Adverse Childhood Experiences & Impulsivity in Late Adolescence & Young Adulthood of Students of University of the Punjab Lahore

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Abstract

The study aimed to investigate the relationship between adverse childhood experiences and impulsivity in students (17-25 years of age) of University of the Punjab, Lahore. A sample of 80 university students (mean age = 21 years) was selected through convenience sampling from five departments at the New Campus with equal representation of both genders. The Adverse Childhood Experiences Questionnaire (Anda, 2007) measured number of adverse childhood experiences faced by the participants; while Barratt Impulsiveness Scale, Version 11 (Patton, Stanford & Barratt, 1995) assessed impulsivity. Pearson product moment correlation revealed a non-significant correlation between adverse childhood experiences and impulsivity. Furthermore, a significant gender difference was discovered through independent samples t test, men reporting significantly higher occurrences of adverse childhood experiences. It was concluded that due to the sensitive nature of the topic with reference to the conservative Pakistani society, participants might have inaccurately reported that childhood experiences resulting in the non-significant correlation with impulsivity. Accordingly, it was suggested that indigenous tools be developed in order to minimize these

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cultural influences and future studies should aim to explore these cultural dynamics.
Keywords: Adverse Childhood experiences, Impulsivity,

Introduction

University students refer to a large and diverse population who are in an interesting medium and context for research purposes. They are experiencing rapid changes in their social dynamics where they feel much more exposed to the society than they have ever before (Education Indicators in Focus, 2013).

These individuals, who are mostly late adolescents and young adults, are often associated with energy, activity and passion. Often for the first time in their lives, they discover that their social circle is widening, taking in its margins the newly arisen needs and the pressure to be successful (USC Center for Excellence in Teaching, 2003). Many important decisions of life raise their heads during this time, providing additional challenges for them–these decisions include career-adoptions, romantic matters and settling down (Education Indicators in Focus, 2013). These set of characteristics and situations set these people at a unique position in their lifetime, with distinctive qualities and struggles. The scenario often paves way for impulsive behaviors in the youth (Romer, 2010).

Impulsive behaviors in youth have often been attributed to hormonal changes and fluctuations. These biological factors coupled with the energy of youth are often used as an explanation for the impulsive behaviors during this time (Casey, Jones, & Hare, 2008). Moreover, the standards of strength and significance are often very concrete during this time period and individuals try to establish and uphold these standards by actions they deem "impressive" (Education Indicators in Focus, 2013).

In 2001, Moeller, Barratt, Dougherty, Schmitz and Swann defined impulsivity as a tendency to react rapidly without thinking to any stimulus without attending to the possible aversive consequences (Redi, Cyders, Moghaddam & Fong, 2012). At least three potentially independent types of impulsivity underlie such behaviour in young individuals: 1) Acting without thinking; characterized by hyperactivity without underlying decision-making, 2) Impatience; characterized by expressing impatience in face of a choice between an immediate small reward and a delayed large reward and 3) Sensation/novelty seeking; characterized by excessive interest in exploring the unknown despite of the possible risks. (Romer, 2010).

Research indicates that individuals with impatience tendency are also more likely to engage in drug-use at an early stage (Hamilton, Felton, Risco, Lejuez, & MacPherson, 2014; Jafri, 2013; Romer, 2010). Moreover Raine et al. (1998), found that novelty seeking was related with juvenile aggression and other externalized behavior (Romer, 2010).

Impulsivity is not, however, a by-product of youth; a multitude of environmental factors also play important roles in its development. Past experiences cannot be disregarded in the matter; these experiences lay the basis for the individual's ideas and tendencies for the rest of his/her life (Casey, Jones, & Hare, 2008). Many researches argue that childhood experiences have far-reaching effects and should not be disregarded (Anda et al., 2006; Dube et al., 2001; 2006; Edwards, Holden, Felitti, & Anda, 2003; Felitti et al., 1998; Ramiro, Madrid, & Brown, 2010; Teicher, Samson, Polcari, & McGreenery, 2006). They are the earliest recollections that the individual has about the world and those around, forming a solid base for further ideas, tendencies, stereotypes and attitudes. Keeping that information in mind, it does not come as a surprise that adverse childhood experiences have negative impact on the respective individual.

