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Parental Psychological Abuse and Adolescents' Quality of Life: The Mediating Role of Self-esteem

under the supervision of

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Abstract

This study was conducted with the aim of investigating the mediating role of self-esteem on the relationship between parental psychological abuse and adolescents' (aged 16-20 years) quality of life. Participants ($N = 86$) were asked to complete an online survey about maltreating behaviours adopted by the father and by the mother. Participants' self-esteem and quality of life have also been investigated. It was postulated that frequent exposure to psychological abuse will be associated with adolescents' low quality of life and poor self-esteem. Furthermore, the adverse impact of this abuse on adolescents' quality of life was expected to be mediated by their self-esteem. The results confirmed these assumptions. In fact, low levels of self-esteem and quality of life were associated with frequent exposure to paternal or maternal psychological abuse. Moreover, self-esteem successfully mediated the adverse impact of paternal and maternal psychological abuse on adolescent's quality of life. These findings suggest that self-esteem provides an important intrinsic resource that should be promoted in interventions targeting psychologically abused adolescents.

Keywords: psychological abuse, adolescents, quality of life, mediation, self-esteem

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Introduction

Child maltreatment constitutes a major social, economic, and public health problem (Sethi et al., 2013). There is substantial evidence showing the harmful impact of parental maltreatment on children's later psychosocial adjustment and well-being (e.g., Institute of Medicine [IOM] and National Research Council [NRC], 2014). Long-term outcomes may concern psychophysical health, neurodevelopment, social competences, and risky behaviour. Contrarily, less attention has been paid to maltreatment during adolescence. It was argued that maltreatment occurring during this developmental phase can cause more extensive repercussions on individuals' later adaptation (Thornberry et al., 2010). Furthermore, it has become increasingly clear that individually or in combination, the types of maltreatment exert a different influence on mental health-related conditions (Merrick et al., 2017), thus affecting the person's quality of life (Jernbro et al., 2015). In this paper, the focus lies on paternal and maternal psychological abuse and their impact on adolescents' quality of life. Furthermore, given the existence of factors that can reduce the harmful consequences of these adverse experiences (Afifi & Mcmillan, 2011), the mediating role of self-esteem will be investigated with the aid of an online questionnaire. Thus, with a cross-sectional design and mediation analyses, this study will examine the mediator effect of self-esteem on the relationship between paternal or maternal psychological abuse and adolescents' quality of life. The results may provide relevant information for the conception and planning of appropriate and tailor-made interventions in the context of psychological abuse perpetuated by one parent.

Prevalence of maltreatment

Data indicating the prevalence of child maltreatment are underestimated, because of family and social dynamics that lead children not to bring up the incident (Norman et al., 2012). Stigmatisation and blame are common feared consequences. Another possible reason of the underestimation of data concerns the recognition of the abusive act as such by the victim because of doubts concerning its admissibility or legitimacy (IOM and NRC, 2014). In contrast, when relying on the self-filled questionnaires, the number of episodes of child maltreatment appears to be higher than in the reports released by the responsible agencies.

A consistent number of papers have investigated the incidence of child maltreatment (e.g., Jud et al., 2021; Sethi et al., 2013). A European report evaluated that sexual, physical, and mental maltreatment accounted for 117 million children under 18 years old (Sethi et al., 2013). It revealed percentages close to 10% in the United Kingdom (11.2%) and Italy (9.5%). These ratios are close to those recorded in the United States (12.1%) and Canada (9.7%). Recently, during the Covid-19 pandemic, it was estimated that child physical abuse reached

18% and child psychological abuse attained 39% worldwide (Lee & Kim, 2022). Another recent article focused on the responsiveness of the Swiss public sectors related to child and adolescent maltreatment (Jud et al., 2021). In 2016, a total of 10'335 cases were reported over a three-month period. The majority of these cases concerned adolescents over 13 years old, thus representing 0.66% of Swiss children.

Legal situation in Switzerland

According to the Art. 314d of the Swiss Civil Code on the duty to notify (Duty to notify, 2019), professionals who, on official duty become aware of cases where "physical, psychological or sexual integrity of a child is at risk and that they cannot remedy the threat as part of their professional activities", are bound to inform a superior of the matter. The interpretation of abusive acts as such is therefore an individual's responsibility. Furthermore, the requirements for reporting these incidents are regulated by the single cantons. Therefore, there may be differences from canton to canton.

Maltreatment models

A paper in the field of child maltreatment that is most referred to is Belsky's Ecological Integration (1980). The author based his work on Bronfenbrenner's Ecological Systems Theory (Bronfenbrenner, 1979, as cited in Sidebotham, 2001), which assumed four ecologic systems containing internal and external factors that influence the child's development. The first system is called ontogenic development and includes parents' experiences during their childhood, such as maltreatment episodes and education, and their adult life, such as psychiatric conditions, drug or alcohol abuse (Figure 1). In this system, Belsky (1980) identified factors that predispose to parental maltreatment practices, such as the educational background of the parents, their past maltreatment or neglect experiences and observing aggressive behaviours during childhood. In the next system, the microsystem, lie the proximate influencing factors. In the case of little children, these are features such as culture, child's temperament such as prolonged crying and conduct problems, and health condition such as underweight, premature birth, mental or physical disability, and interpersonal relationships among family members such as parental educational style and intimate violence. Gradually, as the children develop, the factors of influence increase and include peers, friends, and teachers. Above the microsystem lies the exosystem, context that includes neighbourhood, parental employment and earnings, social status, etc., all of which have an indirect effect on child development. The last system is the macrosystem and involves norms regarding violent behaviours and shared view of corporal punishment as an educational practice in the society. Although this model

allows for the discovery of factors and their connections that play a role in maltreatment cases, the risk is that, once they are found, it will be assumed that maltreatment is unavoidable.

Figure 1

Bronfenbrenner's Ecological Systems Theory (1979)
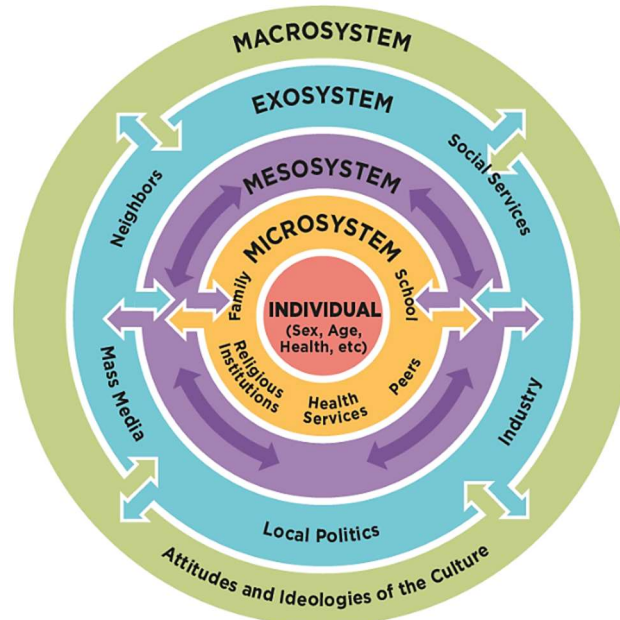
Note. Retrieved from *Preventing Bullying Through Science, Policy, and Practice*, by the National Academies of Sciences, Engineering, and Medicine, 2016, p. 73. Copyright 2016 by National Academies Press.

Another relevant framework is the ecological-transactional model of Cicchetti and Ritzely (1981). According to this model, there are agents and conditions that can potentially enhance (potentiating factors) or reduce (compensatory factors) the probability that maltreating behaviours will be adopted. In addition, the authors drew a temporal differentiation between factors that persist (vulnerability) and those that are temporary (protective factors).

In a further step, Cicchetti and Lynch (1993) wrote a paper adopting an ecological-transactional perspective in the field of community violence and child maltreatment in order to understand the processes underlying the adoption of abusive practices within the family context. They based their work on Belsky's model and that of Cicchetti and Ritzely. The four-level structure was then reprised, and the potentiating and compensatory factors present on each were identified. Starting from the outermost level, the macrosystem, there was evidence of high rates of crime and violence and an acceptance in American society of punitive parenting practices of a physical nature. In the exosystem, this shared idea constituted a vulnerability, as it persisted, and predisposed individuals to punitive or violent behaviour. Further relevant factors were

physical isolation and lack of a network of contacts and support, which in turn prevented parents from acquiring techniques and knowledge regarding their children's education. In the microsystem, these factors might have enhanced the adoption of abusive punitive practices toward children or, if the violence was external to the family, for not adopting strategies to counteract the consequences of these acts on children. In this system, parental characteristics that might have acted as potentiating factors were a low level of maternal education and past experiences of maltreatment; especially violent attitudes which were emulated by the children. Depressive symptoms and difficulty regulating stress were also present in parents who adopted abusive behaviours. The author assumed the existence of a process of internalisation in children, who assimilated these parental practices. These then affected children's identity formation, future attitudes, and behaviours with other people. Finally, concerning ontogenic development, it has been shown that children with maltreatment history exhibited disorganized and conflicting behaviours toward their primary caregiver in stressful situations, such as the separation from him/her. As they grow up, these behaviours remained stable. Moreover, these children showed difficulties in their affect regulation, i.e., in recognizing and distinguish affect-related facial expressions, and the presence of depressive and anxious symptoms, helplessness, and a poor ability to withstand stress. Finally, compensatory factors could be found at all levels, such as the presence of a network of contacts and support, high education of the mother, knowledge of appropriate educational practices, stress coping and affect regulation strategies, and trusting and nurturing relationship with the primary caregiver.

Many factors thus interact in a situation of maltreatment, and scenarios can vary greatly. To those already presented, there exist many other factors. Ammerman (1990) displayed findings from research that investigated child maltreatment. The author emphasized the reciprocal influence that certain child's characteristics, such as difficult temperament, behaviour problems, health-related conditions, or disabilities, had with those of the parents, such as poor self-esteem, lack of interpersonal contacts, poor irritation and stress endurance, lack of adequate educational knowledge, or unrealistic expectations. In particular, the inconsolable crying of infants has been shown to cause negative affect and physiological arousal even in parents who did not engage in abusive practices. Concerning parenting traits, anger management was certainly a crucial aspect. If the parents' physiological and affective responses were perceived by them as aversive and they lacked knowledge about functional strategies to manage these perceptions, the likelihood of responding aggressively increased. Finally, in the societal and cultural context, differences between African Americans and

Caucasians have been observed. The first ones reported more cases of neglect, while the latter presented more episodes of physical abuse or combined with neglect.

Defining the different types of maltreatment

A major issue in the existing scientific literature on child maltreatment is related to the definition of which practices are considered abusive or negligent (Moore et al., 2015). There is no univocal and consistent definition both in legal system and in the scientific field (Gabrielli et al., 2017). Furthermore, considering the cultural aspect, what is considered as maltreatment may vary among countries (Meadows et al., 2011). As a result, the experiments are difficult to compare as the findings are highly dependent on the operationalisation of maltreatment.

In order to operationalise a type of maltreatment, the concrete acts that fall into its category need to be specified. For instance, the psychological type of maltreatment can be operationalised as all experiences of receiving insults, threats, being locked in a wardrobe or basement, being thrown out of the home, and being menaced with beating (Jernbro et al., 2015). Clearly, proceeding in this way can lead to contradictions between the various studies as to which behaviours are considered psychological maltreatment (Table 1). One study (Spinazzola et al., 2014) employed the term "psychological maltreatment" to include episodes of emotional abuse (e.g., to bully, to frighten, to control coercively), of verbal abuse (e.g., harsh insults, abasement, menaces), of emotional neglect (e.g., shunning, isolating), and of excessively demanding. Thus, psychological maltreatment is a construct with multiple dimensions (Allen, 2008), which leads to a construct validity problem (Herrenkohl & Herrenkohl, 2009).

Table 1

Conceptualisation of psychological abuse according to different studies

References	Conceptualisation of psychological abuse
Miller-Perrin et al. (2009)	Psychological aggression
Higgins & McCabe (2000); Spinazzola et al. (2014)	Psychological maltreatment
Kwok et al. (2019); Thoma et al. (2021)	Emotional abuse
Tomoda et al. (2011)	Verbal abuse

To avoid confusion, when discussing maltreatment, this paper will refer to the definitions presented in the book written by Arias and colleagues (2008).

Child maltreatment has been defined by these authors as "any act or series of acts of commission or omission by a parent or other caregiver that results in harm, potential for harm, or threat of harm to a child" (Arias et al., 2008, p.11). The actions of commission cover all verbal behaviours or conducts that damage, have the potential to inflict damage, or contain a menace to cause damage to a child. This category includes physical, sexual, and psychological

abuse. Concerning the actions of omission, these include neglect of the child's physical, emotional, and educational necessities and poor caregiver monitoring. In both categories, the adverse consequences caused by maltreatment acts may or may not be deliberate.

Psychological abuse concerns all the acts of communicating to a child that he/she is without value, defective, not loved, undesirable, at risk or appreciated only when satisfying others' necessities. The following actions belong to this sub-category: "blaming, belittling, degrading, intimidating, terrorizing, isolating, restraining, confining, corrupting, exploiting, spurning" (Arias et al., 2008, p.16). These behaviours can harm the child on an affective and psychological level.

Co-occurrence and interrelatedness of maltreatment types

As far as the frequency of occurrence of different maltreatment types is concerned, there is great comorbidity between them. This co-occurrence is called "multitype maltreatment" (Higgins & McCabe, 2000) and has been extensively explored in the scientific literature (e.g., Hazen et al., 2009; Herrenkohl & Herrenkohl, 2009; Witt et al., 2016).

The maltreatment types were found to be interrelated, with medium to strong correlations (Higgins & McCabe, 2000; Jernbro et al., 2015). Particularly, an association was found between physical and psychological abuse (Debowska et al., 2017; Higgins & McCabe, 2000; Witt et al., 2016), indicating the existence of a common variance.

When multitype maltreatment was present, more detrimental consequences on children's and adolescents' psychopathology and quality of life (e.g., Witt et al., 2016) and an impaired later psychological adaptation (Debowska et al., 2017) have been reported. Moreover, it has been found that when maltreatment of a psychological nature was combined with physical or sexual abuse, it increased their harmful influence (Spinazzola et al., 2014).

When considering the findings in this paper section, several factors must be taken into consideration. First, all studies employed correlations, making it impossible to draw causal conclusions, and many are cross-sectional, which only provide information regarding the time of detection. Furthermore, variations exist between the studies in the data collection instruments (interviews, questionnaires, reports), sources (participants, caregivers), sample characteristics (culture (mostly Western), age, etc.), conceptualisation and operationalisation of maltreatment types. Finally, the presence of cognitive biases (recall bias and social desirability) may have influenced the obtained results.

Clinical and neurobiological consequences of maltreatment

The development of the brain is determined by the combined impact of genes and environment, the latter influencing gene expression (Meadows et al., 2011). Initially, infants

are not able to auto-regulate themselves, i.e., modulate temperature, manage hunger and thirst, and rely on their primary caregivers (IOM and NRC, 2014). The caregivers' appropriate responses to the children's manifested needs and their stimulation lead to a high expression of the children's biological heritability, thus reducing the influence of the socio-familial environment (Meadows et al., 2011). In contrast, when responses are inadequate or stimulation is lacking, as in the case of abuse and neglect, neurodevelopmental impairments may result. These traumatic experiences are sources of stress that impact various brain structures and systems such as the sympathetic system, which prepares the organism for attack or escape, the serotonergic system, involved in the regulation of mood, sexuality, sleep, appetite, and cognitive functions (Kavanaugh et al., 2017), the stress axis (hypothalamic-pituitary-adrenal axis, HPA), the system that regulates emotions (amygdala) and the memory and learning system (hippocampus), the prefrontal cortex, which controls executive functions, and the corpus callosum, which allows the exchange of information between the two cerebral hemispheres (IOM and NRC, 2014). Consequently, over a period of time, the body presents high rates of catecholamines, serotonin, cortisol, and corticotropin-releasing hormones (Kavanaugh et al., 2017). Their presence may act on the previously mentioned systems as well as on the immune system, thus making the body vulnerable to the development of physical conditions such as high blood pressure and cardiovascular diseases, and to clinical disorders such as affective disorders (Meadows et al., 2011).

A consistent body of literature has addressed the long-term consequences of maltreatment in childhood, concerning mental and physical health, brain and social skills development, and the adoption of risky behaviours (e.g., IOM and NRC, 2014; Meadows et al., 2011). At a clinical level, there may emerge suicide attempts, drug and alcohol consumption and abuse, at-risk sexual conducts, internalising symptoms, such as depressive and anxiety disorders (Norman et al., 2012), externalising symptoms, such as oppositional defiant disorder and conduct disorders, and posttraumatic stress disorder (IOM and NRC, 2014). Further consequences of caregivers' inadequate responses or lack of stimulation are changes in behaviour in children and later in adolescents and adults, such as violence and aggression, which lead to difficulties at school and in social interactions (Meadows et al., 2011).

A further important factor to keep in mind while examining the detrimental impact of maltreatment is the timing of its occurrence. It was found that individuals with childhood maltreatment episodes, such as neglect, physical and sexual abuse, presented adverse psychological outcomes which were limited to internalising problems (Thornberry, et al., 2010). In contrast, individuals with adolescence maltreatment experiences were more likely to

consume and abuse substance, have suicidal thoughts, engage in delinquent conducts and end up in prison, show at-risk sexual conducts and receive an STD diagnosis. Nevertheless, it should be kept in mind that 40% of this group reported abusive episodes going back to both adolescence and childhood.

Specific impact of psychological abuse

A consistent body of literature has demonstrated that psychological abuse perpetuated by caregivers, or in general any abusive act of a psychological nature, often co-occur with other maltreatment types, specifically with physical abuse (e.g., Debowska et al., 2017; Higgins & McCabe, 2000;). However, less research has focused on the specific impact of this type of maltreatment.

A study (Spinazzola et al., 2014) showed that abusive acts of psychological nature, such as emotional abuse, verbal abuse, emotional neglect, and excessively demanding, were associated with higher rates of conduct problems, at-risk conducts, disturbances in functioning, symptomatology, and disorders, in comparison to physical and sexual abuse. Lower rates than those of physical abuse were observed in conduct disorder, general conduct problems, and attention deficit hyperactivity, and lower rates than those of sexual abuse concerned sexualised conduct and suicidality. Nevertheless, consideration must be given to the multidimensional aspect of psychological abuse and the consequent difficulty in distinguishing between abuse and neglect and in comparing results with other studies.

A consistent body of research demonstrated that psychological abuse is associated with the development of depressive symptoms (e.g., Allen, 2008; Miller-Perrin et al., 2009; Paul & Eckenrode, 2015). A longitudinal study (Gross & Keller, 1992) showed the existence of a moderate predictive value of psychological abuse, indicating that it moderately explained the individual variance of depressive symptomatology, self-esteem, and maladaptive attributional style in university students aged 18-22 years. Yoon and colleagues (2019) have discovered a factor that mediated the relationship between psychological abuse (e.g., have been frightened, insulted, despised) and depressive symptomatology in adolescents aged 17 years: self-esteem. This variable made the impact of the abusive act on depressive symptoms indirect. In fact, psychological abuse was correlated with poor self-esteem, the latter being associated with increased depressive symptoms.

Self-esteem.

Self-esteem is defined as a combination of evaluative judgements that a person gives of him/herself (Greger et al., 2017). Parents constitute a fundamental factor in the development of their children's self-esteem (Shaffer & Kipp, 2010). On this subject, Bowlby conceptualised

the working models theory (Bowlby, 1988, as cited in Shaffer & Kipp, 2010), which highlighted the positive influence of a child's secure attachment with his or her reference figure. This connection enables a better evaluation of oneself than in children with an insecure attachment. In the attachment model (Bowlby, 1969, as cited in Shaffer & Kipp, 2010), Bowlby defines attachment as an emotional bond that binds the child to his/her reference persons. It is considered secure when the caregiver provides adequate responses to the child's manifestations of needs and the child understands how he/she can favourably attract the caregiver's attention. Several studies showed that, in comparison to infants without a maltreatment history, infants who have experienced maltreatment presented more insecure attachments (e.g., Baer & Martinez, 2006; Cicchetti & Lynch, 1993). The assimilation of this type of attachment could generate assumptions about how other people might behave, influencing future interpersonal attitudes and dynamics (Cicchetti & Lynch, 1993). These theories and findings suggest that the caregiver's abusive behaviour may negatively influence the child's evaluative perception of him/herself.

