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The Relationship between Childhood Adversity, Psychopathology Symptoms and Life Experiences

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Abstract

Objectives: This paper examines the contribution of ten categories of childhood adversity, including abuse, neglect and household dysfunction and recent life experiences, including positive and negative experiences, among college students to the development of psychopathology symptoms. We tested the childhood adversity as predisposing factors and recent life events as precipitant factors to explain psychopathology symptoms.

Method: Participants were total of 105 college students, which 21% (n = 22) were males and 79% (n = 84) females, age range between 18 and 54 years.

Results: We found that 22 (21%) of the respondents revealed clinical values in psychopathology. A positive correlation between total childhood adversity and global psychopathology scores ($r = .258$, $p < .01$) was found, but we did not find significant correlation between total scores of psychopathology and positive ($r = .112$ $p < .01$) and negative ($r = .288$, $p < .01$) LES. Logistic regression analyses were performed including childhood adversity and later positive and negative life experiences as predictor variables and psychopathology as outcome variable. We found that only childhood adversity was significantly associated with psychopathology.

Conclusion: Despite the link between childhood adversity and subsequent development of psychopathology no means determinism, our findings suggest the importance of the early life experiences to the child´s development and future vulnerability to mental disorders, independently of later life experiences exposure.

Keywords: *Childhood Adversity; Life Experiences; Psychopathology; Abuse; Neglect; Resilience; Cumulative Adversity*

Introduction

Many studies have been performed relating social factors and life events to the development of illness and psychopathology. The reason of this interest is the evidence of a temporal association between the development of illness and psychopathology concomitant to the increase in the number of events that require socially adaptive responses on the part of the individual [1,2]. On this topic, researcher have also been interested on the study of predisposing factors that are behaviour patterns, childhood experiences and durable personal and social characteristics that may alter the susceptibility of the individual to illness [1,2]. Additionally, researchers are interested in precipitant factors that are a recent increase in the number of events that require socially adaptive responses on the part of the individual and a temporal association between the onset of illness [1].

Childhood adversity: predisposing factors

Among these predisposing factors, childhood is an important period due to the evidence that stressful life events during this period have a strong relationship with later development of illness and mental problems. Studies have revealed that the exposure to early adversity increase the biological vulnerability to a broad range of chronic diseases during adulthood and increased risk to develop lifetime psychopathology [3-5]. Victims of childhood adversity become more vulnerable to future life stresses, developing a lower threshold of persevering stress and an exaggerated stress response [6]. Adversity has been described by researchers as "a set of circumstances unfavorable for normal human development". Why victims of childhood adversity became vulnerable for later illness and psychopathology? According to attachment theory, the child begins in infancy to develop cognitive models of relationship. Children experience a sense of security and readiness to explore the environment. However, maltreated children are often denied the benefits of a secure attachment relationship. These difficulties in attachment relationships may lead to the creation of negative models of both self and the others relationships, based on unsatisfactory experiences with early attachment figures. These maltreated children, especially those who have been physically abused, have been found to have less positive self-conceptions than the other children. Studies revealed that older maltreated children described themselves as less competent than their peers. Black, Dubowitz and Harrington (1994) also found that maltreated children had low scores on perceived competence and social acceptance. Therefore, maltreatment appears to be associated with impaired social competence and corresponding negative feelings about the self.

These studies also shown that healthy peer relationship promote the development of moral reasoning, cooperation and reciprocity. Poor peer relationship in childhood have been found to predict current and later adjustment problems, including antisocial behaviour and psychiatric disorder. Bolger, Patterson and Kupersmidt demonstrated that children who experienced chronic maltreatment were most likely to experience low levels of acceptance by their peers and have selfesteem difficulties. Research on attachment has demonstrated that a child's working model (or internal representation) of their attachment figure is highly dependent on the child's perception of how available and responsive the caregiver is, when needed. This child's working model is truly important considering that affect the way in which an individual thinks, predict and control the behaviour of the others in future relationships, including social competence, self-esteem, peer relationships, overall adjustment, arousal, distress and psychopathology. In fact, victims´ psychological distress is largely due to the shattering of basic assumptions held about themselves and their world. In this matter, Widom., *et al*. argued that individuals with poor health may be more likely to interpret their early experiences negatively. Childhood adversity is very common in the community and for many it is a chronic condition, with repeated and ongoing maltreatment with serious merging into adverse outcomes throughout childhood and into adulthood [4].

