THE ROLE OF DARK TETRAD IN RELATIONSHIP OF CHILD ABUSE AND WORKPLACE BULLYING

Sadia Mushtaq  
Ph.D. Scholar,  
Department of Psychology, Foundation University,  
Islamabad, Pakistan  
E-mail: sadia_bhs@yahoo.com

Iffat Rohail  
Professor,  
Department of Psychology, Foundation University,  
Islamabad, Pakistan  
E-mail: iffat.rohail@fui.edu.pk

ABSTRACT  
This study purposes to investigate the predictive impact of childhood abuse on bullying behavior of perpetrators in workplace and the moderating role of dark tetrad (psychopathy, narcissism, Machiavellianism and everyday sadism) on the relationship. Self-report questionnaires were used for data collection. Using convenient sampling, 203 employees from public and private sectors in Pakistan were approached. The smart PLS SEM model was used to test the hypothesis. Consistent with the prediction, results of the study showed that abusive experience during childhood is positively associated to workplace bullying (B = 0.33). From the four dark personality traits, only psychopathy and narcissism were found to moderate the relationship between childhood maltreatment was positively associated to bullying behavior in workplace. The results of present study extent the current knowledge on the role of dark tetrad in relation to childhood abusive experience and bullying behavior of perpetrators at workplace.

KEYWORDS  
Bullying perpetrators, Maltreatment, Dark tetrad, Machiavellianism, Psychopathy, Narcissism and Everyday sadism

INTRODUCTION  
The abusive experience of childhood may influence the view of an individual about interpersonal connection, surroundings and stressors in their later life. Individuals, who have been abused or neglected, are forced to navigate a world filled with uncertainty
and fear. They did not express their emotion and learnt to suppress them because they are confused about the reaction of their caregivers (Wolfe et al., 2009). This uncertainty leads to hinder normal psychosocial development as result, the individual start doubting others and can never build a healthy interpersonal relationship throughout the life span (Low & Van Ryzin, 2014). Neglected children are more likely to develop emotional, behavioral, and interpersonal problems, mental health illnesses, learning disabilities and violence throughout their lives (Daniel et al. 2011).

Researches have revealed that long term abuse or neglect make a person abusive, they learnt it from their environment and become abuser while interact in society relation (Coid et al, 2001; Sigurdardottir & Halldorsdottir, 2013). It has also been found that childhood maltreatment restrict the social cognition of an individual, therefore, they lack in ability of resolving conflicting situations and failed in their social life (Hixon, 2009). These individual when interact in their workplace may also behave in a hostile way and deal with their coworkers aggressively. Hence abusive experiences of childhood may cause workplace bullying.

Workplace bullying is commonly referred to frequent, persistent, hostility, and power imbalance (Einarsen et al., 2011). It includes harassing, offending, socially excluding or negatively affecting someone’s tasks in work setting repeatedly and over a period of time. (Einarsen, Hoel, Zapf, & Cooper, 2003, p. 15). As shown in a meta-analysis of prevalence rates, approximately 15% of employees worldwide are subjected to workplace bullying in some capacity (Nielsen et al., 2010). Workplace bullying has emerged as an important area of research in social and management studies, over the past two decades. The literature revealed that researches conducted by social scientists have focused on the victim aspect of workplace bullying whereas researches conducted in management sciences have focused on its impact on progress of organization and the financial loss that an organization have to pay in terms of attrition and low productivity (Nielsen & Knardahl 2015; Henle & Gross 2014; Bano & Malik,2013). This phenomenon has serious implications not only for the psychological safety and well-being of victims, but also for the operation of an organization. Therefore, examining the contributing factors of bullying in work setting would help to understand this phenomenon (Bond et al., 2010).

