PERSONALITY TRAITS AN ANTECEDENT OR CONSEQUENCES OF WORKPLACE BULLYING

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ABSTRACT

This study investigates whether Big Five personality traits are antecedents or consequences of bullying. A two-panel study designed in which panel one T1 data collected in one attempt and after a year panel, two T2 time data collected in the second attempt. Existing research on bullying found that individuals exposed to bullying experience an increase in conscientiousness and neuroticism and a decrease in agreeableness. It is claimed that the personality of the victim contributes to the bullying escalation process. There is still research scarcity whether personality is the cause of bullying or bullying results in personality change and another gap found in previous research was the lack of longitudinal research intended in shaping the individual antecedents or the impact of workplace bullying. By bridging these gaps, our study with simple random sampling collected data from university employees (N = 725). Manova test with repeated measures and structural equation modeling (SEM) analysis in AMOS was then used to examine and parallel many competing models to govern data fitness. Results found that experience of bullying in the first interval T1 leads to reduce in agreeableness and an increase in neuroticism in second interval T2. Managerial implication is also discussed.

Keywords: Workplace bullying; Personality; Longitudinal study; agreeableness; neuroticism
1. INTRODUCTION

1.1. Bullying at the workplace

Bullying at the workplace has been discussed clearly in the last three decades (Lipinski & Crothers, 2014). Bullying definition contains few specific key components which include the occurrence of negative behavior (offending, making alone, social exclusion, unnecessary monitoring, unmanageable workload, work below one’s level, etc.), consistently happening (monthly, weekly or daily) since last six months or more. Bullying encompasses escalating processing during which power imbalance relationship progresses between two parties, the victim and bystander (Einarsen et al., 2011).

Massive literature discussed the prevalence of bullying, existence of negative behaviors and associated risks (Zapf et al., 2011; Chan & Wong, 2015; Devonish & Devonish, 2017), bullying impact on victim's well-being (Tehrani, 2012), bullying impact on the organization (Caponecchia & Wyatt, 2012), and other organizational factors that contribute to bullying (Hauge et al., 2011).

There are two schools of thought on the antecedents of bullying, Leymann who considers organizational factors are the main cause of bullying. Instead of sticking to the idea of a specific personality, he suggested that any employee could be a victim of bullying (Leymann, 1996); it is not the only personality or individual disposition but also the deficit work environment, which promotes bullying. (Zapf & Einarsen, 2011).

Among the organizational factors prompting the frequency of bullying acts are, a messy and unpredictable work environment, minimum work control, role conflicts, and role ambiguity, changes in work, work pressure, demands for high performance, interpersonal conflicts, damaging management style, truncated moral standard, culture and climate of organization (Bowling & Beehr, 2006; Matthiesen & Einarsen, 2001; Agervold, 2009).

On the other hand, Zapf and Einarsen (2011) found that these are individual factors that are responsible for bullying. Few researchers think that an employee's personality may be an antecedent of workplace bullying (Coyne et al., 2000; Bowling & Beehr, 2006; Nielsen & Knardahl, 2015). Personality may be that of the perpetrator or the victim. While others, like Leymann, argue that the leadership style and other organizational factors are the root cause of bullying.

Victims try to externalize the reasons for bullying like a person in a positive sense is indifferent to his colleagues, (e.g., he is a high achiever, more motivated or better performer)
(Brodsky, 1976) can be the target of bullying. According to the leymann school of thought, individual personality plays a minor role in predicting and explaining bullying while according to Zapf and Einarsen (2011), personality may influence employees to involve in workplace bullying (Coyne et al., 2000; Bowling & Beehr, 2006). It is also under consideration whether personality is an outcome or cause of bullying (Glaso et al., 2007).

There is still research scarcity whether personality is the cause of bullying or bullying results in personality change and another gap found in previous research was the lack of longitudinal research intended in shaping the individual causes or the impact of workplace bullying. Existing literature on the association between personality and bullying concentrated on one-time data collection (Glao et al., 2007; Lind et al., 2009), the objective of this study is to investigate whether personality traits forecast bullying abuse or bullying subjection leads to change in personality traits with longitudinal data.