Low levels of self-esteem may persist during adolescence. At this stage of development, self-esteem is influenced by interpersonal relationships (Shaffer & Kipp, 2010). There are therefore different environments that can contribute to the development of good self-esteem, such as peers, friends, parents, teachers, and classmates.

In the scientific literature, it has been shown that both research with a sample of adolescents who have been removed from their homes by out-of-home care services (e.g., Yoon et al., 2019), and research with adolescents still living in their homes (e.g., Arslan, 2016; Higgins & McCabe, 2000; Malik & Kaiser, 2016), found a negative association between psychological abuse and self-esteem. Moreover, lower levels of self-esteem were also reported in adolescents living in developing countries (e.g., Mwakanyamale & Yizhen, 2019), suggesting the existence of comparable dysfunctional mechanisms in abuse environments.

In the context of psychological abuse, inadequate verbal behaviour such as blaming and threatening was found to prevent the construction of a positive self-perception (Taussig & Culhane, 2019). Furthermore, verbal aggression negatively affected the perception of being liked by peers. The latter, as was stated earlier (Shaffer & Kipp, 2010), plays a fundamental role in the development of self-esteem in adolescents.

Quality of life.

As previously seen, for children, attachment with caregivers is crucial, whereas for adolescents it is the relationships with people inside and/or outside the family. Therefore, the quality of interpersonal interactions is important for the development and maintenance of a

good self-esteem. This factor, along with self-esteem, are domains of quality of life, which can be severely impaired by abusive acts (Chahine, 2014).

The World Health Organization (1997, as cited in Kim, 2014) defines the quality of life as a multidimensional construct regarding the "individuals' perception of their position in life in the context of the culture and value systems in which they live and in relation to their goals, expectations, standards, and concerns". In order to measure the quality of life, it is therefore necessary to consider a range of different contexts, such as autonomy, value system, interpersonal interactions, physical and mental health (Chahine, 2014).

There is a substantial body of literature that has shown a reduced quality of life in adults with childhood maltreatment experiences (e.g., Corso et al., 2008; Piontek et al., 2021). Moreover, an additive impact of abusive acts on adults' quality of life was found (Afifi et al., 2007). In contrast, little research has focused on the effect of maltreatment on children's quality of life, which has been shown to be significant (Weber et al., 2016).

Contrasting results were found from two studies that recruited children and adolescents (Jud et al., 2013; Weber et al., 2017). A 3 years-longitudinal Swiss study (Jud et al., 2013) was conducted with 180 children under 18 years, suspected of intra- or extrafamilial maltreatment, such as neglect, physical, sexual, or psychological abuse. Caregivers were also interviewed about the quality of life of their children. Children over the age of six had a poorer quality of life in the domains of school and interpersonal relationships with peers and parents. No significant relationship was found for children under the age of six. Caregivers, on the other hand, did not observe any detrimental effects of maltreatment on the children's quality of life. Similarly, a cross-sectional German study (Weber et al., 2017) employed 249 children aged 8-12 years and adolescents aged 13-18 years with experiences of maltreatment, such as neglect, physical, sexual, or psychological abuse, and 350 caregivers. Caregivers reported a decreased quality of life in their children/adolescents, whereas the latter did not show worse outcomes. Comparing the studies, a difference can be seen depending on the source. Indeed, in the first study, children over the age of six reported a reduced quality of life, whereas in the second study it was the caregivers who noticed this phenomenon. These contrary findings could derive not only from the nature of the research (longitudinal vs. cross-sectional), but also from the differences in the sampling: in the first study, the sample was smaller and composed of at-risk individuals, who may therefore have experienced more serious and frequent episodes of maltreatment. Similarities between the studies concern the discovery of factors with predictive value towards a reduced quality of life. Weber and colleagues (2017) identified the following factors: older age, post-traumatic stress signs, affective and conduct symptoms, and socio-

economic situation. Jud and colleagues (2013) highlighted the presence of more life events and a worse socio-economic situation in children over the age of six. The important negative effect of these latter factors on children's and adolescents' quality of life has been documented in the scientific literature (e.g., Greger et al., 2016; Villalonga-Olives et al., 2010; Von Rueden et al., 2006). Their co-occurrence can make the specific impact of maltreatment difficult to recognise. Finally, the presence of protective factors such as family support, which has been shown to be protective on the psychological adaptation of adolescents with past episodes of maltreatment (Cook et al., 2012), was not investigated in both studies.

Finally, similarly to adults, as the number of experienced maltreatment types increased, a progressive decrease in the quality of life of adolescents was observed (Jernbro et al., 2015; Weber et al., 2016; Witt et al., 2016).

Protective and compensatory factors

In the previous sections it has become evident that childhood and adolescent's psychological abuse can lead to detrimental health-related and psychosocial consequences in the long and short term. Moreover, it plays an important role in the formation of self-esteem. Many researchers have therefore postulated the existence of protective effects of a high self-esteem on these adverse outcomes (e.g., Arslan, 2016; Thoma et al., 2021).

Protective action differs from compensatory action. Protection can be conceived as a pole on a continuum, opposed to the vulnerability (Masten & Wright, 1998). Vulnerability refers to the intrinsic characteristics or states that, by exposing the individual to specific conditions, potentially pose a threat to psychological adjustment or physical health. Similarly, compensation is situated on the opposite pole of risk on a continuum, where risk factors are intrinsic characteristics that have the potential to enhance the odds of adverse consequences. Therefore, protective factors assume a preventive role, attenuating or buffering the adverse impact of stressful events. In contrast, compensatory factors act in high-risk situations, counterbalancing the repercussions of risk factors and contributing to a more favourable impact. As an example, self-esteem has a protective effect when it is already present at the time of maltreatment and succeeds in buffering the detrimental impact of this abusive act. Instead, it assumes a compensatory role when, in an abusive context, it counterbalances mental health problems caused by maltreatment.

A further distinction exists between moderating and mediating factors. A moderation occurs when an external (independent) variable influences the effect of an independent variable on a dependent one (Baron, 1986). The action of this external factor alters the impact on the dependent variable, either increasing/decreasing it or reversing it. Mediation, when total, on

the other hand, occurs when, once a third variable has been inserted, the impact of the independent variable on the dependent variable becomes null. The relationship between the independent and dependent variable passes entirely through the added variable. To make this possible, the correlations of the two variables with the added variable must both be significant.

In samples consisting of adolescents, a total or partial mediating role of self-esteem was found in the relationship between childhood psychological abuse and adverse health-related outcomes (e.g., Arslan, 2016; Chen & Qin, 2020). Specifically, self-esteem have been shown to be a protective factor against affective and conduct difficulties in adolescents aged 14-19 years and with past experiences of psychological abuse (i.e., all acts of "rejection", "unrealistic expectations", "degrading", "acceptance") (Arslan, 2016). In another study (Chen & Qin, 2020), pre- and adolescents aged 10-15 years and with past experiences of psychological abuse (e.g., have been felt unwanted, despised, have been addressed injurious words) were recruited. The impact of this maltreatment type on social anxiety symptoms was found to completely pass through self-esteem. As far as samples consisting of adolescents benefiting from out-of-home services are concerned, the mediating role of self-esteem in the relationship between psychological abuse (e.g., have been felt unwanted, despised, have been addressed injurious words) and depressive symptoms was confirmed (Yoon et al., 2019).

A growing body of research has focused on the protective impact of self-esteem on adolescent's health-related outcomes and mental health. In contrast, little research investigated his protective role in the relationship between childhood or adolescence maltreatment and adolescents' quality of life. A study with adolescents aged 12–23 years and placed in out-of-home care found that self-esteem mediated the impact of childhood maltreatment (i.e., physical or sexual abuse, had been exposed to violence or to "household dysfunction", e.g., substance or alcohol abuse in the home, mentally ill family member, incarcerated parent, etc.) on their quality of life (components: "physical, well-being, emotional well-being, friends") (Greger et al., 2017). However, the impact of psychological abuse was not taken into consideration.

Research question and hypotheses

Prior studies have demonstrated the presence of a negative connection between psychological abuse and adolescents' quality of life (Chahine, 2014; Weber et al., 2016). Contrasting findings emerged from two studies in which the reports of primary caregivers differed from those of their children and adolescents (Jud et al., 2013; Weber et al., 2017). To provide more clarity, the aim of this study is to investigate the impact of the frequency of exposure to psychological abuse on adolescents. In more detail, the focus will be on the impact

of psychological abuse on adolescents' quality of life. In addition, the abusive acts perpetuated by the father will be distinguished by the ones adopted by the mother.

The research questions are following: Does self-esteem mediate the relationship between maternal psychological abuse on adolescents' quality of life? Does self-esteem mediate the relationship between paternal psychological abuse on adolescents' quality of life? In order to answer these questions, mediation analyses will be used. These procedures require that psychological abuse is significantly correlated with quality of life and self-esteem and that self-esteem is significantly associated with quality of life. The scientific literature demonstrated the existence of a negative association between psychological abuse and adolescent's quality of life (e.g., Jernbro et al., 2015) and between this abusive act and adolescents' self-esteem (e.g., Arslan, 2016). Thus, it is expected that the frequency of exposure to paternal psychological abuse will negatively predict the adolescents' scores of quality of life as well as their self-esteem ($H1_a$ and $H1_b$). The same results are expected for the maternal psychological abuse ($H2_a$ and $H2_b$). Concerning the relationship between self-esteem and quality of life, as the first factor is often employed as a domain of quality of life (Chahine, 2014), it is expected that adolescents' scores of self-esteem will positively predict their scores of quality of life (H3). Furthermore, in the scientific literature, the (partial or total) mediating role of adolescents' self-esteem on the relationship between psychological abuse and mental health-related outcomes has been identified (Arslan, 2016; Chen & Qin, 2020; Yoon et al., 2019). It can therefore be assumed that a similar situation can be found when examining the effect of self-esteem on the impact of psychological abuse on the quality of life. In fact, one study that considered dysfunctional factors in the family context and their impact on adolescents' quality of life, observed a mediating effect of self-esteem (Greger et al., 2017). Thus, it is expected that a mediation will show that adolescents' self-esteem mediates the relationship between paternal psychological abuse and adolescent's quality of life ($H1_c$). The same result is assumed to exist for the psychological abuse perpetuated by the mother ($H2_c$).

The advanced hypotheses are following:

$H1_a$ Frequent exposure to paternal psychological abuse will be associated with low scores of adolescents' quality of life.

$H1_b$ Frequent exposure to paternal psychological abuse will be associated with low scores of adolescents' self-esteem.

$H1_c$ Adolescents' self-esteem will mediate the impact of paternal psychological abuse on their quality of life.

H2$_a$ Frequent exposure to maternal psychological abuse will be associated with low scores of adolescents' quality of life.

H2$_b$ Frequent exposure to maternal psychological abuse will be associated with low scores of adolescents' self-esteem.

H2$_c$ Adolescents' self-esteem will mediate the impact of maternal psychological abuse on their quality of life.

H3 High scores of adolescents' self-esteem will be associated with high scores of their quality of life.

Method

Design

This study is a quasi-experiment with a cross-sectional design. An online questionnaire was created to highlight the parenting practices that adolescents and young adults may have encountered during their lives within the family home.

Participants

A total of 86 participants have been considered for the analyses, in which 67 were women and 15 men (Table 2). All participants had an age between 17 and 28 years ($M = 19.08$, $SD = 2.10$). The sample was constituted by 62% French- ($N = 53$) and 38% Italian-speaking participants ($N = 33$). The 57% of participants were Swiss ($N = 48$), whereas 22% had multiple nationalities ($N = 18$). Finally, the perceived family's economic status of most participants was on average ($N = 56$), followed by an above average ($N = 16$) and below average status ($N = 13$). Only one person stated that his/her family's economic status was far below average.

Table 2

Sociodemographic characteristics of participants

Sample characteristics	*N*	*%*	*M*	*SD*	*Range (95% CI)*
Sex	86				
Male	19	22.1			
Female	67	77.9			
Gender	81				
Male	15	18.5			
Female	63	77.8			
Other	3	3.7			
Language	86				
French	53	61.6			
Italian	33	38.4			
Age group	86		19.8	2.10	20.25 – 19.35
Adolescent	46	53.5			
Young adult	40	46.5			
Nationality	85				
Switzerland	48	56.5			
France	8	9.4			

Sample characteristics	N	%	M	SD	Range (95% CI)
Belgium	1	1.2			
Benin	1	1.2			
Quebec	2	2.4			
Algeria	1	1.2			
Germany	2	2.4			
Italy	1	1.2			
Portugal	1	1.2			
Hungary	1	1.2			
Congo	1	1.2			
Multiple	18	21.2			
Socio-economic status	86		3.06	0.64	3.2 – 2.92
(1 = far below the average; 5 = far above the average)					
Far below the average	0				
Below average	13	15.1			
On average	56	65.1			
Above average	16	18.6			
Far above average	1	1.2			

Note: N = 86. Number of participants, mean, standard deviation and 95%-confidence interval. Descriptive statistics have been computed in relation to the total participants in each group.

Materials

Two online surveys were used to test the hypotheses (Appendix A), the first lasting 15 minutes and the other an hour. The questions concerning the hypotheses in this paper are contained in three scales. For each scale there was an Italian and a French version. A validated French version was made available thanks to the collaboration with the Psychology Department of the University of Lausanne. To ensure linguistic equivalence, the technique of double translation was used. First, various people translated the source version of the scale (English) into Italian. Other people took care of retranslating from Italian into English. The scientific collaborators then compared this latter translation with the original version and the French version in order to identify the presence of discrepancies.

Parental abusive practices.

The Conflict Tactics Scale Parent Child-Child Adult (CTSPC-CA: Straus, 2001) is a self-administered questionnaire and consists of 22 items assessing parental abusive practices (i.e., physical assault, psychological aggression) as well as nonviolent discipline. This is a retrospective measure indicating the frequency with which a given abusive (/non-violent) act has been adopted by parents/caregivers in the past year. Each item presents two similar questions: one referring to abusive acts perpetuated by the mother and the other to abusive acts adopted by the father. In this study, the term "mother" represents the female reference figure, while "father" refers to the male primary caregiver. The response Likert scale ranges from "never" (=1) to "more than 20 times" (=8). The subscale of psychological aggression was used

for the analyses, with a total of five items (e.g., Item 6: My mother yelled/screamed at me). The internal coherence of the psychological aggression subscale in this study is good ($\alpha = .87$). Concerning the contribution of the different items at the α index, the values lie between .55 and .81.

Self-esteem.

To measure the current global self-esteem of adolescents, the self-administered Self-Perception Profile for Adolescence has been employed (SPPA: Harter, 1988, 2012), which consists of five items. The items are formulated in different ways: some to assess high (e.g., Item 5: I am happy to be the way I am) and others low self-esteem (e.g., Item 1: I am not satisfied with my life). The response Likert scale ranges from "completely true" (=1) to "completely false" (=5). The Cronbach alpha value in this study is .91, showing a good internal consistency. Concerning the contribution of the different items at the α index, the values lie between .86 and .89.

Quality of life.

The Kiddo-KINDL – Teenagers's Version (Erhart et al., 2009) is a self-administered questionnaire consisting of 12 items assessing adolescents' quality of life. This is a retrospective measure indicating the frequency with which different quality-of-life-related situations occurred during the previous week. The response Likert scale ranges from "never" (=1) to "always" (=5). Items are formulated in different ways: some to assess high (e.g., Item 7: I got along well with my friends) and others low quality of life (e.g., Item 2: I felt lonely). The Cronbach alpha value in this study is .85, showing a good internal consistency. Concerning the contribution of the different items at the α index, the values lie between .51 and .78.

Control variables.

Firstly, it has been argued that maltreatment occurring during different developmental stages can differ in the nature and range of repercussions on the individual's adaptation (Thornberry et al., 2010). The age can significantly influence the primary study variables. Thus, it is important to control for this variable.

Secondly, previous research has revealed a higher frequency of exposure to psychological maltreatment of boys, compared to girls (Taussig & Culhane, 2019). Furthermore, the boys' quality of life was found to be greatly affected by maltreating experiences, indicating the existence of differences according to gender (Chahine, 2014). Another relevant factor of influence can therefore be the biological sex of participants.

Finally, the socio-economic situation has been shown to have a predictive value towards a reduced quality of life (Weber et al., 2017). Specifically, a worse socio-economic status was

observed in families of children and adolescents who presented a lower quality of life (Jud et al., 2013).

Procedure

The study was carried out by the Psychology Department of Fribourg's University in collaboration with the Psychology Department of Lausanne's University. The latter gave us access and the opportunity to use a French questionnaire on parents' maltreating practices.

Data were collected from community sample (sport clubs, youth associations, etc.), at-risk sample (out-of-home care infrastructures) and university students (Psychology Department). In order to join the experiment, people had to have an age between 16 and 20 years and a good knowledge of French or Italian.

The questionnaire was posted on the Qualtrics platform, which allowed the study to be shared online. Participants were recruited by sharing the study on social networks (WhatsApp, Instagram, Facebook, Telegram), by email, newsletter and through the Moodle site of the Psychology Department of the University of Fribourg. Flyers (Appendix C) allowing to scan the link to the study were also available at this University and at the Universities of the Italian-speaking part of Switzerland. Organisations dealing with young people such as foyers, associations and sports clubs were contacted by telephone or in person to ask for help in reaching this population (Appendix B).

The questionnaire began with a text describing the purpose and content of the study as well as information about the anonymity and confidentiality of the participants and the freedom to participate, or not, in the survey. Young people were informed that they could stop the questionnaire at any time if they were uncomfortable with it. Following this information, the contacts of La Main Tendue (Telefono Amico, in Ticino), a telephone and internet-based help and support service in Switzerland, were provided. Following the survey, adolescents and young adults gave their consent to participate in the study. At the beginning, they were asked to provide their socio-demographic data and then to complete various scales. The questionnaire ended with an open-ended question allowing for comments or suggestions regarding the survey they had participated in. The link to la Main Tendue/ Telefono Amico was given again, and the participants were thanked for their participation. Finally, at the end of the questionnaire, a link was given to enter an online competition to win a Netflix voucher worth 40 CHF. The winner was randomly drawn by a member of the research team and his/her prize was sent to him/her by email. The Bachelor students in Psychology who participated in the study received one experience hour, as the survey took about 45 minutes to complete.

In parallel, a 15-minutes version of the questionnaire was employed. The procedure was the same as for the longer questionnaire, but with a reduced number of scales.

The procedure was accepted by the Ethics Committee of the Department of Psychology of the University of Fribourg (N° dossier: 2022-780 R1).

Data analysis

The analysis of the results was performed by means of the R Studio tool version 4.2.2 and Excel (Microsoft Excel 2022, Office Microsoft 365). The data were ordinal and the variables of self-esteem and quality of life were transformed into continuous variables. In fact, following the KINDL manual (Ravens-Sieberer & Bullinger, 2023), after inverted the items which indicated the presence of a low quality of life (Items: 2, 3, 4, 8, 11, 12), a total score was computed. Some items of the self-esteem scale had to be reversed as well (Items: 3, 5). Then, a mean score was computed.

Concerning psychological abuse, ordinal data were transformed into frequencies. Two categorical variables were created to distinguish paternal from maternal abusive acts. Following the suggestion of Higgins and McCabe (2000), a cut-off value was determined to divide the participants according to the frequency of exposure to parental psychological abuse. Thus, the levels of the two variables were determined by means of the median, which divided "less frequent psychological abuse" (coded 1) from "frequent psychological abuse" (coded 2). Afterwards, the univariate normality of data was evaluated by means of histogram, boxplot, and Kolmogorov-Smirnov test, as well as the bivariate normality by means of residuals Scatterplot (Burdenski, 2000). The linearity, independence, equality of variance, and normality of residuals was evaluated by means of a scatterplot of residual against fitted value, a scatterplot of standardized residuals and predicted value (Kim, H. Y., 2019), and a normal quantile-quantile plot (Q-Q plot) as well as a Shapiro-Wilk test (Khatun, 2021). Finally, the presence of correlations between the predictors and the criterion and the absence of multicollinearity have been checked by means of Pearson's correlations (Kim, J. H., 2019). Two mediation analyses have been executed, according to the steps of Baron and Kenny (1986) and using the Hayes' PROCESS macro for R. Using participants' Self-esteem as mediator and their Quality of life as criterion, a mediation with Paternal psychological abuse as predictor and another with Maternal psychological abuse as predictor have been effectuated. Indirect effects' significance was tested using the percentile Bootstrapping confidence intervals (Creedon & Hayes, 2015), by means of the Mediation package in R. This nonparametric method computes the unstandardised indirect effect of the predictor on the criterion that passes through the mediator and uses a 95% confidence interval. Finally, exploratory analyses were carried out to

investigate the mediating role of Self-esteem on the impact of Maternal and Paternal psychological abuse on the subcategories of participants' quality of life, i.e., Well-being, Friends, and School. The univariate and the bivariate normality of the dependent variables, i.e., Well-being, Friends, and School, have been checked. An evaluation of the linearity, independence, normality, and equality of variance of the residuals has been effectuated. As the assumptions for the "Friends" variable were not fully respected, it was necessary to normalise it through the elimination of the outliers (Pek & Wong, 2018). Indirect effects' significance was tested using the percentile Bootstrapping method.

