



Life satisfaction and Early Maladaptive Schemas in children in residential care

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ABSTRACT

Life satisfaction is the degree to which a person positively evaluates the overall quality of life. The aim of the present study is to illustrate the levels of life satisfaction both in total and per domain and to investigate the relationship of EMS and EMS domains with life satisfaction in children living in residential care. Sixty six children (51,5% were girls) with mean age $12.9 \pm 2,4$ participated in our study. Participants of our study were children and adolescents that were referred to the Day Center “The house of the Child” and lived in caring homes of “ the Smile of the Child”. The Greek version of the Brief Multidimensional Students’ Life Satisfaction Scale and the Greek version of the Schema Questionnaire for Children were administered to children. Highest scores of life satisfaction were presented by satisfaction with friends and lowest by satisfaction with family contact. Life satisfaction was inversely predicted by EMS: a) Emotional Inhibition, b) Enmeshment, c) Vulnerability to Harm and d) Abandonment and by domains of EMS: a) Disconnection/Rejection and b) Overvigilance/Inhibition. Regarding life satisfaction, it was observed negative correlation with age and no gender differences were observed for life satisfaction and EMS. We suggest the extension of the study to broader samples including evaluations regarding psychopathology. Through the knowledge on cognitive processes and dysfunctional patterns, it is possible that the dynamic process of their consolidation will be better understood and more appropriate and developmentally oriented intervention will be created.

Key Words: *Life satisfaction, Early Maladaptive Schemas, child protection services, residential care*

INTRODUCTION

The study of life satisfaction focuses on the evaluations that individuals make regarding their own lives, both as regards individual and general domains. In our study, we focus on the life satisfaction of children in residential care in relation to Early Maladaptive Schemas. Cognitive schemas appear to be central to the development or maintenance of psychological difficulties in adulthood [1]. While there is an increase in studies on life satisfaction, there are still few studies available that investigate the issue in children and even fewer in children in residential care [2].

Child protection homes and residential care in Greece

Residential child care involves a large network of residential resources for out-of-home care, usually for the most severely affected children and adolescents requiring attention that cannot be provided in a family context, such as kinship care or family foster care [3]. According to Andreopoulou et al. [4] in Greece there are 85 children institutions nationwide that host 2,825 children from all over the country as well as immigrant children, according to latest reports. Only 28 of these institutions are public, while 57 are privately funded by Non-Government Organizations, churches and other associations/institutions. Our study is focused on a sample of children that live in residential care homes of the association “The Smile of the Child” and they were referred to the “House of the Child”. The association is in charge of 11 Homes nationwide in order to protect children that are victims of any form of violence and provide them with a safe living environment where they can enjoy everything necessary for their healthy physical, mental, emotional and social development. “The House of the Child” is a Mental Health Unit for the pro-vision of individualized Mental Health Services to children and adolescents victims of abuse, neglect, domestic violence, victimized minors, children involved in bullying incidents and generally children who have recently or in the past been exposed to severe psycho-traumatic experiences and suffering, resulting to mental health, adaptation or behavioral problems. The domestic child protection civil society Association “The Smile of the Child” is the administrator of the “The House of the Child” [5]. According to González-García et al. [3], Therapeutic Residential Care organizes living environments that are constructed in such a way to offer a multi-dimensional setting that improves treatment, education, communication and socialization possibilities, support and protection of children and adolescents that present behavioural and mental health needs in

collaboration with families and the community, through formal and informal funding as well as other resources.

Life satisfaction

From the mid 90s’ until today, there is an increasing interest on the part of the academic society from psychopathology to positive psychology with the aim of interpreting in which way and under which circumstances people experience positive feelings, such as happiness, in their life [6]. Positive psychology emphasizes on different aspects of happiness as well as takes interest in the quality of adaption in various circumstances and conditions, which is being expressed through positive behavioural, psychological and physical indices [7]. Positive psychology is based on and attempts to give prominence to individual strengths, positive elements and success without emphasizing on aspects that refer to individual deficits. Through this perspective, positive psychology tries to “heal” [8].

It is very often the case that studies which examine the development of children put emphasis on “psychopathological paradigms” [6]. The more we emphasize on the pathology of children that experience behavioural problems the more possible is that they will remain an important problem to their parents, teachers and peers [9]. Consequently, there is a need to shift our interest from mere diagnostic issues, that stem from the diagnostic criteria of disorders, to the relationships that these children foster and to the way they can be restored. Positive psychology has managed to shift the focus from “pathology” to a developmental perspective of “normality”. Furthermore, the focus at the present time lies on early intervention and settings that offers a variety of motives and stimuli for children.