Experience of workplace bullying has been used to be a hazardous type of social stress at work or even as an upsetting happening which has a more crippling effect for workers than all other categories of work-related stress put together (Einarsen et al., 2011; Zapf et al., 1996). At an individual level, workplace bullying causes post-trauma stress, productivity loss, presenteeism, emotional exhaustion and mental health problems (Reknes et al., 2017; Houck & Colbert, 2017; Neto et al., 2017; Conway et al., 2016; Zhou et al., 2016).

It is associated with the powerlessness to concentrate, mood swings, anxiety, sleep problems, fear, and depressive symptoms as well as psychosomatic symptoms such as headaches, respiratory and cardiac complaints, hypertension, and hypersensitivity to sounds (Hallberg et al., 2015; Macintosh, 2016; Karatza et al., 2016; Devonish et al., 2017). A study of Norwegian employees investigated employees exposed to workplace bullying finds that the targets exhibit psychological distress 1.77 times more than those who were not experiencing workplace bullying (Reknes et al., 2014).

Workplace bullying is also associated with behavioral or attitudinal consequences relevant to the organization such as turnover intention, job satisfaction and job performance (Olsen et al., 2014; Laschinger & Nosko, 2015; Bernstein & Trimm, 2016; Salin & Notelaers, 2017; Blackstock et al., 2015). The victims of workplace bullying often feel betrayed by their employing organization (Oade, 2009) and report an advanced degree of burnout and absenteeism combined with a lower degree of organizational commitment (Houshm et al., 2012; Nielsen & Einarsen, 2012).
A few other studies display that victims may cope with bullying using sickness, absence, or taking drugs. Some may even intend to suicide (Voss et al., 2004). The latest literature authorizes that bullying victimization at work may surge the suicidal hazard even among men and women with no former psychiatric disorder (Pompili et al., 2008). In a more recent study, bullying at work has been identified as a risk factor for type 2 diabetes, and bullied participants were reported having 1.46 times greater risk of emerging diabetes compared with non-bullied respondents (Xu et al., 2018). Due to its devastating effects on employees, it is requisite to investigate whether personality is the cause or consequence of bullying.

Our research question is whether big five personality traits are antecedents or consequences of bullying at the workplace.

1.2. Bullying and personality

Few researchers considered the linkage between personality traits and bullying. Outcomes of these researches display that victim score greater on neuroticism, depression as compare to non-victims (Zapf, 1999), less emotional stability (Glasø et al., 2007), and reduced self-respect (O'moore & Lynch, 2007), negative affectivity (Bowling et al., 2010), and more emotionally reactive persons (Gamian-Wilk, 2010).

Similarly, the victim of bullying shows a minimum level of social skills, aggressiveness, assertiveness, and extraversion (Glaso et al., 2007). Bullying victims not merely found ineffective in social and political skills and less talkative but were also found with less understanding level, no or minimum diplomacy, and less likable (Glaso et al., 2007). Existing research also found the victims as high achievers, self-monitoring and self-centered, conscientious, and no tolerance for diversity (Glaso et al., 2007).

Collectively, existing studies suggest that employees who have been experiencing bullying show four basic features, less emotional stability, high neuroticism and conscientiousness, less agreeableness, and extroversion. Lind et al. (2009) institute that stumpy agreeableness and great conscientiousness linked with the chances of becoming a bullying victim. In another longitudinal research, negative emotionality prophesied being offended at the workplace (Nielsen & Knardahl, 2015).

While further consequences recommend that variations in personality traits are bullying consequences instead of bullying causes (Nielsen & Knardahl, 2015). Sank agreeableness was also seen as an outcome instead of an antecedent of bullying (Podsiadly & Gamian-Wilk, 2017). Therefore, more research is required to investigate if personality traits are antecedents
or consequences of bullying. The research objective is to investigate if personality traits are predictors or outcomes of workplace bullying.