Results

Descriptive statistics

In the sample, 43% participants ($N = 37$) were exposed to frequent episodes of paternal psychological abuse, while 57% to less frequent episodes ($N = 49$). Concerning maternal psychological abuse, 48% participants experienced it frequently ($N = 41$), while 52% less frequently ($N = 45$). There have been 47% participants whose age exceeded the upper limit of 20 years (mean age = 21.7). It was therefore necessary to compare this group of young adults ($N = 39$) with the adolescents ($N = 46$) for each relevant variable. As no significant differences were found between the two groups, the complete sample was used to perform the analyses. Concerning the biological sex of participants, female participants were more frequently exposed to psychological abuse by the father, $F(1, 84) = 3.18$, $p < .1$, $\eta_p^2 = .04$, as well as by the mother, $F(1, 84) = 5.01$, $p < .05$, $\eta_p^2 = .06$. No significant differences were found between girls and boys in scores of quality of life and self-esteem. Finally, no significant differences were observed according to the family's economic status for the variables of interest. Table 3 includes descriptive statistics for primary study variables and for exploratory analyses.

Table 3

Descriptive statistics

	N	%	M	SD	Range (95% CI)
Paternal psychological abuse	86				
Less frequent psychological abuse	49	57			
Frequent psychological abuse	37	43			
Maternal psychological abuse	86				
Less frequent psychological abuse	45	52.3			
Frequent psychological abuse	41	47.7			
Self-esteem[a]	85		3.11	0.95	3.16 – 3
Quality of life (global score)[a]	85		3.15	0.7	3.03 – 3
Well-being (quality of life's dimension)[a]	85		3.16	0.79	3.33 – 2.99
Friends (quality of life's dimension)[a]	85		3.47	0.84	3.66 – 3.29
School (quality of life's dimension)[a]	85		2.82	0.83	3 – 2.64

Note: N = 86. Number of participants, mean, standard deviation, and 95%-confidence interval have been computed in relation to the total number of participants in each group. Psychological abuse was coded 1 for less frequent psychological abuse and 2 for frequent psychological abuse.

[a]One participant did not respond and is therefore not included in the table.

Data quality of primary study variables

The data in the study were normally distributed. The residuals were also normally distributed and independent. The coefficients' power was sufficient, which ensured a stability of the estimated coefficients. Moreover, the existing correlations of the independent variables, i.e., Paternal psychological abuse, Maternal psychological abuse, and Self-esteem, with the dependent variable, i.e., Quality of life, were all significant and not too much elevated ($p < .90$), with the highest value of .78. Thus, no multicollinearity was present, which indicated the existence of a specific contribution of the independent variables.

Correlations between primary study variables

Table 4 shows bivariate correlations for all primary study variables. A moderate negative correlation existed between Paternal psychological abuse and participants' Quality of life, $r(83)$, = -.36, $p < .001$. The same held true for the Maternal psychological abuse, $r(83)$, = -.28, $p < .05$. Self-esteem and Quality of life were strongly and positively correlated, $r(83)$, = .78, $p < .001$. Paternal psychological abuse was strongly and positively associated with Maternal psychological abuse, $r(84)$, = .53, $p < .001$, and both were moderately and negatively correlated with Self-esteem, respectively $r(83)$, = -.23, $p < .05$ and $r(83)$, = -.32, $p < .01$.

Table 4

Correlation matrix of primary study variables, i.e., Paternal psychological abuse, Maternal psychological abuse, Self-esteem, and Quality of Life

Variable	1	2	3	4
1. Quality of life[a]	–			
2. Paternal psychological abuse	-.36***	–		
3. Maternal psychological abuse	-.28*	.53***	–	
4. Self-esteem[a]	.78***	-.23*	-.32**	–

Note: N = 86. Psychological abuse was coded 1 for less frequent psychological abuse and 2 for frequent psychological abuse.

[a]One participant did not respond and is therefore not included in the table.

*p < .05. **p < .01. ***p < 0.001

**Data quality of exploratory analyses' variables**

Concerning the exploratory analyses, data were normally distributed. The residuals were also normally distributed and independent. Only the dependent variable "Friends" presented a non-homogeneous variance and an anormal distribution of residuals, as well as a positive skewness of the data distribution. The coefficients' power was sufficient, which ensured a stability of the estimated coefficients. The correlations of the independent variables, i.e., Paternal psychological abuse, Maternal psychological abuse, and Self-esteem, with the dependent variables, i.e., Well-being, School, and Friends, were significant and not too much elevated ($p < .90$), with the highest value of .83.

Correlations between exploratory analysis' variables

Figure 2 displays bivariate correlations for the variables employed for an exploratory analysis. It shows the presence of moderate to strong positive correlations of Self-esteem with the dimensions of quality of life, i.e., Well-being, School, and Friends. Paternal psychological abuse was moderately and negatively correlated with all quality of life's dimensions, whereas Maternal psychological abuse was moderately and negatively correlated with the Friends and School dimensions.

Figure 2

Graphic representation of correlations between Paternal psychological abuse, Maternal psychological abuse, Self-esteem, and Quality of life's dimensions, i.e., Well-being, Friends, School
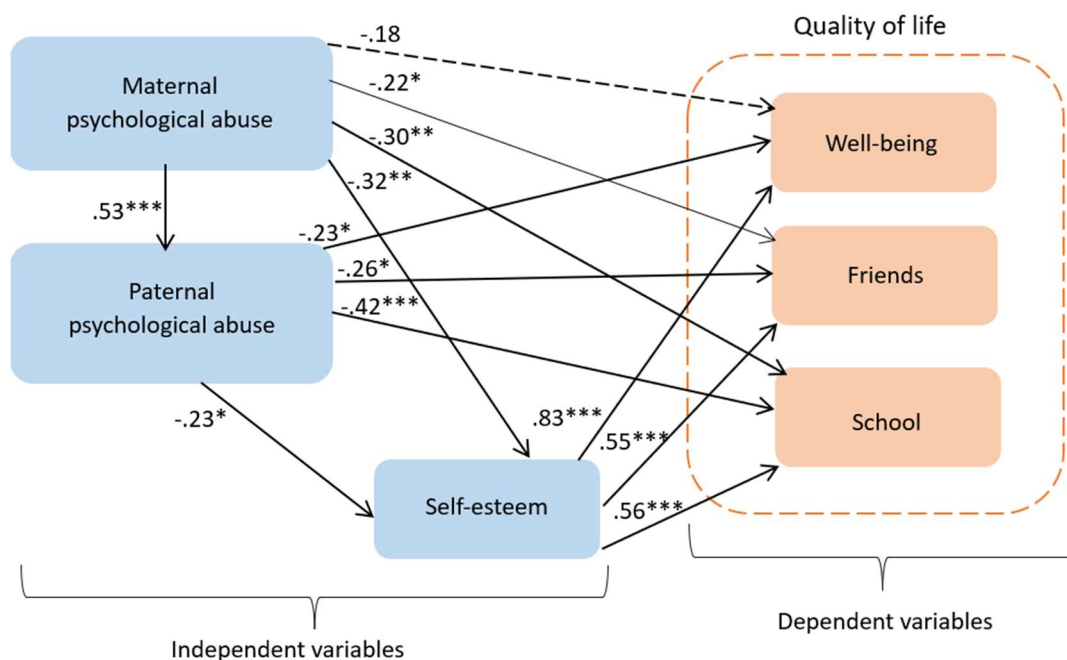
Note: Psychological abuse was coded 1 for less frequent psychological abuse and 2 for frequent psychological abuse.

p < .05. **p* < .01. ***p* < 0.001

Mediation analyses: quality of life as criterion

The first two hypotheses declare that a frequent exposure to paternal psychological abuse is associated with a poor self-esteem and a low quality of life. In line with these hypotheses, Paternal psychological abuse was significantly and negatively correlated with Quality of life, $\beta_{\text{non standardised}}$ = -.51, t = -3.57, p < .001, and Self-esteem, $\beta_{\text{non standardised}}$ = -.44, t = -2.17, p < .05 (Table 5).

The third hypothesis assumes the existence of a mediating effect of participants' self-esteem on the impact of paternal psychological abuse on their quality of life. In line with this hypothesis, when Self-esteem mediator has been inserted, a significant direct effect between Paternal psychological abuse and Quality of life remained, $\beta_{\text{non standardised}}$ = -.27, t = -2.87, p < .01, suggesting a partial mediation (Table 5). Figure 3 visually displays this mediation. Furthermore, there was a significant indirect effect of Paternal psychological abuse on the Quality of life by way of decreased Self-esteem, $\beta_{\text{non standardised}}$ = -.24, p < .05. The predictors explained 65% of criterion's variance, R^2 = .65, p < .01.

Finally, the last hypothesis states that high scores of adolescents' self-esteem will be associated with high scores of their quality of life. In line with this hypothesis, there was a significant and positive correlation between Self-esteem and Quality of life, $\beta_{\text{non standardised}}$ = .57, t = 10.7, p < .001 (Table 5).

Table 5

Regression analysis for Mediation by Self-esteem on the relationship between Paternal psychological abuse and Quality of life

Variable	B	t	95% CI	SE B	β	R^2	ΔR^2
Step 1						.13***	
Intercept	3.37***	36.19	[3.18, 3.55]	0.09	–		
Paternal psychological abuse	-0.51***	-3.57	[-0.79, -0.23]	0.14	-.36		
Step 2						.05*	
Intercept	3.30***	24.90	[3.03, 3.56]	0.13	–		
Paternal psychological abuse	-0.44*	-2.17	[-0.85, -0.04]	0.20	-.23		
Step 3						.65**	.52
Intercept	1.58***	9.11	[1.24, 1.93]	0.17	–		
Paternal psychological abuse	-0.27**	-2.87	[-0.46, -0.08]	0.09	-0.19		
Self-esteem	0.54***	10.99	[0.44, 0.64]	0.05	0.74		
Average casual mediation effects	-0.24*		[-0.47, -0.02]				
Total effect	-0.51***		[-0.79, -0.22]				

Note: $N = 85$; one participant did not respond and is therefore not included in the table. Psychological abuse was coded 1 for less frequent psychological abuse and 2 for frequent psychological abuse. Step 1 shows the Regression model with participants' Quality of life and Paternal psychological abuse. Step 2 shows the Regression model with Paternal psychological abuse and participants' Self-esteem. Step 3 shows the Regression model with all three variables. *B* represents unstandardised regression weights and *β* the standardised regression weights. The lower and upper limits of a 95%-confidence interval are in brackets. R^2 indicates the criterion's variance explained by the model. Average casual mediation effects indicate the indirect effect of the predictor on the criterion, through the mediator. Total effect stands for direct + indirect effect of the predictor on the criterion.
*$p < .05$. ** $p < .01$. ***$p < 0.001$

Concerning the psychological abuse perpetuated by the mother, the first hypotheses declare that a frequent exposure to maternal psychological abuse is associated with a poor self-esteem and a low quality of life. In line with these hypotheses, Maternal psychological abuse was significantly and negatively correlated with the Quality of life, $β_{\text{non standardised}} = -.38$, $t = -2.62$, $p < .05$, and with the self-esteem, $β_{\text{non standardised}} = -.61$, $t = -3.09$, $p < .01$ (Table 6).

The third hypothesis assumes the existence of a mediating effect of participants' self-esteem on the impact of maternal psychological abuse on their quality of life. In line with this hypothesis, when Self-esteem mediator has been inserted, the relationship between Maternal psychological abuse and Quality of life was not more significant, $β_{\text{non standardised}} = -.04$, $t = -0.39$, $p = .7$, suggesting a total mediation (Table 6). Figure 3 visually displays this full mediation. Furthermore, there was an indirect effect of Maternal psychological abuse on the Quality of life by way of decreased Self-esteem, $β_{\text{non standardised}} = -0.34$, $p < .01$. The predictors explained 61% of criterion's variance, $R^2 = .61$, $p < .001$.

Finally, the last hypothesis states that high scores of adolescents' self-esteem will be associated with high scores of their quality of life. In line with this hypothesis, there was a significant and positive correlation between Self-esteem and Quality of life, $β_{\text{non standardised}} = .54$, $t = 10.99$, $p < .001$ (Table 6).

Table 6

Regression analysis for Mediation by Self-esteem on the relationship between Maternal psychological abuse and Quality of life

Variable	B	t	B 95% CI	SE B	β	R^2	ΔR^2
Step 1							.08*

Variable	B	t	B 95% CI	$SE\ B$	β	R^2	ΔR^2
Intercept	3.33***	33.25	[3.13, 3.53]	0.10	–		
Maternal psychological abuse	-0.38*	-2.62	[-0.67, -0.09]	0.15	-0.28		
Step 2						.10**	
Intercept	3.40***	25.23	[3.13, 3.66]	0.13	–		
Maternal psychological abuse	-0.61**	-3.09	[-1.00, 0.22]	0.20	-0.32		
Step 3 ($N = 84$)						.61***	.53
Intercept	1.40***	7.31	[1.02, 1.78]	0.19	–		
Maternal psychological abuse	-0.04	-0.39	[-0.24, 0.16]	0.10	-0.03		
Self-esteem	0.57***	10.70	[0.46, 0.67]	0.05	0.77		
Average casual mediation effects	-0.34**		[-0.57, -0.12]				
Total effect	-0.38*		[-0.68, -0.10]				

Note: $N = 85$; one participant did not respond and is therefore not included in the table. Psychological abuse was coded 1 for less frequent psychological abuse and 2 for frequent psychological abuse. Step 1 shows the Regression model with participants' Quality of life and Maternal psychological abuse. Step 2 shows the Regression model with Maternal psychological abuse and participants' Self-esteem. Step 3 shows the Regression model with all three variables. *B* represents unstandardised regression weights and *β* the standardised regression weights. The lower and upper limits of a 95%-confidence interval are in brackets. R^2 indicates the criterion's variance explained by the model. Average casual mediation effects indicate the indirect effect of the predictor on the criterion, through the mediator. Total effect stands for direct + indirect effect of the predictor on the criterion.

*$p < .05$. ** $p < .01$. ***$p < 0.001$

Figure 3

Mediations by Self-esteem on the relationship between Paternal or Maternal psychological abuse and Quality of life
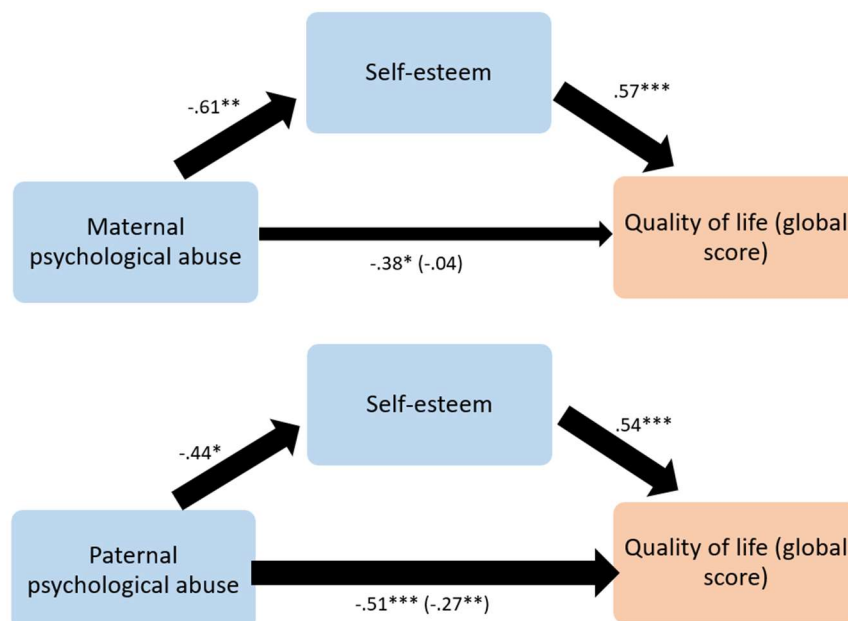
Note. Regression non standardised coefficients of the relationship between Maternal or Paternal psychological abuse and participants' Quality of life, mediated by their Self-esteem. The regression coefficient between Maternal or Paternal psychological abuse and participants' Quality of life, controlled by their Self-esteem, is between brackets.
*p < .05. ** p < .01. ***p < 0.001

Mediation analyses: quality of life's dimensions as criteria

In order to provide more insight, exploratory analyses for the quality of life's dimensions, i.e., well-being, friends, and school, have been carried out. Thus, mediation analyses by participants' Self-esteem on the relationship between Maternal or Paternal psychological abuse and the Well-being, Friends and School dimensions have been executed. Figure 4 shows that when the Self-esteem mediator has been inserted, the relationship between Paternal psychological abuse and Well-being was not more significant, $\beta_{\text{non standardised}}$ = -.06, t = -0.62, p > .05, indicating a full mediation. Concerning Maternal psychological abuse, no significant relationship existed with Well-being and thus no mediation was found. Another full mediation was found for Self-esteem on the relationship between Paternal psychological abuse and the Friends dimension, $\beta_{\text{non standardised}}$ = -.23, t = -1.55, p > .05. The same held true for Maternal psychological abuse, $\beta_{\text{non standardised}}$ = -.05, t = -0.33, p > .05. Participants' Self-esteem also significantly and fully mediated the relationship between Maternal psychological abuse and the School dimension, $\beta_{\text{non standardised}}$ = -.22, t = -1.37, p > .05. A partial mediation was found for Self-esteem on the relationship between Paternal psychological abuse and the School dimension, $\beta_{\text{non standardised}}$ = -.52, t = -3.53, p < .05.

Figure 4

Mediation by Self-esteem on the relationship between Paternal or Maternal psychological abuse and Quality of life's dimensions, i.e., Well-being, Friends, and School
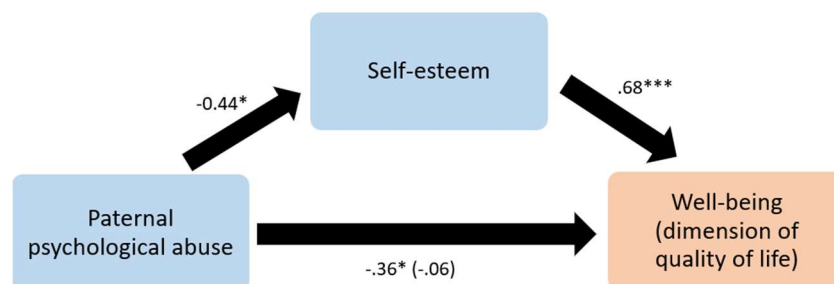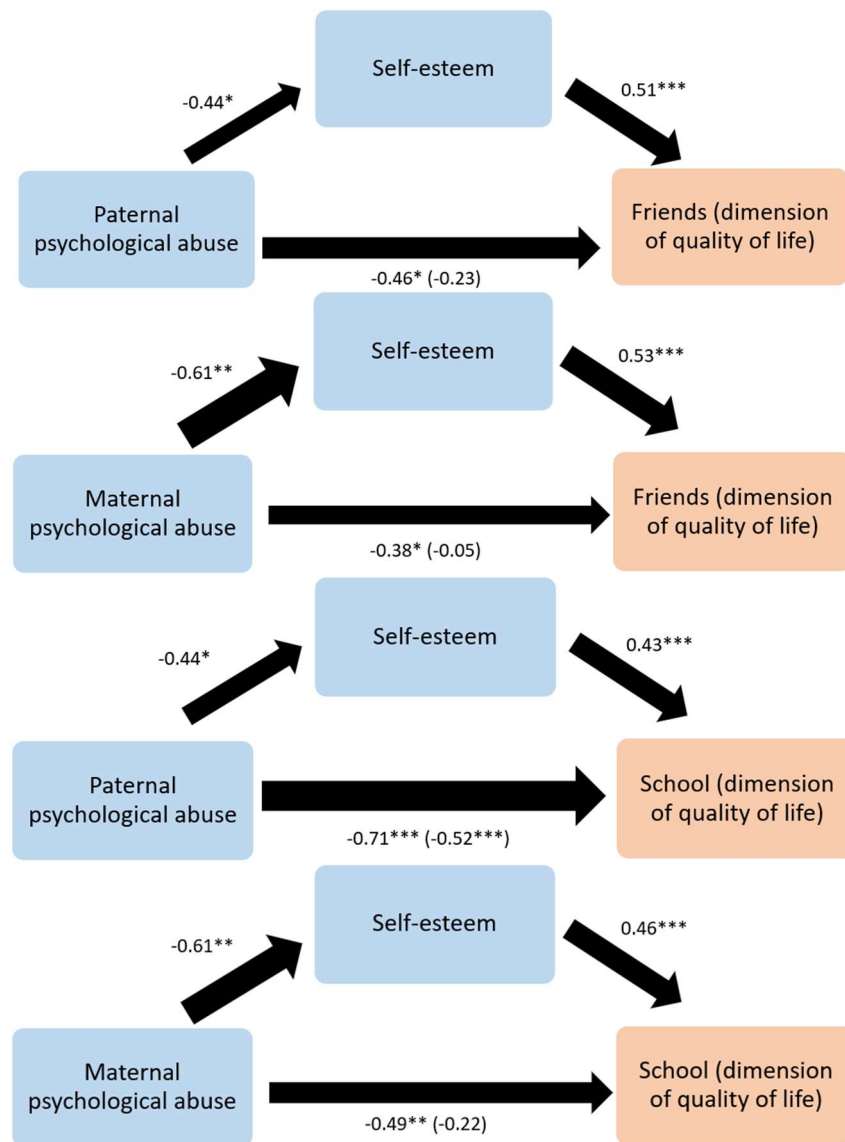
Note. Regression non standardised coefficients of the relationship between Maternal or Paternal psychological abuse and participants' quality of life's dimensions, mediated by their Self-esteem. The regression coefficient between Maternal or Paternal psychological abuse and participants' Quality of life's dimensions, controlled by their Self-esteem, is between brackets.