According to Diener [10], “subjective well-being” is defined as “the way a person experiences the positive characteristics of hir/her life”. According to Diener, there are three dimensions as regards the expression of subjective well-being: the positive feeling (including feeling of joy and content), the negative feeling (such as stress and despair) and satisfaction from life. The satisfaction from life constitutes a dimension of vital importance as regards the drawing and retrieval of personal strength and eagerness for development in order for children and adolescents to be mentally and psychologically resilient. Nevertheless, studies are limited but increase in number as far as subjective well-being and children’s life satisfaction is concerned [6,11].

Life satisfaction is defined as the subjective, spherical evaluation of positive aspects of life not only as a whole but also in specific domains of life (e.g. family and school life) [12]. This index presents relevancy to risk taking behaviours of children such as alcohol and psychoactive substances consumption, aggressive and cruel behavior, sexually-related activities, psychopathological symptoms (depression, stress, loneliness) and physical health (e.g. eating patterns and training) [13]. Huebner's theoretical model includes five specific domains of life satisfaction as regards children and adolescents (family, friends, school, living environment, self) from which a spherical index of life satisfaction can be extracted [13-14].

Life satisfaction of children and youth in residential care

As suggested by Monserrat et al. [2], research on life satisfaction of children in the care system is still in its infancy. The value of studying life satisfaction in this population will help us understand their evaluations and perceptions about their lives and especially on topics, such as satisfaction about the residential home where they are accommodated, their family of origin, school and their self among other aspects. Furthermore, the study of life satisfaction allows us to identify which factors or conditions of the protection system help in the process of increasing children's life satisfaction in care [2], e.g. stability, the prioritization of school [15], and in which type of placement children are most likely to find themselves. There are extremely few studies that have investigated the life satisfaction of children in residential care and previous studies indicate that they report significantly inferior life satisfaction than their peers in kinship and non-kinship foster care [16-17]. Research in children and youth in residential care supports that higher levels of life satisfaction are associated with lower levels of violence, fewer suicide attempts, and fewer risk-taking behaviors, including substance abuse and sexual risk taking behavior [18]. As suggested by Wood and Selwyn [19], factors such as abuse, care placements, "having to be continuously in contact with professionals, along with the uncertainty of the surrounding leaving care, impact on the life satisfaction of children in care".

Early Maladaptive Schemas

A schema is conceived of as a structure used for screening, coding, and evaluating impinging stimuli [20]. They constitute cognitive structures which are shaped by former experience and/or knowledge a person has and are used in evaluation of events and conditions as well as in the shaping of future aspirations and plans. The

experiences a person has lead them to the shaping of schemas about themselves, the others and the environment. The schemas are found in a latent form, however, they tend to be activated under specific circumstances [21]. According to Young [1], the psychopathology of adults stems from maladaptive Schemas that have been developed during childhood.

The early maladaptive schemas, according to Young et al. [22] are developed when particular vital needs of the childhood are not satisfied · they constitute wide and stable patterns · they comprise memories, feelings and knowledge · they refer to the relationship of a person with the others and one's self · they are developed during childhood and puberty and continue to develop throughout one's life.

According to Schema Theory [22], schemas are grouped into five broad categories of unmet emotional needs the "schema domains": a) Disconnection and Rejection, b) Impaired Autonomy and Performance, c) Impaired Limits, d) Other-Directedness and e) Overvigilance and Inhibition.

Disconnection and Rejection domain relates to the assumption that the following needs such as security, safety, stability, nurturance, empathy, sharing of feelings, acceptance, and respect are not going to be satisfied in a way that could be predicted. Impaired Autonomy and Performance relates to the assumption that elements of the self and the environment interfere with one's assumed ability to separate, survive, function independently, or perform successfully. Impaired limits relate to problems with internal limits, responsibility to others, or long-term goal orientation. Other-Directedness relates to a constant emphasis on the desires, feelings, and responses of others, at the expense of one's own wishes and desires so as to gain love and approval, maintain one's sense of connection, or avoid retaliation. Usually involves suppression and lack of awareness regarding one's own weak elements and emotional bursts and natural inclinations. Overvigilance and Inhibition relates to excessive focus on not expressing one's spontaneous feelings, impulses, and choices or on abiding by strict, internalized rules and expectations about performance and moral behavior, often at the expense of happiness, self-expression, relaxation, close relationships, or health [22]. Furthermore, as Young et al. [22] suggested one more taxonomy of schema which is based on unconditional and conditional schemas. The schemas that are developed the earliest and are the most at the core; are unconditional beliefs about the self and the others (e.g. Mistrust/Abuse), whereas the schemas that are

developed later are conditional (e.g. Self-Sacrifice).

Nevertheless, according to Reinecke et al. [23] few research studies have focused on the topic of schema development while there are very few empirical data on the issue. Moreover, there has been no systematic research until today as regards the degree to which schemas in adulthood relate to the schemas and their functions during childhood and adolescence. The identification and the recognition of the importance of critical periods for the development of schemas during childhood could not only assist the early intervention during the development of dysfunctional schemas but also the creation and consolidation of more adaptive schemas as regards the reference frame.