1.3. **Personality as an antecedent and consequences of negative social interactions**

Victim’s personality has been considered a key factor in amplifying bullying victimization (Einarsen et al., 2011), personality traits possess specific hidden characters which enable a person to think, behave and proceed in a specific way (Zawadzki et al., 1998). A person's temperament helps trigger negative behavior from co-workers, seniors, and juniors, and individuals with certain personality traits (Bowling & Beehr, 2006) may expedite workplace standards by annoying others.

Victim's personality traits such as neuroticism, negativity in emotions, and self-esteem may arise from bullying victimization (Nielsen & Knardahl, 2015). On the other side, individual personalities may also get change with experience of negative behaviors, social expectations, and with the changing nature demand of work roles (Specht et al., 2011). Personality changes as an outcome of life events discussed in the light of social events and social interactions. Social events include getting a new job in a competitive environment, getting divorced or married, having a child has a substantial effect on personality changes (Specht et al., 2011).

An individual suffering from stress as an outcome of bullying may also change the individual's personality. Existing literature also suggests that bullying victims become less compliant (Gamian-Wilk, 2013), and possess a greater level of suspiciousness (Matthiesen & Einarsen, 2001). Bullying is a dynamic process that escalates negative behavior between perpetrator and victim. Perpetrators show many kinds of negative behaviors such as work-related bullying (e.g., unmanageable workload, unnecessary monitoring, having opinions ignored or key areas of responsibility removed), person-related bullying (e.g., spreading rumors, isolation, insulting or humiliating behavior), physical intimidation (e.g., threatening, abuse or harsh language) (Einarsen et al., 2011).

Victim undergoes through diverse stages during the bullying process (Høgh & Dofradottir, 2001) that are eventually ineffective. The victim becomes stressed, depressive and has negative emotions after experiencing bullying (Leymann, 1996), feels fatigued and chronic pain and lack of concentration on work and other health-related problems (Hansen et al., 2006; Høgh et al., 2011). Furthermore, in case of rejection in social relations, victims inclined to behave aggressively (Smart-Richman & Leary, 2009).
Social denial spoils self-regulation and also reduces cognitive abilities (Baumeister & Dewall, 2005). Unbalanced self-regulation has an impact on cognitive, emotional, and behavioral functioning; research also found that reduced self-regulation leads to downward twisting where social exclusion enhances socially unexpected behaviors and leads to more social rejection.

As an outcome of the dynamic and long-lasting bullying process, victims found themselves as a socially rejected person who reduces emotional, cognitive, and behavioral functioning. We may assume that exposure to bullying leads to enhanced neuroticism and reduced agreeableness, extraversion, openness to experience, and conscientiousness. Among the existing research on bullying, few longitudinal studies have conducted, but their outcome focus was the health of victims.

Few other longitudinal studies provide a background for individual temperaments of bullying targets and help understand the cause and effect nature of workplace bullying and its advancement (Zapf et al., 1996). Our research objective was also to govern the reason and consequence associations between personality traits and bullying behaviors through a longitudinal research design. This study used a two-wave panel research design with a time interval of twelve months, with the application of causal and anti-causal effects. The objective was to identify whether a big five personality traits were a predictor of workplace bullying or outcomes. To test personality as an antecedent, we hypothesize as,

- **H1a**: The lower agreeableness linked with workplace bullying experience.
- **H2a**: The lower extraversion linked with workplace bullying experience.
- **H3a**: The greater conscientiousness linked with workplace bullying experience.
- **H4a**: The greater neuroticism linked with workplace bullying experience.
- **H5a**: The greater openness to experience linked to workplace bullying experience.

These hypotheses tested in the reverse direction. As our objective is to also investigate the after-effects of bullying as a long-lasting process, which results in social, emotional, and cognitive isolation. So we hypothesize that:

- **H1b**: Workplace bullying experience negatively linked with agreeableness.
- **H2b**: Workplace bullying experience negatively linked with extraversion.
- **H3b**: Workplace bullying experience negatively linked with lower conscientiousness.
• H4b: Workplace bullying experience positively linked with neuroticism.

