistent with the developmental tasks in this stage (e.g., autonomy and self-determination), when more conflicts tend to emerge between adolescents and their caregivers (Gonçalves, 2016). In fact, there is evidence highlighting the staff difficulties in creating and maintaining young people-caregiver relationships when young people shown challenging behaviors (McLean, 2013). For that reason, professionals in residential care would be able to manage these challenging behaviors through positive strategies (e.g., negotiate daily basis routines), while imposing limits and rules, that enable establishing of positive relationships (McLean, 2013).

This is even more important as young people's perceptions of their placement in residential care (e.g., more stable; Moore et al., 2018) and the length of placement were also related with more positive relationships' quality. This finding highlights the importance of stability in residential care to the young people's development (Christiansen et al., 2010). Studies have shown that the length of residential care placements, disruptions and reentries in care may impact young people's perceptions of the quality and supportive relationships (Florsheim et al., 2000; Rabley et al., 2014). Young people who have longer relationships tend to describe adults as more supportive (Munson et al., 2010). These results suggest that quality relationships tend to occur within a regular, stable, and predictable relational context. Even if residential care is intended to be temporary, stability should be favored, and disruptions must be prevented whenever possible.

Furthermore, personal states of well-being and motivation for treatment (e.g., being happy and motivated for treatment) were associated with better relationships (Moses, 2000; Harder et al., 2013). Due the previous experiences of abuse and neglect (Jones et al., 2011), most of young people when entering in residential care have not experienced trustful and secure relationships and are more likely to show low self-confidence (Indias et al., 2019). However, the literature suggests that a secure emotional bond with a professional in residential care is critical (Holmqvist et al., 2007) and it is a predictor of young people's feelings of confidence, social

competence, and psychological adaptation (e.g., emotion regulation; Mota & Matos, 2008; Zegers et al., 2006).

Beyond child characteristics, professionals' factors were also identified in this review. Professionals' behaviors and treatment skills (e.g., commitment, standing besides, acting as a parent; Harder et al., 2013; Sulimani-Aidan, 2016) and their personal characteristics of genuineness, self-awareness, or being trustworthy (Manso et al., 2008; Sulimani-Aidan, 2016; 2017) were associated with greater relationship quality between young people and professionals. These professionals' behaviors and attributes might buffer the negative impact of previous adverse experiences by providing them secure and warm relationships (Heinze et al., 2010; Thompson et al., 2006; Whetten et al., 2014).

Additionally, this review also provided evidence on the role of organizational factors in quality relationships, such as the turnover of professionals in care (Moore et al., 2018), the ratio between child and professionals (Moore et al., 2018; Quiroga & Hamilton-Giachritsis, 2016), the existence of multiple staff (Rabley et al., 2014) and the administrative burden (Moore et al., 2008). The high turnover of professionals and the huge administrative work may negatively impact the young people and staff relationship quality, given that lasting, consistent, and trustworthy relationships with professionals are critical ingredients to develop quality relationships (Duppont-Hurley et al., 2017; Moore et al., 2018). Stable relationships may foster young people's sense that they have worth and that they are not alone (Augsberger & Swenson, 2015), and for that reason high ratios of children to professionals on staff may prevent the ability to developing and maintaining close, therapeutic, and secure relationships (Moore et al., 2018; Quiroga & Hamilton-Giachritsis, 2016; Zegers, et al., 2006).

Finally, this review also highlighted some cross-cutting factors that do not refer to any specific level, but are linked to the relation between levels, such as the congruence between staff and children on gender, personality, and interests (Rabley et al., 2014). This means that young people revealed to feel more connected to professionals who resemble themselves (e.g., female adolescents feel that it is easier to address their personal issues with female professionals, because female professionals will be better understand their problems) Rabley et al., 2014). Lastly, longer lasting relationships and spending more time with each other seem to enhance the opportunity to build quality relationships.