Through the knowledge on cognitive processes and dysfunctional patterns, it is possible that the dynamic process of their consolidation will be better understood and more appropriate and developmentally oriented intervention will be created. The aforementioned aims at the reduction of vulnerability and the boosting of life satisfaction during adulthood.

The present study

The aim of the present study is to illustrate the levels of life satisfaction both in total and per domain as regards children in residential care. To our knowledge, this is the first study in Greece that used advanced psychometric methods (Confirmatory Factor Analysis) to investigate the psychometric properties of the BMSLSS.

The present study is the first that aspires to investigate the predictive capacity of EMS as well as the domains of EMS in life satisfaction of children in residential care. The innovation of the present study is that it tries to investigate the EMS not as a factor connected to psychopathology but as a factor that relates to the subjective well-being and the positive aspects of psychology. As it is depicted in the study of Ford et al. [24], at least 60% of the children in residential care present difficulties on psychological level and 72% of the children bound to live in residential care have been diagnosed with at least one mental disorder. Therefore, through the present study, we aspire to investigate the notion of life satisfaction as an opposing notion to the burden that children with these characteristics experience, in accordance with Early Maladaptive Schemas that are linked to the potential appearance of psychopathology during adulthood.

As regards life satisfaction, we believe that children will present satisfaction connected to friends.

As far as the EMS are concerned, we believe that the participants will present higher rates in the Mistrust/Abuse and Vulnerability to harm domain. We also believe that EMS will have a reverse correlation to life satisfaction. Regarding the relationship of domains of EMS with life satisfaction strong negative correlations are expected for Disconnection/Rejection and Overvigilance and Inhibition. Finally, it is expected that life satisfaction will be reduced from mid school age children until adulthood.

Method

Participants

In the present study, children and adolescents that were referred to the Day Center "The house of the Child" of "the Smile of the Child" for diagnostic evaluation and search for therapeutical support participated. The participants were children that lived in sheltering frameworks of "The Smile of the Child". More specifically, from the 66 children that participated, 32 (48,5%) were boys and 34 (51,5%) were girls. The age span was between 9 and 18 years old, mean age 12.9 years old (SD = 2,4). As regards the age that children were placed in residential care, the youngest age span was between 0 until 16 years old, mean age 7.1 (SD=3.9) years old.

Measurements

Brief Multidimensional Students' Life Satisfaction Scale (BMSLSS).

The BMSLSS [25] contains five items on children's and adolescents' satisfaction with five important specific life domains: satisfaction with communication with family, satisfaction with friendships, satisfaction with school experience, satisfaction with oneself, and satisfaction with the living environment. These five items are rated on a 5-point Likert-type scale, ranging from 1 (not satisfied at all) to 5 (very satisfied). The BMSLSS has demonstrated acceptable internal consistency reliability in prior study [25]. From the scale, an overall score of life satisfaction is extracted from the average scores of the dimensions. The scale was adapted to Greek from the original English versions by two bilingual researchers following back translation procedures.

Schema Questionnaire for Children (SQC)

The SQC was developed by Stallard and Rayner [26], has been administered to community and clinical

samples [27] and aims at investigating and evaluating the EMS.

The SQC, translated in Greek language by Zafiropoulou, et al. [28], assesses 15 early maladaptive schemas (Abandonment, Mistrust, Emotional deprivation, Defectiveness, Social isolation, Dependence, Vulnerability, Enmeshment, Failure, Entitlement, Insufficient self-control, Subjugation, Self-sacrifice, Emotional inhibition and Unrelenting standards) as proposed by Young. In our study we also used mean scores for schema domains: a) Disconnection and Rejection (Emotional Deprivation, Abandonment, Mistrust/Abuse, Social Isolation and Defectiveness), b) Impaired Autonomy and Performance (Failure, Dependence/Incompetence, Vulnerability to harm, Enmeshment), c) Impaired limits (Entitlement, Insufficient self-control), d) Other Directedness (Subjugation, Self-sacrifice) and e) Overvigilance and Inhibition (Emotional inhibition and Unrelenting standards). The original scale has been tested for validity and psychometric properties [26,29] and has been administered to community and clinical samples [27].

Procedure

The questionnaires completed by the children and the caregivers were part of the diagnostic assessment process that took place at the Day Center "The House of the Child" and were completed during the diagnostic evaluation phase. This is a retrospective study as it was conducted on already available data that were collected as part of routine diagnostic evaluation. Written informed consent was obtained by the person who had the legal custody of the minor at the point of the assessment process (before the minor was assessed). Recognising the need for ethical clearance for such a retrospective analysis, the researchers were concerned with whether there was more than minimal risk of harm to the participants. No risk was identified and the authors/ researchers decided to obtain approval from the President of the "Smile of the Child" who has the legal custody for all/ the majority of the participants. Moreover, researchers ensured privacy and confidentiality, which were maintained at all times by using unlinkable anonymized data, by storing the data in an anonymised or a de-identified database and extracting them securely.