• H5b: Workplace bullying experience is negatively linked with openness to experience.

2. METHODOLOGY

Hypotheses tested through a two-wave research design with a time interval of one year between two waves, the objective to keep twelve months' time lag was the psychological nature of bullying experience which requires at least six months to show its complete effect (Einarsen et al. (2011). The data collected from 725 participants 491 males (60.6%), 319 females (39.4) from different sectors of the public and private universities age range, 21-60, (Mean = 1.90 and SD = 1.026).

Respondents maximum qualification was four years degree program (Max = 49%, Mean = 1.90, SD = .844). Maximum job experience of respondents were 1-5 year (response rate = 59%, Mean = 1.80 and SD = 1.274). Maximum respondents were working at keen managerial position (341, 42%, Mean = 1.65, SD = .763). Maximum respondent were married (response rate 454, 56%, Mean = 1.46, SD = .530).

The selection criteria required full-time workers with maximum interaction with managers or supervisors at least four times/week. Participants selected through simple random sampling by getting pay roles from HR departments and selected participants informed that they have to fill the questionnaire two times after twelve months duration those who were not willing were dropped from the respondent's list. Maximum respondents participated in both surveys.

The response rate in the 2\textsuperscript{nd} wave was 81% which is greater than, found in previous literature (Podsiadly & Gamian-Wilk, 2017). The reason, in the first survey researcher, took the contact details such as contact number and email address of respondents so that she may contact for the second survey on an individual basis).

3. MEASURING SCALE

3.1. The shortest version of a big five personality traits.

The shortest version of the Big Five Inventory consisting of 10-items, developed by (Rammstedt & John, 2007) used for this study. The main reason to use BFI was it represented the high and low pole of each personality factor of big five traits, so the BFI consisted of one true score and one false score items. A second important reason for using this shortest version
was, it covered as broad bandwidth as possible for each scale by selecting two contrasting items that measured the core aspect but were not redundant in content.

The first item of BFI which reversed scored and the sixth item was used to measure extraversion, second and seventh (reverse scored) were used to measure agreeableness, third (reverse scored) and eighth item were used to measure conscientiousness, forth (reverse scored) and ninth items were used to measure neuroticism and fifth (reverse scored) and tenth items were used to measure openness.

The response rate measured on five points Likert scale with the range starting from disagree strongly = 1, disagree a little = 2, neither agree nor disagree = 3, agree a little = 4 and agree strongly = 5. Cronbach’s alpha value for data collected in T1 for each dimension was .82 for extroversion (E), .78 for agreeableness (A), .80 for conscientiousness, .74 for neuroticism (N) and .82 for openness (O). Cronbach’s alpha value for data collected in T2 for each dimension was .84 for extroversion (E), .79 for agreeableness (A), .81 for conscientiousness, .77 for neuroticism (N) and .80 for openness (O).

3.2. Negative act behavior (bullying behavior).

Negative act at the workplace was measured by the NAQ-R version which was given by (Einarsen et al., 2009) and contains 22 acts. The response rate measured on five points Likert scale, range; never = 1, Now and Then = 2, Monthly = 3, Weekly = 4 and daily = 5. Cronbach’s alpha value for data T1 was .86 and for T2, .88.

3.3. Statistical analysis

The correlation was run in SPSS to get a primary understanding of data. After correlation, a Manova test with repetitive procedures was applied to identify the across-time variations in individual variables as used by (Podsiadly & Gamian-Wilk, 2017). Structural equation model (SEM) was used in AMOS, and different competing models were run to check and compare which model was the best fit according to our data as used by (Podsiadly & Gamian-Wilk, 2017).