Limitations and Research Implications

Although we were able to identify factors at different levels explaining quality relationships in residential care, a set of limitations should be recognized. First, most of the

reviewed studies are cross-sectional, therefore longitudinal studies would be useful. Second, most of the studies include samples made up of more males, as such future research is needed including gender balanced samples. Third, most of the reviewed studies included a single informant, which calls for multi-informant's designs. Fourth, most studies were qualitative thus somewhat limited in its scope and extension of findings. Fifth, several studies relied on reports from professionals alone, which is problematic given the consistent finding that staff reports of relationship quality do not correspond well with youth-report (e.g., Bickman et al., 2004; Duppont-Hurley et al., 2013). As such, a multi-informant approach would be beneficial in the future research. Additionally, to further expand the evidence about relationship quality in out-of-home placement, future studies would be guided by ecological theoretical approaches, including simultaneously variables at different levels (e.g., child, professionals and organizational climate or structure). In fact, the organizational factors were less explored in these studies, but the organizational social context is relevant as it influences young people's outcomes. An organizational social context in residential care should provide the necessary conditions and support for caregivers establishing quality relationships with young people (Silva et al., 2021). This would enable the design and implementation of interventions to improve the organizational climate of residential youth care services.

Finally, regarding the quality of methodological designs, most of the studies fully achieved the methodological quality indicators provided by APA standards, except one qualitative manuscript (Manso et al., 2008) and one mixed methods article (Holmqvist et al., 2007). Moreover, the weakest quality indicator in qualitative studies refers to study participants or data sources (and specifically the researcher description, and the description of the researcher-participant relationship) and in quantitative studies refers to sampling procedures and inclusion or exclusion criteria. Bearing in mind the great variability of residential care settings and young people, the absence of detailed information on sampling and inclusion and exclusion criteria weakens the ability to contrast and compare the findings.

Practice and Policy Implications

Despite these limitations, a set of implications for practice could be stated. First, even though the duration of placement in residential care might positively impact the opportunity to develop and maintain positive relationships, professionals in care must be able to provide opportunities of secure and warm relationships with all the young people, regardless the placement length. This begins with providing an

adaptive transition to the residential care setting through supportive relationships.

Second, considering the number of young people in out-of-home care around the world (i.e., approximately 2.7 million children; Petrowski et al., 2017) it is very important to provide support to their professionals, as well as specific and advanced training on treatment skills. The critical protective role of professionals in residential care (Ferreira et al., 2020; Magalhães et al., 2021; Pinheiro et al., 2021; Silva et al., 2021) requires particular attention from governmental and organizational entities. Thus, staff life-long learning, supervision, and training to provide emotional support (e.g., sensitivity, consistency, affection; Costa et al., 2020) are needed to foster their skills and greater quality relationships. Lastly, macrosystemic improvements are needed regarding the child protection system, namely the improvement of labor conditions (i.e., preventing the turnover, promoting well-paid and stable contracts) as well as recruitment procedures that allow the selection of skilled professionals, not merely regarding their knowledge but also their relational skills. The residential settings should be organized as small group homes, including low ratios of children to professionals on staff, as it allows more individualized care practices (Quiroga & Hamilton-Giachritsis, 2016).

Given that we have included studies on different types of residential care settings, these findings and implications could be also useful for designing other out-of-home care settings. The quality of relationships with alternative carers is an important factor in any out-of-home care service, and this systematic review has added important insights about how to enhance quality relationships as a critical ingredient of young people's psychological functioning and recovery.

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Declarations

Conflict-of-Interest Statement The authors declare that they have no conflict of interest.