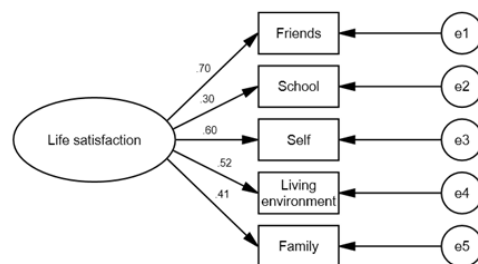
Results

Confirmatory Factor Analysis

A Confirmatory Factor Analysis was conducted in the BMSLSS to ensure the statistical appropriateness of the

measurement model. The analysis showed acceptable goodness of fit indices in the determination of the underlying structure of the scales ($\chi^2 = 5.09$, $df = 5$, $p = .405$, $\chi^2/df = 1.02$, $TLI = .99$, $CFI = 1.00$, $RMSEA = .02$, $SRMR = .06$ (see Figure 1).

Figure 1. Confirmatory factor analysis for BMSLSS



Descriptive statistics

Life satisfaction. As regards life satisfaction indices, the highest mean score was presented by satisfaction with friends followed by satisfaction with oneself, school, living environment and communication with family (see Table 1).

EMS. As regards Early Maladaptive Schemas, the highest rates were presented by Vulnerability to Harm and Unrelenting Standards while the lowest rates by Failure and Emotional Deprivation (see table 1)

Domains of EMS. As regards the domains of EMS, the highest rates were observed in Overvigilance/Inhibition whereas the lowest were presented by Disconnection/Rejection (see table 1).

Table 1
Descriptive statistics regarding life satisfaction, EMS and domains of EMS

BMSLSS	M	SD
Friends	4.48	0.77
Self	4.06	1.28
School	3.87	1.27
Living environment	3.82	1.42
Contact with family	3.41	1.65
Life satisfaction	3.93	0.81
EMS		
Vulnerability to Harm	6.03	3.38
Unrelenting Standards	4.29	3.57
Dependence/Incompetence	4.02	3.46
Emotional Inhibition	4.00	3.46
Self Sacrifice	3.84	3.20
Social Isolation	3.70	3.05
Subjugation	3.59	2.93
Enmeshment	3.36	2.83
Entitlement	3.27	3.33
Mistrust/Abuse	3.14	2.92
Insufficient self-control	2.88	2.89
Defectiveness/Shame	2.76	2.46
Abandonment	2.26	2.70
Failure	1.94	2.18
Emotional Deprivation	1.91	1.93
Domains of EMS		
Overvigilance/Inhibition	4.14	2.83
Impaired Autonomy/Performance	3.84	1.80
Other Directedness	3.71	2.24
Impaired Limits	3.08	2.66
Disconnection/Rejection	2.75	1.79

Sociodemographic factors, life satisfaction and EMS

Gender. Following the control of differences through a t-test for independent samples, statistically significant differences concerning the gender were not observed as regards the means of the factors of life satisfaction, the EMS and the domains of EMS (see Table 2).

Current age and age of entrance to the institution

Pearson r correlation was used to evaluate the relationship of age and the age when participants were placed in residential care with life satisfaction and EMS. Regarding age, it was correlated inversely to satisfaction with friends, school, contact with family and total life satisfaction. Adolescents presented statistically significantly lower life satisfaction indices. Statistically significant correlations among age, EMS and domains of EMS (see Table 3) were not observed. Regarding the age of entering the institution, older children reported statistically significant lower satisfaction with contact with the family. A statistically significant correlation with the age of entrance to the institution and the Defectiveness/Shame was also observed (see Table 3).

Statistical prediction of life satisfaction by EMS and domains of EMS.

Two multiple regression analyses (stepwise method) were performed to predict life satisfaction by a) EMS and b) domains of EMS. Life satisfaction was predicted ($R^2=0.41$, $F_2 = 0.69$) by a) Emotional Inhibition ($\beta = -0.38$, $t = -3.53$, $p = .001$, $\Delta R^2 = 0.20$) b) Enmeshment ($\beta = 0.33$, $t = 3.30$, $p = .002$, $\Delta R^2 = 0.10$) c) Vulnerability to Harm ($\beta = -0.28$, $t = -2.69$, $p = .009$, $\Delta R^2 = 0.06$), d) Abandonment ($\beta = -0.23$, $t = -2.26$, $p = .028$, $\Delta R^2 = 0.05$) (see table 4). As regards the domains of EMS, life satisfaction was predicted by ($R^2=0.27$, $F_2 = 0.37$) by a) Disconnection/Rejection ($\beta = -0.32$, $t = -2.67$, $p = .010$, $\Delta R^2 = 0.20$) and b) Overvigilance/Inhibition ($\beta = -0.30$, $t = -2.51$, $p = .015$, $\Delta R^2 = 0.07$) (see Tables 4 and 5).