Individual qualities such as personality traits are highlighted as possible predecessors of bullying in the individual disposition hypothesis, which asserts that certain characteristic boost the probability of being bullying perpetrators (Zapf & Einarsen, 2011). The empirical literature reveals that personality of individual might be the most important factor of bullying and harassing behavior (Swearer & Hymel, 2015; Pilch & Turska, 2014). Bullying perpetrator behavior is often deep-rooted in personality disorder, self-esteem issues, or emotional deregulation. (Hauge et al. 2009). So the
individuals having dark tetrad traits may have tendency of bullying on workplace.

The term Dark triad was incepted by Paulhus & Williams (2002) and was turned to Dark Tetrad by Chabrol and his colleagues in 2009 as the fourth component was added in dark trait family. These personality traits includes; psychopathy, narcissism, machiavellianism and everyday sadism. All the four traits are non-clinical and shared malevolent personality characteristics; emotional coldness, dishonesty, and aggression which are all examples of potentially detrimental behavior (Paulhus & Williams, 2002; ZeiglerHill & Marcus, 2016). Researches on personality of perpetrator revealed that dark tetrad are significant predictor of bullying behavior (van Geel et al., 2016; Fanti & Kimonis, 2012; Baughman et al., 2012; Ragatz et al., 2011; Linton & Power, 2013; Podsiadly & GamianWilk, 2015).

A detailed literature review directed that perpetrators have received extremely little direct attention. Therefore, In 2003 Rayner and Cooper labeled this gap as a ‘black hole’ in the arena. Aquino and Thau (2009) declared the least researched area. Nielsen and Einarsen (2018) have draws attention to the paucity of research on perpetrator of bullying as well as, relying on data collected from single source. Thus, research focusing on perpetrator characteristics is necessary to increase understanding on the reasons some people behave as bullies (Zapf & Einarsen 2011; Baillien et al., 2011). Keeping in view this gap the primary object of current study was to examine the association between childhood maltreatment and workplace bullying behavior of perpetrators and data was not only collected from the perpetrators but also from their associates with the permission of participants. In order to have a deeper insight of this association, the second object of current study was to examine the moderating role of dark tetrad on association among childhood maltreatment and bullying at workplace.

Figure 1: Conceptual Framework

![Conceptual Framework Diagram]

Child Abuse ———> Workplace Bullying

Dark Tetrad
- Psychopathy
- Narcissism
- Machiavellianism
- Everyday Sadism
RESEARCH OBJECTIVES
1. To assess the relationship between child abuse and workplace bullying behavior of perpetrators.
2. To examine the role of dark tetrad i.e. psychopathy, narcissism, Machiavellianism and everyday sadism, as moderator between the association of child abuse and bullying at workplace.

RESEARCH HYPOTHESES
1. There is a positive relationship between child abuse and workplace bullying behavior of perpetrators.
2. Psychopathy moderates the association between child abuse and bullying at workplace.
3. Narcissism moderates the connection between child abuse and bullying behavior at workplace of perpetrators.
4. Machiavellianism moderates the association among child abuse and bullying at workplace.
5. Everyday sadism moderates the association among child abuse and bullying at workplace.

RESEARCH METHODOLOGY
Sample and procedure
The data was collected through questionnaires which were distributed among participants after detailed discussion of the phenomena in public and private sectors organizations in Pakistan. The current study was executed in line with ethical guidelines, and informed consent was attained before data collections from the participants. The analysis included a total of 203 valid questionnaires. Sample was comprised of 78 (38.42%) women and 125 (61.57 %) men whose age range was 23-56 (M = 38.15, SD = 8.42). Table 1. is presenting further demographics detail.