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References

- Aguilar-Vafae, M. E., Roshani, M., & Hassanabadi, H. (2014). Protective factors enhancing prosocial behavior and preventing internalizing and externalizing symptoms among adolescents living in foster care homes. *Iranian Journal of Psychiatry and Behavioral Sciences*, 8(2), 52.
- American Psychological Association (2020). *Publication manual of the American Psychological Association* (7th ed.). <https://doi.org/10.1037/0000165-000>
- Andersson, B., & Johansson, J. (2008). Personal approaches to treatment among staff in residential care: a case study. *Journal of Social Work*, 8(2), 117–134. <https://doi.org/10.1177/1468017307088493>.
- Arpini, D. M. (2003). Repensando a Perspectiva Institucional e a Intervenção em Abrigos para Crianças e Adolescentes. [Rethinking the institutional perspective and intervention in shelters for children and adolescents]. *Psicologia: Ciência e Profissão*, 23(1), 70–75.
- Arteaga, A. B., & Del Valle, J. F. (2003). Las redes de apoyo social de los adolescentes acogidos en residencias de protección. Un análisis comparativo con población normativa. *Psicothema*, 15(1), 136–142.
- Assouline, A. A. H., & Attar-Schwartz, S. (2020). Staff support and adolescent adjustment difficulties: the moderating role of length of stay in the residential care setting. *Children and Youth Services Review*, 110, 104761. <https://doi.org/10.1016/j.childyouth.2020.104761>.
- 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>.
- Augsberger, A., & Swenson, E. (2015). “My worker was there when it really mattered”: Foster care youths’ perceptions and experiences of their relationships with child welfare workers. *Families in Society: The Journal of Contemporary Social Services*, 96(4), 234–240. <https://doi.org/10.1606/2F1044-3894.2015.96.34>.
- Bakker, A. B., & Demerouti, E. (2017). Job demands–resources theory: taking stock and looking forward. *Journal of Occupational Health Psychology*, 22(3), 273–285. <https://doi.org/10.1037/ocp0000056>.
- Bickman, L., Vides de Andrade, A. R., Lambert, W., Doucette, E., Sapyta, A., Suzanne Boyd, J., Rumberger, A., Moore-Kurnot, D. T., McDonough, J., L. C., & Rauktis, M. B. (2004). Youth therapeutic alliance in intensive treatment settings. *The Journal of Behavioral Health Services & Research*, 31(2), 134–148. <https://doi.org/10.1007/BF02287377>.
- Cahill, O., Holt, S., & Kirwan, G. (2016). Keyworking in residential child care: Lessons from research. *Children and Youth Services Review*, 65, 216–223. <https://doi.org/10.1016/j.childyouth.2016.04.014>.
- Calheiros, M. M., Lopes, D., & Patrício, J. N. (2011). Assessment of the needs of youth in residential care: development and validation of an instrument. *Children and Youth Services Review*, 33(10), 1930–1938. <https://doi.org/10.1016/j.childyouth.2011.05.020>.
- Campos, J., Barbosa-Ducharme, M., Dias, P., Rodrigues, S., Martins, A. C., & Leal, M. (2019). Emotional and behavioral problems and psychosocial skills in adolescents in residential care. *Child and Adolescent Social Work Journal*, 36(3), 237–246. <https://doi.org/10.1007/s10560-018-0594-9>.
- Colton, M., & Roberts, S. (2007). Factors that contribute to high turnover among residential child care staff.