Subsequent life experiences: Precipitating factors

There are considerable evidences that a relationship exists between life stress events and psychopathology [7-10]. Irwin G. Sarason in cooperation with James H. Johnson and Judith M. Siegel, University of Washington, developed a very important study in the context of life experiences. Particularly, these studies focus on the separate assessment of positive and negative experiences of life of individuals, as well as evaluation of their impact. According to Rabkin and Struening [1] the assumption is that life changes may have their most adverse effect on individuals who perceive themselves as having little control over environmental events. Similarly, Folkman, Lazarus, Gruen and DeLongis [11], argue that individuals who are "repeatedly in uncontrollable situations experience helplessness, become increasingly passive in their coping efforts and ultimately experience demoralization and depression". The process is called as cognitive appraisal in which an individual evaluates whether a particular encounter with the environment is a potential harm or benefit to self-esteem. In fact, numerous empirical studies have investigated the relationship between life stress and the susceptibility to physical and psychological problems [2,12-14]. Most of them have been based on assumptions that life changes require adaption on the part of the individual and that adaption is stressful and persons experiences marked degrees of life changes during recent past are susceptible to physical and psychiatric problems [1].

Positive experiences as buffer between negative experiences and psychopathology

Empirical studies have shown that positive experiences contribute to deal with adversity and give competence to individuals "bounce back" from stressful experiences quickly and effectively [2]. Positive life events may serve as a buffer between the effects of negative life events and impact on health [15,16]. The broaden and build theory of positive emotions is used as a framework for understanding psychological resilience. These authors used a multimethod approach in studies to predict that resilient people use positive emotions to rebound from and find positive meaning in, stressful encounters. Mediational analyses revealed that the experience of positive emotions contributed, in part, to participants' abilities to achieve efficient emotion regulation, demonstrated by accelerated cardiovascular recovery from negative emotional arousal and by finding positive meaning in negative circumstances [17], positive events may serve as stress buffers by generating positive feeling states that facilitate stress adaptation. Specifically, positive life experiences may provide a "breather" from negative experiences, sustain individuals coping efforts and restore depleted psychological resources. Additionally, Cohen and Hoberman [15] contributed for the stress-buffering effects of positive life events as argued by other authors. These authors found a significant interaction between negative and positive life events in the prediction of depression. Specifically, they found that the number of negative events was a significant predictor of psychological disorder.

Positive experiences have a negative effect on health.

Conversely, Brown and McGill [18] found that positive life events had a negative effect on physical well-being. These authors concluded that positive life events and selfesteem interact to affect the development of physical illness. The adverse effects of positive life events on physical well-being are confined to individuals who tend to think of themselves in negative terms. Life events changes, including, in this case, positive experiences, may force individuals to change the structure of the self concept and as consequence disrupt their identity, with a negative impact on health. In fact, the conceptual system of the individuals, when threatened, the world is apt to be perceived as chaotic and effective action becomes difficult. From this perspective, the link between life experiences and health is influenced by changes in self-concept, which is used to understand their own behaviour and the behaviour of others toward them [18]. In fact, most of studies have been based on the assumption that life changes require socially adaptive responses on the part of the individual and are stressful which increase the risk for disease and psychopathology [1].

Negative experiences as risk for development of psychopathology.

A considerable literature has shown that the exposure to negative experiences increases the risk for psychopathology and health conditions throughout the life. For instance, studies found a relationship between negative life experiences and depression [19-22], anxiety [23,24], suicidal behaviour [25], delinquency [26].

Relationship between childhood adversity, subsequent life experiences and psychopathology

Increased vulnerability for psychopathology has been found among individuals with childhood adversity in combination with subsequent adversity thorough life. However, much research investigating life adversity focuses on single experiences (e.g. reactions to a divorce) neglecting adverse experiences that occurred thorough life [27]. The evaluation of a single experience makes it difficult to isolate the impact thoroughgoing life. Researchers suggest the need of assess individuals' overall history of adversity considering that the cumulative adversity (i.e. the total amount of adversity experienced by a person), increases the risk for negative health outcomes. Assessments of cumulative adversity typically involve counts of negative events experienced over a period of time [27]. Studies on this issue have shown that the cumulative effect of adversity thorough life have a higher impact on mental health, increasing the risk for development of both psychological distress and psychiatric disorder [28,29]. In fact, the purpose of life events research is to demonstrate a temporal association between the onset of illness and a recent increase in the number of events that require socially adaptive responses on the part of the individual [1].