Discussion

Through this study, we tried to investigate the correlation between life satisfaction and Early Maladaptive Schemas of children living in resident care. The present study constitutes the first study to investigate the relation between the aforementioned variables as regards residential care.

With respect to the rates of life satisfaction, the highest indices were presented by satisfaction with friends while the lowest indices were presented by satisfaction with

Table 2
Gender differences on life satisfaction, EMS and domains of EMS

	Boys		Girls		t
	M	SD	M	SD	
Friends	4.47	0.76	4.50	0.79	-0.16
School	3.66	1.43	4.07	1.09	-1.32
Self	4.28	1.11	3.85	1.40	1.37
Living environment	3.84	1.46	3.79	1.41	0.14
Contact with family	3.78	1.56	3.06	1.69	1.80
Life satisfaction	4.01	0.73	3.86	0.88	0.75
Unreleasing Standards	4.50	3.77	4.09	3.41	0.47
Social Isolation	4.00	3.34	3.41	2.78	0.78
Mistrust/Abuse	3.66	3.18	2.65	2.60	1.41
Abandonment	2.00	2.53	2.50	2.86	-0.75
Dependence/Incompetence	4.31	3.69	3.74	3.25	0.67
Vulnerability to Harm	5.91	3.27	6.15	3.53	-0.29
Emotional Deprivation	1.88	2.17	1.93	1.70	-0.13
Subjugation	3.53	3.21	3.64	2.69	-0.15
Defectiveness/Shame	3.09	2.63	2.44	2.29	1.08
Entitlement	3.81	3.84	2.76	2.72	1.27
Self Sacrifice	3.25	3.19	4.39	3.15	-1.46
Emotional Inhibition	3.88	3.61	4.12	3.36	-0.28
Enmeshment	3.84	3.18	2.91	2.42	1.94
Insufficient self-control	3.28	3.31	2.50	2.40	1.10
Failure	2.22	2.76	1.68	1.43	0.99
Disconnection/Rejection	2.93	1.81	2.59	1.80	0.76
Impaired Autonomy/Performance	4.07	1.89	3.62	1.70	1.02
Impaired Limits	3.55	3.06	2.63	2.18	1.39
Other Directedness	3.39	2.31	4.01	2.16	-1.13
Overvigilance/Inhibition	4.19	2.96	4.10	2.75	0.12

Table 3
Pearson r correlation among age, age of children when they were placed in the institution, life satisfaction, EMS and domains of EMS

Pearson r	Age	Age in institutional care
Friends	-.32**	.06
School	-.25*	.12
Self	-.13	-.05
Living environment	-.19	.24
Contact with family	-.26*	-.33**
Life satisfaction	-.35**	-.02
Unreleasing Standards	-.04	.04
Social Isolation	-.07	.00
Mistrust/Abuse	-.01	-.10
Abandonment	-.08	.23
Dependence/Incompetence	-.11	-.14
Vulnerability to Harm	.24	.02
Emotional Deprivation	-.11	.04
Subjugation	-.23	-.12
Defectiveness/Shame	.09	.33**
Entitlement	-.12	.01
Self Sacrifice	.17	-.07
Emotional Inhibition	-.08	-.15
Enmeshment	-.21	-.02
Insufficient self-control	-.06	-.02
Failure	-.06	.00
Disconnection/Rejection	-.05	.14
Impaired Autonomy/Performance	-.04	-.07
Impaired Limits	-.11	.00
Other Directedness	-.03	-.13
Overvigilance/Inhibition	-.07	-.07

Note * $p < .05$, ** $p < .01$, *** $p < .001$

Table 4
Multiple regression analysis (method stepwise) for the prediction of life satisfaction by EMS

	Step (ΔR^2)	Life satisfaction			
		B	SE	b	t
Unreleasing Standards					
Social Isolation					
Mistrust/Abuse					
Abandonment	4(0.05)	-0.07	0.03	-0.23	-2.26*
Dependence/Incompetence					
Vulnerability to Harm	3(0.06)	-0.07	0.02	-0.28	-2.69**
Emotional Deprivation					
Subjugation					
Defectiveness/Shame					
Entitlement					
Self Sacrifice					
Emotional Inhibition	1(0.20)	-0.09	0.02	-0.38	-3.53***
Enmeshment	2(0.10)	0.09	0.03	0.33	3.30**
Insufficient self-control					
Failure					
R^2			0.41		
F^2			0.69		

Note * $p < .05$, ** $p < .01$, *** $p < .001$

friends while the lowest indices were presented by satisfaction with family contact and satisfaction with the place of accommodation. Our findings are compatible with the fact that the majority of participants were adolescents, a developmental period when satisfaction stemming from friends is of utmost importance to identity formation. Equivalent findings on satisfaction with relationships of children in residential care are also found not only in the corresponding literature [2,3] but also in community sample [6]. As for the low level of satisfaction with the place where one lives (referring to the neighbourhood) and low satisfaction with contact with family, this finding is also in consistency with previous studies in children in residential care [2,3]. Low satisfaction with contact with family is consistent with the fact that the children, participating in the present study, have experienced either abandonment or neglect from their biological parents or have been abruptly removed from abusing or negligent environment. In some cases, contact with biological parents has been excluded by the authorities on behalf of the child's protection.