- Child & Family Social Work*, 12(2), 133–142. <https://doi.org/10.1111/j.1365-2206.2006.00451.x>.
- Cooke, A., Smith, D., & Booth, A. (2012). Beyond PICO: the SPIDER tool for qualitative evidence synthesis. *Qualitative Health Research*, 22, 1435–1443. <https://doi.org/10.1177/1049732312452938>.
- Cordovil, C., Crujo, M., Vilariça, P., & Da Calderia, P. (2011). Resiliência em crianças e adolescentes institucionalizados. [Resilience in institutionalized Children and adolescents]. *Acta médica portuguesa*, 24.
- 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>.
- Christiansen, Ø., Havik, T., & Anderssen, N. (2010). Arranging stability for children in long-term out-of-home care. *Children and Youth Services Review*, 32(7), 913–921. <https://doi.org/10.1016/j.childyouth.2010.03.002>.
- Delgado, P., Carvalho, J., & Correia, F. (2019). Viver em acolhimento familiar ou residencial: O bem-estar subjetivo de adolescentes em Portugal. [Living in foster care or residential care: the subjective well-being of adolescents in Portugal]. *Psicoperspectivas*, 18(2), 86–97. <https://doi.org/10.5027/psicoperspectivas-vol18-issue2-fulltext-1605>.
- Drapeau, S., Saint-Jacques, M. C., Lepine, R., Begin, G., & Bernard, M. (2007). Processes that contribute to resilience among youth in foster care. *Journal of Adolescence*, 30, 977–999. <https://doi.org/10.1016/j.adolescence.2007.01.005>.
- Duppong-Hurley, K., Lambert, M. C., Van Ryzin, M., Sullivan, J., & Stevens, A. (2013). Therapeutic alliance between youth and staff in residential group care: psychometrics of the therapeutic alliance quality scale. *Children and Youth Services Review*, 35(1), 56–64. <https://doi.org/10.1016/j.childyouth.2012.10.009>.
- Duppong-Hurley, K., Lambert, M. C., Gross, T. J., Thompson, R. W., & Farmer, M. Z. (2017). The role of therapeutic alliance and fidelity in predicting youth outcomes during therapeutic residential care. *Journal of Emotional and Behavioral Disorders*, 25(1), 37–45. <https://doi.org/10.1177/1063426616686756>.
- Erol, N., Simsek, Z., & Münir, K. (2010). Mental health of adolescents reared in institutional care in Turkey: challenges and hope in the twenty-first century. *European child & adolescent psychiatry*, 19(2), 113–124. <https://doi.org/10.1007/s00787-009-0047-2>.
- Ferreira, S., Magalhães, E., & Prioste, A. (2020). Social support and mental health of young people in residential care: a qualitative study. *Anuario de Psicologia Jurídica*, 30, 29–34. <https://doi.org/10.5093/apj2019a12>.
- Florsheim, P., Shotorbani, S., Guest-Warnick, G., Barratt, T., & Hwang, W. C. (2000). Role of the working alliance in the treatment of delinquent boys in community-based programs. *Journal of Clinical Child Psychology*, 29(1), 94–107. https://doi.org/10.1207/S15374424jccp2901_10.
- Garrido, V. M., Patrício, N. J., Calheiros, M. M., & Lopes, D. (2016). Comparing the social images of youth in and out of residential care. *Journal of Community & Applied Social Psychology*, 26(5), 439–455. <https://doi.org/10.1002/casp.2273>.
- Gearing, R. E., Brewer, K. B., Elkins, J., Ibrahim, R. W., MacKenzie, M. J., & Schwalbe, C. S. (2015). Prevalence and correlates of depression, posttraumatic stress disorder, and suicidality in Jordanian youth in institutional care. *The Journal of Nervous and Mental Disease*, 203(3), 175–181. <https://doi.org/10.1097/NMD.0000000000000267>.
- Glisson, C., & Green, P. (2011). Organizational climate, services, and outcomes in child welfare systems. *Child Abuse & Neglect*, 35(8), 582–591. <https://doi.org/10.1016/j.chiabu.2011.04.009>.
- Glisson, C., Green, P., & Williams, N. J. (2012). Assessing the organizational social context (OSC) of child welfare systems: implications for research and practice. *Child Abuse & Neglect*, 36(9), 621–632. <https://doi.org/10.1016/j.chiabu.2012.06.002>.