*p < .05. ** p < .01. ***p < 0.001

Discussion

This study was conducted with the aim of examining the mediating role of self-esteem in the relationship between paternal and maternal psychological abuse and adolescents' quality of life. Findings showed that participants who frequently experienced psychological abuse, whether by the mother or by the father, presented a low quality of life and a poor self-esteem.

Furthermore, self-esteem acted as a significant mediator on the relationship between psychological abuse by one parent and participants' quality of life.

In line with the first assumption, participants who were frequently exposed to paternal psychological abuse presented low scores of quality of life. Similar results were observed for the maternal psychological abuse. Thus, as expected, psychological abuse had a detrimental impact on participants' quality of life. These findings are consistent with prior research, which showed a greater adverse influence of this type of abuse on the quality of life, compared to neglect and physical abuse (Chahine, 2014). However, it must be kept in mind that adolescents are in a developmental stage in which they experience physiological, psychological, and social changes (Goldbeck et al., 2007). During adolescence, a general reduction in life satisfaction has been identified. In addition, vulnerability at the emotional level, caused by the increased intensity of perceived emotions (McLaughlin, 2022), makes adolescents more susceptible to negative social responses such as rejection (Nelson et al., 2005). Abused adolescents are therefore more at risk of presenting a lower quality of life than their peers.

The second assumption stated that frequent exposure to paternal psychological abuse would be associated with low scores of participants' self-esteem. The same hypothesis has been conceived for the maternal psychological abuse. Firstly, it has been observed that low scores of self-esteem were related to a high frequency of exposure to psychological abuse, whether perpetuated by the father or by the mother. This relationship was confirmed by a prior study (Thoma et al., 2021), which employed adults with recorded past experiences of maltreatment. Thus, the frequency of exposure to an abusive act may influence the levels of self-esteem. Secondly, the findings of the present study are consistent with previous research, which identified a negative impact of psychological abuse, whether by the father or by the mother, on adolescents' self-esteem (e.g., Finzi-Dottan & Karu, 2006). On a theoretical level, according to Bowlby's working models theory (Bowlby, 1988, as cited in Shaffer & Kipp, 2010), the figure of the primary caregiver assumes a fundamental role in the child's self-evaluation process. Parents' abusive behaviour has the potential to negatively influence the child's self-representation of him/herself (Shaffer & Kipp, 2010). Through the process of internalisation, the child introjects the negative messages about his/her value (Malik & Kaiser, 2016) and the guilt for the maltreating act he/she has suffered (Frankel, 2002), thus shaping a negative image of him/herself. This biased self-perception affects the development of his/her self-esteem (Shaffer & Kipp, 2010). Consistent with this conception, it has been shown that psychological abuse has a predicting value towards low levels of self-esteem (Karakus, 2012). Moreover, it has been observed that all types of maltreatment were significantly associated with fluctuations

in self-esteem over time (Kim & Cicchetti, 2006). Specifically, children who experienced maltreatment of a psychological nature presented a slower rebound in terms of level of self-esteem in the long term. Thus, psychological abuse constitutes a relevant risk factor for a poor self-esteem as well as for an impaired progression path of self-esteem development over time.

In line with the fourth hypothesis, participants who reported high levels of self-esteem presented high scores of quality of life. This result is consistent with previous research, which identified self-esteem as a relevant factor of influence of quality of life in adolescence (Karatzias et al., 2006). Specifically, it has been suggested that a positive perception of one's own worth leads the adolescent to better function in the environment and to experience greater contentment in more aspects of his or her life (Rey et al., 2011).

According to the Belsky's Ecological Integration (1980), adverse interpersonal experiences such as abusive acts are proximal influencing factors that can negatively impact the child's development and later, the adolescent's functioning. Psychological abuse can have detrimental consequences on the formation of the identity (Cicchetti & Ritzely, 1981) through a process of internalisation in children and adolescents, who assimilates these parental practices. These then affect the identity formation and the future psychosocial adjustment, which leads to a poor quality of life in adolescence (Pinto et al., 2021). This conception is supported by the results of previous studies who employed self-reported retrospective measures and an adult sample, which found that parental psychological abuse was negatively related to self-esteem, which in turn was positively associated with psychological health, the latter indicated by the presence of psychiatric symptoms (e.g., Thoma et al., 2021). Consistent with these findings, the mediating analyses of the present study indicated that psychological abuse, whether by the father or by the mother, had an indirect impact on participants' quality of life via their self-esteem. Specifically, psychological abuse had a detrimental impact on the quality of life by way of decreased self-esteem.

Therefore, in the present study, the potential role of self-esteem in reducing the detrimental impact of abuse on quality of life was revealed. In the scientific literature, self-esteem has been identified as a relevant factor which is influenced by intra-familial dynamics and has the potential to affect the development of the quality of life (Theodoropoulou et al., 2023). According to the ecological-transactional model of Cicchetti and Ritzely (1981), self-esteem can act as a compensatory factor by counteracting the effects of psychological abuse on the quality of life. Consistent with this assumption, prior research revealed that having high scores of self-esteem positively infuenced the self-perception and indicated that this factor could empower the individual to better cope with stressful events (Chen & Qin, 2020). To sum

up, self-esteem could provide an important intrinsic resource that should be targeted and increased in interventions involving psychologically abused adolescents and young adults.

As far as the comparison between maternal and paternal psychological abuse is concerned, a difference was observed. In fact, the abuse perpetuated by the father had two effects: a direct impact on participants' quality of life and an indirect impact via their self-esteem. The results indicated the presence of a partial mediation. In detail, when self-esteem was present, it acted as a compensatory factor, by buffering the impact of paternal psychological abuse on participants' quality of life. However, alongside this mediation, a significant relationship between paternal psychological abuse and quality of life persisted. In contrast, when considering the maternal psychological abuse, it had an indirect impact on participants' quality of life through their self-esteem. Thus, it indicated the existence of a full mediation by self-esteem. These findings suggest that self-esteem of affected individuals played a more important role in a situation when the psychological abuse was perpetuated by their mother.

A possible explanation for this difference could be the more prominent role of the mother figure in the context of child caring (Moretti & Craig, 2013). It has been shown that a secure attachment with their mother is still relevant in adolescence (Rosenthal & Kobak, 2010). In this regard, one study (Varia & Abidin, 1999) found a group of children and pre-adolescents who, despite experiencing psychological abuse, did not recognise it as such. "Affection" and "warmth" provided by the mother seemed to have positively affected the child's self-image and acted as protection against the adverse consequences of the abuse. In contrast, no significant impact was found from paternal caring. This also applied to adolescents, as a significant positive association was only found between maternal, and not paternal, caring and their self-esteem (Finzi-Dottan & Karu, 2006). Thus, the possible influence of maternal care on the participants' self-esteem and the consequent impact on their quality of life must be taken into account in the present study, as it might affect the internal validity.

A further factor that could have contributed to the difference between paternal and maternal psychological abuse could be the existence of different constructs related to the parent's biological sex, which could alter the construct validity. A prior study (Gouvion, 1990) investigated the predictive values of different psychological abusive acts in relation to the biological sex of the perpetuator. The results showed the existence of subcategories explaining maternal psychological abuse, i.e., "humiliation-degradation", "attentive-interest", "fostering autonomy", "corrupting", and "fostering antisociality", which differed from those predicting paternal psychological abuse, i.e., "attentive-interest/protection", "humiliation-degradation",

"terrorising", "infantilising", and "incestuous behaviour". The author observed minimal intergender concordance of the items. In comparison with this research, the questionnaire which has been employed in the present study did not include items belonging to the strongest predictor of paternal abuse, i.e., "attention/protection" (e.g., My father was too concerned with his own affairs to take any notice of me), which was found by Gouvion (1990). This assertion also applies to other paternal subcategories, such as "infantilising" (e.g., It seemed that my father did not wish me to grow up), and "incestuous behaviour" (e.g., My father insisted on giving me a bath even when I was old enough to oppose it and to be embarrassed). In contrast, some items related to the strongest predictor of maternal abuse, i.e., "humiliation/degradation" (e.g., My mother called me stupid), appeared in the questionnaire of the present study. Actually, in the present study, the items mainly reflected verbal aggression, which may be more frequently employed by mothers. Therefore, in a future study, a questionnaire with items related to the biological sex of the perpetuator should be implemented.

A further possible explanation lies in the dimensions of life considered by the scale which was employed in the present study. It is possible that some dimensions were more influenced than others, depending on the biological sex of the parent. The exploratory analyses that have been carried out may provide information to clarify this point. In this regard, small to medium significant and negative correlations were observed between paternal psychological abuse and all dimensions of quality of life, i.e., well-being, friends, and school. Similarly, the psychological abuse perpetuated by the mother presented small to medium significant and negative correlations with the Friends and School dimensions. These findings agree with the scientific literature that has shown the existence of an adverse impact of psychological abuse on the quality of life's dimensions such as emotional well-being, physical well-being, friends, self-esteem (Greger et al., 2017), family life (Chahine, 2014), peers, and school (Jud et al., 2013; Weber et al., 2017). Specifically, in the school setting, psychological abuse has been shown to be associated with lower performance-related outcomes (Hart & Brassard, 1991), but not in the long term (Ciarrochi et al., 2007). Further findings revealed that abused and neglected children and adolescents presented more school difficulties, which were manifested through lower grade point scores and absenteeism (Romano et al., 2015). Regarding the context of relationships with friends, it has been suggested that the dynamics involved in intra-familial abuse environments can have a negative influence on extra-familial interactions, as in the case of friendships (Weber et al., 2017). For example, the adolescent might reproduce the same behavioural patterns that has observed and experienced in the family or show aggression or violence in social interactions (Meadows et al., 2011). Finally, lower levels of emotional well-

being have been found for psychologically abused adolescents (Greger et al., 2017). Interestingly, in contrast to paternal psychological abuse, in the present study, the one perpetuated by the mother was not significantly associated with the participants' well-being. These contrast findings suggest the existence of a specific impact of the father's behaviour on the adolescent's well-being. A prior study (Videon, 2005), which employed adolescents aged between 11 and 20 years supports this assumption. It showed that psychological well-being of boys and girls were significantly altered over time by their quality of interactions with their father. The influence of the relationship with the mother was only present for girls and had an equivalent weight compared to one held with their father. Similarly, a more important impact of the father's participation in the adolescents' lives, as compared to the mother, was observed on the well-being of boys and girls (Flouri & Buchanan, 2003). The existence of unequal roles between mother and father within the family household could explain the different impact of their abusive acts on adolescents' well-being.

Mediating exploratory analyses indicated that participants' self-esteem totally mediated the impact of paternal psychological abuse on participants' well-being. This result is consistent with previous research (Greger et al., 2017), which showed an indirect effect of child maltreatment on well-being through decreased self-esteem. Furthermore, a prior longitudinal study (Ciarrochi et al., 2007) found a predicting value of poor self-esteem toward low levels of sadness in adolescents. However, a predicting value of low levels of sadness toward poor self-esteem was also observed, indicating a relationship of a bidirectional nature. Furthermore, whether with paternal or with maternal psychological abuse as a predictor, participants' self-esteem totally mediated the impact of the abusive act on the Friends dimension. Similarly, an indirect effect was found for the maternal psychological abuse on the School dimension by way of decreased self-esteem. In contrast, with the paternal psychological abuse as a predictor, the participants' self-esteem acted as a partial mediator. Specifically, the paternal psychological abuse continued to be significantly related to the School dimension even when the self-esteem mediator was present. This implies that, in order to improve the quality of life of an abused adolescent in the school setting, increasing his or her self-esteem will have a better outcome if the psychological abuse was perpetuated by the mother. On this subject, the literature highlighted the relevance of adolescents' attachment with their mother (Rosenthal & Kobak, 2010), which infuences their perception of themselves and other people (Toth & Cicchetti, 1996). This perception of self is important for learning how a given context works and what to expect. It can have an impact on expectations related to social interactions and on its own functioning in the school setting, thus influencing the Friends and School dimensions.

Study strengths and limitations

A study strength consists in demographic characteristics such as different socio-economic status, presence of youth from the general population as well as university students and adolescents in out-of-home care. In addition, despite the multi-dimensionality of the construct defining the psychological abuse (Allen, 2008), which makes the results highly related to the operationalisation, the reliability of the questionnaire scores was tested. In fact, the Cronbach alpha at each scale indicated good internal consistency. Furthermore, the use of continuous data enabled the identification of the frequency of exposure to psychological abuse. However, the severity of the abusive act, independently of the frequency of its occurrence, was not considered and the age of onset of the abuse was not identified.

A further strength of this study is the control of some confound variables such as the group age (adolescent vs young adult), the socio-economic status, and the biological sex of the participants, which did not have a significant impact on the findings. A significant difference by gender was observed for the frequency of exposure, where girls experienced psychological abuse more frequently than boys. Besides these variables, there could be further factors that influenced the results, such as comorbidity with other types of maltreatment. Specifically, the co-occurrence of other maltreatment types, especially physical abuse (Debowska et al., 2017) or neglect (Jernbro et al., 2015), could have caused an additive impact of abusive acts, thus amplifying the detrimental consequences on participants' quality of life (Afifi et al., 2007). Other factors that might have altered the results could be the presence of intrinsic stress coping resources, such as resilience (Arslan, 2016), or extrinsic ones, such as family support (Cook et al., 2012). The first factor has been associated with better psychosocial adjustment (Luthar et al., 2000) and thus it constitutes a useful resource to counteract the adverse impact of psychological abuse (Rutter, 2006). The support was identified by Cicchetti and Lynch's ecological-transactional perspective (1993), according to which a trusting and nurturing relationship with the primary caregiver and the social support can function as compensatory factors and hence reduce the detrimental consequences of maltreatment.

When examining the findings, several limitations must be taken into consideration. First, in this study, the terms "maternal" and "paternal" were used to refer to the female and male figure of reference. Therefore, these terms apply to adolescents' primary caregivers, such as parents, relatives, or educators. Second, correlations were employed, which makes it impossible to draw causal conclusions. Third, due to the cross-sectional nature of the study, longitudinal measurements are necessary to confirm causality and to examine the evolution of the influence of self-esteem with time. In effect, fluctuations in self-esteem may occur over

time. Fourth, a control group was not employed, which would have made it possible to identify the specific influence of psychological abuse.

In addition, the use of self-reported measures could have activated cognitive processes such as social desirability and led to a consequent underestimation of the frequency of maltreatment episodes. The use of anonymity should have reduced this bias. Nevertheless, in order to better counteract this cognitive bias, multi-method measures should be adopted by adding an interview to the questionnaire (Greger et al., 2017) and different sources such as the primary caregiver should be considered. Finally, concerning external validity, the sample is small. Thus, it is not possible to generalise the results to the general population. Furthermore, although youth infrastructures, such as sports clubs and youth centres, out-of-home placement facilities, such as foyers, were contacted, and university students took part in the study, due to the anonymity, it is not possible to compare participants within the three categories.

Suggestions for future research

Future research with a greater sample size and longitudinal measures would be useful to confirm the results found in the present study. Due to the existence of differences in the impact of psychological abuse according to the biological sex of the perpetuator, it is important that the questions in the questionnaire have significant predictive value. Therefore, the use of a standardised parental psychological abuse scale including items related to the abusive subcategories which are the most frequently employed by each parent should be considered. In addition, it would be interesting to examine the relationships between mother and son or mother and daughter and between father and son or father and daughter. Influencing factors such as maternal care, family support, and resilience should be controlled. In addition, the examination of bidirectional effects among the primary study variables, i.e., maternal and paternal psychological abuse, self-esteem, and quality of life, would provide a more comprehensive view of the possible influences of and on maltreatment. Finally, due to the existence of a strong correlation between maternal and paternal abuse, it is also important to conduct dyadic analyses to identify the influence of the couple's behaviour on the adolescent's quality of life.

Conclusion

Although the focus of quality-of-life research is mainly on adults (Casas, 2016), the present study showed the existence of an adverse impact of parental psychological abuse on adolescent's well-being and functioning in social and school contexts. This finding highlights the importance of providing appropriate and functional parenting skills and educating primary caregivers about the harmful consequences of maltreating educational practices. In particular,

since psychological abuse is perpetuated primarily via verbal transmission, it is crucial to improve functional interactional dynamics between the reference figure and the adolescent. Investigating resources that have the potential to mitigate the detrimental repercussions of this abuse could contribute to the ideation of tailored interventions targeting abused adolescents. On this latter point, the results of the present study showed the significant role of adolescent's self-esteem in experiencing a good quality of life in a family context of psychological abuse. Since self-esteem is a factor whose values fluctuate over time, it is crucial to intervene to prevent an impaired progression path of its development over time (Kim & Cicchetti, 2006). Providing training to increase self-esteem could thus contribute to an increase in the quality of life of psychologically abused adolescents. Specifically, for individuals experiencing paternal psychological abuse, the quality-of-life domains on which self-esteem seemed to have the most impact were well-being and relationships with friends. On the other hand, for individuals experiencing maternal abuse, self-esteem had more influence on their quality of life in the school setting and in their relationships with friends.