Stability model with contrast to nested model and reverse causation model (after Podsiadly & Gamian-Wilk, 2017; Nielsen & Knardahl, 2015) was used to examine the causal relationship ship among variables. The stability model also is known as (M1) was used as a reference model and comprised of sequential stabilities and synchronous (within-time) impact of variables across time. Causation model also is known as (M2) looks like M1 but was drawn-out with additional, cross-lagged structural paths from Time 1 (personality traits) to Time 2
(bullying experience). Inverted causation models are known as (M3) also look like M1 but comprised of cross-lagged structural paths in the opposite direction from T1 (bullying exposure) to T2 (personality traits). In the last reversed causation model (M4) was run. These models looked like M1 but incorporated cross-lagged structural paths from T1 (personality traits) to T2 (bullying experience) and from T1 (bullying experience) to T2 (personality traits).

So, this study investigated two-time design by instantaneously paralleling the competing models for the linkage between personality traits and experience of workplace bullying across time (Zapf et al., 1996). This study included all paths and presented saturated models with df = 0 and χ2 = 0 (Cook & Kenny, 2005). We develop separate models for each personality trait dimension as done by (Podsiadly & Gamian-Wilk, 2017).

Table 1: Mean, SD, minimum and maximum values for T1 and T2

| T1          | T2          |
|-------------|-------------|
| Extraversion|             |
| Min         | Max         | M     | SD   | Min         | Max         | M     | SD   |
| 1.00        | 5.00        | 3.5927| 1.24256 | 1.00        | 5.00        | 3.4700 | 1.18114 |
| Agreeableness|            |
| Min         | Max         | M     | SD   | Min         | Max         | M     | SD   |
| 1.00        | 5.00        | 3.2134| 1.34016 | 1.00        | 5.00        | 3.1663 | 1.26322 |
| Conscientiousness|        |
| Min         | Max         | M     | SD   | Min         | Max         | M     | SD   |
| 1.00        | 5.00        | 3.5768| 1.10492 | 1.00        | 5.00        | 3.2262 | 1.14629 |
| Neuroticism|              |
| Min         | Max         | M     | SD   | Min         | Max         | M     | SD   |
| 1.00        | 5.00        | 3.4256| 1.21772 | 1.00        | 5.00        | 3.3150 | 1.22199 |
| Openness    |              |
| Min         | Max         | M     | SD   | Min         | Max         | M     | SD   |
| 1.00        | 5.00        | 3.5780| 1.05242 | 1.00        | 5.00        | 3.4663 | .97371 |
| Bullying Experience|  |
| Min         | Max         | M     | SD   | Min         | Max         | M     | SD   |
| 1.04        | 3.88        | 2.2460| .62895  | 1.00        | 4.60        | 2.2392| .70555 |

4. RESULTS AND DISCUSSION

Mean, SD, minimum and maximum values for T1 and T2 given in Table 1 and correlation measures provided in Table 2. The correlation measure showed that the experience of bullying was unchanging at T1 and T2. The more the respondents experienced bullying at T1, the greater the neuroticism level was, and lesser their degree of agreeableness, they revealed to T2. Experience of bullying was linked with increased neuroticism and decreased the level of agreeableness, to examine the changes across-time, repeated measure

Table 2: Correlation values for T1 AND T2.

|                      | 1   | 2   | 3   | 4   | 5   | 6   | 7   | 8   | 9   | 10  | 11  | 12  |
|----------------------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| 1. ExtroversionT1    | 1   |     |     |     |     |     |     |     |     |     |     |     |     |
| 2. AgreeablenessT1   | .160**| 1   |     |     |     |     |     |     |     |     |     |     |     |
| 3. ConscientiousnessT1| .308**| .053 | 1   |     |     |     |     |     |     |     |     |     |     |
| 4. NeuroticismT1     | .126* | .232**| .243**| 1   |     |     |     |     |     |     |     |     |     |
| 5. OpennessT1        | .093* | .234**| .191**| .195**| 1   |     |     |     |     |     |     |     |     |
| 6. Experience of Bullying T1 | .132**| -.120*| -.018 | .120* | -.183**| 1   |     |     |     |     |     |     |     |
| 7. ExtroversionT2    | -.032 | -.032 | -.096 | -.002 | -.071 | .048 | 1   |     |     |     |     |     |     |
| 8. AgreeablenessT2   | -.028 | .32**| .019 | .020 | .096 | -.139**| .217**| 1   |     |     |     |     |     |
| 9. ConscientiousnessT2| -.025 | -.015 | -.030 | .007 | -.053 | .081 | .124**| -.053 | 1   |     |     |     |     |
| 10. NeuroticismT2    | .126* | .232**| .243**| 1.000**| .195**| -.120*| -.002 | .020 | .007 | 1   |     |     |     |
| 11. OpennessT2       | -.052 | -.097 | -.008 | -.016 | -.118**| -.058 | .123**| .107**| .148**| -.016 | 1   |     |     |
| 12. Experience of Bullying T2 | -.018 | -.058 | -.080 | -.048 | -.049 | .50**| .048 | -.117*| -.048 | .134**| -.026 | 1   |

