Role of Guilt in the Relationship of Negative Emotions and Attitude towards Society among University Students

Ms. Samreen Umer, Dr. Mohsin Atta, & Dr. Najma Iqbal Malik

Abstract

**Background:** The individual's behaviors and attitudes are the outcome of one’s feelings and emotions related to life. This study was aimed to understand the role of guilt in the relationship of negative emotions with aggression, bullying, and shyness among university students (N = 270) through cross sectional research design.

**Methods:** The current study was comprised of two phases: in phase I. Guilt and shame proneness scale (Cohen, Wolf, Panter, & Insko, 2011), Berkeley Expressivity Questionnaire (Gross & John, 1997), Aggression Scale (Orpinas & Frankowski, 2001), and Shyness Scale (Cheek & Melichor, 1985) were translated in Urdu for present study through the back-translation method. An Urdu translated version of the Illinois Bullying Scale (Espelage & Holt, 2001) translated by Shujja and Atta (2013) was also used to measure the pertinent construct.

**Results:** Phase-II was carried out to test study hypotheses through correlation coefficient and Hierarchical regression to study the moderating effect of guilt. Findings revealed that there is a positive relationship between aggression and bullying. A high level of guilt significantly moderated the relationship between negative emotions and aggression.

**Conclusions:** The current study focused on the role of guilt in the relationship of negative emotions with aggression, bullying, and shyness. The present study indicated that guilt has a negative relation with negative emotions, aggression, bullying and shyness. Aggression was found positively correlated with bullying and shyness. Limitations, suggestions, and practical implications were also thoroughly discussed.

**Keywords:** Guilt, Negative emotions, Aggression, Bullying, Shyness

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Background

The individual's behaviors and attitudes are the outcome of one's feelings and emotions related to life. Here the intensity and directions of these emotional and behavioral pursuits depict the internal psychological mechanism of one’s being. Emotional expressivity, its intensity, direction, and the link between emotions and behaviors have been one of the key interests among developmental psychologists due to its empirical and theoretical implications (Pekrun & Stephens, 2010; Fiedler & Beier, 2014; Pekrun & Perry, 2014). However, much of the emphasis is on how the affective state of these emotional expressions is linked with the behavioral attitudes especially the guilt and shame feelings for high emotional expressivity that can contribute to one’s aggressive, bullying shyness attitudes. The interplay of these not only impact the cognitive process but also influence the futuristic behavioral pursuits of individuals especially the youngsters who strive for societal adjustment.

Guilt can be defined as the feeling, emotion of committed something wrong. It is a bad feeling when a person thinks that s/he has done something wrong and s/he cannot face the people with confidence. Because of bad feelings, s/he avoids facing the people, situations, and feeling sorry (Fisher & Shaver, 1990). It is one in all the sad emotions, which also embraces the loneliness, grief in the comprehensive framework. (Carnochan, Fischer & Shaver, 1990). The tenderness of guilt is mostly connected with the judgment of injuring someone or violating some ethical rules (Haidt, 2003). When a person does something wrong consciously/unconsciously, and then s/he realized that s/he committed wrong and s/he feels bad after that realization and s/he becomes sad which is one of the negative emotions.

Our feelings perform an essential role during complete decades of our lives due to a reason that they nourish almost all our provoking time with two opposite feelings which are happy or unhappy. Cacioppo (2001) and his fellows did research that emotions guide, improve and ennoble life, they give meaning to everyday life, they reduce the valuation placed on life and property, which shows that the mutually the correlation with our real-world is emotional. The emotional response can be measured in at least three completely different systems. i.e emotional reports, physiological reactivity, and overt behavioural actions (Lang, 1969). There are seven basic emotions, including both positive and negative. Negative emotions can be described as a feeling that causes one to become sad. It is a sense which makes one dislike people, events, and even oneself. This feeling makes one’s confidence low and as a result, he avoids facing the people. A person doesn't want to involve in social activities. Negative emotions are expressed in the sort of sadness, hate, anger, disgust, and jealousy. Emotional ventilation is very important in someone's life because through the emotions person can portray his/her feelings to the people. Emotional associations with people make someone's attitude toward society, events, and, situations.