References

Afifi, T. O., Enns, M. W., Cox, B. J., de Graaf, R., Ten Have, M., & Sareen, J. (2007). Child abuse and health-related quality of life in adulthood. *The Journal of nervous and mental disease*, *195*(10), 797-804. https://doi.org/10.1097/NMD.0b013e3181567fdd

Afifi, T. O., & MacMillan, H. L. (2011). Resilience following child maltreatment: A review of protective factors. *The Canadian Journal of Psychiatry*, *56*(5), 266-272. https://doi.org/10.1177/070674371105600505

Allen, B. (2008). An analysis of the impact of diverse forms of childhood psychological maltreatment on emotional adjustment in early adulthood. *Child Maltreatment*, *13*(3), 307-312. https://doi.org/10.1177/1077559508318394

Ammerman, R. T. (1990). Etiological models of child maltreatment: A behavioral perspective. *Behavior modification*, *14*(3), 230-254. https://doi.org/10.1177/01454455900143002

Arias, I., Leeb, R. T., Melanson, C., Paulozzi, L. J., & Simon, T. R. (2008). *Child maltreatment surveillance; uniform definitions for public health and recommended data elements*. National Center for Injury Prevention and Control (NCIPC). https://www.cdc.gov/violenceprevention/pdf/cm_surveillance-a.pdf

Arslan, G. (2016). Psychological maltreatment, emotional and behavioral problems in adolescents: The mediating role of resilience and self-esteem. *Child abuse & neglect*, *52*, 200-209. https://doi.org/10.1016/j.chiabu.2015.09.010

Baer, J. C., & Martinez, C. D. (2006). Child maltreatment and insecure attachment: A meta-analysis. *Journal of reproductive and infant psychology*, *24*(3), 187-197. https://doi.org/10.1080/02646830600821231

Baron, R. M., & Kenny, D. A. (1986). The moderator–mediator variable distinction in social psychological research: Conceptual, strategic, and statistical considerations. *Journal of personality and social psychology*, *51*(6), 1173. https://doi.org/10.1037/0022-3514.51.6.1173

Belsky, J. (1980). Child maltreatment: An ecological integration. *American Psychologist*, *35*(4), 320–335. https://doi.org/10.1037/0003-066X.35.4.320

Burdenski, T. K. (2000). *Evaluating Univariate, Bivariate, and Multivariate Normality Using Graphical Procedures*. https://files.eric.ed.gov/fulltext/ED440989.pdf

Casas, F. (2016). Children, Adolescents and Quality of Life: The Social Sciences Perspective Over Two Decades. In F. Maggino (Eds.), *A life devoted to quality of life: Festschrift in honor of Alex C. Michalos* (pp. 3-21). Springer. https://doi.org/10.1007/978-3-319-20568-7_1

Chahine, E. F. (2014). Child abuse and its relation to quality of life of male and female children. *Procedia-Social and Behavioral Sciences*, *159*, 161-168. https://doi.org/10.1016/j.sbspro.2014.12.350

Chen, C., & Qin, J. (2020). Emotional abuse and adolescents' social anxiety: The roles of self-esteem and loneliness. *Journal of family violence*, *35*, 497-507. https://doi.org/10.1007/si0896-019-00099-3

Ciarrochi, J., Heaven, P. C., & Davies, F. (2007). The impact of hope, self-esteem, and attributional style on adolescents' school grades and emotional well-being: A longitudinal study. *Journal of Research in Personality*, *41*(6), 1161-1178. https://doi.org/10.1016/j.jrp.2007.02.001

Cicchetti, D., & Lynch, M. (1993). Toward an ecological/transactional model of community violence and child maltreatment: Consequences for children's development. *Psychiatry*, *56*(1), 96-118. https://doi.org/10.1080/00332747.1993.11024624

Cicchetti, D., & Rizley, R. (1981). Developmental perspectives on the etiology, intergenerational transmission, and sequelae of child maltreatment. *New Directions for Child and Adolescent Development*, *1981*(11), 31-55. https://doi.org/10.1002/cd.23219811104

Cook, E. C., Chaplin, T. M., Sinha, R., Tebes, J. K., & Mayes, L. C. (2012). The stress response and adolescents' adjustment: The impact of child maltreatment. *Journal of youth and adolescence*, *41*, 1067-1077. https://doi.org/10.1007/s10964-012-9746-y

Corso, P. S., Edwards, V. J., Fang, X., & Mercy, J. A. (2008). Health-related quality of life among adults who experienced maltreatment during childhood. *American journal of public health*, *98*(6), 1094-1100. https://ajph.aphapublications.org/doi/abs/10.2105/AJPH.2007.119826

Creedon, P. S., & Hayes, A. F. (2015). Small sample mediation analysis: How far can we push the bootstrap. In *Annual conference of the Association for Psychological Science*. https://www.afhayes.com/public/aps2015ch.pdf

Debowska, A., Willmott, D., Boduszek, D., & Jones, A. D. (2017). What do we know about child abuse and neglect patterns of co-occurrence? A systematic review of profiling studies and recommendations for future research. *Child Abuse & Neglect, 70*, 100-111. https://doi.org/10.1016/j.chiabu.2017.06.014

Duty to notify, 8 Swiss Civil Code § Art. 314d (2019). https://www.fedlex.admin.ch/eli/cc/24/233_245_233/it#book_2/part_2/tit_8/chap_3/lvl_C/lvl_VI/lvl_6

Erhart, M., Ellert, U., Kurth, B. M., & Ravens-Sieberer, U. (2009). Measuring adolescents' HRQoL via self reports and parent proxy reports: an evaluation of the psychometric properties of both versions of the KINDL-R instrument. *Health and Quality of Life Outcomes, 7*(1), 1-12. https://doi.org/10.1186/1477-7525-7-77

Finzi-Dottan, R., & Karu, T. (2006). From emotional abuse in childhood to psychopathology in adulthood: A path mediated by immature defense mechanisms and self-esteem. *The Journal of nervous and mental disease, 194*(8), 616-621. https://doi.org/10.1097/01.nmd.0000230654.49933.23

Flouri, E., & Buchanan, A. (2003). The role of father involvement and mother involvement in adolescents' psychological well-being. *British Journal of Social Work, 33*(3), 399-406. https://doi.org/10.1093/bjsw/33.3.399

Frankel, J. (2002). Exploring Ferenczi's concept of identification with the aggressor: Its role in trauma, everyday life, and the therapeutic relationship. *Psychoanalytic Dialogues, 12*(1), 101-139. https://doi.org/10.1080/10481881209348657

Gabrielli, J., Jackson, Y., Tunno, A. M., & Hambrick, E. P. (2017). The blind men and the elephant: Identification of a latent maltreatment construct for youth in foster care. *Child abuse & neglect, 67*, 98-108. https://doi.org/10.1016/j.chiabu.2017.02.020

Goldbeck, L., Schmitz, T. G., Besier, T., Herschbach, P., & Henrich, G. (2007). Life satisfaction decreases during adolescence. *Quality of Life Research*, *16*, 969-979. https://doi.org/10.1007/s11136-007-9205-5

Gouvion, J. A. (1990). *Development and evaluation of a questionnaire to measure psychological abuse of children and adolescents* [Master's thesis, California State University]. Theses Digitization Project. https://scholarworks.lib.csusb.edu/etd-project/559

Greger, H. K., Myhre, A. K., Klöckner, C. A., & Jozefiak, T. (2017). Childhood maltreatment, psychopathology and well-being: The mediator role of global self-esteem, attachment difficulties and substance use. *Child abuse & neglect*, *70*, 122-133. https://doi.org/10.1016/j.chiabu.2017.06.012

Greger, H. K., Myhre, A. K., Lydersen, S., & Jozefiak, T. (2016). Child maltreatment and quality of life: a study of adolescents in residential care. *Health and quality of life outcomes*, *14*(1), 1-17. https://doi.org/10.1186/s12955-016-0479-6

Gross, A. B., & Keller, H. R. (1992). Long-term consequences of childhood physical and psychological maltreatment. *Aggressive behavior*, *18*(3), 171-185. https://doi.org/10.1002/1098-2337(1992)18:3<171::AID-AB2480180302>3.0.CO;2-I

Hart, S. N., & Brassard, M. R. (1991). Psychological maltreatment: Progress achieved. *Development and Psychopathology*, *3*(1), 61-70. https://doi.org/10.1017/S0954579400005095

Harter, S. (2012). *Self-Perception Profile for Adolescents (SPPA)* [Database record]. APA PsycTests. https://doi.org/10.1037/t05703-000

Hazen, A. L., Connelly, C. D., Roesch, S. C., Hough, R. L., & Landsverk, J. A. (2009). Child maltreatment profiles and adjustment problems in high-risk adolescents. *Journal of interpersonal violence*, *24*(2), 361-378. https://doi.org/10.1177/0886260508316476

Herrenkohl, R. C., & Herrenkohl, T. I. (2009). Assessing a child's experience of multiple maltreatment types: Some unfinished business. *Journal of family violence*, *24*(7), 485-496. https://doi.org/10.1007/s10896-009-9247-2

Higgins, D. J., & McCabe, M. P. (2000). Relationships between different types of maltreatment during childhood and adjustment in adulthood. *Child maltreatment*, *5*(3), 261-272. https://doi.org/10.1177/1077559500005003006

Institute of Medicine and National Research Council. 2014. *New Directions in Child Abuse and Neglect Research*. The National Academies Press. https://doi.org/10.17226/18331

Jernbro, C., Tindberg, Y., Lucas, S., & Janson, S. (2015). Quality of life among Swedish school children who experienced multitype child maltreatment. *Acta paediatrica*, *104*(3), 320-325. https://doi.org/10.1111/apa.12873

Jud, A., Landolt, M. A., Tatalias, A., Lach, L. M., & Lips, U. (2013). Health-related quality of life in the aftermath of child maltreatment: follow-up study of a hospital sample. *Quality of life research*, *22*, 1361-1369. https://doi.org/10.1007/s11136-012-0262-z

Jud, A., Mitrovic, T., Portmann, R., Gonthier, H., Fux, E., Koehler, J., Kosirnik, C., & Knüsel, R. (2021). Multi-sectoral response to child maltreatment in Switzerland for different age groups: Varying rates of reported incidents and gaps in identification. *Child abuse & neglect*, *111*, 104798. https://doi.org/10.1016/j.chiabu.2020.104798

Karakus, Ö. (2012). Relation between childhood abuse and self-esteem in adolescence. *International Journal of Human Sciences*, *2*(9), 753–763. https://ir.ucc.edu.gh/xmlui/handle/123456789/8058

Karatzias, A., Chouliara, Z., Power, K., & Swanson, V. (2006). Predicting general well-being from self-esteem and affectivity: An exploratory study with Scottish adolescents. *Quality of life research*, *15*, 1143-1151. https://doi.org/10.1007/s11136-006-0064-2

Kavanaugh, B. C., Dupont-Frechette, J. A., Jerskey, B. A., & Holler, K. A. (2017). Neurocognitive deficits in children and adolescents following maltreatment: Neurodevelopmental consequences and neuropsychological implications of traumatic stress. *Applied Neuropsychology: Child*, *6*(1), 64-78. https://doi.org/10.1080/21622965.2015.1079712

Khatun, N. (2021). Applications of normality test in statistical analysis. *Open Journal of Statistics*, *11*(01), 113. https://doi.org/10.4236/ojs.2021.111006

Kim, H. Y. (2019). Statistical notes for clinical researchers: simple linear regression 3–residual analysis. *Restorative dentistry & endodontics*, *44*(1). https://doi.org/10.5395/rde.2019.44.e11

Kim, J., & Cicchetti, D. (2006). Longitudinal trajectories of self-system processes and depressive symptoms among maltreated and nonmaltreated children. *Child development*, *77*(3), 624-639. https://doi.org/10.1111/j.1467-8624.2006.00894.x

Kim, J. H. (2019). Multicollinearity and misleading statistical results. *Korean journal of anesthesiology*, *72*(6), 558-569. https://doi.org/10.4097/kja.19087

Kim, S. (2014). World Health Organization quality of life (WHOQOL) assessment. *Encyclopedia of quality of life and well-being research*, 1-2. https://doi.org/10.1007/978-94-007-0753-5_3282

Kwok, S. Y., Gu, M., & Cheung, A. (2019). A longitudinal study on the relationship among childhood emotional abuse, gratitude, and suicidal ideation of Chinese adolescents. *Child abuse & neglect*, *94*, 104031. https://doi.org/10.1016/j.chiabu.2019.104031

Lee, H., & Kim, E. (2022). Global prevalence of physical and psychological child abuse during COVID-19: A systematic review and meta-analysis. *Child Abuse & Neglect*, 105984. https://doi.org/10.1016/j.chiabu.2022.105984

Luthar, S. S., Cicchetti, D., & Becker, B. (2000). The construct of resilience: A critical evaluation and guidelines for future work. *Child development*, *71*(3), 543-562. https://doi.org/10.1111/1467-8624.00164

Malik, S., & Kaiser, A. (2016). Impact of emotional maltreatment on self esteem among adolescents. *Journal of Pakistan medical association*, *66*(7), 795-799.

Masten, A. S., & Wright, M. O. D. (1998). Cumulative risk and protection models of child maltreatment. *Journal of Aggression, Maltreatment & Trauma*, *2*(1), 7-30. https://doi.org/10.1300/J146v02n01_02

McLaughlin, K. A., Garrad, M. C., & Somerville, L. H. (2022). What develops during emotional development? A component process approach to identifying sources of

psychopathology risk in adolescence. *Dialogues in clinical neuroscience.*
https://doi.org/10.31887/DCNS.2015.17.4/kmclaughlin

Meadows, P., Tunstill, J., George, A., Dhudwar, A., & Kurtz, Z. (2011). The costs
and consequences of child maltreatment. *National Institute of Economic and Social Research.*

Merrick, M. T., Ports, K. A., Ford, D. C., Afifi, T. O., Gershoff, E. T., & Grogan-
Kaylor, A. (2017). Unpacking the impact of adverse childhood experiences on adult mental
health. *Child abuse & neglect*, *69*, 10-19. https://doi.org/10.1016/j.chiabu.2017.03.016

Miller-Perrin, C. L., Perrin, R. D., & Kocur, J. L. (2009). Parental physical and
psychological aggression: Psychological symptoms in young adults. *Child abuse & neglect*,
33(1), 1-11. https://doi.org/10.1016/j.chiabu.2008.12.001

Moore, S. E., Scott, J. G., Ferrari, A. J., Mills, R., Dunne, M. P., Erskine, H. E.,
Devries, K. M., Degenhardt, L., Vos, T., Whiteford, H. A., McCarthy, M., & Norman, R. E.
(2015). Burden attributable to child maltreatment in Australia. *Child Abuse & Neglect*, *48*,
208-220. https://doi.org/10.1016/j.chiabu.2015.05.006

Moretti, M. M., & Craig, S. G. (2013). Maternal versus paternal physical and
emotional abuse, affect regulation and risk for depression from adolescence to early
adulthood. *Child abuse & neglect*, *37*(1), 4-13. https://doi.org/10.1016/j.chiabu.2012.09.015

Mwakanyamale, A. A., & Yizhen, Y. (2019). Psychological maltreatment and its
relationship with self-esteem and psychological stress among adolescents in Tanzania: a
community based, cross-sectional study. *BMC psychiatry*, *19*, 1-9.
https://doi.org/10.1186/s12888-019-2139-y

National Academies of Sciences, Engineering, and Medicine. (2016). *Preventing
bullying through science, policy, and practice.*
https://nap.nationalacademies.org/read/23482/chapter/5

Nelson, E. E., Leibenluft, E., McClure, E. B., & Pine, D. S. (2005). The social re-
orientation of adolescence: a neuroscience perspective on the process and its relation to
psychopathology. *Psychological medicine*, *35*(2), 163-174.
https://doi.org/10.1017/S0033291704003915

Norman, R. E., Byambaa, M., De, R., Butchart, A., Scott, J., & Vos, T. (2012). The long-term health consequences of child physical abuse, emotional abuse, and neglect: a systematic review and meta-analysis. *PLoS medicine*, *9*(11), e1001349. https://doi.org/10.1371/journal.pmed.1001349

Paul, E., & Eckenrode, J. (2015). Childhood psychological maltreatment subtypes and adolescent depressive symptoms. *Child abuse & neglect*, *47*, 38-47. https://doi.org/10.1016/j.chiabu.2015.05.018

Pek, J., Wong, O., & Wong, A. C. (2018). How to address non-normality: A taxonomy of approaches, reviewed, and illustrated. *Frontiers in psychology*, *9*, 2104. https://doi.org/10.3389/fpsyg.2018.02104

Pinto, R., De Castro, M. V., Silva, L., Jongenelen, I., Maia, A., & Levendosky, A. A. (2021). The impact of psychopathology associated with childhood trauma on quality of life in portuguese adolescents: A two-wave longitudinal study. *Frontiers in Psychiatry*, *12*, 650700. https://doi.org/10.3389%2Ffpsyt.2021.650700

Piontek, K., Wiesmann, U., Apfelbacher, C., Völzke, H., & Grabe, H. J. (2021). The association of childhood maltreatment, somatization and health-related quality of life in adult age: Results from a population-based cohort study. *Child Abuse & Neglect*, *120*, 105226. https://doi.org/10.1016/j.chiabu.2021.105226

Ravens-Sieberer U, Bullinger M. (2023). *KINDLR-questionnaire for measuring health-related quality of life in children and adolescents: revised version manual*. https://www.kindl.org/english/questionnaires/implementation-manual/

Rey, L., Extremera, N., & Pena, M. (2011). Perceived emotional intelligence, self-esteem and life satisfaction in adolescents. *Psychosocial intervention*, *20*(2), 227-234. http://doi.org/10.5093/in2011v20n2a10

Romano, E., Babchishin, L., Marquis, R., & Fréchette, S. (2015). Childhood maltreatment and educational outcomes. *Trauma, Violence, & Abuse*, *16*(4), 418-437. https://doi.org/10.1177/1524838014537908

Rosenthal, N. L., & Kobak, R. (2010). Assessing adolescents' attachment hierarchies: Differences across developmental periods and associations with individual

adaptation. *Journal of research on adolescence*, *20*(3), 678-706. https://doi.org/10.1111/j.1532-7795.2010.00655.x

Rutter, M. (2006). Implications of resilience concepts for scientific understanding. *Annals of the New York Academy of Sciences*, *1094*(1), 1-12. https://doi.org/10.1196/annals.1376.002

Sethi, D., Bellis, M., Hughes, K., Gilbert, R., Mitis, F., & Galea, G. (2013). *European report on preventing child maltreatment*. World Health Organization. Regional Office for Europe. https://apps.who.int/iris/handle/10665/326375

Shaffer, D. R., & Kipp, K. (2013). *Developmental psychology: Childhood and adolescence*. Cengage Learning.

Sidebotham, P. (2001). An ecological approach to child abuse: A creative use of scientific models in research and practice. *Child Abuse Review: Journal of the British Association for the Study and Prevention of Child Abuse and Neglect*, *10*(2), 97-112. https://doi.org/10.1002/car.643

Spinazzola, J., Hodgdon, H., Liang, L. J., Ford, J. D., Layne, C. M., Pynoos, R., Briggs, E. C., Stolbach, B., & Kisiel, C. (2014). Unseen wounds: The contribution of psychological maltreatment to child and adolescent mental health and risk outcomes. *Psychological Trauma: Theory, Research, Practice, and Policy*, *6*(1), 18-28. https://psycnet.apa.org/doi/10.1037/a0037766

Straus, M. A. (2001). New evidence for the benefits of never spanking. *Society*, *38*(6), 52. https://doi.org/10.1007/BF02712591

Taussig, H. N., & Culhane, S. E. (2019). Emotional maltreatment and psychosocial functioning in preadolescent youth placed in out-of-home care. In *The Effect of Childhood Emotional Maltreatment on Later Intimate Relationships* (pp. 52-74). Routledge. https://doi.org/10.1080/10926770903476008

Theodoropoulou, O., Gardner, K. J., Caswell, N., Holyoak, L., & Gonidakis, F. (2023). Effects of family functioning on eating pathology and psychosocial quality of life: The mediating role of self-esteem. *European Eating Disorders Review*, *31*(1), 121-134. https://doi.org/10.1002/erv.2947

Thoma, M. V., Bernays, F., Eising, C. M., Maercker, A., & Rohner, S. L. (2021). Child maltreatment, lifetime trauma, and mental health in Swiss older survivors of enforced child welfare practices: Investigating the mediating role of self-esteem and self-compassion. *Child Abuse & Neglect*, *113*, 104925. https://doi.org/10.1016/j.chiabu.2020.104925

Thornberry, T. P., Henry, K. L., Ireland, T. O., & Smith, C. A. (2010). The causal impact of childhood-limited maltreatment and adolescent maltreatment on early adult adjustment. *Journal of Adolescent Health*, *46*(4), 359-365. https://doi.org/10.1016/j.jadohealth.2009.09.011

Tomoda, A., Sheu, Y. S., Rabi, K., Suzuki, H., Navalta, C. P., Polcari, A., & Teicher, M. H. (2011). Exposure to parental verbal abuse is associated with increased gray matter volume in superior temporal gyrus. *Neuroimage*, *54*, S280-S286. https://doi.org/10.1016/j.neuroimage.2010.05.027

Toth, S. L., & Cicchetti, D. (1996). The impact of relatedness with mother on school functioning in maltreated children. *Journal of School Psychology*, *34*(3), 247-266. https://doi.org/10.1016/0022-4405(96)00014-3

Varia, R., & Abidin, R. R. (1999). The minimizing style: Perceptions of psychological abuse and quality of past and current relationships. *Child Abuse & Neglect, 23*(11), 1041–1055. https://doi.org/10.1016/S0145-2134(99)00083-6

Videon, T. M. (2005). Parent-child relations and children's psychological well-being: Do dads matter?. *Journal of family issues*, *26*(1), 55-78. https://doi.org/10.1177/0192513X04270262

Villalonga-Olives, E., Rojas-Farreras, S., Vilagut, G., Palacio-Vieira, J. A., Valderas, J. M., Herdman, M., et al. (2010). Impact of recent life events on the health related quality of life of adolescents and youths: The role of gender and life events typologies in a follow-up study. *Health and Quality of Life Outcomes*, *8*, 71. https://doi.org/10.1186/1477-7525-8-71

Von Rueden, U., Gosch, A., Rajmil, L., Bisegger, C., & Ravens-Sieberer, U. (2006). Socioeconomic determinants of health related quality of life in childhood and adolescence: results from a European study. *Journal of Epidemiology & Community Health*, *60*(2), 130-135. https://doi.org/10.1136/jech.2005.039792

Weber, S., Jud, A., & Landolt, M. A. (2016). Quality of life in maltreated children and adult survivors of child maltreatment: a systematic review. *Quality of life research*, *25*, 237-255. https://doi.org/10.1007/s11136-015-1085-5

Weber, S., Jud, A., Landolt, M. A., & Goldbeck, L. (2017). Predictors of health-related quality of life in maltreated children and adolescents. *Quality of Life Research*, *26*, 2717-2727. https://doi.org/10.1007/s11136-017-1615-4

Witt, A., Münzer, A., Ganser, H. G., Fegert, J. M., Goldbeck, L., & Plener, P. L. (2016). Experience by children and adolescents of more than one type of maltreatment: Association of different classes of maltreatment profiles with clinical outcome variables. *Child Abuse & Neglect*, *57*, 1-11. https://doi.org/10.1016/j.chiabu.2016.05.001

Yoon, M., Cho, S., & Yoon, D. (2019). Child maltreatment and depressive symptomatology among adolescents in out-of-home care: The mediating role of self-esteem. *Children and Youth Services Review*, *101*, 255-260. https://doi.org/10.1016/j.childyouth.2019.04.015

Appendix A

Questionnaire (French version)

Introduction and relevant information about the study

Si tu as entre 16 et 20 ans, nous avons besoin de toi ! 😄

Nous réalisons une étude qui s'intéresse aux comportements que les parents/ tuteurs·rices peuvent adopter avec leur·s adolescent·e·s et jeune·s adulte·s et la manière dont vous, les adolescent·e·s et jeune·s adulte·s, percevez ces pratiques. En effet, les réactions des parents peuvent être très variées, parfois chaleureuses, contrôlantes ou agressives. Nous souhaitons comprendre comment ces pratiques parentales ont une influence sur votre quotidien. Cela permettrait de sensibiliser les parents aux effets que certaines pratiques peuvent avoir sur vous.