However, the cumulative effect does not gather consensus in literature. Some studies did not found relationship between the cumulative adversity and psychopathology [30-32], but instead of this, other studies have showed that the severity of the adversities is more associated to psychopathology than the total amount of adversity experienced [21]. Further, other studies found that both cumulative and severity are strongly associated to psychopathology [33].

Conversely, other studies did not confirm that victims of childhood adversity have increased vulnerability for later psychopathology compared with nonvictims. The study of Comijs., *et al*. [34], using a sample of 1887 older persons, found no evidence for the assumption that older persons were more vulnerable for depression in reaction to recent life events when they were exposed to childhood adversity. These authors concluded that although responses to stress vary strongly among individuals, this variability does not seem to be determined by childhood adversity. The purpose of this study was to examine the contribution of childhood adversity and life experiences to the development of psychopathology among young college students that were exposed to life transitions, including new individual life experiences during university stage. Specifically, we included the childhood adversity and subsequent life experiences in the same statistical model to examine the cumulative effect of the life experiences. Additionally, we assessed the prevalence of ten categories of childhood adversity (predisposing factors), including five against the individual (abuse and neglect) and five of household dysfunction (domestic violence), as well as the exposure to positive and negative life experiences (precipitating factors) during the last year and finally, the prevalence of psychopathology.

We expect to found a cumulative effect between childhood adversity as precipitating factors and negative life experiences exposure as predisposing factors, to the presence of psychopathology. We expect a "buffer effect" of positive recent life experiences between negative experiences and childhood adversity to the development of psychopathology.

Method Participants

There are 105 participants, aged between 18 and 54 years old (M = 22.75 years; S.D. = 6, 655). There are 22 males and 84 females.

The sample were selected randomly from a Portuguese college - Universidade Lusófona do Porto, in the same geographical area and the mean years of education was statically similar, as well as approximate family social class.

During the first evaluation, we asked the 105 institutionalized youths to participate in a second evaluation. During the first evaluation, we asked the 105 institutionalized youths to participate in a second evaluation.

At the second evaluation, three weeks later, from the initial sample of 105 students, 30 subjects were located between 18 and 39 years of age (4 males, 26 females, M age = 22 years, SD = 4.291). In all cases, the children lived with their family for at least five years before being identified by CPS prior to the age of 13. The retrospective reports of childhood adversity were obtained by self-administered questionnaires. All participants were from Northern Portugal.

Measures

ACE study questionnaire

A Portuguese version of this questionnaire was used. The questionnaire included detailed information on ten adverse childhood experiences, organized into two areas: children's experiences and household dysfunction.

The five categories of children's experiences included emotional abuse, defined by three items (e.g. how often did a parent, stepparent, or adult living in your home swear at you, insult you, or put you down?); physical abuse, evaluated with four items (e.g. while you were growing up, that is, in your first 18 years of life, did a parent, stepparent, or adult living in your home push, grab or slap you, or throw something at you?); and sexual abuse, assessed with four items (e.g. during the first 18 years of life, did an adult, relative, family friend, or

stranger, at least five years older, ever touch or fondle your body in a sexual way?). The evaluation of emotional neglect was based on four reverse items (e.g. my family was a source of strength and support) and five additional items evaluated physical neglect (e.g. I did not have enough to eat). The response choices included never, once or twice, sometimes, often, or very often, with the exception of sexual abuse, for which a dichotomous response (yes or no) was given.