<table>
<thead>
<tr>
<th>Characteristics</th>
<th>N</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age</td>
<td></td>
<td></td>
</tr>
<tr>
<td>20 - 30 Years</td>
<td>50</td>
<td>25</td>
</tr>
<tr>
<td>31 - 40 Years</td>
<td>98</td>
<td>48</td>
</tr>
<tr>
<td>41 - 50 Years</td>
<td>39</td>
<td>19</td>
</tr>
<tr>
<td>51 - 60 Years</td>
<td>16</td>
<td>8</td>
</tr>
<tr>
<td>Gender</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Men</td>
<td>125</td>
<td>62</td>
</tr>
<tr>
<td>Women</td>
<td>78</td>
<td>38</td>
</tr>
<tr>
<td>Marital Status</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Single</td>
<td>61</td>
<td>30</td>
</tr>
<tr>
<td>Married</td>
<td>98</td>
<td>48</td>
</tr>
</tbody>
</table>
Instruments

**Negative Act Questionnaire-R (NAQ-R)**
Workplace bullying behavior was measured by using Negative Act Questionnaire-R Scale comprised of 22-item by Einarsen, Hoel & Notelaers (2009). This scale is articulated in behavioral terms, without any reference to the term bullying. The scale used in present study is modified as per the requirements of the study, thus, participants are asked how often they engaged in each behavior during the last six months at their workplace (e.g., “I humiliated or ridiculed someone in connection with his/her work” and “I have engaged in threats of violence or physical or real abuse”). Each item is rated to reflect the frequency from 0 (Never) to 4 (Daily). High score indicate higher level of bullying behavior at workplace. The alpha value of the scale is .87 to .93 (Einarsen, Hoel & Notelaers, 2009). This scale was also used for collection of rating from the associates of participants.

**Childhood Trauma Questionnaire – Short Form (CTQ-SF)**
Bernstein and his colleagues (2003) developed CTQ-SF scale which is consist of 25 items and ask about abuse and neglect experiences. Each item is rated to reflect the frequency of exposure from 0 (“never true”) to 5 (“very often true”). A total – score is calculated by summing all items scores after revers coding the required items.
Reliability for the CTQ-SF is good with high internal consistency scores ranging from .80-.95.

**The Short Dark Triad (SD3)**
The Short Dark Triad is a self-report measure developed by Jones & Paulhus in 2014. It was used to measure the dark triad personality traits including narcissism, Machiavellianism, and psychopathy. It is consist of 3 dimensions and 27 items (nine items per trait). Participants rated a 5-point Likert scale with the response options ranging from 1 (Strongly Disagree) to 5 (Strongly Agree) to see the degree of their personality trait. Over all reliability of Dark Triad as a composite trait, is (a = .88) as well as identifying narcissism (a = .77), Machiavellianism (a = .81), and Psychopathy (a = .80) independently (Jones & Paulhus, 2014).

**Short Sadistic Impulse Scale (SSIS)**
The SSIS is composed of 10 items and developed by O’Meara et al., 2011 to measure everyday sadism (O’Meara et al., 2011). It is a 5-point rating scale, range from 1 “Strongly disagree” to 5 “Strongly agree”. Short Sadistic Impulse Scale has a good reliability with average alpha of .87.

**RESULTS**
PLS-SEM (Partial Least Squares Structural Equation Modeling) was used to test the hypotheses, as it can handle complex intercalations between constructs even on small datasets (Henseler et al., 2016) and assess the impact in three ways: direct, indirect, and total. Furthermore, it dealt with non-normally distributed data which is its important feature for the survey data. The default path weighting scheme was used to run the PLS algorithm, the data was standardized before the estimation of latent constructs, the tolerance level was set to 1e-5, and the algorithm was run to create 5000 bootstrap participants in accordance with the recommendations of Hair et al (2017).

The analysis started with an assessment of the reflective measures using both convergent and discriminant validity tests. Convergence validity was assessed by using Cronbach’s Alpha, Rho_A, Composite Reliability and Average Variance Extracted (AVE). The values (Table 2), of composite reliability were above 0.8 threshold. The values of Cronbach’s a and rho_A were also above the 0.7 threshold. The Average of variance extracted values were well over the 0.5 threshold, which indicated good convergent reliability.