- Glisson, C., Landsverk, J., Schoenwald, S., Kelleher, K., Hoagwood, K. E., Mayberg, S., Green, P., & The Research Network on Youth Mental Health, & Research Network on Youth Mental Health. (2008). Assessing the organizational social context (OSC) of mental health services: implications for research and practice. *Administration and Policy in Mental Health and Mental Health Services Research*, 35(1–2), 98–13. <https://doi.org/10.1007/s10488-007-0148-5>.
- Golding, K. S. (2020). Understanding and helping children who have experienced maltreatment. *Pediatrics and Child Health*, 30(11), 371–377. <https://doi.org/10.1016/j.paed.2020.08.002>.
- Gonçalves, J. P. (2016). Ciclo vital: início, desenvolvimento e fim da vida humana possíveis contribuições para educadores. [Life cycle: beginning, development and end of human life possible contributions for educators]. *Revista Contexto & Educação*, 31(98), 79–110. <https://doi.org/10.21527/2179-1309.2016.98.79-110>.
- Gutterswijk, R. V., Kuiper, C. H., van der Horst, F. C., Jongerling, J., Harder, A. T., & Prinzie, P. (2022). Behavioural problems of adolescents in secure residential youth care: gender differences and risk factors. *Child & Family Social Work*, 1–15. <https://doi.org/10.1111/cfs.12976>.
- Harder, A. T., Knorth, E. J., & Kalverboer, M. E. (2013). 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>.
- Heinze, H. J., Jozefowicz, D. M. H., & Toro, P. A. (2010). Taking the youth perspective: Assessment of program characteristics that promote positive development in homeless and at-risk youth. *Children and Youth Services Review*, 32, 1365–1372. <https://doi.org/10.1016/j.childyouth.2010.06.004>.
- Holmqvist, R., Hill, T., & Lang, A. (2007). Treatment alliance in residential treatment of criminal adolescents. *Child & Youth Care Forum*, 36(4), 163–178. <https://doi.org/10.1007/s10566-007-9037-z>.
- Houston, S. (2010). Building resilience in a children's home: results from an action research project. *Child & Family Social Work*, 15(3), 357–368. <https://doi.org/10.1111/j.1365-2206.2010.00684.x>.
- Houston, S. (2011). Using action research to enhance resilience in a children's home: an exploration of need, experience and role. *Child Care in Practice*, 17(2), 115–129. <https://doi.org/10.1080/13575279.2010.541425>.
- Kachel, S., Steffens, M. C., & Niedlich, C. (2016). Traditional masculinity and femininity: validation of a new scale assessing gender roles. *Frontiers in Psychology*, 7, 956. <https://doi.org/10.3389/fpsyg.2016.00956>.
- Índias, S., Arruabarrena, I., & De Paúl, J. (2019). Child maltreatment, sexual and peer victimization experiences among adolescents in residential care. *Children and Youth Services Review*, 100, 267–273. <https://doi.org/10.1016/j.childyouth.2019.03.014>.
- Izzo, C. V., Aumand, B. N., Cash, B. M., McCabe, L. A., Holden, M. J., & Bhattacharjee, M. (2014). Exploration of the youth-adult relationship in residential care. *International Journal of Child and Family Welfare*, 15(1/2), 10–23.
- Jansen, A. (2010). Victim or troublemaker? Young people in residential care. *Journal of Youth Studies*, 13(4), 423–437. <https://doi.org/10.1080/13676261003801770>.
- Jones, R., Everson-Hock, E. S., Papaioannou, D., Guillaume, L., Goyder, E., Chilcott, J., & Swann, C. (2011). Factors associated with outcomes for looked-after children and young people: a correlates review of the literature: looked-after children and young people: factors and outcomes. *Child: Care Health and Development*, 37(5), 613–622. <https://doi.org/10.1111/j.1365-2214.2011.01226.x>.
- Jonson-Reid, M., & Way, I. (2001). Adolescent sexual offenders: incidence of childhood maltreatment, serious emotional disturbance,