According to Anda (2007) an ACE, or "adverse childhood experience" is contact with any of the following prior to age 18: recurrent physical abuse, recurrent emotional abuse, sexual abuse, an alcohol and/or drug abuser in the household, an incarcerated household member, someone in the home who is chronically depressed, mentally ill, institutionalized, or suicidal, domestic violence, one or both biological parents absent, emotional neglect, and physical neglect.

The studies that have calculated the co-occurrence of multiple categories of abuse have found that it is indeed very common (World Health Organization WHO, 2013). Typically less than 10% of the reported child abuse cases involved a single type of abuse it was instead found that the majority of the children had been abused in multiple ways (McGee, Wolfe, Yuen, Wilson, & Carnochan, 1995; Ney, Fung, & Wickett, 1994). The concept of adverse childhood experiences combines various kinds of child maltreatment under one umbrella and gives better understanding of possibly complex childhood circumstances.

A growing body of research suggests that childhood trauma and hostile experiences can lead to a wide range of negative health outcomes, including substance abuse and attempted suicide among adolescents and adults (Anda et al., 1999; Dube, et al., 2001; 2006; Edwards, Holden, Felitti, & Anda, 2003; Meyerson, Long, Miranda Jr, & Marx, 2002;

Ramiro, Madrid, & Brown, 2010). There is considerable evidence that severe stressors, especially those which are persistent and are not under the control of the individual, harshly affect the health conditions of the concerned individual (Anda et al., 2006; Edwards, Holden, Felitti, & Anda, 2003; Meyerson, Long, Miranda Jr & Marx, 2002; Ramiro, Madrid, & Brown, 2010). Childhood sexual and physical abuse have been strongly associated with suicide attempts (Dube, et al., 2001; Fergusson, & Lynskey, 1995). An earlier review of the literature in 1986 by Browne and Filkenhor (WHO, 2013) shows that depression, feelings of isolation and stigma, poor self-esteem, distrust, substance abuse, and sexual maladjustment are the most frequently reported long-term effects of child abuse and neglect. More recent findings point to the same consequences but include a variety of other psychopathological disorders such as suicide, panic disorder, dissociative disorders, post-traumatic stress disorder, and antisocial behaviours (Anda et al., 1999; 2006, Dube et al.,2001; 2006; Duke, Pettingell, McMorris, & Borowsky, 2009; Edwards, Holden, Felitti, & Anda, 2003; Fergusson, & Lynskey, 1995; Meyerson, Long, Miranda Jr, & Marx, 2002; Ramiro, Madrid, & Brown, 2010; Teicher, Samson, Polcari, & McGreenery, 2006; Zurbriggen, Gobin, & Freyd, 2010). Child abuse and neglect also result in impaired brain development with long-term consequences for cognitive, language, and academic abilities (Felitti et al., 1998; Zolotor et al., 1999). In young women incidences of sexual abuse correlated highly with exposure to other sources of stress and was linked to earlier age at first intercourse, and unintended pregnancy (Meyerson, Long, Miranda Jr, & Marx, 2002). It is also established that women report higher incidences of childhood maltreatment and adverse childhood experiences than men (Cauffman, Feldman, Waterman, & Steiner, 1998; Dierkhising et al., 2013; Ford, Chapman, Hawker, & Albert, 2007; Wood, Foy, Layne, Pynoos, & James, 2002). Child maltreatment therefore contributes to a broad range of adverse physical and mental health outcomes as well as impulsive/risky behaviours that are costly, both to the child and to society, over the course of a victim's life (WHO, 2013).

There is a serious lack of indigenous researches conducted on adverse childhood experiences and impulsivity. The present research aimed to provide help in understanding impulsivity in the light of various kinds of adverse childhood experiences in the Pakistani youth.

Hypotheses

- There will be an association between adverse childhood experiences and impulsivity in university students.
- There will be a gender difference in the adverse childhood experiences.

Methods

Research Design

Correlational research design was used for this study.

Participants

A sample of 80 (40 men; 40 women) university students with an age-range of 17-25 years who were enrolled in the BS (Hons.) programme at Institute of Business Administration, Centre for Clinical Psychology and Institute of Applied Psychology in the University of the Punjab (New Campus) were selected through convenience sampling. All participants had reasonable understanding and comprehension of Urdu language. Individuals suffering from any serious psychological problem or physiological illness which could significantly hinder their participation in the study were not included.

Measures

Demographic form was prepared by the researcher to obtain demographic and other basic information of the participants.