The evaluation of household dysfunction included questions about mother treated violently, assessed with three items (e.g. while you were growing up, in your first 18 years of life, how often did your father, stepfather, or mother's boyfriend do any of these things to your mother or stepmother: push, grab, slap, or throw something at her?). The responses for mother treated violently were the same as the five categories of children's experiences. Household substance abuse was evaluated by two items (e.g. during the first 18 years of life, did you live with anyone who used drugs?). The category mental illness or suicide in family was evaluated by two items (e.g. was a household member depressed or mentally ill?). The other two categories of household dysfunction (parental separation or divorce and incarcerated household members) were evaluated with one item each (e.g. did a household member go to prison?). The responses for these last four categories were dichotomous (yes or no) and an affirmative response to these questions indicated childhood exposure to each category of household dysfunction. All items for the 10 different examples of childhood adversity were dichotomized (yes or no), based on how often the experiences occurred A response of often or very often for at least one item was defined as yes for emotional abuse. For physical abuse, only a response of often or very often to the item, "Sometimes parents or other adults hurt children. While you were growing up, that is, in your first 18 years of life, how often did a parent, stepparent, or adult living in your home push, grab, or slap you, or throw something at you?" or sometimes, often, or very often to the item, "Hit you so hard that you had marks or were injured?" was considered a yes. A yes response to any of the four items defined a respondent as having experienced sexual abuse. A subject was considered to have been a victim of emotional neglect when he/she chose never or once for at least one of the items indicating lack of care. The same measurement applied to physical neglect for the two items that measured physical care and for responses of often or very often to the two items that measured this kind of neglect. For items that measured household dysfunction, participants were considered to have been exposed to each category when the response was affirmative.

The only exception was mother treated violently, for which a response of sometimes, often or very often to one of the items defined a respondent as having been exposed. For each category, if the subject answered at least one of the items positively, he/she was defined as having been a victim of that experience. Using this measurement, the total number of adverse experiences for each subject ranged from zero to 10.

The reliability of the ACE Study Questionnaire was tested by Dube, Williamson, Thompson, Felitti and Anda (2004) using a kappa statistic for variables coded dichotomously that showed appropriate values, ranging between 0.46 and 0.86. In the Portuguese version the reliability values were similar to the original version, ranging between 0.65 and 0.86.

Brief Symptom Inventory - BSI: We used a Portuguese version of the Canavarro BSI. This questionnaire is a short-form of the SCL-90-R, with a 53-item self-report measure that evaluates psychological distress.

Subjects describe how they were affected by symptoms in the past seven days on a 5-point scale (not at all = 0; extremely = 4). The inventory includes nine symptom dimensions: somatization, obsessive compulsivity, interpersonal sensitivity, depression, anxiety, hostility, phobic anxiety, paranoid ideation and psychoticism. We then calculated the Positive Symptoms Index (PSI), a global index that reflects the intensity and number of symptoms. The cut off score for clinical cases in the Portuguese version was 1.7 on the PSI. The BSI internal consistency for the present sample was alpha = .98 for the overall items.

The Life Experiences Survey-LES: The Life Experiences Survey-LES. Had already been carried out for the adaption diabetic population in Portugal It was designed to eliminate certain shortcomings of previous measures of life stress and allows separate assessment of positive and negative experiences of life, as well as individualized assessments of the impact of events.

However, for this study was adapted to psychological assessment for the population academic. The original instrument includes 60 items divided into two sections. Section 1 contains 50 life changes that are common to individuals in a wide variety of situations (for example, last year you got married?). Section 2 contains 10 items that are just for students. The items were chosen to represent life changes often experienced by individuals in the general population. Most articles were based on measures of stress existing life, including social Readjustment Rating Scale developed by Holmes and Rahe. Respondents rate each event of life lived on a 7-point scale ranging from -3 (very negative) to +3 (very positive). If an event has not occurred, the item is coded as 0. Each event that occurred is coded as a "unity of life change." These units can be added for a total score of recent life events. The positive and negative events can be added separately or may be marked on the same scale using positive and negative numbers.

Procedure

We made formal contact with the rectory of the University that our sample was allowed to attend the research. Students were randomly selected from the classes of Psychology and were invited to participate in the study. The objectives and confidentiality issues, including the importance of participation were explained at the time of data collection. The questionnaires and informed consent were distributed in sealed envelopes. To ensure the confidentiality of all cases of children identified, the names and personal data were coded. The use of code numbers ensured that none of the information about the child can be identified, except for the researcher who maintains the data records and questionnaires in a safe condition.

Statistical analysis

We analyzed the data statistically with Statistical Package for the Social Sciences (SPSS) (Version 20). We used an independent-samples t-test to examine the differences between maltreated and non-maltreated groups in terms of total, negative and positive LES and global psychopathology. We also used t-test to compare clinical and non-clinical groups, using the cut off score for clinical cases in the Portuguese version of 1.7 PSI, in terms of total, negative and positive LES. We used Intraclass correlations coefficient (ICC) to estimate the test-retest reliability of the 30 participants' responses to the LES categories and questions at the first and second evaluations. The test-retest method is the most way to assess the reliability of self-reported experiences and is preferred to other reliability methods, such as Cronbach´s alpha.