**Table 2: Convergent Validity, Cronbach’s Alpha, Rho_A, Composite Reliability and Average Variance Extracted (AVE) of Scales**

<table>
<thead>
<tr>
<th>Scales</th>
<th>A</th>
<th>rho_A</th>
<th>CR</th>
<th>AVE</th>
</tr>
</thead>
<tbody>
<tr>
<td>CA</td>
<td>0.96</td>
<td>0.96</td>
<td>0.95</td>
<td>0.50</td>
</tr>
</tbody>
</table>
A discriminant validity was tested by calculating heterotrait-monotrait ratios (HTMTs). The lack of discriminant validity is indicated by HTMT scores near to 1 (Henseler et al., 2016). All of the numbers are higher than 1, indicating that discriminant validity is acceptable.

Table 3: Discriminant Validity Heterotrait-Monotrait Ratio (HTMT) of Scales

<table>
<thead>
<tr>
<th></th>
<th>CA</th>
<th>MCH</th>
<th>WB</th>
<th>NAR</th>
<th>PSY</th>
<th>ES</th>
</tr>
</thead>
<tbody>
<tr>
<td>CA</td>
<td>0.57</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>MCH</td>
<td>0.53</td>
<td>0.57</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>WB</td>
<td>0.60</td>
<td>0.59</td>
<td>0.37</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>NAR</td>
<td>0.62</td>
<td>0.51</td>
<td>0.48</td>
<td>0.56</td>
<td></td>
<td></td>
</tr>
<tr>
<td>PSY</td>
<td>0.56</td>
<td>0.47</td>
<td>0.34</td>
<td>0.48</td>
<td>0.43</td>
<td></td>
</tr>
<tr>
<td>ES</td>
<td>0.23</td>
<td>0.28</td>
<td>0.36</td>
<td>0.22</td>
<td>0.20</td>
<td>0.14</td>
</tr>
</tbody>
</table>

Note. CA= Childhood Abuse, MCH. = Machiavellianism, NAR= Narcissism, PSY= Psychopathy, ES= Everyday Sadism, CR= Composite Reliability, AVE = Average of variance extracted

Table 4 recapitulated the structural model of PLS analysis and showed the standardized path coefficients (B) and the t values observed with the significance level achieved. Firstly, direct effect of child abuse on workplace bullying and dark tetrad traits was calculated using the bootstrapping approach recommended by Preacher and Hayes (2008) and t statistic was applied at p < 0.05. Then interaction term is calculated to examine the moderating effect.

Table 4: Moderating Effect of Psychopathy on relationship between childhood negative experience and workplace bullying behavior among Perpetrators

<table>
<thead>
<tr>
<th>Variable</th>
<th>B</th>
<th>SE</th>
<th>t</th>
<th>P</th>
</tr>
</thead>
<tbody>
<tr>
<td>CA  WB</td>
<td>0.33</td>
<td>0.11</td>
<td>3.10</td>
<td>0.002</td>
</tr>
<tr>
<td>PSY  WB</td>
<td>0.19</td>
<td>0.09</td>
<td>2.02</td>
<td>0.044</td>
</tr>
</tbody>
</table>
### Table 1: Path Coefficients and Significance Tests

<table>
<thead>
<tr>
<th>Path</th>
<th>Coefficient</th>
<th>Standard Error</th>
<th>t-value</th>
<th>p-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>CA*PSY → WB</td>
<td>0.15</td>
<td>0.07</td>
<td>2.28</td>
<td>0.022</td>
</tr>
<tr>
<td>CA → WB</td>
<td>0.45</td>
<td>0.10</td>
<td>4.48</td>
<td>0.000</td>
</tr>
<tr>
<td>NAR → WB</td>
<td>-0.02</td>
<td>0.09</td>
<td>0.17</td>
<td>0.866</td>
</tr>
<tr>
<td>CA*NAR → WB</td>
<td>0.17</td>
<td>0.06</td>
<td>2.71</td>
<td>0.007</td>
</tr>
<tr>
<td>CA → WB</td>
<td>0.19</td>
<td>0.10</td>
<td>1.86</td>
<td>0.063</td>
</tr>
<tr>
<td>MCH → WB</td>
<td>0.35</td>
<td>0.09</td>
<td>3.84</td>
<td>0.000</td>
</tr>
<tr>
<td>CA*MCH → WB</td>
<td>0.06</td>
<td>0.09</td>
<td>1.10</td>
<td>0.271</td>
</tr>
<tr>
<td>CM → WB</td>
<td>0.42</td>
<td>0.11</td>
<td>3.88</td>
<td>0.000</td>
</tr>
<tr>
<td>ES → WB</td>
<td>-0.01</td>
<td>0.11</td>
<td>0.12</td>
<td>0.904</td>
</tr>
<tr>
<td>CA*ES → WB</td>
<td>0.06</td>
<td>0.09</td>
<td>0.63</td>
<td>0.527</td>
</tr>
</tbody>
</table>