Attitude is a broad concept which based on past experiences and feelings, and then includes specific behaviour toward the specific person and situation. How one tends to see the world, think about completely different individuals, or look at somebody or a thing. Attitudes are defined as the set of beliefs, calculated feelings, and behavioural tendencies directed towards a person, objects, or activities. Attitude primarily based on our experiences with the individuals and that we see the individuals consistent with our prejudice and our stereotypes. Attitude consists of the three parts cognitive, affective, and behavioural components. Current study focused on three types of attitudes i.e, aggression, bullying and shyness.

According to social psychology, the keyword aggression is mainly used for the most important aspect which is displayed as any behaviour that should injure another man who doesn't intend to be hatred (Baron & Richardson, 1994). In indirect aggression, the harmed individual is physically there. While then again in indirect aggression, the casualty is missing. Even the aggressive conduct has a wide learned component, researches demonstrate that acquired qualities represent might be a quarter to a third of an aggressive inclination (Tuvblad et al., 2009). An assortment of social stressors will expand the inclination to move toward aggressive behaviour.

Bullying is a subtype of aggressive conduct, in which a man or a lot of individuals assault others, humiliates, and avoids a moderately weak individual. Most researches reveal that bullying is widely found amongst the school students and the youth around the country. According to Robert Agnew who was an experienced social-psychologist, in his “General Strain Theory” he conceptualized about the stress and strain focused upon a person are outcomes of bullying can result to a manifest which shows the problematic emotions that are usually found in patternless behaviour, possible symptoms of misbehaviour (Agnew, 2006). Duncan (2011) explained that Family impacts on exploitation have been more indefinable, yet symbolize connections to abuse, disregard, and overprotective parenting. Youth spend most of the time in a day to make associations with friends in educational institutes, neighbourhoods, groups, and online networking, and bullying behaviours almost regularly occur inside the associate connection (Pepler et al., 2010).

On the other hand shyness is defined as the feelings which may seem awkward, troubled, or tensed entirely based on environmental interactions with people, especially with strange individuals. Shyness is examined as a sensitive condition of individuation characterized by abundant egocentric distraction and over-concern with social analysis, with the result that the nervous individual hinders, pulls back, keeps away from, and escapes social associations (Zimbardo, 1982). The latest research developed a theory that accepts pre-research discoveries of (Turner, et al., 1990), that shyness is a fluctuated element. Interestingly, numerous people who say they were unreasonably or remarkably shy as kids don’t meet the criteria for any psychiatric issue as adults. Most scientists concur that two fundamental variables contribute to shyness. They are science and a man's earliest childhood and later life encounters; as it were one's setting. There is a chance that somebody experienced childhood in negative behaviour or was apprehensive or rejected by their family all through his initial youth, that individual will feel shyness (Hilliard, 2005). There is additional verification that
shyness influences a student studying method (Bru, Murgberg & Paulson, 2006). One of the main elements which helping to overcome shyness in schools is in support. According to Paulson (2006), Support should return not simply from family however from academics as well. A parent's support for their children's school work can facilitate the student to overcome their fears and will encourage them to assume completely concerning themselves. With a parent's unconditional support, children can be able to overcome their shyness as they grow old (Paulson et al. 2006)).

This study aims to explore the moderating role of guilt in the relationship between negative emotions and attitudes towards society among students of the university. In the present study, the three construct Aggression, bullying, and shyness used to show the attitude of students. This study also explores the correlation between the study variable. The purpose of this study is to see the negative emotions and aggressive behaviour among youngsters. Guilt moderated the relationship of negative emotion with aggression and shyness. Guilt has a negative and weak correlation with negative emotions, aggression, and bullying. Aggression has a moderate positive correlation with bullying. Moreover, Eid and Diener (2001) found that diverse cultures have different rules for the expression and understanding of several emotions. The experience of negative emotions may be strong and could be associated with aggressive behaviours (Kelly & Barsade, 2001; Miller & Brewer, 1986). Therefore, current study is about to see the moderating role of guilt in the relationship between negative emotions and attitudes towards society.

**Method**

**Objective**

1. To investigates the moderating role of guilt on the relationship between negative emotions and attitudes towards society.