Adverse Childhood Experience (ACE) Questionnaire. It is a ten-item scale with Yes/No responses, developed by Anda et al. (2007) was used in the present study. It assesses the incidences of ten adverse childhood experiences: physical abuse, emotional abuse, sexual abuse, alcohol and/or drug abuser in the household, incarcerated household member, chronically depressed, mentally ill, institutionalized, or suicidal persona in the household, domestic violence, one or both biological parents absent, emotional neglect and physical neglect (Anda et al., 2007). Test re-test reliabilities for the questionnaire have been found to be appropriate. The convergent validity values for the ACE questionnaire were also found to be satisfactory (Dube et al., 2003; 2004; Edwards et al., 2001; Felitti et al., 1998). ACE Questionnaire was translated into Urdu according to MAPI guidelines before being used in the present study.

The Barratt Impulsiveness Scale, Version 11 (BIS-11). It was developed by Patton, Stanford & Barratt in 1995. It is a 30 item self-report questionnaire designed to assess general impulsiveness in terms of six first-order and three second-order factors. Responses are given on a four-point Likert scale and total score is calculated through simple summation (Patton, Stanford & Barratt, 1995). The scale was found to have satisfactory psychometric properties (Stanford et al., 2009). The tool was translated by Jafri and Yousaf (2013) and the translated Urdu version of BIS-11 was used in the current study with permission.

Procedure

As the first step, departmental permission for conducting the research was acquired. Permissions from all the respective department heads were also taken before data collection. Before the administration process information was provided to the participants to explain the nature of research, participants' rights and to ensure confidentiality. Contact information was also provided to them in case of any relevant queries. Furthermore, both verbal and written informed consent was taken from all participants involved in the study process. Before the main study, a pilot study was carried out on five students enrolled in BS (Hons.) at Centre for Clinical Psychology. It took about 20 minutes to complete the questionnaires and there were no reported ambiguities in the items. During the main study, data was collected from Institute of Business Administration (n=18; men=12, women=6), Department of English (n=20; men=6, women=14), Institute of Administrative Sciences (n=30; men=16, women=14) and Institute of Applied Psychology (n=7; men=2, women=5). Five participants submitted incomplete questionnaires and were thus dropped from the study. It took one and half month to complete the data collection procedure.

Results

The results of the Pearson product moment correlation between the total scores of ACE Questionnaire and the total scores of BIS-11 show a non-significant correlation (r=.10, p>.05). This means that the presence of any one of the two constructs (adverse childhood experiences and impulsivity) is independent of the other according to the present results.

Table 1
Independent-Samples t test for Mean Differences in scores of men and women participants on Adverse Childhood Experiences Questionnaire

Variables	Men		Women		t	*p*	95% CI		Cohen's d
	M	SD	M	SD			LL	UL	
Adverse Childhood Experiences	2.05	2.16	.40	.92	4.43	.00	.91	2.39	0.99

Note: CI=confidence interval; LL=lower limit; UL=upper limit; P=Significance (2-tailed)

The results of the Independent-Sample *t* test analysis reveal significant gender difference in the Adverse Childhood Experiences reported by the participants (t (52.93) =4.43, p<.001). Men were found to report more ACEs as compared to women.

Discussion

The present study aimed to investigate the relationship between Adverse Childhood Experiences (ACEs) and Impulsivity in university students. The results indicated that the relationship between these two variables was non-significant with respect to the population of interest. Furthermore, a significant gender difference were revealed with respect to the Adverse Childhood Experiences reported by the participants. Men reported more Adverse Childhood Experiences as compared to women.

The revealed results regarding the correlation between Adverse Childhood Experiences and Impulsivity are not in accordance with the literature. This may be attributed to the fact that the tool used for measuring Adverse Childhood Questionnaire is primarily a screening tool which is readily available online and gives a rough estimate of the occurrence of various categories of adverse childhood experiences (American Academy of Pediatrics, 2014). The World Health Organization has standardized the ACE Questions to develop an international version suitable for usage across the world, but the process is still in the initial phases and it is currently being validated (World Health Organization, 2014).

Furthermore, the fact that the Adverse Childhood Experiences Questionnaire was taken up by WHO for standardization to be used at an international level indicates that the problem of cultural differences is a significant one in this regard. Sensitive issues such as child maltreatment

(including the component of sexual abuse) and unfavourable home environment can be conceptualized as easier to report in the individualistic cultures of the West where the role of family ends after an individual hits adulthood, but can be very difficult to disclose in a collectivistic culture such as ours. Moreover, sexual abuse in specific is a tabooed subject in the conservative Pakistani society. Thus, the mentioned cultural factors might have contributed to the under-reporting of adverse childhood experiences and in turn, the revealed non-significant correlation between impulsivity and adverse childhood experiences.

Another factor associated with the cultural differences is the revealed gender difference in the reported adverse childhood experiences. In the present study, men reported much more adverse childhood experiences as compared to women. 33 out of the 40 men reported at least one adverse childhood experience compared to only eight out of the 40 women in the sample. Specifically, men reported significantly higher occurrences of a household member gone to jail and residence with someone who smoked, consumed alcohol or used drugs during their childhood which are both consistent with the findings of New York Council on Children and Families (2010) who also found significant higher occurrences of these two adverse childhood experiences in men. However, they found significantly higher occurrences of sexual abuse and a household member depressed, mentally ill or suicidal in women as compared to men (New York Council on Children and Families, 2010) which are both significantly higher in men according to the findings of the present study. This can again be explained in terms of cultural factors that the Pakistani society concentrates much of its social control and constraints on women. Their sexuality is suppressed and they are expected to value modesty over protection of their rights. Moreover, due to the social scrutiny specifically focused on women, they tend to be a lot less expressive about their experiences. Yaqoob (2012) found that in reference to the socio-cultural constraints imposed on women in a city of Khyber Pakhtunkhwa, Pakistan, the fact that the power to make decisions rests primarily with the men was a significant one. This power differential in the Pakistani society amounts for the lack of freedom of expression in women.

Another way to look at the cultural factors regarding the gender difference with respect to adverse childhood experiences revealed in the present study is the conceptualization of women as protected and "kept safe" by men. In spite of the negative implications, this may help girls

stay away from certain types of adverse childhood experiences like alcohol or drug abuser in the household. Physical abuse and emotional abuse were also found to be significantly lower in women in the present study which may also be related to the above-mentioned cultural factor. It is interesting to note that not even one woman among the 40 female participants reported the occurrence of childhood physical abuse.

With regard to impulsivity, 33 of the total 80 participants (almost half) appeared to be highly impulsive according to the results of the BIS-11. This can be understood in the context of a study by Steinberg et al. (2008) who found that young individuals (like late adolescents and young adults) were far more impulsive than older adults. Since our sample consisted of university students with ages 17-25 (Mean age=21.01), they were expected to report high impulsivity levels.

Thus, the major factor behind the non-significant correlation revealed between adverse childhood experiences and impulsivity in the present study appears to be problems with the reporting of adverse childhood experiences. However, the implications and consequences of adverse childhood experiences are severe and should not be disregarded. As Hashima and Finkelhor (1999) point out, children living with families that mistreat them or in other unfavourable and hostile circumstances are not in the position to leave their situations and become independent like adults can do. This lack of choice in the face of dangerous circumstances may result in their vulnerability to intimate victimization and street crime (Hashima & Finkelhor, 1999).

Limitations and Suggestions

The topic of adverse childhood experiences was a sensitive one to probe in the sample with special reference to the Pakistani culture. This issue became more potent in the absence of an indigenous tool, thus it can be suggested that such a tool be developed in the future for measuring adverse childhood experiences. Moreover, literature suggests that the expression of impulsivity varies culturally (Kacen & Lee, 2002) which indicates the need for an indigenous tool for measuring impulsivity as well.

Data was collected from only five departments of the University of the Punjab (New Campus), Lahore. Generalizability of the findings may be increased through future studies which collect data from other universities of the city as well.

Implications

- The issue of adverse childhood experiences is a sensitive yet significant one that can have dire consequences. Often due to the cultural factors, these experiences, specifically sexual abuse, are seldom reported. The present study confirms the presence of this cultural effect and provides a guideline for further research in this regard; qualitative investigations might prove to be useful in future.
- The present research revealed a gender difference in terms of adverse childhood experiences in the population of university students, with men reporting significantly higher occurrences of these experiences. However, it is not clear whether this difference is in the occurrence or the reporting of such experiences. The present research thus provides a pathway for further investigation in this direction.

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