The hypothesis as regards high indices in Vulnerability to Harm was confirmed. In the study of Stallard [26], involving a clinical sample of children, consistent findings were presented. The schema of Vulnerability to Harm has been linked to depression [22] during adulthood. Consequently, further investigation of the schema Vulnerability to Harm in this population could help the prevention and the appropriate treatment aiming at the development of more functional schemas for the children belonging to this population.

Strong predictive factors as regards life satisfaction were Emotional Inhibition (the excessive inhibition of spontaneous action, feeling, or communication, usually to avoid disapproval by others, feelings of shame or losing control of one's impulses), Enmeshment (excessive emotional involvement and closeness with one or more significant others at the expense of full individuation or normal social development), Vulnerability to Harm (exaggerated fear that imminent catastrophe will strike at any time and that one will be unable to prevent it), Abandonment (the perceived instability or unreliability of those available for support and connection). Our hypothesis that EMS would be negatively related to life satisfaction was partially confirmed.

Table 5
Multiple regression analysis (method stepwise) for the prediction of life satisfaction by domains of EMS

	Life satisfaction				
	Step (ΔR^2)	B	SE	b	t
Disconnection/Rejection	1(0.20)	-0.14	0.05	-0.32	-2.67**
Impaired Autonomy/Performance					
Impaired Limits					
Other Directedness					
Overvigilance/Inhibition	2(0.07)	-0.09	0.03	-0.30	-2.81*
R^2			0.27		
F^2			0.37		

Note * p < .05, ** p < .01, *** p < .001

Relevant findings can be found in studies with sample of adults from general population. [30-31]. It is worth pointing out that the strongest predictor of life satisfaction (Emotional Inhibition) is a conditional EMS. However, Enmeshment was positively related to life satisfaction. As suggested by Young et al. [22], the schema of Enmeshment relates to the excessive emotional proximity with one or more significant others which often stands as a burden to the claiming of total independence or to normal social development. The aforementioned might also be linked to an adaptive strategy as regards care residency, however being maladaptive during adulthood. Consequently, a frequent challenge for childhood care residency is the confrontation with problems that refer to the promotion of the autonomy and self-differentiation of children that have experienced a complex and developmental trauma. Nevertheless, future studies will need to investigate the positive connection between life satisfaction and Enmeshment schema. As it is also suggested by Zafiropoulou et al. [27], through a developmental approach, throughout the creation and the development of developmental schemas during childhood and adolescence, some schemas are not considered maladaptive by definition but constitute part of an ongoing developmental procedure.

As regards the domains of EMS, our hypotheses for the inverse correlation between life satisfaction and the domains of EMS a) Disconnection/Rejection and b) Overvigilance/Inhibition were confirmed. According to the theory of schemas, the lack of stability and security (Disconnection/Rejection) as well as the emotional withdrawal against happiness, relaxation and close relationships (Overvigilance/Inhibition) were supposed to be reversely correlated to life satisfaction. The present study is the first to verify this relation with a sample of children and adolescents.

It is very important that we emphasize on the fact that the schema model explained about 41% while EMS domains 27% life satisfaction's variance. From the aforementioned, it can be seen that the model has a greater predictive power when we used the EMSs separately than in domains.

As regards the negative correlation between age and life satisfaction, our findings are compatible with the findings of previous studies on community samples [6, 32-33] and according to Goldbeck et al. [33], the observed decrease in life satisfaction constitutes a developmental pattern during the developmental phase of adolescence.

In the study, no gender differences on life satisfaction and EMS were observed. As far as life satisfaction is concerned, equivalent findings were observed in literature on children in care residency [2] and in community [34]. However, there are some studies [35-37], where girls have reported lower subjective well-being scores than boys. Regarding the EMS, equivalent findings were observed in the study of Stallard [27]. The fact that EMS did not seem to be linked to the age the children were placed in care residency, with the exception of Defectiveness/Shame, is of great interest. It is possible that the children who were placed in an older age in the institution had developed bonds with people from the previous contexts in which they lived, and displayed, in relation to this, higher values in Defectiveness/Shame and less satisfaction with contact with the (dysfunctional) family. However, further research on situational factors related to hospitality contexts is needed in order for more secure conclusions to be drawn.