**. Correlation is significant at the 0.01 level (2-tailed).
*. Correlation is significant at the 0.05 level (2-tailed).
Manova with time as a respondents experience of bullying (F (1, 191) =3.57, p=.06, \( \eta^2_p =.02 \)) and personality traits (on extraversion, F(1, 191) = 20.38, p < .001, \( \eta^2_p = .13 \); on agreeableness, F (1, 191) = 19.45, p < .001, \( \eta^2_p = .12 \); on conscientiousness, F(1, 191) = 22.32, p < .001, \( \eta^2_p = .14 \); on neuroticism, F(1, 191)=18.43, p < .001, \( \eta^2_p =.13\); on, openness F (1, 191) = 21.20, p < .001, \( \eta^2_p =.11 \)) was carried out. The consequences found a bit increase in the level of bullying experience. The outcomes also showed a general level increase in big five personality traits. Hypotheses tested through different models. Data fitness was tested with the comparison of stability model, causation model and reverse causation model and results with fit indices given in Table 3.

Table 3: Personality traits and workplace bullying: cross-lagged structural regression.

| Personality trait | Model  | \( \chi^2(\text{df}) \) | P   | RMSEA | GFI | AGFI | Comparison | \( \Delta \chi^2 \) |
|-------------------|--------|------------------------|-----|-------|-----|------|------------|------------------|
| E                 | M1     | .88 (2)                |    | .43   | .06 | .91  | .93        |                  |
|                   | M2     | .56 (1)                |    | .54   | .07 | .91  | .94        | 2 vs. 1 .32      |
|                   | M3     | .32 (1)                |    | .32   | .05 | .93  | .94        | 3 vs. 1 .56      |
| A                 | M1     | 3.57 (2)               |    | .12   | .04 | .97  | .93        |                  |
|                   | M2     | 3.57 (1)               |    | .05   | .03 | .97  | .94        | 2 vs. 1 .00      |
|                   | M3     | .00 (1)                |    | .87   | .05 | .97  | .92        | 3 vs. 1 3.57*    |
| C                 | M1     | .95 (2)                |    | .22   | .06 | .98  | .92        |                  |
|                   | M2     | .31 (1)                |    | .43   | .05 | .98  | .92        | 2 vs. 1 .64      |
|                   | M3     | .64 (1)                |    | .34   | .06 | .98  | .93        | 3 vs. 1 .31      |
| N                 | M1     | 3.98 (2)               |    | .04   | .05 | .99  | .93        |                  |
|                   | M2     | 3.98 (1)               |    | .03   | .05 | .97  | .93        | 2 vs. 1 .00      |
|                   | M3     | .00 (1)                |    | .02   | .06 | .97  | .92        | 3 vs. 1 3.98     |
| O                 | M1     | .96 (2)                |    | .16   | .06 | .98  | .93        |                  |
|                   | M2     | .59 (1)                |    | .07   | .05 | .95  | .94        | 2 vs. 1 .27      |
|                   | M3     | .27 (1)                |    | .34   | .05 | .98  | .94        | 3 vs. 1 .66      |

For few personality traits like extraversion, conscientiousness, neuroticism, and openness, the M1 stability models look like very suitable, and by toting either causal or reverse causal cross-lagged structural path did not alter the meaning of data. Even though M2 and M3 also showed model fitness but causal and reversed causal cross-lagged structural paths were not significant.