Nous allons donc te demander de répondre à une série de questions dans les pages suivantes. Cela te prendra 15 minutes maximum. Certaines questions vont peut-être t'étonner ou te choquer. Essaie néanmoins de répondre à toutes les questions le plus précisément possible. **Il n'y pas de bonnes ou de mauvaises réponses ; seule ton opinion personnelle nous intéresse. Lorsque tu répondras aux questions, sois attentif·ve aux options de réponse car elles peuvent changer !**

Ton aide est vraiment précieuse pour nous ! Il est important que tu te souviennes que tes réponses sont **anonymes et confidentielles**. Nous n'aurons donc aucun moyen de t'identifier une fois que nous aurons récolté les données. Tu es libre de ne pas répondre à certaines questions ou à l'ensemble du questionnaire. Tu es aussi libre d'arrêter à tout moment en cas d'inconfort de ta part. Néanmoins, les réponses données seront enregistrées et il ne sera pas possible pour nous de retirer ta participation après cela dû au fait que ton anonymat est préservé. En poursuivant sur la page suivante, tu nous donnes ton consentement quant à ta participation à cette étude.

D'avance, un grand merci pour ton aide et ta participation !

Au nom de l'équipe de recherche,
Valentina Ballerini, Magdalena Babic et Sabrina Rizzo

Avant de commencer, nous souhaitons te dire que nous organisons un concours te permettant de gagner un bon Netflix de 40 CHF. Tu pourras participer en suivant les indications données à la fin du questionnaire.

Tél :143
Site : www.143.ch

Les contacts ci-dessus sont ceux de « La Main Tendue ». Il s'agit d'un service d'aide pour toute personne en difficulté. Ton-ta interlocuteur-rice sera compréhensif-ve, sensible et sans préjugés.

The psychological aggression subscale of the Conflict Tactics Scale Parent Child-Child Adult (CTSPC-CA: Straus, 2001)

Voici une liste de comportements que la figure maternelle et la figure paternelle que tu nous as indiquée ont pu avoir <u>au cours de l'année écoulée ou l'année précédant ton départ de la maison</u>. Pour chaque comportement, indique la fréquence de ces derniers à l'aide des options de réponse suivantes. Par exemple, si tu n'as rencontré un de ces comportements qu'une fois, sélectionne "une fois". Si tu as déjà rencontré ce comportement, mais pas cette année ou l'année précédent ton départ de la maison, sélectionne "jamais".

	Jamais	Pas dans l'année	Une fois	Deux fois	3 à 5 fois	6 à 10 fois	11 à 20 fois	Plus que 20 fois
Ma mère m'a crié ou hurlé dessus.	O	O	O	O	O	O	O	O
Même énoncé, mais concernant ton père.	O	O	O	O	O	O	O	O
Ma mère m'a insulté·e ou adressé de gros mots.	O	O	O	O	O	O	O	O
Même énoncé, mais concernant ton père.	O	O	O	O	O	O	O	O
Ma mère m'a menacé·e de m'envoyer vivre ailleurs ou de me mettre à la porte.	O	O	O	O	O	O	O	O
Même énoncé, mais concernant ton père.	O	O	O	O	O	O	O	O
Ma mère a menacé de me frapper ou de me donner une fessée mais ne l'a pas fait.	O	O	O	O	O	O	O	O
Même énoncé, mais concernant ton père.	O	O	O	O	O	O	O	O
Ma mère m'a traité·e d'idiot·e ou de fainéant·e ou d'autres mots de ce genre.	O	O	O	O	O	O	O	O
Même énoncé, mais concernant ton père.	O	O	O	O	O	O	O	O

The Self-Perception Profile for Adolescence (SPPA: Harter, 1988, 2012)

Voici maintenant quelques affirmations qui te concernent. À l'aide des options de réponse ci-dessous, sélectionne la réponse qui te semble la plus appropriée.

	Complètement vrai				Complètement faux
Je ne suis pas satisfait·e de ma vie.	O	O	O	O	O
Je ne suis pas content·e de la façon dont je mène mon existence.	O	O	O	O	O
Je suis, la plupart du temps, content·e de moi-même.	O	O	O	O	O
J'aimerais souvent être quelqu'un d'autre.	O	O	O	O	O
Je suis content·e d'être comme je suis.	O	O	O	O	O

The Kiddo-KINDL – Teenagers's Version (Erhart et al., 2009)

À l'aide des options de réponse ci-dessous, nous aimerions que tu nous indiques la fréquence à laquelle ces choses t'ont concerné·e <u>au cours de la semaine dernière</u>.

	Jamais	Rarement	Parfois	Souvent	Toujours
J'ai beaucoup ri et je me suis bien amusé·e.	O	O	O	O	O
Je me suis embêté·e.	O	O	O	O	O
Je me suis senti·e seul·e.	O	O	O	O	O
Je me suis senti·e craintif·ve ou pas sûr·e de moi.	O	O	O	O	O
J'ai fait quelque chose avec des ami·e·s.	O	O	O	O	O
J'ai été « bien accueilli·e » par les autres.	O	O	O	O	O
Je me suis bien entendu·e avec mes ami·e·s.	O	O	O	O	O
J'ai eu le sentiment d'être différent·e des autres.	O	O	O	O	O
J'ai bien réussi à faire mes devoirs à l'école.	O	O	O	O	O
Je me suis intéressé·e aux cours.	O	O	O	O	O
Je me suis fait·e du souci pour mon avenir.	O	O	O	O	O
J'ai eu peur d'avoir de mauvaises notes.	O	O	O	O	O

Appendix B

Informatory document (French version)

UNI
FR
■

UNIVERSITÉ DE FRIBOURG
UNIVERSITÄT FREIBURG

Faculté des lettres et des sciences humaines
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Fribourg, août 2022

Étude sur l'attitude des figures parentales face à des adolescent-e-s et jeunes adultes.

Madame, Monsieur,

L'adolescence est une période de la vie durant laquelle surviennent de nombreux changements tant physiques que psychologiques. La perception de ces derniers est grandement influencée par l'environnement familial et principalement par les pratiques parentales. La recherche actuelle démontre en effet que les différences quant à la manière de considérer les enfants augmentent à l'adolescence, notamment en fonction du genre. La relation entre figures parentales et leurs adolescent-e-s évolue en conséquence, le comportement de l'un-e influençant celui de l'autre et vice-versa. Il est dès lors important de connaître l'impact de ce phénomène sur le développement du jeune. Les résultats de cette recherche permettront de fournir des données quant à la perception des adolescent-e-s et jeunes adultes des conduites parentales qu'ils-elles vivent et de sensibiliser les figures parentales sur ces dernières.

Il existe peu d'études menées en Suisse à l'heure actuelle sur la perception des adolescent-e-s et jeunes adultes sur les pratiques parentales et les effets de ces dernières sur leur développement. Afin d'apercevoir une esquisse de cette problématique, le département de psychologie de l'Université de Lausanne, en collaboration avec le département de psychologie de l'Université de Fribourg/Freiburg, conduit un projet de recherche d'ampleur internationale. Cette étude a été examinée et approuvée par la commission d'éthique (N° dossier : 2022-780 R1).

Dans le cadre d'une enquête en ligne d'une durée de 15 minutes, nous demandons aux jeunes âgé-e-s entre 16 et 20 ans de répondre à des affirmations concernant certaines pratiques parentales envers eux-elles. Nous leur demandons également de partager le lien de l'enquête à leurs pairs afin d'obtenir un grand nombre d'avis au sein de différents milieux familiaux. En remerciement de leur participation, les personnes auront la possibilité de gagner un bon Netflix grâce à un tirage au sort en ligne. La participation est facultative et est possible en fournissant une adresse email qui sera irrévocablement supprimée une fois que le tirage au sort sera terminé. Il ne sera pas possible d'associer les réponses du questionnaire aux participant-e-s car le tirage au sort se situe sur une autre plateforme.

Toutes les données récoltées seront anonymes et seront utilisées seulement à des fins de recherche. Elles seront stockées sur un serveur universitaire et seront accessibles seulement aux personnes travaillant au sein du projet. Il est important de noter que des sujets sensibles sont

abordés dans le questionnaire et que ce dernier peut être stoppé par les participant-e-s à tout moment sans conséquences et sans besoin de se justifier. Ces sujets sensibles concernent principalement la manière dont les parents gèrent un comportement qu'ils désapprouvent chez leur adolescent-e. Les personnes intéressées peuvent répondre à l'étude en utilisant le lien ou le code QR suivant. Merci beaucoup pour votre collaboration et votre volonté de transmettre le lien de l'étude aux jeunes de votre association.

https://unifr.eu.qualtrics.com/jfe/form/SV_9mKd4zFUuc1K6mG

Au nom de l'équipe de recherche, nous vous remercions grandement pour votre participation et votre soutien. N'hésitez pas à nous contacter si vous avez des questions.

Au nom de l'équipe de recherche, nous vous remercions grandement pour votre participation et votre soutien. N'hésitez pas à nous contacter si vous avez des questions.

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Appendix C

Flyers (French version)

UNI FR

AS-TU ENTRE 16 ET 20 ANS ? NOUS AVONS BESOIN DE TOI !

HAI TRA I 16 E I 20 ANNI? ABBIAMO BISOGNO DI TE!

Grâce à un questionnaire en ligne, nous aimerions connaître ton opinion sur le comportement que tes figures parentales peuvent adopter avec toi. De plus, tu auras la possibilité de gagner un bon Netflix de 25 CHF ou, pour les étudiant-es- en psychologie, de recevoir 1 heure de points d'expériences !

L'étude est conforme aux directives éthiques de la loi sur la recherche sur l'homme. La participation est volontaire et peut être retirée à tout moment et sans donner de raison. Tous les membres du projet sont soumis à la confidentialité. Le traitement confidentiel des données et ton anonymat est garanti.

Responsable de l'étude : Dr Cornelia Rolli Salathé (cornelia.rollisalathe@unifr.ch)

Collaboratrices scientifiques : Valentina Ballerini (BSc) (valentina.ballerini@unifr.ch), Magdalena Babic (BSc) (magdalena.babic@unifr.ch), Sabrina Rizzo (BSc) (sabrina.rizzo@unifr.ch)

Tes figures parentales ont-elles toujours raison ?

Donne-nous ton avis !

UNI FR

As-tu entre 16 et 20 ans ? Nous avons besoin de toi !

Grâce à un questionnaire d'une durée de 15 minutes, nous aimerions connaître ton opinion sur le comportement que tes figures parentales peuvent adopter avec toi. De plus, tu auras la possibilité de participer à un tirage au sort en ligne et de gagner un **bon Netflix** de **25 CHF** !

L'étude est conforme aux directives éthiques de la loi sur la recherche sur l'homme. La participation est volontaire et peut être retirée à tout moment et sans donner de raison. Tous les membres du projet sont soumis à la confidentialité. Le traitement confidentielles des données et ton anonymat est garanti.

Pour participer, il te suffit de scanner le QR code ci-dessous :

Nous apprécierons grandement que tu **partages** l'enquête à tes ami-e-s et au personne de ton entourage. Merci beaucoup de ton soutien !

N'hésite pas à nous **contacter** en cas de besoin !

| Responsable de l'étude:	Collaboratrices scientifiques:		
Dr Cornelia Rolli Salathé	Valentina Ballerini (BSc)	Magdalena Babic (BSc)	Sabrina Rizzo (BSc)
cornelia.rollisalathe@unifr.ch	valentina.ballerini@unifr.ch	magdalena.babic@unifr.ch	sabrina.rizzo@unifr.ch

Appendix D

Normality test for primary study variables

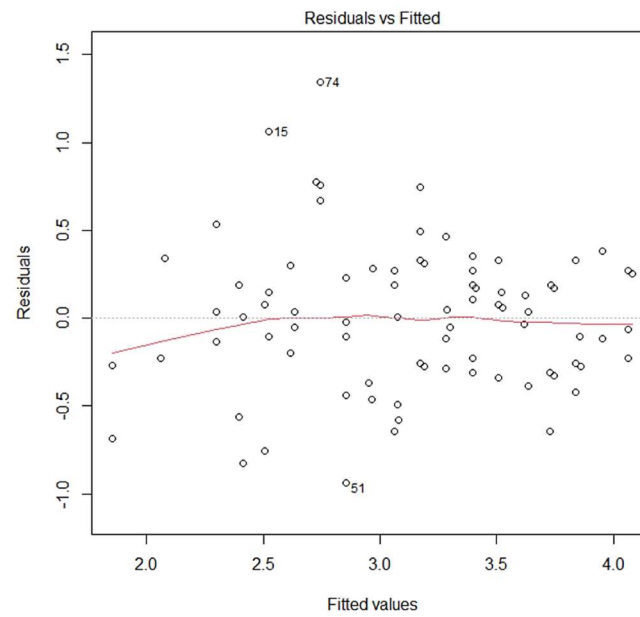Univariate normality: histogram and boxplot of the dependent variable "Quality of life"
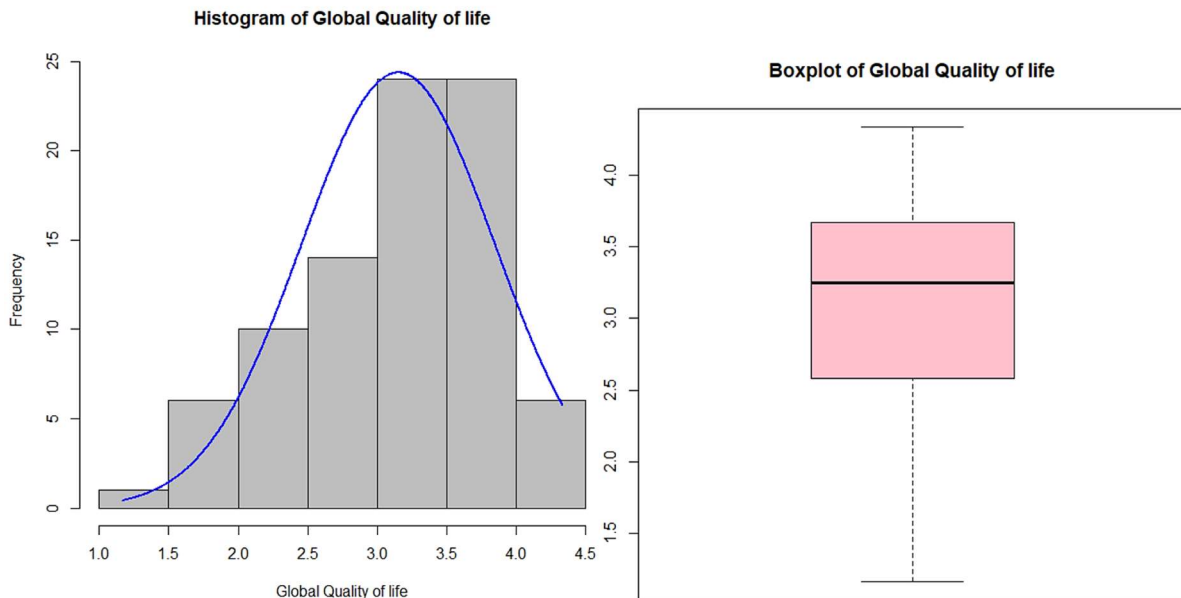
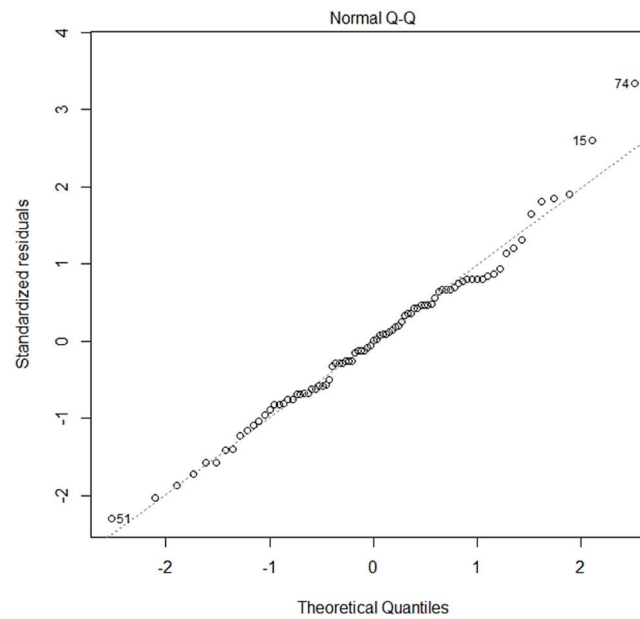Bivariate normality: Scatterplot of the primary study variables
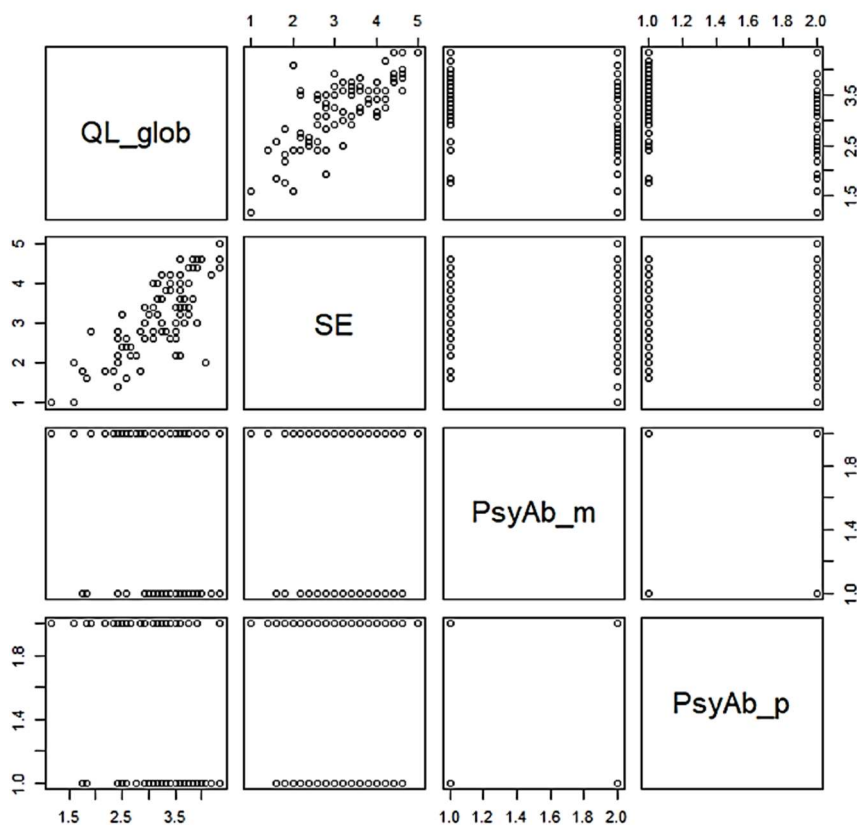
Note. QL_glob = Quality of life, SE = Self-esteem, PsyAb_m = Maternal psychological abuse, PsyAb_p = Paternal psychological abuse.
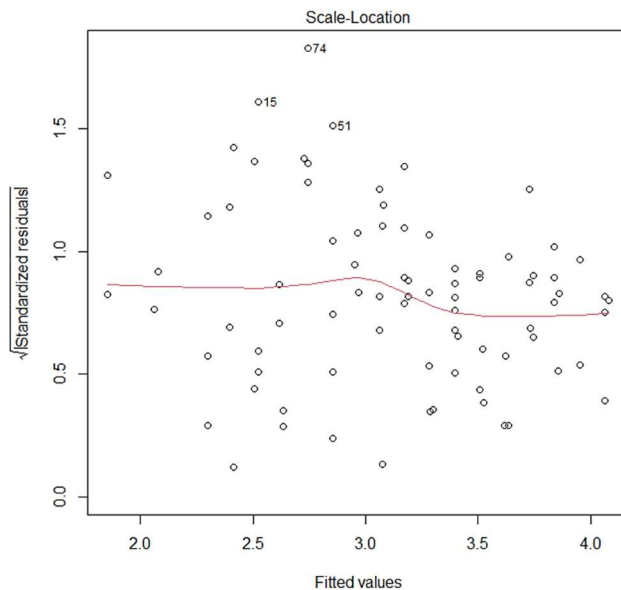
Residuals linearity: scatterplot of residuals against fitted value
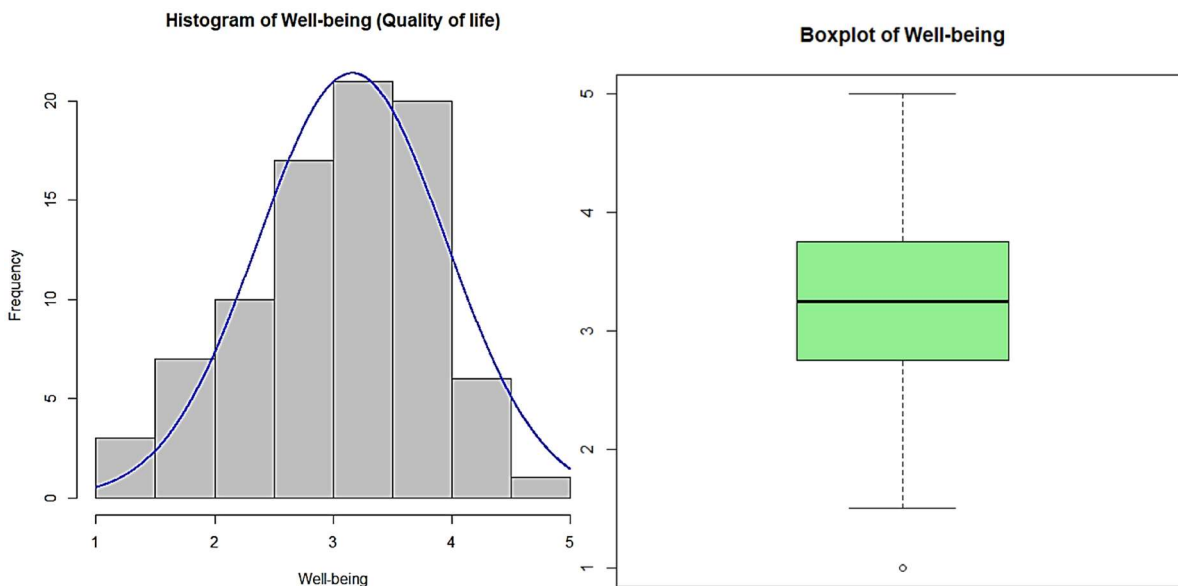