Intraclass Correlation Coefficients (ICCs) are designed as ≤ 0.40 poor to fair agreement, o.40 - 0.60 moderate agreement, 0.60 - 0.80 good agreement and 0.81 - 1.00 excellent agreement. We used Pearson correlation to test associations among variables as psychopathology, childhood adversity and LES. The test-retest method is the most appropriate way to assess the reliability of self-reported trauma experiences and is preferred to other reliability methods, such as Cronbach´s alpha (Pinto, 2008). Finally, we conducted logistic regression analyses to assess the effect of ten categories of adversity reported (predictors) in the incarcerated group (dichotomized as incarcerated group vs. other groups), adjusted for age and education.

Results

We assessed the self-report of ten categories of ACE among the total sample of 105 students. Parental substance abuse was the most commonly reported form of child adversity (21.9%, n = 23), followed of mental illness and suicide of a family member (20.0%, n = 21), exposure to domestic violence (12.4%, n = 13), parents' divorce (18.1%, n = 19), emotional neglect (17.1%, n = 18), emotional abuse (12.4%, n = 13), sexual abuse (10.5%, n = 11), physical neglect (7.6%, n = 8), physical abuse (6.7%, n = 7), arrest of a family member (2.9%, n = 3). We found that 22 (21%) of the respondents revealed clinical values in psychopathology. The means of positive LES was 7.75 (7.81) and negative LES was 7.57 (7.22). The table 1 presents the ICCs for total LES and specific questions.

Considering the total LES, the ICC between the first and second evaluation was of .80, 95%, .62 - .90.

We found a positive correlation between total childhood adversity and global psychopathology scores (r = .258, p < .01). However, we did not find significant correlation between total scores of psychopathology and positive (r = .112 p < .01) and negative (r = .288, p < .01) LES; and between total childhood adversity reported and positive(r = -,032 p < .01) and negative (r = .132 p < .01) LES. Table 1 presents the ICCs for total LES, including the items. The ICC for the total LES was of .889.

Sex	n	%
Male	22	21.0
Female	79	79.0

Table 1: *Characteristics of the sociodemographic variables being studied (N = 105).*
M: Mean; SD: Standard Deviation; Mdn: Median.

We found no differences between non psychopathology and psychopathology groups in terms of positive (t(105) = -1.555, p = 0.123) and negative experiences (t(105) = -1.529, p = 0.129). We also found no differences between non-maltreated and 17 maltreated groups in terms of positive (t(105) = -0.758, p = 0.450) and negative experiences (t(105) = -1.608, p = 0.111).

The logistic regression analyses showed a significant model ($\chi^2(6) = 25.75$, p < 0.001), accounting for 11% and 17% of psychopathology variance, with 96% successfully predicted for the non psychopathology group and 27% accurate predictions for the psychopathology group. The analyses showed that only childhood adversity was significantly associated with an increase in the odds of belonging to the psychopathology group by a factor of 1.536 (See table 2) was used to examine possible precipitant factors to development of psychopathology, especially considering those who had history of childhood adversity which was hypothesized as predisposing factors. We hypothesized to found a cumulative effect between childhood adversity, functioning as precipitating factors and negative life experiences exposure, functioning as predisposing factors, to the presence of psychopathology. However, we only found a significant and an independent association between childhood adversity and psychopathology. The recent life experiences were not associated to psychopathology. We verified that neither the positive experiences were negative associated to psychopathology, functioning as a buffer, nor the recent negative life experiences.

		95% CI for Odds Ratio		
Variable	B (SE)	Lower	Odds Ratio	Upper
Constant	1.329 (-1.562)		.210	
Age	-.029 (.047)	.887	.972	1.065
Sex	-.382 (.615)	.204	.682	2.278
Childhood adversity	.429 (.159)	1.125	1.536**	2.096
Positive events	.048 (.034)	.984	1.050	1.120
Negative events	.017 (.034)	.951	1.017	1.087

Table 2: *Logistic regression analysis to examine the effect of childhood adversity and life events in psychopathology.*
Note: R^2= .(Hosmer and Lemeshow), .11 (Cox & Snell), .17 (Nagelkerke).
**p < .05. **p < .01.*