**Hypotheses**

To achieve the above-mentioned objectives of the study following hypotheses were formulated:

- **H1:** There is a positive relationship between guilt and negative emotions
- **H2:** Guilt moderates the relationship of negative emotions with bullying, aggression, and shyness
- **H3:** There is a positive relationship between negative emotions and aggression
- **H4:** There is a positive relationship between negative emotions and bullying
- **H5:** There is a positive relationship between negative emotions and shyness

**Design**

The present study utilized the cross-sectional survey research design for meeting the objectives.

**Participants**

For the current study, a convenient sampling technique was used to collect data from the sample comprised of university students (N = 270). Sample was further categorized as male (n = 133) and female (n = 137). The age of the sample ranged from 21 to 27 years (M = 23.75, SD = 2.63)

**Measures**

**Guilt and Shame Proneness Scale (GASP).** It was developed by Cohen, Wolf, Panter, and Insko (2011). In current study only guilt subscale consisted of 8-items with response format of 7-point likert was used to measures individual differences in the propensity to experience guilt across a range of personal misbehaviours. Literature has reported this scale to have alpha coefficient of .79 (Taya & Cohen, 2011).

**Berkeley Expressivity Questionnaire.** It was developed by Gross and John (1997) comprised of 16 items in total divided into 3 facets of emotional expressivity: Negative Expressivity, Positive Expressivity, and Impulse Strength. Each item has a response format on a 7-point Likert-type ranging from strongly disagree to strongly agree. For present study only negative emotional expressivity of 6 items was used to measure negative emotional expressivity. Negative emotionality can be defined as the personality variable that experiences negative feelings and poor self-concept. Negative emotions include anger, disgust, fear, and guilt, etc.

**Aggression Scale.** It is an 11-items scale developed by Orpinas, and Frankowski, (2001) with a 7-point Likert-type response format ranging from “0” to “6”. Aggression is the term characterized as a scope of practices that can bring about both physical and mental harm to oneself, others, or objects in the environment. It is one of the most dominant and negative behaviours that young generation facing these days and they are also at potential risk of facing aggressive and victimization too (Maguire & Patore, 1998).

**Illinois Bullying Scale.** Bullying can be defined as the repetitive behaviours that disturb, irritate, and harm other people, verbally, psychologically, and physically, (Boulton & Underwood, 1992). In current study bullying was measured through Illinois Bullying Scale developed by Espelage and Holt (2001) and translated into Urdu by Shajja and Att (2013). It is scored on the 4-points Likert type format and the Cronbach alpha reported by authors was .90.

**Shyness Scale.** Shyness has been considered as an individual’s heightened state overcernes related to social evaluation and intense egocentric leading to his/her inhibition for social withdrawal, avoidance ad escapes from events or (Zimbardo, 1982). To assess the shyness 20-items scale developed by Cheek and Melichor, (1985) which is anchored on a 5-points Likert scale was used in current study.

**Procedure**

After the proper approval for intitutitional ethical board study was carried out in two distinctive phase and in phase-1 instruments were translated, through the back-translation method recommended by Brislin (1970), before using them in the present study. The sample was approached using convenient sampling at various places of campus e.g. canteens, playgrounds, libraries, classrooms, etc. First of all, informed consent was taken from the participants which ensured their willingness to participate in the Study. The participants were then briefed about the nature and purpose of the study. They were ensured that research will not bring any physical, financial and psychological harm. The information they were going to provide would remain confidential. Demographic information sought from them through the demographic datasheet. Afterwards questionnaire booklet along with verbal
Results

Table 1

Mean, Standard Deviation, Alpha Reliability and Correlation Matrix for All the Variables Used in the Study (N = 270)

<table>
<thead>
<tr>
<th>variables</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>M</th>
<th>SD</th>
<th>a</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Guilt</td>
<td></td>
<td>-.37***</td>
<td>-25**</td>
<td>-28**</td>
<td>-.15*</td>
<td>43.4</td>
<td>7.3</td>
<td>.68</td>
</tr>
<tr>
<td>2. Negative Emotions</td>
<td>-</td>
<td>-.10</td>
<td>.11</td>
<td>.19**</td>
<td>.08</td>
<td>14.0</td>
<td>4.9</td>
<td>.85</td>
</tr>
<tr>
<td>4. Bullying</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>57.0</td>
<td>11.2</td>
<td>.71</td>
</tr>
<tr>
<td>5. Shyness</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*p < .01, ***p < .001

Table 2

Moderating Role of Guilt in the Relationship of Negative Emotions and Aggression (N = 270)

<table>
<thead>
<tr>
<th>Models</th>
<th>Predictor</th>
<th>B</th>
<th>ΔR²</th>
</tr>
</thead>
<tbody>
<tr>
<td>Model 1</td>
<td>Negative emotions</td>
<td>.10</td>
<td>.010</td>
</tr>
<tr>
<td>Model 2</td>
<td>Negative emotions</td>
<td>.09</td>
<td>.057</td>
</tr>
<tr>
<td></td>
<td>Guilt</td>
<td>-.24***</td>
<td>.030</td>
</tr>
<tr>
<td>Model 3</td>
<td>Negative emotions × Guilt</td>
<td>1.06**</td>
<td>.097</td>
</tr>
<tr>
<td>Total R²</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**p < .01, ***p < .001.

Table 3

Moderating Role of Guilt in the Relationship of Negative Emotions with Bullying (N = 270)

<table>
<thead>
<tr>
<th>Models</th>
<th>Predictor</th>
<th>B</th>
<th>ΔR²</th>
</tr>
</thead>
<tbody>
<tr>
<td>Model 1</td>
<td>Negative emotions</td>
<td>.11</td>
<td>.013</td>
</tr>
<tr>
<td>Model 2</td>
<td>Negative emotions</td>
<td>.10</td>
<td>.073</td>
</tr>
<tr>
<td></td>
<td>Guilt</td>
<td>-.27***</td>
<td>.001</td>
</tr>
<tr>
<td>Model 3</td>
<td>Negative emotions × Guilt</td>
<td>.17</td>
<td>.087</td>
</tr>
<tr>
<td>Total R²</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

***p < .001.

Table 4

Moderating Role of Guilt in the Relationship of Negative Emotions with Shyness (N = 270)

<table>
<thead>
<tr>
<th>Models</th>
<th>Predictor</th>
<th>B</th>
<th>ΔR²</th>
</tr>
</thead>
<tbody>
<tr>
<td>Model 1</td>
<td>Negative emotions</td>
<td>.19**</td>
<td>.035</td>
</tr>
<tr>
<td>Model 2</td>
<td>Negative emotions</td>
<td>.18**</td>
<td>.018</td>
</tr>
<tr>
<td></td>
<td>Guilt</td>
<td>-14*</td>
<td></td>
</tr>
<tr>
<td>Model 3</td>
<td>Negative emotions × Guilt</td>
<td>.85*</td>
<td>.019</td>
</tr>
<tr>
<td>Total R²</td>
<td></td>
<td></td>
<td>.072</td>
</tr>
</tbody>
</table>

**p < .01
and written instruction, regarding responding to instruments, were provided to them. Data were subjected to the SPSS-23 version for analyses. Besides descriptive and reliability analyses (see Table 1) hierarchical regression analyses were carried out to compute test the moderation effect of guilt in the relationship of negative emotions with aggression, bullying, and shyness (see Table 2, 3, & 4).

Results in Table 1 depict the psychometric properties of instruments. Alpha values are in the satisfactory range except for the Satisfaction with Life Scale. The value of skewness is acceptable in normal range showed a normal distribution of data.

Table 1 represented the means, standard deviations, alpha reliabilities, and correlation matrix computed for all the variables. Alpha coefficients ranged from .68 to .85.

Table 2 showed the moderating influence of guilt on the relationships between negative emotions and aggression. The table represented three models whereas the first model explained the prediction of aggression by negative emotions. The overall model is found to be non-significant.

In second model, negative emotions and guilt both variables were entered in the prediction list. \(\Delta R^2 = .057, \Delta F (2,268) = 16.41, p < .001\). Beta values exhibited that guilt was significant negative predictor of the aggression \((\beta = -.24, t = -4.05, p < .001)\). When both values were entered in the predictor list, 5.7% variance was increased in the dependent variable \(R^2 = .057\). The third model presented an interaction of negative emotions and guilt predicting aggression. Overall model was found to be significant with \(\Delta R^2 = .30, \Delta F (3, 267) = 8.84, p < .01\) which suggested that the product of negative emotions and guilt predicts the dependent variable with \((\beta = 1.06, t = 2.97, p < .01)\). When both values were entered in the predictor list, a 3% variance was increased in the dependent variable \(R^2 = .03\).

Table 3 showed the moderating influence of guilt in the relationship between negative emotions and bullying. The table represented three models whereas the first model explained the prediction of bullying by negative emotions. The overall model was found to be non-significant.

In second model, negative emotions and guilt both variables were entered in the prediction list. \(\Delta R^2 = .073, \Delta F (2,268) = 21.42, p < .001\). Beta values exhibited that guilt was significant negative predictor of the bullying \((\beta = -.27, t = -4.63, p < .001)\). When both values were entered in the predictor list, 7.3% variance was increased in the dependent variable \(R^2 = .073\).

The third model presented an interaction of negative emotions and guilt predicting bullying. Overall model was found to be non-significant with \(\Delta R^2 = .001, \Delta F (3, 267) = .22, p = n.s.\).

Table 4 showed the moderating influence of guilt in the relationship between negative emotions and shyness. The table represented three models whereas the first model explained the prediction of shyness by negative emotions. The overall model was found to be significant, with \(\Delta R^2 = .035, F (1,269) = 9.81, p < .01\). Beta values that was also significant predictor of shyness \((\beta = .19, t = 3.13, p < .01)\) and has been found the contributing for 3.5% variance in the dependent variable \(R^2 = .035\).

In second model, negative emotions and guilt both variables were entered in the prediction list. \(\Delta R^2 = .018, \Delta F (2,268) = 5.21, p < .01\). Beta values exhibit that guilt significant negative predictor of the shyness \((\beta = -.14, t = -2.28, p < .01)\). When both values are entered in the predictor list, 1.8% variance is increased in the dependent variable \(R^2 = .018\).

The third model presented an interaction of negative emotions and guilt predicting shyness. Overall model was found to be significant with \(\Delta R^2 = .019, \Delta F (3, 267) = 5.58, p < .05\) which suggested that the product of negative emotions and guilt predicts the dependent variable with \((\beta = .85, t = 2.36, p < .05)\).

**Discussion**

The present study was aimed to explore the role of guilt in relationships of negative emotions and attitude towards society among university students. Furthermore, the study also explored the role of guilt as a moderator between negative emotions and attitudes (aggression, bullying and shyness). Further, Pearson correlation between different variables was explored to have preliminary insight in relationship pattern (see Table 1). The pilot study was also conducted to find out the essential psychometric properties of the instruments for the indigenous population. The alpha demonstrated that all the scales were moderately reliable and acceptable as recommended by Nunnally (1974) for social sciences.

The first hypothesis of the study was a positive relationship. The first hypothesis of the study was a positive relationship between guilt and negative emotions. The results of the study did not support the hypothesis and showed that there is no relationship between guilt and negative emotions. Guilt is feeling after realizing that s/he did something wrong and there are chances that people feel sorry at their wrong deeds. As we collected the data from the educated population and there are chances of social desirability. Sometimes people give fake responses to hide their emotions. Research (Tangney, 1995) was conducted in the past in which they explored that guilt is a public emotion linked to individual conscience, and shame is a public emotion linked to exposure to others.

The second hypothesis of the study was that the guilt will moderate the relationship between negative emotions and attitude (Aggression, bullying, and shyness). The results of the study supported the hypothesis that guilt moderates the relation between negative emotions and aggression (see Table 2). Guilt is feeling when a person realizes that he did something wrong against his moral values and s/he feels sorry at his wrong deeds. Because of guilt, a person's negative emotions like sadness and anger are higher. Sometimes s/he shows anger that why s/he did wrong. Previous researches showed that guilt itself one of is the negative emotions and the people who feel guilt; they are easily annoyed and show anger to get rid of their anxiety.
The results of the study also indicated that guilt does not play a role in the relationship between negative emotions and bullying. As we know that bullying is a behaviour that irritates and tease the other people and guilt is feeling after realizing that person did some unethical deed. A bully person hardly feels the guilt because he consciously involves bullying activities and s/he knows the outcomes of that bullying activity. But the people, who are victimized, feel negative emotions like sadness, anger, and hatred. The result showed that guilt also moderates the relationship between negative emotions and shyness (see Table 4). Guilt is a situation in which a person escapes from people and events while a shy person also avoids the people in social situations. Doğan, Çelik, and Karakaş (2016) explored guilt and shyness in which he found that shy and guilty people in social situations. It was observed that shy people also tend to be guilty. It was observed that both shy and guilty people tend to be high in trait anxiety, and low in hostility and self-esteem (Doğan et al., 2016).