Residuals normality: Q-Q plot of standardised residuals of the primary study variables

Equality of variance of residuals: scatterplot of standardized residuals and predicted value
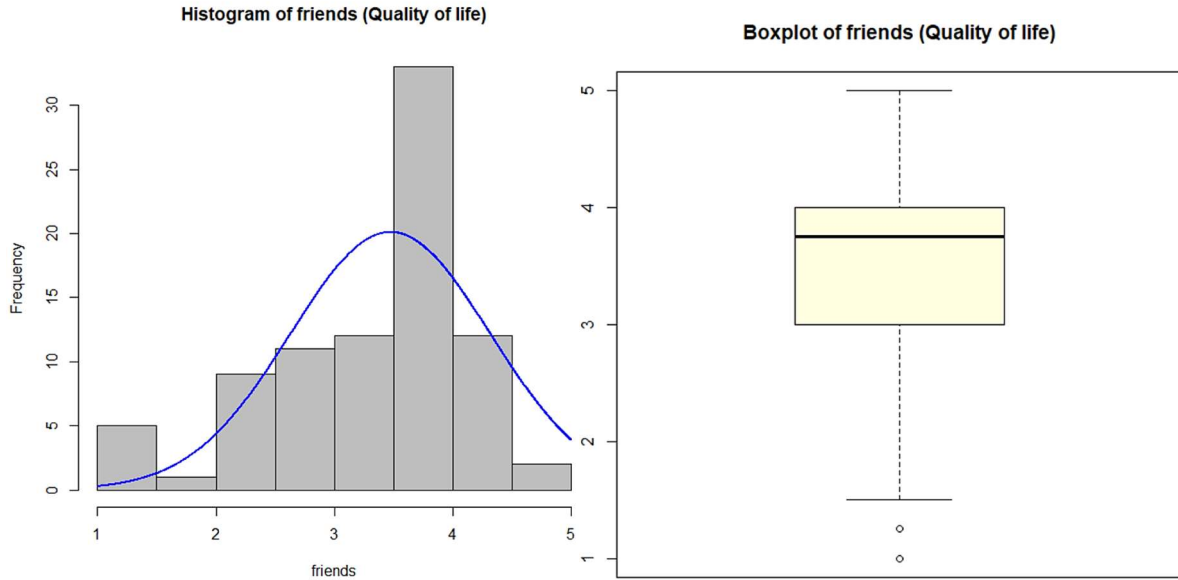
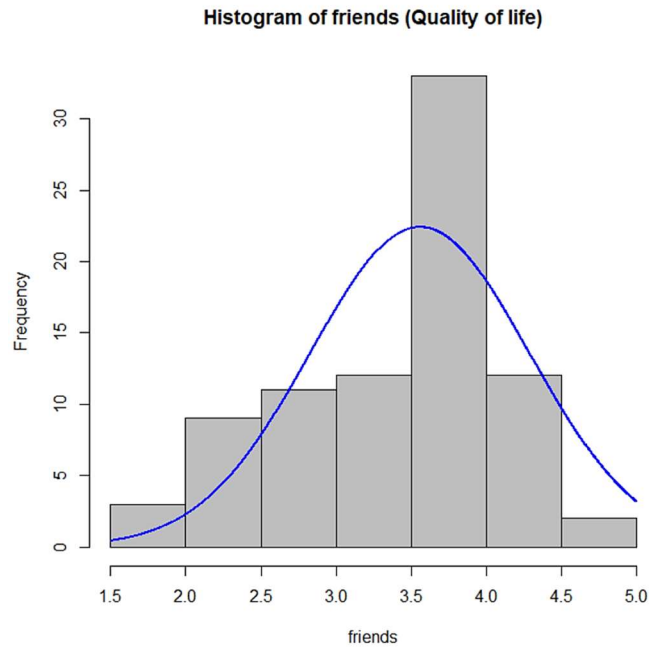## Normality test for exploratory analysis

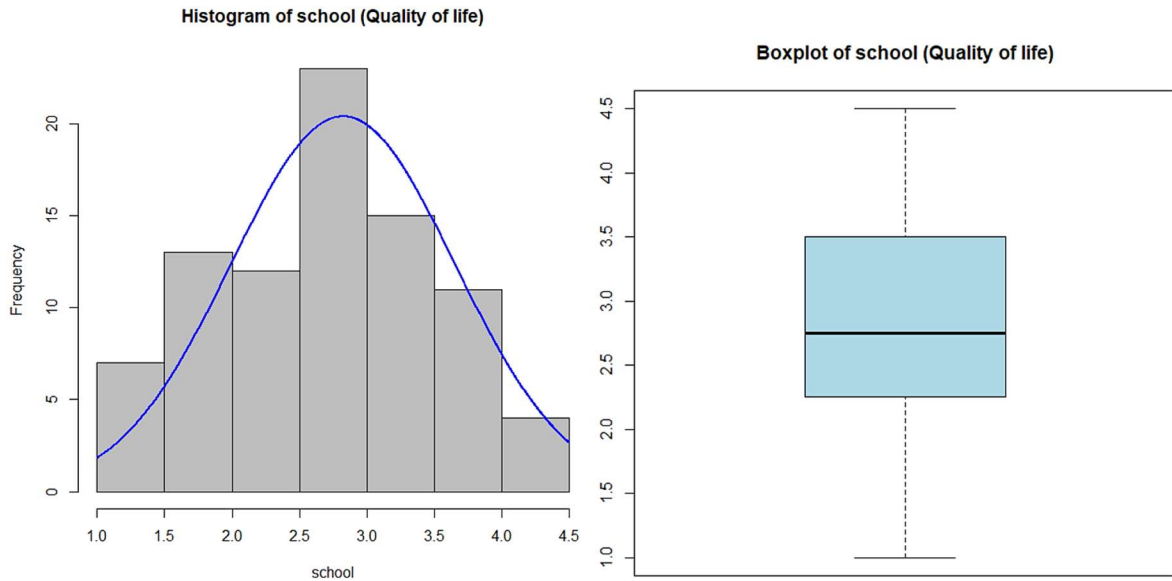Univariate normality: histogram and boxplot of the dependent variable "Well-being"

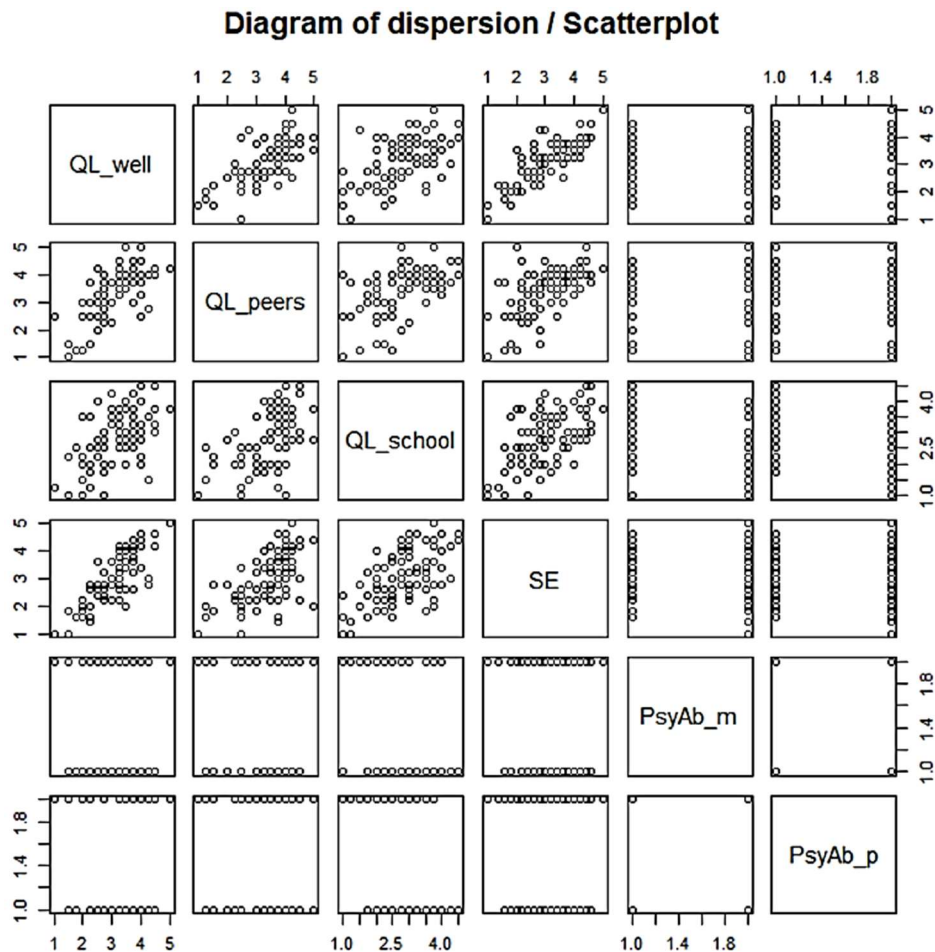Univariate normality: histogram and boxplot of the dependent variable "Friends"

Histogram of the dependent variable "Friends", without the outliers

Univariate normality: histogram and boxplot of the dependent variable "School"
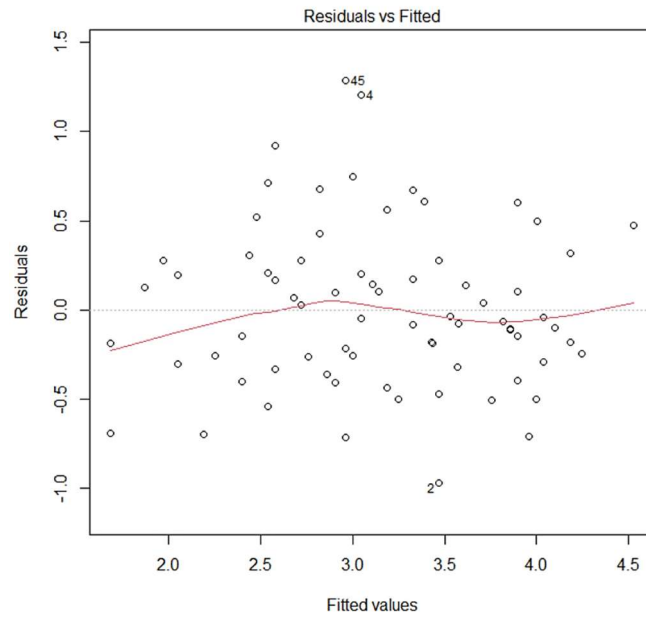
Bivariate normality: Scatterplot of the exploratory variables

Note. QL_well = Well-being, QL_peers = Friends, QL_school = School, SE = Self-esteem, PsyAb_m = Maternal psychological abuse, PsyAb_p = Paternal psychological abuse.

Residuals linearity: scatterplot of residuals vs fitted value, of the dependent variable "Well-being"

Residuals normality: Q-Q plot of standardised residuals for the dependent variable "Well-being"
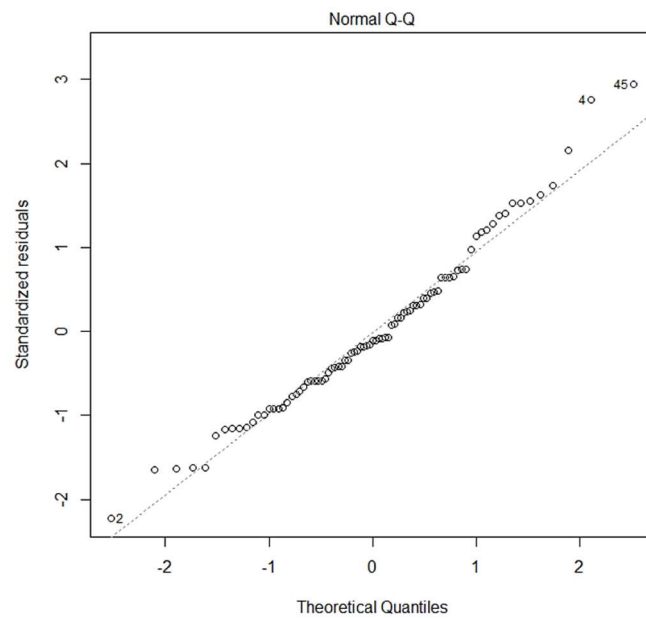
Equality of variance of residuals: scatterplot of standardized residuals and predicted value, for the dependent variable "Well-being"

Residuals linearity: scatterplot of residuals vs fitted value, for the dependent variable "Friends"

Residuals normality: Q-Q plot of standardised residuals for dependent variable "Friends"

Equality of variance of residuals: scatterplot of standardized residuals and predicted value, for the dependent variable "Friends"
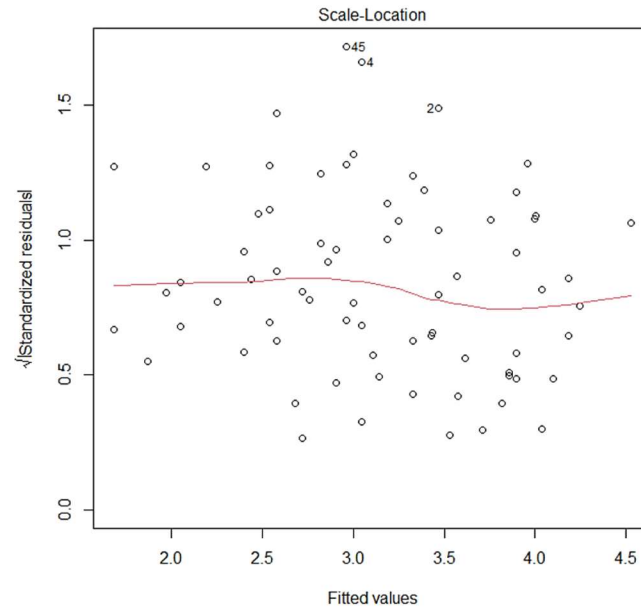

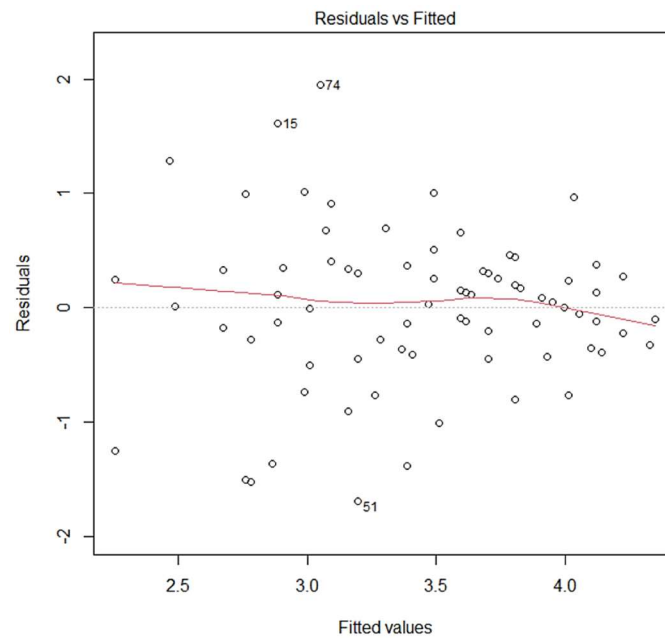Residuals linearity: scatterplot of residuals vs fitted value, of the dependent variable "School"