Limitations/Suggestions for future study

The present study presents some limitations. It must be highlighted that the sample does not meet the criteria of random sampling. Furthermore, the data was collected through self-reference questionnaires, with all the limitations that this entails. Furthermore, limitations of the present study refer to the nature of the cross-sectional design (which does not permit a causal relationship to be established between the variables). The prediction of life satisfaction is a multidimensional process which cannot be described only through the few variables that can be studied in empirical studies. The results of the present study could assist to the development of appropriate educational and preventive programs with the aim of preventing the consolidation of early maladaptive schemas in children in residential care.

The results of the present study could contribute to the development of appropriate intervention programs, so that the establishment of dysfunctional patterns and behaviors in children living in residential care are prevented. Further studies need to be carried out in order to validate the findings using larger samples. In order to better understand the complex association between childhood adversities and life satisfaction, further research is required to include measurements related to exposure to adverse childhood experiences (ACE).

Despite the limitations of this study, some implications for policy and practice can be suggested based on its results. Residential care should be encouraged as the best way to promote factors that increase children's life satisfaction, such as stability. Residential care should be improved regarding the promotion of fostering stable and healthy relationships with peers outside the residential centre. Caregivers in residential care should be stable and respected reference persons since they are extremely important to children's lives and must adopt an individualized perspective to fit children's and adolescents' particular socio-emotional needs more appropriately.

We suggest the extension of the study to broader samples with the inclusion of evaluations regarding psychopathology. It is suggested that a comparative study as regards life satisfaction of children in residential care, adopted children and children who live with their biological parents as well as further research on life satisfaction and EMS on children through longitudinal studies should be conducted.

References

- Young JE. *Cognitive Therapy for Personality Disorders: a schema-focused approach*. Sarasota, FL: Professional Resource Exchange. 1990.
- Montserrat C, Llosada-Gistau J, Garcia-Molsosa M, Casas F. The Subjective Well-Being of Children in Residential Care: Has It Changed in Recent Years?. *Social Sciences* 2022; 11(1):25.
- González-García C, Águila-Otero A, Montserrat C, Lázaro S, Martín E, del Valle JF, Bravo A. Subjective well-being of young people in therapeutic residential care from a gender perspective. *Child Indicators Research* 2022; 15(1):249–62.
- Andreopoulou O, Skiadopoulos S, Drakou Z, Gourzis P. Behavioural and emotional profile of children in residential care in Greece. *Psychiatrike= Psychiatriki* 2020; 31(4):321–31.
- Tsouvelas G, Chondrokouki M, Nikolaidis G, Shapiro E. A vicarious trauma preventive approach. The Group Traumatic Episode Protocol EMDR and workplace affect in professionals who work with child abuse and neglect. *Dialogues in Clinical Neuroscience & Mental Health* 2019; 2(3):130–38. doi:10.26386/obrela.v2i3.123
- Tsouvelas G, Papoulidi A, Pavlopoulos V. Decreasing trends in adolescent life satisfaction: the role of developmental and demographic factors: <https://doi.org/10.54088/10.54088/6i68j>. *Developmental and Adolescent Health* 2022; 2(1):48–56.
- Cowen EL. Now that we all know that primary prevention in mental health is great, what is it? *Journal of Community Psychology* 2000; 28(1):5–16. doi:10.1002/(sic)1520-6629(200001)28:1<5::aid-jcop3>3.0.co;2-h
- Seligman MEP, Csikszentmihalyi M. *Positive psychology: An introduction*, *American Psychologist* 2000; 55:5–14.
- Roberts MC. *Positive Psychology for children: development, prevention and promotion*. In: Snyder CR, Lopez SJ, editors. *Handbook of Positive Psychology*. New York: Oxford University Press. 2002.
- Diener E. Assessing subjective well-being: Progress and opportunities. *Social Indicators Research* 1994; 31(2):103–57. doi:10.1007/bf01207052
- Huebner ES, Suldo SM, Smith LC, & McKnight CG. Life satisfaction in children and youth: Empirical foundations and implications for school psychologists. *Psychology in the Schools* 2004; 41(1):81–93. doi:10.1002/pits.10140
- Diener E, Suh EM, Lucas RE, Smith HL. Subjective well-being: Three decades of progress. *Psychological Bulletin* 1999; 125(2), 276–302. doi:10.1037/0033-2909.125.2.276
- Huebner ES, Laughlin JE, Ash C, Gilman R. Further validation of the Multidimensional Students' Life Satisfaction Scale. *Journal of Psychoeducational Assessment* 1998; 16(2):118–34. doi:10.1177/073428299801600202
- Gilman R, Huebner ES, Laughlin J. A first study of the Multidimensional Students' Life Satisfaction with adolescents. *Social Indicators Research* 2000; 52(2):135–160.
- García-Molsosa M, Collet-Sabé J, Martori JC, Montserrat C. School satisfaction among youth in residential care: A multi-source analysis. *Children and Youth Services Review* 2019; 105:104409.
- Carvalho J, Delgado P, Montserrat C, Llosada-Gistau J, Casas F. Subjective well-being of children in care: Comparison between Portugal and Catalonia. *Child and Adolescent Social Work Journal* 2021; 38(1):81–90. doi:10.1007/s10560-020-00675-3
- Llosada-Gistau J, Casas F, Montserrat C. What matters in for the subjective well-being of children in care?. *Child Indicators Research* 2017; 10(3):735–60.
- Gilman R, Barry J. Multidimensional life satisfaction among adolescents in a residential treatment setting: Changes across time and its relationship with social desirability. *Residential Treatment for Children and Youth* 2003; 21(2):19–41.
- Wood M, Selwyn J. Looked after children and young people's views on what matters to their subjective well-being. *Adoption & Fostering* 2017; 41(1):20–34. doi:10.1177/0308575916686034
- Beck A. Thinking and depression: 2. Theory and therapy. *Archives of General Psychiatry* 1964; 10: 561–571.
- Beck A. *Cognitive models of depression*. *Journal of Cognitive Psychotherapy* 1987; 1: 5–37.
- Young JE, Klosko JS, Weishaar ME. *Schema therapy: A practitioner's guide*. Guilford Press. 2003.
- Reinecke MA, Dattilio FM, Freeman A. *Cognitive Therapy with Children and Adolescents: a casebook for clinical practice*. New York: Guilford Press. 2003.
- Ford T, Vostanis P, Meltzer H, Goodman R. Psychiatric disorder among British children looked after by local authorities: Comparison with children living in private households. *British Journal of Psychiatry* 2007; 190(4):319–325. doi:10.1192/bjp.bp.106.025023
- Seligson JL, Huebner ES, Valois RF. Preliminary validation of the brief multidimensional students' life satisfaction scale (BMSLS). *Social Indicators Research* 2003; 61(2):121–145.
- Stallard P, Rayner H. The Development and Preliminary Evaluation of a Schema Questionnaire for Children (SQC). *Behavioural and Cognitive Psychotherapy* 2004; 33(2):217–224. doi:10.1017/s1352465804001912
- Stallard P. Early maladaptive schemas in children: Stability and differences between a community and a clinic referred sample. *Clinical Psychology & Psychotherapy* 2007; 14(1):10–8. doi:10.1002/cpp.511
- Zafiropoulou M, Avagianou PA, Vassiliadou S. Parental bonding and early maladaptive schemas. *Journal of Psychological Abnormalities in Children* 2014; 3(1):1–6. doi:10.4172/2329-9525.1000110
- Tsouvelas G, Chondrokouki M, Antoniou X, Nikolaidis G. Polyvictimization and early maladaptive schemas in children in residential care. *Child and Adolescent Psychiatry* 2021; 9(2):3–17.
- Faustino B, Vasco AB, Delgado J, Farinha-Fernandes A, Guerreiro JC. Early maladaptive schemas and COVID-19 anxiety: The mediational role of mistrustfulness and vulnerability to harm and illness. *Clinical Psychology & Psychotherapy* 2022; 1–12. <https://doi.org/10.1002/cpp.2706>
- Shirvani MY, Peyvastegar M. The relationship between life satisfaction and early maladaptive schemas in university students. *Knowledge & Research in Applied Psychology* 2011; 12(2), 55–65.
- Bisegger C, Cloetta B, von Bisegger U, Abel T, Ravens-Sieberer U. Health-related quality of life: gender differences in childhood and adolescence. *Sozial-Und Präventivmedizin SPM* 2005; 50(5): 281–291. doi:10.1007/s00038-005-4094-2
- Goldbeck L, Schmitz TG, Besier T, Herschbach P, Henrich G. Life satisfaction decreases during adolescence. *Quality of Life Research* 2007; 16(6), 969–979. doi:10.1007/s1136-007-9205-5
- Rees G, Bradshaw J, Goswami H, Keung A. *Understanding children's well-being. A national survey of young people's well-being*. London: The Children's Society. 2010.
- Dinisman T, Montserrat C, Casas F. The subjective well-being of Spanish adolescents: Variations according to different living arrangements. *Children and Youth Services Review* 2012; 34(12):2374–80.
- Llosada Gistau J, Casas Aznar F, Montserrat Boada C. The subjective well-being of children in kinship care. *Psicothema* 2019; 31(2):149–55.
- Main M, Solomon J. Procedures for identifying infants as disorganized/disoriented during the Ainsworth Strange Situation. In: Greenberg MT, Cicchetti D, Cummings EM, editors., *The John D. and Catherine T. MacArthur Foundation series on mental health and development. Attachment in the preschool years: Theory, research, and intervention*. Chicago, IL, US: University of Chicago Press. 1990. pp. 121–160.