The third hypothesis was assumed that there is a positive relationship between negative emotions and aggression. The results did not support the hypothesis of the study and showed that there is no relationship between negative emotions and aggression. Social desirability is also mattered. It has been recognized that aggressive acts can occur for a variety of reasons, and a distinction has been made between affective aggression that is associated with negative emotion (Neuman & Baron, 1997). As we conducted the data from different departments of the University of Sargodha and it is possible that students hide their emotions and gave fake responses. That is why the study did not support the hypothesis.

The fourth hypothesis was stated that there is a positive relationship between negative emotions and bullying. The results of the study indicated that there is no relationship between negative emotions and bullying. As we know that bullying is an act in which people tease other people, and there are fewer chances to feel negative emotions because of bullying. However, the people who victimized of bullying are more likely to feel sadness, anger, and irritation as well.

The fifth hypothesis was stated that there is a positive relationship between negative emotions and shyness. The results indicated that there is a minor positive relationship between both variables (see Table 3). It has been seen that females are shyer as compared to males in our culture. Shyness is their innate tendency, on which they have weak control power. It is possible that on some occasions, they do feel sad and anger on their shyness that they cannot face the people and do not go to the events easily. As we collected the data from the University of Sargodha and it is mostly found in young girls, their Shyness reluctant the meeting with the people.

**Limitations and Implications of the study**

Firstly, the sample of the present study was limited to the students who belong to the Sargodha. Findings of this study should be generalized with caution, as we cannot generalize the results on the base of a population of Sargodha that it is not representative of the whole country.

Secondly, the sample of the present study was only students. So, if this limitation is removed then a more reliable conclusion can be drawn.

Thirdly, this study was directed in educational institutes. As a result, findings of the present study are also limited in terms of education which might also limit the generalizability of these findings.

Fourthly, data were obtained through a single method through self-report measures. The only self-report measure cannot be relied upon, because of the chances of social desire ability.

Lastly, several individuals, groups, and environmental factors, differences in personalities of the students, all exert effects on the level of variables.

To reduce the socially desirable responses, on self-report measures used in the present study, a mixed-method approach is recommended for future empirical efforts.

The sample of the present study was confined to the students who belong to the University of Sargodha, it is therefore suggested that larger sample size should be approached from the different universities of Pakistan, to maximize the external validity.

There are several practical implications of the current study that can be capitalized in the field of psychology. The findings of the present research have shown significant position of variables among university students. These findings can be supportive in improving the students by guiding them as to how can they handle the guilt which plays a key role in causing negative emotions, aggression, and shyness. The study gives a vision into the negative outcomes of variables. The present study enhances the understanding of guidelines to improve positive constructs and emotions.

By and large, this study provides literature for researchers to find new extents and ways for researches. It can be valuable in research settings as well as helpful in educational settings.

**Conclusion**

The current study focused on the role of guilt in the relationship of negative emotions with aggression, bullying, and shyness. The present study indicated that guilt has a negative relation with negative emotions, aggression, bullying and shyness. Aggression was found positively correlated with bullying and shyness. Different moderation analysis had also been undertaken in this study. Moderation analysis exposed the moderating role of guilt in the relationship of negative emotions and attitude (aggression, bullying and shyness). All moderation analyses were based on empirical literature. The analysis showed guilt moderate the aggression and shyness in the relationship of negative emotions.

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**Supplementary information**
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Availability of data and materials
The datasets used and/or analyzed during the current study are available from the corresponding authors on reasonable request.

Author’s contributions
This paper was conceived by Sanreen Umar based on her MPhil research work under the supervision of Dr. Mohsin Atta and Co-Supervision of Dr. Najma Iqbal Malik.

Ethics approval and consent to participate
The study was approved by department of Psychology, University of Sargodha Ethical Review Board. Written consent was obtained from all participants.

Competing interests
The authors declare to have no competing interests.

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