Residuals normality: Q-Q plot of standardised residuals of dependent variable "School"
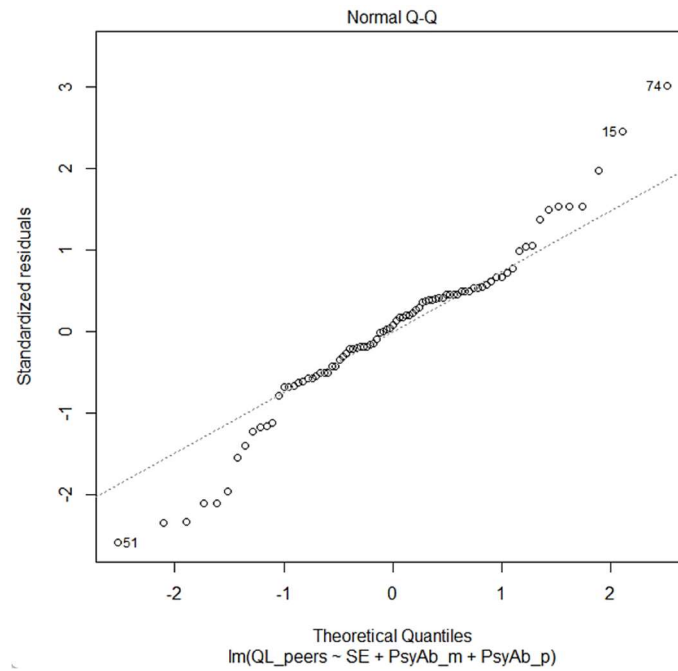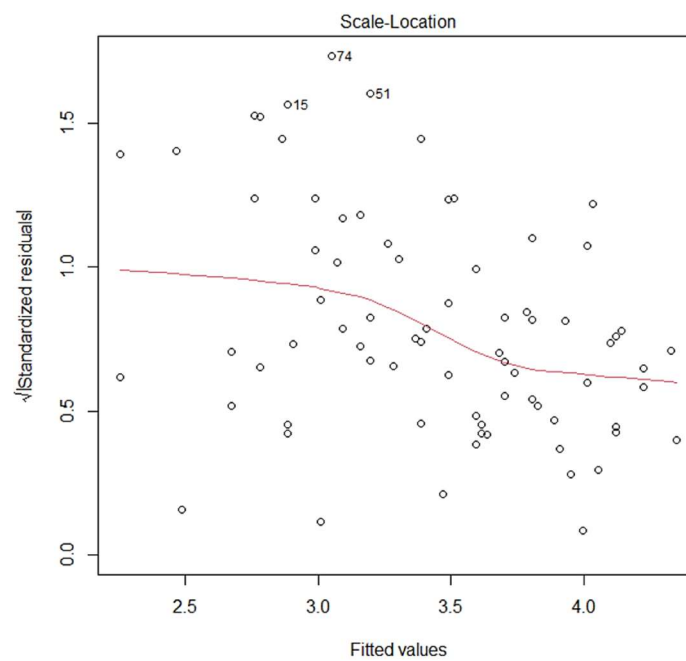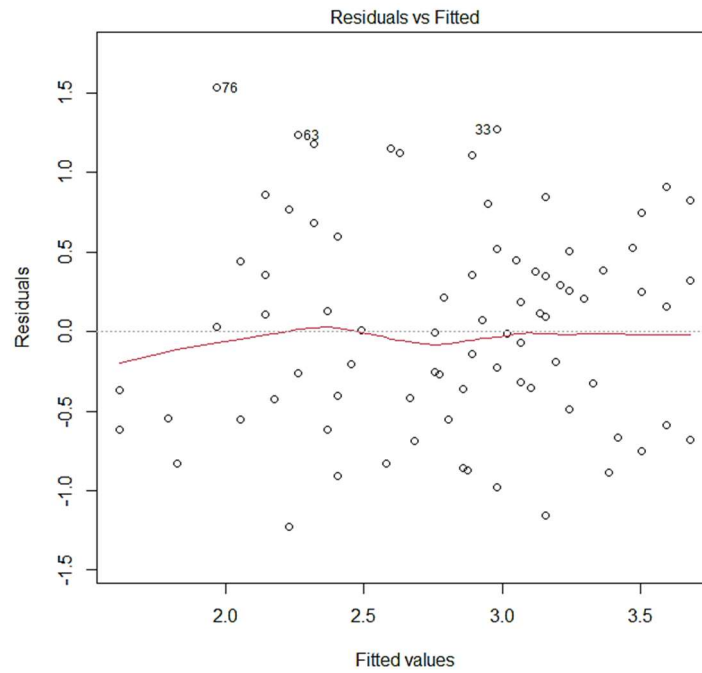

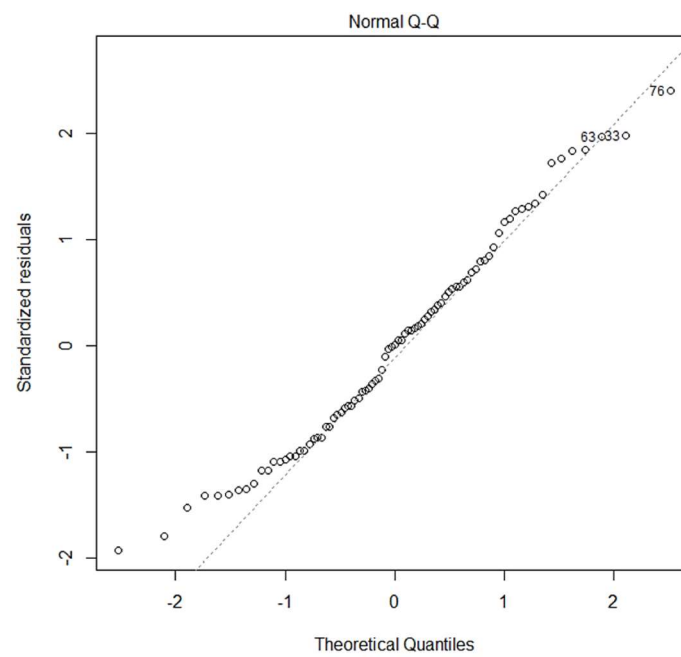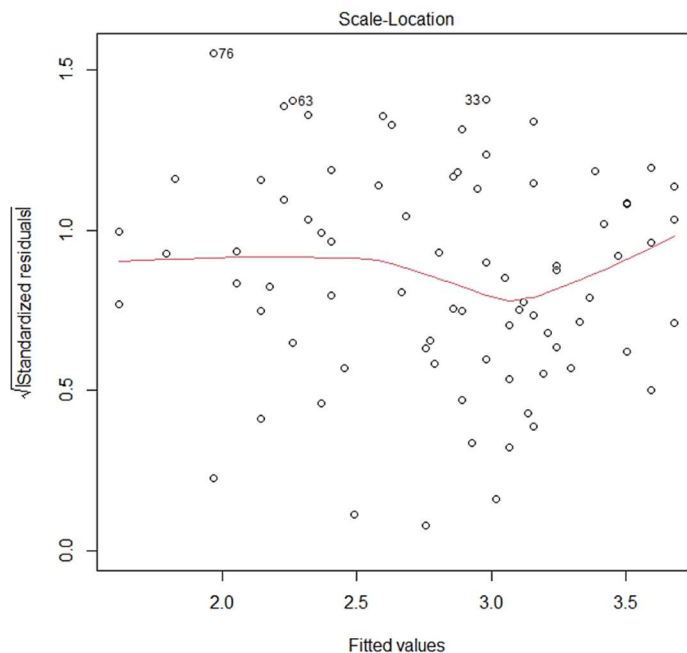Equality of variance of residuals: scatterplot of standardized residuals and predicted value, for the dependent variable "School"

Correlational matrix of exploratory analysis

Correlation matrix of Paternal psychological abuse, Maternal psychological abuse, Self-esteem, and Quality of life's dimensions, i.e., Well-being, Friends, School

Variable	1	2	3	4
Well-being dimension				
1. Well-being[a]	–			
2. Maternal psychological abuse	-.18	–		
3. Paternal psychological abuse	-.23*	.53***	–	
4. Self-esteem[a]	.83***	-.32**	-.23*	–
Friends dimension				
1. Friends[a]	–			
2. Maternal psychological abuse	-.22*	–		
3. Paternal psychological abuse	-.26*	.53***	–	
4. Self-esteem[a]	.55***	-.32**	-.23*	–
School dimension				
1. School[a]	–			
2. Maternal psychological abuse	-.30**	–		
3. Paternal psychological abuse	-.42***	.53***	–	
4. Self-esteem[a]	.56***	-.32*	-.23*	–

Note: $N = 85$. Psychological abuse was coded 1 for less frequent psychological abuse and 2 for frequent psychological abuse.

[a]One participant did not respond and is therefore not included in the table.

*$p < .05$. **$p < .01$. ***$p < 0.001$

Regression analyses of exploratory analyses

Regression analysis for Mediation by Self-esteem on the relationship between Paternal psychological abuse and Well-being

Variable	B	t	B 95% CI	SE B	β	R^2	ΔR^2
Step 1						.05*	
Intercept	3.32***	29.93	[3.10, 3.54]	0.11	–		
Paternal psychological abuse	-0.36*	-2.14	[-0.70, -0.03]	0.17	-0.23		
Step 2						.05*	
Intercept	3.30***	24.90	[3.03, 3.56]	0.13	–		
Paternal psychological abuse	-0.44*	-2.17	[-0.85, -0.04]	0.20	-0.23		
Step 3						.68**	.63
Intercept	1.07***	5.68	[0.69, 1.44]	0.19	–		
Paternal psychological abuse	-0.06	-0.62	[-0.27, 0.14]	0.10	-0.04		
Self-esteem	0.68***	12.76	[0.58, 0.79]	0.05	0.82		
Average casual mediation effects	-0.30*		[-0.64, -0.02]				
Total effect	-0.36*		[-0.73, -0.01]				

Note: $N = 85$. Psychological abuse was coded 1 for less frequent psychological abuse and 2 for frequent psychological abuse. Step 1 shows the Regression model with participants' Well-being and Paternal psychological abuse. Step 2 shows the Regression model with Paternal psychological abuse and participants' Self-esteem. Step 3 shows the Regression model with all three variables. B represents unstandardised regression weights and β the standardised regression weights. The lower and upper limits of a 95%-confidence interval are in brackets. R^2 indicates the criterion's variance explained by the model. Average casual mediation effects indicate the indirect effect of the predictor on the criterion, through the mediator. Total effect stands for direct + indirect effect of the predictor on the criterion.

*$p < .05$. **$p < .01$. ***$p < 0.001$

Regression analysis for Mediation by Self-esteem on the relationship between Maternal psychological abuse and Well-being

Variable	B	t	B 95% CI	SE B	β
Step 1					
Intercept	3.29***	28.19	[3.06, 3.53]	0.12	–
Maternal psychological abuse	-0.28	-1.66	[-0.62, -0.06]	0.17	-0.18

Note: $N = 85$. Psychological abuse was coded 1 for less frequent psychological abuse and 2 for frequent psychological abuse. Step 1 shows the Regression Model with participants' Well-being and Paternal psychological abuse. B represents unstandardised regression weights and β the standardised regression weights. The lower and upper limits of a 95%-confidence interval are in brackets.

***$p < 0.001$

Regression analysis for Mediation by Self-esteem on the relationship between Paternal psychological abuse and Friends

Variable	B	t	B 95% CI	SE B	β	R²	ΔR²
Step 1						.07*	
Intercept	3.67***	31.44	[3.44, 3.90]	0.12	–		
Paternal psychological abuse	-0.46*	-2.57	[-0.82, -0.10]	0.18	-0.27		
Step 2						.05*	
Intercept	3.30***	24.90	[3.03, 3.56]	0.13	–		
Paternal psychological abuse	-0.44*	-2.17	[-0.85, -0.04]	0.20	-0.23		
Step 3						.39***	.32
Intercept	1.97***	7.11	[1.25, 2.43]	0.28	–		
Paternal psychological abuse	-0.23	-1.55	[-0.36, 0.26]	0.15	-0.14		
Self-esteem	0.51***	6.51	[0.37, 0.70]	0.08	0.58		
Average casual mediation effects	-0.23*		[-0.47, -0.02]				
Total effect	-0.46*		[-0.83, -0.11]				

Note: N = 85. Psychological abuse was coded 1 for less frequent psychological abuse and 2 for frequent psychological abuse. Step 1 shows the Regression model with participants' Friends dimension and Paternal psychological abuse. Step 2 shows the Regression model with Paternal psychological abuse and participants' Self-esteem. Step 3 shows the Regression model with all three variables. *B* represents unstandardised regression weights and *β* the standardised regression weights. The lower and upper limits of a 95%-confidence interval are in brackets. *R²* indicates the criterion's variance explained by the model. Average casual mediation effects indicate the indirect effect of the predictor on the criterion, through the mediator. Total effect stands for direct + indirect effect of the predictor on the criterion.
*p < .05. ***p < 0.001

Regression analysis for Mediation by Self-esteem on the relationship between Maternal psychological abuse and Friends

Variable	B	t	B 95% CI	SE B	β	R²	ΔR²
Step 1						.05*	
Intercept	3.65***	29.61	[3.40, 3.90]	0.12	–		
Maternal psychological abuse	-0.38*	-2.09	[-0.73, -0.02]	0.18	-0.22		
Step 2						.10**	
Intercept	3.40***	25.23	[3.13, 3.66]	0.13	–		
Maternal psychological abuse	-0.61**	-3.09	[-1.00, -0.22]	0.20	-0.32		
Step 3						.37***	.32
Intercept	1.84***	6.19	[1.25, 2.43]	0.30	–		
Maternal psychological abuse	-0.05	-0.33	[-0.36, 0.26]	0.16	-0.03		
Self-esteem	0.53***	6.49	[0.37, 0.70]	0.08	0.60		
Average casual mediation effects	-0.32**		[-0.56, -0.11]				
Total effect	0.86*		[-0.72, -0.03]				

Note: N = 85. Psychological abuse was coded 1 for less frequent psychological abuse and 2 for frequent psychological abuse. Step 1 shows the Regression model with participants' Friends dimension and Maternal psychological abuse. Step 2 shows the Regression model with Maternal psychological abuse and participants' Self-esteem. Step 3 shows the

Regression model with all three variables. *B* represents unstandardised regression weights and *β* the standardised regression weights. The lower and upper limits of a 95%-confidence interval are in brackets. R^2 indicates the criterion's variance explained by the model. Average casual mediation effects indicate the indirect effect of the predictor on the criterion, through the mediator. Total effect stands for direct + indirect effect of the predictor on the criterion. *p < .05. **p < .01. ***p < 0.001

Regression analysis for Mediation by Self-esteem on the relationship between Paternal psychological abuse and School

Variable	*B*	*t*	*B* 95% CI	*SE B*	*β*	R^2	ΔR^2
Step 1						.18*	
Intercept	3.12***	85.85	[2.91, 3.34]	0.11	–		
Paternal psychological abuse	-0.71***	-4.24	[-1.04, -0.38]	0.17	-0.42		
Step 2						.05*	
Intercept	3.30***	24.90	[3.03, 3.56]	0.13	–		
Paternal psychological abuse	-0.44*	-2.17	[-0.85, -0.04]	0.20	-0.23		
Step 3						.41***	.23
Intercept	1.70***	6.32	[1.17, 2.24]	0.27	–		
Paternal psychological abuse	-0.52***	-3.53	[-0.81, -0.22]	0.15	-0.31		
Self-esteem	0.43***	5.62	[0.28, 0.58]	0.08	0.49		
Average casual mediation effects	-0.19*		[-0.41, -0.02]				
Total effect	-0.71***		[-1.02, -0.37]				

Note: *N* = 85. Psychological abuse was coded 1 for less frequent psychological abuse and 2 for frequent psychological abuse. Step 1 shows the Regression model with participants' School dimension and Paternal psychological abuse. Step 2 shows the Regression model with Paternal psychological abuse and participants' Self-esteem. Step 3 shows the Regression model with all three variables. *B* represents unstandardised regression weights and *β* the standardised regression weights. The lower and upper limits of a 95%-confidence interval are in brackets. R^2 indicates the criterion's variance explained by the model. Average casual mediation effects indicate the indirect effect of the predictor on the criterion, through the mediator. Total effect stands for direct + indirect effect of the predictor on the criterion. *p < .05. **p < .01. ***p < 0.001

Regression analysis for Mediation by Self-esteem on the relationship between Maternal psychological abuse and School

Variable	*B*	*t*	*B* 95% CI	*SE B*	*β*	R^2	ΔR^2
Step 1						.09**	
Intercept	3.06***	25.70	[2.82, 3.29]	0.12	–		
Maternal psychological abuse	-0.49**	-2.84	[-0.84, -0.15]	0.17	-0.30		

Variable	B	t	B 95% CI	$SE\ B$	β	R^2	ΔR^2
Step 2						.1**	
Intercept	3.40***	25.23	[3.13, 3.66]	0.13	–		
Maternal psychological abuse	-0.61**	-3.09	[-1, -0.22]	0.20	-0.32		
Step 3						.33**	.24
Intercept	1.50***	5	[0.90, 2.11]	0.30	–		
Maternal psychological abuse	-0.22	-1.37	[-0.53, 0.1]	0.16	-0.13		
Self-esteem	0.46***	5.47	[0.29, 0.62]	0.08	0.52		
Average casual mediation effects	-0.28***		[-0.5, -0.09]				
Total effect	-0.49**		[-0.8, -0.13]				

Note: $N = 85$. Psychological abuse was coded 1 for less frequent psychological abuse and 2 for frequent psychological abuse. Step 1 shows the Regression model with participants' School dimension and Maternal psychological abuse. Step 2 shows the Regression model with Maternal psychological abuse and participants' Self-esteem. Step 3 shows the Model regression with all three variables. *B* represents unstandardised regression weights and *β* the standardised regression weights. The lower and upper limits of a 95%-confidence interval are in brackets. R^2 indicates the criterion's variance explained by the model. Average casual mediation effects indicate the indirect effect of the predictor on the criterion, through the mediator. Total effect stands for direct + indirect effect of the predictor on the criterion. *$p < .05$. **$p < .01$. ***$p < 0.001$

Appendix E

Confirmation of the Ethic Committee of the Psychology Department of the Fribourg's University (N° dossier: 2022-780 R1)

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UNIVERSITÉ DE FRIBOURG
UNIVERSITÄT FREIBURG

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Department of Psychology

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Internal Review Board of the Department of Psychology University of Fribourg

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Cornelia Rolli
Departement of Psychology
University of Fribourg

Fribourg, 25 NOV 2022

Decision of the Internal Review Board

The Internal Review Board of the Department of Psychology of the University of Fribourg has closely examined the following research project by means of an electronic circulation of files.

Title of the research project   Code of study: Ref-No.: 2022-780 A1

Relationship between adolescents and their caregivers

Members of the Internal Review Board

The Internal Review Board has held its meeting in the following composition and hence had the quorum. The Internal Review Board draws upon the rules of the implementation of ethical principles and the definition of a code of conduct for the psychological research at the Department of Psychology at the University of Fribourg (1.7.2011).

	Name, given name	Professional position / Title	m	f	Involved members		
					yes	no	
						absent	withdrawn
Head	Klumb, Petra	Prof.	☐	x	x	☐	☐
Representative Professoriate	Kurth, Salomé	Prof.	☐	x	x	☐	☐
Representative Professoriate	Vetter, Petra	Prof.	☐	x	x	☐	☐
Representative scientific collaborators	Richter, Marianne	M.Sc.	☐	x	x	☐	☐
Representative students	Duran, Marlene		☐	x	x	☐	☐
External member	Bresciani, Jean-Pierre	Prof.	x	☐	x	☐	☐

Main applicant (responsible director of study at the site of experiment)

Prof. Dominik Schöbi

Address: Department of Psychology, University of Fribourg

The Internal Review Board bases its evaluation on the documents as listed:

x   on the basic request form dated 14 APR 22, revision dated 10 JUL 22, amendment dated 31 OCT 22
☐   on the attached cover letters
x   on the category „evaluated documents" (see below)

Way of procedure:
x   Approval of single study
☐   Approval of series of studies
☐   Simplified procedure (Alteration of approval)
☐   Subsequent Evaluation

The Internal Review Board issues the following **resolution:**

x   **A**   **positive**
☐   **B**   **positive with suggestions**
☐   **C**   **conditions**
        ☐   subsequent evaluation by the ethics committee necessary
        ☐   written notification to the ethics committee sufficient
☐   **D**   **negative (with justification and recommendations for subsequent evaluation)**
☐   **E**   **refusal to consider (with justification)**

☐ The resolution applies to all examiners listed by name being in the scope of responsibility of the Internal Review Board (according to separate detailed list).

The resolution is effective within the following period:

x   Period as indicated in the basic request form.
☐   From .... to ....

Evaluated documents

2022-780_Ethics_Application___Parental_Practises.pdf
2022-780_Appendix_1.pdf
2022-780_Appendix_2.pdf
2022-780_Appendix_3.pdf
2022-780_Appendix_4.docx
2022-780_Appendix_5.docx

Plus French-translation_STarT-Back-Tool, QDSA-1-1, Social pain questionnaire

(expandable)

Suggestions

(expandable)

Conditions

Please clarify the following points, and send us a note explaining how you addressed the points:
-

(expandable)

Justification for a negative resolution and recommendation for re-evaluation
-/-

(expandable)

Justification for refusal to consider
-/-

(expandable)

Pro Memoria: **Responsibilities of the main investigator**

Obligation to report :

    a) immediately by severe non desired incidents

    b) new findings, which come up during the study and which influence security of the participants and/or the continuation of the study

    c) severe modifications of the protocol (e.g. experimental design)

    d) end or abandonment of study

For the Internal Review Board:

P. Klumb

Prof. Petra Klumb

Declaration of honesty

I declare on my honour that I have completed my Master's thesis alone and without unauthorised external assistance.

Date, place:

09.08.2023, Fribourg

Signature: