Sub-clinical borderline personality disorder symptoms as predictor of suicidality and non-suicidal self-injury in young Pakistani females

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Abstract
The aim of this study was to determine if suicidal and non-suicidal self-injury can be predicted by the symptoms of Borderline Personality Disorder (BPD) and if non-suicidal self-injury predicts suicidality in young adult females. In this cross-sectional study, 150 undergraduate females (mean age 20.47±3.17) were conveniently sampled and assessed on McLean Screening Instrument for Borderline Personality Disorder, Suicidal Behaviour Questionnaire-Revised, and the Inventory of Statements about Self-injury. Borderline Personality features significantly predicted suicidal ideation and behaviour ($\beta$=.383, p<.001) and non-suicidal self-injury ($\beta$=.282, p<.01). Likewise, non-suicidal self-injury was positively associated with suicidality (r =.330, p<.01). Even sub-threshold BPD features in a non-clinical population may be predictive of suicidal and non-suicidal self-injury. Future research should be based on the management and interventional strategies for tested constructs. Further, screening measures need to be introduced to better detect population at risk of subclinical BPD, suicidal ideation and self-injury.

Keywords: Suicidal, Self-injury, Borderline Personality Disorder.

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Introduction
Early adulthood is a period of development in physical, psychological, social and emotional domains, each characterised by numerous difficulties and changes. Despite these shifts in self-structures, struggling young adults try to achieve autonomy. However, this transitioning phase can have extensive and immense impact on the psychological well-being of an individual. In this new era, the majority of subclinical population of young adults, due to the inability to deal with the critical phase of life, seems to be prone to developing specific identity issue or even some other features of personality disorder such as Borderline Personality Disorder (BPD). A past study demonstrated that in the prevailing subcategories of different personality disorders, in Pakistan BPD is 18.18% of the aggregate reported cases and hence ends up being the most astounding pervasive issue.

BPD is an intricate and serious mental issue portrayed by a persistent pattern of inconsistency in emotional regulation, social connections, impulse control and self-image. As elaborated by the Diagnostic and Statistical Manual of Mental Disorders, Fourth Edition (DSM IV), BPD is a pervasive pattern of unpredictability of interpersonal relationship, self-image, effects, and increased impulsiveness, starting in young adulthood and present in different settings. BPD incorporates maladaptive or dangerous practices, such as rash spending, dangerous sex, drug abuse, shoplifting/theft, and getting involved in physical assault and contentions. Adolescents with BPD have numerous issues, more often instigated by their incapacity to manage emotions. They are interpersonally sensitive, their relationship with teachers, parents and companions suffer immensely.

The utmost distressing and alarming facets of BPD comprise self-injurious behaviour, including non-suicidal self-injury (NSSI) — e.g., self-mutilation, such as wounding and smouldering — and suicide attempts. Evidence supports that both suicidal behaviour and non-suicidal self-harm behaviour are frequently behavioural solutions for undesirable feelings, additional common actions to their emotional swells incorporate violent behaviour, disordered eating, substance abuse, and dissociation. Thus, self-harming behaviour not only provides diversion from excruciating feelings, they additionally permit the person to express feelings, particularly outrage, in an effective, however, private way. A study conducted in Pakistan assessed the predominance of suicidal tendency in Pakistani undergraduates and found that even though there were no significant gender differences, more females (33%) than males (29.2%) reported suicidal ideation, and the rates were high among day scholar respondents.
Various researches and studies are being conducted on suicide and self-harm behaviour in Pakistan but little emphasis has been paid on its association with BPD and increasing rate, especially among young adults. Moreover, these studies conducted on self-harm behaviour and suicide in Pakistan are retrospective, hospital-based and from single centres. Hence, the present study was designed to address the obscure reality regarding the increasing rate of BPD features/symptoms among young subclinical population of Pakistan and its interconnection with suicidality and non-suicidal self-harm behaviour, consequently helping the individuals to focus on their coping strategies and poor defence mechanism. In addition, as there is a lack of specific screening tools for clinical disorders including BPD, self-injury and suicidality at public level, the current research also sets a standard for initial level assessment of aforementioned disorders.

**Patients and Methods**

This cross-sectional study was conducted at the University of Management and Technology (UMT), Lahore, from (October 2018 to December 2018). The sample of 150 young adult females was collected through convenience sampling from UMT. The average age of the participants was 20.47 (±3.17). Females aged between 16 to 22 years, enrolled in the BS programme, were included. To control the potential bias and confounding errors, only those participants were recruited who have not been diagnosed or referred for any psychological illness or counselling services by a university teacher or counsellor. The sample size was calculated by performing Raosoft website's calculations, with 5% margin of error, 50% response distribution and 95% confidence interval. Ethical approval of this study was obtained from the Ethical Review Board, Department of Special Needs Education, University of Management and Technology, Lahore.

To control the study confounding variables, females suffering from physical ailments, psychological issues and above the age 22 years or below the age of 16 years were excluded. After acquiring consent from the participants three self-report measurements were employed.

McLean Screening Instrument for Borderline Personality Disorder (MSI-BPD) which is a 10 dichotomous-items self-report inventory intended to screen for BPD and requires responses in a yes=1 or no=0 form. A cumulative score of positive reactions demonstrate the presence of BPD symptoms in a person. For assessment of frequency and intensity of suicidal behaviour and past history of suicidal attempts Self-Harm Behaviour Questionnaire-Revised (SBQ-R) was used. SBQ-R consists of four items, each measured on specific Likert type scale, enquiring different aspects of suicidal behaviour and past history of suicidal attempts. The cut off score for general population is 7 and for psychiatric inpatients it is 8. The inventory of statements about self-injury (ISAS) was also used; it has two sections, the first section evaluates the occurrence of 12 non-suicidal self-injury (NSSI) behaviours that are executed deliberately and without the intention of committing suicide, such as banging/hitting oneself, biting, burning, carving, cutting, wound picking, needle-sticking, pinching, hair pulling, rubbing skin against rough surfaces, severe scratching, and swallowing chemicals. The subjects were asked to estimate the frequency of each behaviour listed on the scale. It has five additional items at the end, measuring descriptive and contextual factors. The second section assesses 13 purposes of NSSI, each potential function is measured by three items on 3-point Likert-type scale.

After gathering the responses from the participants, the data was entered into SPSS (IBM, 24). In the first step, the potential intervening effect of confounding variables (age, class, education, etc.) was controlled by running Analysis of Variance (ANOVA) which revealed no significant effect of study variables. The correlation analysis was done to find out the nature of relationship between BPD, self-harm behaviour and suicidality. Regression analysis was applied to assess predictive role of BPD symptoms in self-harm behaviour and suicidal ideation.

**Results**

A total of 150 young female students, having mean age 20.47 ±3.17 years, participated in the study. Correlation

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### Table 1: Summary of inter-correlations for scores on BPD symptoms, suicidal behaviour and self-harm behaviour.

<table>
<thead>
<tr>
<th>Measure</th>
<th>BPD Symptom</th>
<th>Suicidal Behaviour</th>
<th>Non-Suicidal Behaviour</th>
<th>Self-harm Behaviour</th>
</tr>
</thead>
<tbody>
<tr>
<td>BPD Symptom</td>
<td>-</td>
<td>0.38***</td>
<td>0.33***</td>
<td>0.28***</td>
</tr>
<tr>
<td>Suicidal Behaviour</td>
<td>-</td>
<td>-</td>
<td>0.16</td>
<td>0.33***</td>
</tr>
<tr>
<td>Non-suicidal Behaviour</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Self-Harm Behaviour</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
</tbody>
</table>

BPD = Borderline Personality Disorder

**p<.01, ***p<.0001.
analysis illustrates that BPD symptoms were significantly positively linked with suicidal and non-suicidal behaviours, and self-harm behaviours (Table-1). Suicidal and non-suicidal behaviours were equally positively linked with self-harm behaviours. In addition, linear regression showed that BPD symptoms significantly explained 7% of variance in non-suicidal self-injurious behaviour ($\beta = .28$, $p < .000$) (Table-2). Similarly, BPD symptoms significantly explained 10% of variance in suicidal ($\beta = .50$, $p < .001$) and 6% in non-suicidal behaviour ($\beta = .11$, $p < .05$).

**Discussion**

In Pakistan various studies have been conducted on self-harm behaviour, suicidal behaviour or suicide, but these studies do not emphasise the association of these behaviours with BPD particularly BPD symptoms as predictive factor. The present research not only revealed significant positive correlation between BPD, self-harm behaviour and suicidal behaviour in female adolescents, but also showed BPD as their significant predictor. This is in line with the previous literature illustrating that both self-harm behaviour and suicide are very common and important features of BPD and females are at greater risk of developing BPD. Subsequently, various clinical and epidemiological researches have observed higher prevalence of BPD with suicidal and self-harm behaviour for females. Thus the risk can further lead to various serious mental health issues associated with functional impairment, at considerable social, economic and personal cost. In Pakistan women less than 35 years old from low socioeconomic background engage in self-harm behaviour. Pakistan is an Islamic state, and an act of suicide or self-harm behaviour is considered criminal. Due to cultural context and stigma related to it, families do not disclose the information, thus it remains underreported; besides people with BPD, who show manifestation at a very young age, are frequently underdiagnosed or neglected in clinical contexts, thus the magnitude of the issue is hard to examine with accuracy because of which they may not receive proper treatment.

**Strengths and Limitation**

The strength of this study is efficiency of McLean screening test of BPD symptoms in normative sample of young female adults. Though, for early identification of BPD, a valid and reliable screening instrument is required that has the ability to identify BPD’s symptoms on the basis of existing standardised diagnostic definitions and is not limited to some theoretical orientation. The McLean screening instrument for BPD was constructed to function as a screening tool centred on DSM-IV diagnostic criteria and it exhibited diagnostic efficiency in initial validation study. While unique, these outcomes are accompanied by some limitations. All the participants were females and data were collected from one institute only, thus limiting the generalisability of the results. It is possible that increasing the sample size across genders, and using different probability/random sampling instead of convenient sampling and covering more geographical location may provide different and more promising results. Ideally, the present research should be replicated using a multi-method, for instance, trait- and interview-based measures. Future research should aim to develop an indigenous version of MSI-BPD to better detect population at risk of self-injury.

**Conclusion**

The study highlights significant interrelationship between BPD, NSSI and suicidality; further MSI-BPD can be used as an effective diagnostic tool for sub-clinical adolescent population. Increasing stress of daily life, poor defence mechanism and inability to cope with environmental stressors is leading the young subclinical population towards the development of symptoms of BPD, most prominently suicide/suicidal ideation, self-harm behaviour to put end/get relief from a poor mental state. This calls for earlier and effective management plan for adolescents.

**Disclaimer:** None to declare.
Conflict of Interest: None to declare.

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References