Discussion

The importance of this research relates to understanding the contribution of childhood adversity and the recent life experiences among college students to the development of psychopathology symptoms. Our sample has the particularly that the college students are exposed to several life transitions, as life experiences during university stage and it were positive associated to psychopathology, functioning as precipitant factors. On one hand, this finding suggests that recent positive life experiences do not function as a buffer between childhood adversity and psychopathology. On the other hand, it suggests that recent negative life experiences do not function as precipitant factor for development of psychopathy. Empirical studies have revealed that exposure to early adversity increased risk to develop lifetime psychopathology [3,4,5]. The victims of childhood adversity become more vulnerable to future life stresses, developing a lower threshold of persevering stress and an exaggerated stress response [6], increasing the risk for later psychopathology. Several studies have shown that stressful life experiences may function as precipitant factors to the onset of psychopathology [9], but our findings showed that negative experiences are not sufficient to account for the occurrence of psychopathology, suggesting that the key element is the vulnerability [35]. In fact, many of individuals who were exposed to stressful life experiences do not develop psychopathology [36].

However, despite the relationship between exposure to childhood adversity and later psychopathology no means determinism, our findings suggest the importance of the early life experiences to the child´s development and future vulnerability to mental disorders, as has been supported by several theoretical perspectives, including the attachment, cognitive and biological models [6].

Further, we found that 22 (21%) of the respondents revealed clinical values in psychopathology. These percentages are approximately similar to the percentages in general population in Europe countries, including Portugal, with 16.07% of the adult population had a mental disorder (WHO, 2007) and 27.6% of the population (17.6% for male population and 36.8% for females) reported anxiety or depression (European Commission, 2008). Regarding to the prevalence of adversity found in studies from other countries, measurement of sexual abuse relies on retrospective self-report studies of episodes that revealed that between 3.7 - 16.3% of children experienced severe parental violence, that included hitting with object, kicking, biting, threatening using a knife or weapon as severe violence (review includes studies in UK, USA, New Zealand, Finland, Italy and Portugal). In our study, we obtained results within this average and it was found that 10.5% of the sample was subjected to sexual abuse in childhood and 12.4% subject to emotional abuse. The same studies show that 10.3% is the annual prevalence of psychological abuse (verbal abuse by adults) in the U.S. and 4 - 9% is the cumulative prevalence based on categories consistent with severe emotional abuse (studies conducted in Sweden, USA and UK). With regard to sexual abuse, studies show that the cumulative prevalence of any sexual abuse is 15 - 30% and 1 - 5% for boys (any sexual abuse includes non-contact, contact, or penetrative abuse) taken from population based studies in developed countries like Australia, New Zealand, Canada and the U.S. [4]. In contrast to these studies, our results are slightly lower, having a prevalence of 10.5%.

The studies carried out on the physical neglect show that 1.4 -15.4% is the incidence of persistent lack of care or providing probability of placing a child at risk of harm (e.g. not enough food, no medical care when necessary, no safe place to stay, serious lack of care, studies of U.S. and UK) [4]. Similarly, in our sample, the results were 7.6%, lying within the average for the European and U.S.

Few studies have been conducted to measure the prevalence of exposure and witness intimate partner violence - exposure to domestic violence. A review of studies showed that 10 - 20% is the prevalence of childhood watching intimate partner in the U.S. and 8 - 10% in Swedish children. [4]. Our sample shows an exposure to domestic violence 12.4%, being slightly higher than Swedish children.

Additionally, out findings revealed a good overall reliability values of LES between the two temporal evaluations, similarly to the Portuguese version using a diabetic individuals. However, some questions in our sample showed poorer reliability values between evaluations. May be, these different reliabilities may arise as a result of differences in the baseline rates of some experiences. Very low baseline-rate events, such as experiences that do not happened in the last year could result in a measurement with greater instability and lower ICC values [37-46].

Some limitations need to be considered when interpreting this study. Our sample is not representative of general population affecting the generalization of the findings. Furthermore, this scale is a measure of retrospective self-report, it is possible the occurrence of some recall bias.

Conclusion

Despite the link between childhood adversity and subsequent development of psychopathology no means determinism, our findings suggest the importance of the early life experiences to the child´s development and future vulnerability to mental disorders, independently of later life experiences exposure.

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Volume 11 Issue 12 December 2019