**Note:** CA= Child Abuse, WB = Workplace Bullying, PSY= Psychopathy, NAR= Narcissism, MCH= machiavellionism, ES= Everyday Sadism

### Figure 2: Mod-Graph with Moderating Effect of Psychopathy between childhood maltreatment and workplace bullying

**Figure 2**: The graph illustrates the moderating effect of psychopathy on the relationship between childhood maltreatment and workplace bullying.

Based on the results, the first moderation analysis tested the association between child abuse, bullying at workplace, and psychopathy. The results presented in Table 1 and also shown in Figure 1, indicate that child abuse has a positive and significant effect ($B = 0.33, t = 3.10, p < 0.001$) on workplace bullying behavior. The direct effect of the moderator, psychopathy, was also positive and significant ($B = 0.19, t = 2.02, p < 0.05$) on workplace bullying behavior. The findings showed that psychopathy positively...
associated with workplace bullying behavior of perpetrators. The interaction term was also positive and significant \((B = 0.15, t = 2.28, p < 0.05)\) which indicated that psychopathy positively moderated the relationship of child abuse and bullying behavior of perpetrators in workplace. The conditional effects of one standard deviation below and above from mean value (Mean-1SD, Mean, mean+1SD) of moderator shown in mod graph (Figure 1). The slope indicate that increase in the level of psychopathy raised the effect of child abuse. The overall R square value of the model was 0.44 \((P <.001)\) which suggested that childhood abusive experience and interaction term explain considerable (Cohen, 1988) 44% of the variance of the workplace bullying behavior of perpetrators.

**Figure 3: Mod-Graph with Moderating Effect of Narcissism between childhood negative experience and workplace bullying**

The results presented in table 4 and also shown in figure 2. The findings indicated that child abuse positively and significantly impact \((B = .45, t = 4.49, p <0.001)\) bullying behavior of workplace perpetrators. However, the direct effect of moderator, narcissism, was negative and non-significant \((B = -.016, t = 1.69, p>0.05)\) on workplace bullying. The interaction term (CM x WB) had positive and significant effect \((B = 0.169, t = 2.71, p < 0.05)\) on bullying behavior of workplace perpetrators.

Therefore, it indicated that narcissism positively moderates the relationship of child abuse and perpetrator’s bullying behavior at workplace. The conditional effects of one standard deviation below and above from mean value (Mean-1SD, Mean, mean+1SD) of moderator presented in mod graph (Figure 2) which further explained by suggesting that narcissism boosted this relationship between child abuse and workplace bullying behavior among perpetrators.

On the other hand machiavellionism \((B = 0.06, t = 1.10, p > 0.05)\) and everyday sadism \((B = .06, t = .63, p > 0.05)\) are not significant moderator at p<0.05.
DISCUSSION AND CONCLUSION
The present study was meant to examine whether dark tetrad traits moderate the association among child abuse and bullying at workplace. Dark tetrad traits are maladaptive behavioral predispositions; hence, it might be assume that individuals with these traits will affect the emotional state of their coworkers.