- and prior offenses. *American Journal of Orthopsychiatry*, 71(1), 120–130.
- Jozefiak, T., Kaye, N. S., Rimehaug, T., Wormdal, A. K., Brubakk, A. M., & Wichstrøm, L. (2016). Prevalence and comorbidity of mental disorders among adolescents living in residential youth care. *European Child & Adolescent Psychiatry*, 25(1), 33–47. <https://doi.org/10.1007/s00787-015-0700-x>.
- Liberati, A., Altman, D. G., Tetzlaff, J., Mulrow, C., Gøtzsche, P. C., Ioannidis, J. P., & Moher, D. (2009). The PRISMA statement for reporting systematic reviews and meta-analyses of studies that evaluate health care interventions: explanation and elaboration. *Journal of Clinical Epidemiology*, 62(10), e1–e34. <https://doi.org/10.1016/j.jclinepi.2009.06.006>.
- Lopes, D., Calheiros, M. M., Patrício, J. N., & Garrido, M. V. (2017). Development and validation of a social images evaluation questionnaire for youth in residential care. *PloS one*, 12(6), e0179890. <https://doi.org/10.1371/journal.pone.0179890>.
- Magalhães, E., & Calheiros, M. M. (2017). A dual-factor model of mental health and social support: evidence with adolescents in residential care. *Children and Youth Services Review*, 79, 442–449. <https://doi.org/10.1016/j.chilcyouth.2017.06.041>.
- Magalhães, E., & Calheiros, M. 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*, 1–21. <https://doi.org/10.1007/s12187-019-09716-5>.
- Magalhães, E., Calheiros, M. M., Costa, P., & Ferreira, S. (2021). Youth's rights and mental health: the role of supportive relations in care. *Journal of Social and Personal Relationships*, 38(3), 848–864. <https://doi.org/10.1177/0265407520975507>.
- Manso, A., Rauktis, M. E., & Boyd, A. S. (2008). Youth expectations about therapeutic alliance in a residential setting. *Residential Treatment for Children & Youth*, 25(1), 55–72. <https://doi.org/10.1080/08865710802209826>.
- Marsh, S. C., Evans, W. P., & Williams, M. J. (2010). Social support and sense of program belonging discriminate between youth-staff relationship types in juvenile correction settings. *Child & Youth Care Forum*, 39(6), 481–494. <https://doi.org/10.1007/s10566-010-9120-8>.
- Maurović, I., Križanić, V., & Klasić, P. (2014). From risk to happiness: the resilience of adolescents in residential care. *Kriminologija & socijalna integracija: časopis za kriminologiju, penologiju i poremećaje u ponašanju*, 22(2), 25–47. <https://hrck.srce.hr/136815>.
- McLean, S. (2013). Managing behavior in child residential group care: unique tensions. *Child & Family Social Work*, 20(3), 344–353. <https://doi.org/10.1111/cfs.12083>.
- McInnes, M. D., Moher, D., Thombs, B. D., McGrath, T. A., Bossuyt, P. M., Clifford, T., & Willis, B. H. (2018). Preferred reporting items for a systematic review and meta-analysis of diagnostic test accuracy studies: the PRISMA-DTA statement. *Jama*, 319(4), doi:<https://doi.org/10.1001/jama.2017.19163>.
- Moore, T., McArthur, M., Death, J., Tilbury, C., & Roche, S. (2018). Sticking with us through it all: the importance of trustworthy relationships for children and young people in residential care. *Children and Youth Services Review*, 84, 68–75. <https://doi.org/10.1016/j.chilcyouth.2017.10.043>.
- Moses, T. (2000). Attachment theory and residential treatment: a study of Staff-Client Relationships. *Journal of Orthopsychiatry*, 70(4), 474–490. <https://doi.org/10.1037/h0087681>.
- Mota, C. P., & Matos, P. M. (2008). Adolescência e institucionalização numa perspectiva de vinculação. [Adolescence and institutionalization: an attachment approach]. *Psicologia & Sociedade*, 20(3), 367–377. <https://doi.org/10.1590/S0102-71822008000300007>.
- 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., 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., Costa, M., & Matos, P. M. (2018). A escola e a instituição: relações significativas e o autoconceito de adolescentes em acolhimento residencial. [School and institution: meaningful relationships and the self-concept of adolescents in residential care]. *Revista PSICOLOGIA*, 32(1), 87–100. <https://doi.org/10.17575/rpsicol.v32i1.1277>.
- Milfont, T. L., & Sibley, C. G. (2016). Empathic and social dominance orientations help explain gender differences in environmentalism: a one-year bayesian mediation analysis. *Personality and Individual Differences*, 90, 85–88. <https://doi.org/10.1016/j.paid.2015.10.044>.
- Munson, M. R., Smalling, S. E., Spencer, R., Scott, L. D. Jr., & Tracy, E. M. (2010). A steady presence in the midst of change: non-kin natural mentors in the lives of older youth exiting foster care. *Children and Youth Services Review*, 32, 527–535. <https://doi.org/10.1016/j.chilcyouth.2009.11.005>.
- Ouzzani, M., Hammady, H., Fedorowicz, Z., & Elmagarmid, A. (2016). Rayyan—a web and mobile app for systematic reviews. *Systematic Reviews*, 5(1), 210. <https://doi.org/10.1186/s13643-016-0384-4>.
- Petrowski, N., Cappa, C., & Gross, P. (2017). Estimating the number of children in formal alternative care: Challenges and results. *Child abuse & Neglect*, 70, 388–398. <https://doi.org/10.1016/j.chiabu.2016.11.026>.
- Pinheiro, M., Magalhães, E., & Baptista, J. (2021). Adolescents' resilience in residential care: a systematic review of factors related to healthy adaptation. *Child Indicators Research*, 15, 1–19. <https://doi.org/10.1007/s12187-021-09883-4>.
- Quiroga, G., M., & Hamilton-Giachritsis, C. (2016). “Getting involved” a thematic analysis of caregivers' perspectives in Chilean residential children's homes. *Journal of Social and Personal Relationships*, 34(3), 356–375. <https://doi.org/10.1177/0265407516637838>.
- 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.chilcyouth.2014.02.012>.
- Rodrigues, S., Barbosa-Ducharme, M., & Del Valle, J. F. (2013). The quality of residential child care in Portugal and the example of its development in Spain. *Papeles del Psicólogo*, 34(1), 11–22.
- Silva, C. S., Calheiros, M. M., Carvalho, H., & Magalhães, E. (2021). Organizational social context and psychopathology of youth in residential care: the intervening role of youth-caregiver relationship quality. *Applied Psychology*, 71, 1–23. <https://doi.org/10.1111/apps.12339>.
- Schofield, G., Larsson, B., & Ward, E. (2016). Risk, resilience, and identity construction in the life narratives of young people leaving residential care. *Child & Family Social Work*, 22(2), 782–791. <https://doi.org/10.1111/cfs.12295>.
- Sulimani-Aidan, Y. (2016). In between formal and informal: staff and youth relationships in care and after leaving care. *Children and Youth Services Review*, 67, 43–49. <https://doi.org/10.1016/j.chilcyouth.2016.05.025>.
- Sulimani-Aidan, Y. (2017). “She was like a mother and a father to me”: searching for the ideal mentor for youth in care. *Child & Family Social Work*, 22(2), 862–870. <https://doi.org/10.1111/cfs.12306>.
- Strapko, N., Hempel, L., MacIlroy, K., & Smith, K. (2016). Gender differences in environmental concern: reevaluating gender socialization. *Society and Natural Resources*, 29(9), 1015–1031. <https://doi.org/10.1080/08941920.2016.1138563>.