Numerous studies have also suggested that personality traits play crucial role in the emergence and maintenance of various types of behavioral problems. (Lonigan & Phillips, 2001). In other words, personality traits particularly, dark traits, can be a predetermined characteristic that alters and shapes an individual’s responses to adversity which lead to maladjusted and unstable behaviors and wide range of negative outcomes (Muris & Ollendick, 2005; Nathanson, Paulhus, & Williams, 2006; Kashy & DePaulo, 1996; Miller, Widiger, & Campbell, 2010; and Megargee, 2009).

In line with H1 the findings reveal that child abuse positively predicted bullying behavior among perpetrators at workplace. These findings are in line with previously reported literature that child abuse have significant impact on behavioral development (Bandura, 2001), the individuals who have been experienced emotional abusive in their young age are at risk of becoming offensive and abusive individuals and the course of violence usually endure (Wang et al., 2019). Such children use bullying tactics to evade further exploitation and may practice these tactics well into adulthood (Dussich & Maekoya, 2007).

With regard to the moderating role of dark tetrad on association between child abuse and bullying at workplace, partial support was found for the hypotheses of current study. Psychopathy (H2a) and narcissism (H2b) are positively moderating the association among childhood abuse and bullying behavior at workplace while, machiavellianism (H2c) and everyday sadism (H2d) are non-significant moderate.

Findings of the study provided a strong support and revealed that psychopathy significantly elevated the effect of child abuse on workplace bullying. Empirical data revealed that psychopathy is a robust predictor of aggression, hostility and delinquency (Jones & Paulhus, 2011) and is associated with lacked in planning the reaction (Peace & Passanisi, 2018). Because of the evidence that psychopathic individuals expect positive outcome from aggressive and bullying behavior and are least bothers about hurting people (Pardini et al. 2003), psychopathy serve intrinsic motive for the workplace bullying perpetrators. Therefore, as psychopathy increases, the association among between child abuse and bullying behavior at workplace. The narcissism also significantly elevated the impact of child abuse on workplace bullying behavior among perpetrators. Previous research has shown that narcissistic people are more likely to follow their own plan than think about their associates, and do what benefits them
instead of what is appropriate for the group as a whole. (Conger et al., 1997; Nevicka et al., 2018). They utilize and focus on their skills of influencing, bullying and deception (Glad, 2002) to get their way at workplace.

On the other hand machiavellianism and everyday sadism were found non-significant moderator. In spite of manipulative and aggressive nature of machiavellian, empirical literature revealed that they are socially skilled and well-adjusted individuals (Card & Little, 2006; Peeters, Cillessen, & Scholte, 2010). They possessed the skill and attitude to influence others, benefiting from aggression while avoiding the bad consequences of their actions. As far as daily sadists getting pleasure from humiliating and aggressive acts (O'Meara et al., 2011; Paulhus, 2014), this pleasure could be obtained just by witnessing (vicarious sadists) rather than participating (direct sadists) (Paulhus & Dutton, 2016).

This research would make a contribution to existing knowledge of the direct influence of child abuse on workplace bullying behavior of perpetrators and role of dark tetrad trait on this association between both variables. Theses finding might be constructive for organizations by investigative the personal factors of bullying at workplace, particularly from the perspective of perpetrators. The organizations may develop and improve the recruitment procedure for a healthy work environment. This study also highlight the need to develop some intervention plans for the individuals who have child abuse history so that such individuals have proper platform to seek help. The future studies can be conducted to explore more factors like motivation and organizational culture in relation to bullying perpetration. Workplace bullying is dangerous not only for victim and organization but also for the perpetrators, thus, protective factors should also be examined. A mix method research design may enhance the theoretical knowledge about workplace perpetrators.

RECOMMENDATIONS
The findings of the present study are to be interpreted with few margins. A cross sectional research design was used for present study. It is recommend to do a qualitative or mix method research in future to study the phenomena of bullying. Future studies should also include organizational variable as well.

REFERENCES
wave cross-lagged study. Work and Stress, 25(2), 128–146


The role of...

Negative Acts Questionnaire-Revised. Work and Stress, 23(1), 24-44.