- Thompson, S. J., McManus, H., Lantry, J., Windsor, L., & Flynn, P. (2006). Insights from the street: perceptions of services and providers by homeless young adults. *Evaluation and Program Planning*, 29, 34–43. <https://doi.org/10.1016/j.evalprogplan.2005.09.001>.
- Whetten, K., Ostermann, J., Pence, B. W., Whetten, R. A., Messer, L. C., Ariely, S., & Thielman, N. M. (2014). Three-year change in the wellbeing of orphaned and separated children in institutional and family-based care settings in five low-and middle-income countries. *PloS One*, 9(8), e104872. <https://doi.org/10.1371/journal.pone.0104872>.
- Williams, N. J., & Glisson, C. (2014). Testing a theory of organizational culture, climate and youth outcomes in child welfare systems: a United States national study. *Child Abuse & Neglect*, 38(4), 757–767. <https://doi.org/10.1016%2Fj.chiabu.2013.09.003>.
- Zegers, M. A., Schuengel, C., van Ijzendoorn, M. H., & Janssens, J. M. (2006). Attachment representations of institutionalized adolescents and their professional caregivers: Predicting the development of therapeutic relationships. *American Journal of Orthopsychiatry*, 76(3), 325–334. <https://doi.org/10.1037/0002-9432.76.3.325>.

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