The only two cross-lagged structural paths shown to stay momentous was instituted in M3 for neuroticism, and agreeableness representing a reversed causal linkage. The same results confirmed in reverse causation models. Reverse causation models of linkage between the experience of bullying and personality traits such as extraversion (Figure 2), agreeableness (Figure 3), conscientiousness (Figure 4), neuroticism (Figure 5), openness (Figure 6) have been provided in Figures. 2, 3, 4, 5, and 6.
This study outcome shows that being experiencing workplace bullying at T1 envisages an increase in neuroticism and reduce in agreeableness at T2. Another causal and reverse causal effect was shown insignificant. It means other personality traits like extraversion, conscientiousness, and openness played neither a prophetic nor causal role in the bullying escalation process (Twenge, 2005).

![Conceptual model (reciprocal causation model M4): Cross-lagged panel design.](image)

Note: B T1 = Bullying experience at T1, B T2 = Bullying experience at T2; PT T1 = personality trait at T1, PT T2 = personality trait at T2; cp = causal path, rcp = reversed causation path, tsp. = temporal stability of personality trait, tsb = temporal stability of bullying experience, s1 = synchronous effect (within-wave 1), s2 = synchronous effect (within-wave 2)”. The model was benchmarked from (Podsiadly & Gamian-Wilk, 2017).

### 4.1. Hypothesis testing

The outcomes of current longitudinal research demonstrate that only two of the reverse causal hypothesis was accepted. High neuroticism and low agreeableness showed as an outcome of bullying experience at the workplace rather than a reason for bullying. All causal hypothesis was significantly invalid. This study outcome revealed that personality traits found a weak predictor of experiencing workplace bullying and change the dimension of existing literature which considers personality a significant individual antecedent of bullying (Zapf, 1999a; Coyne et al., 2000).

![Standardized causal and reverse causal effects of bullying experience and extraversion.](image)

Note: ET1 = extraversion at T1, ET2 = extraversion at T2 B T1 =bullying experience at T1, B T2 = bullying experience at T2. p <.01*, p b <.001**. The model was benchmarked from (Podsiadly & Gamian-Wilk, 2017).
Figure 3: Standardized causal and reverse causal effects of bullying experience and agreeableness.

Note: AT1 = agreeableness at T1, AT2 = agreeableness at T2 B T1 = bullying experience at T1, B T2 = bullying experience at T2. p < .01*, p b < .001** The model was benchmarked from (Podsiadly & Gamian-Wilk, 2017).

Figure 4: Standardized causal and reverse causal effects of bullying experience and conscientiousness.

Note: CT1 = conscientiousness at T1, CT2 = conscientiousness at T2 B T1 = bullying experience at T1, B T2 = bullying experience at T2. p < .01*, p b < .001**. The model was benchmarked from (Podsiadly & Gamian-Wilk, 2017).

Figure 5: Standardized causal and reverse causal effects of bullying experience and neuroticism

Note: NT1 = neuroticism at T1, NT2 = neuroticism at T2 B T1 = bullying experience at T1, B T2 = bullying experience at T2. p < .01*, p b < .001**. The model was benchmarked from (Podsiadly & Gamian-Wilk, 2017).

Figure 6: Standardized causal and reverse causal effects of bullying experience and openness.
Note: OT1 = openness at T1, OT2 = openness at T2, B T1 = bullying experience at T1, B T2 = bullying experience at T2. p < .01*, p b < .001** The model was benchmarked from (Podsiadly & Gamian-Wilk, 2017).

We also initiate a progressive correlation between the bullying experience and neuroticism and a negative correlation between the experience of bullying and agreeableness in study T1. Our outcomes revealed that the experience of bullying at T1 predicted high neuroticism and low agreeableness. We found that bullying experience at T1 envisages high neuroticism and low agreeableness at T2. It shows the significance of longitudinal research with two-wave panel designs where both model causal and reverse causal may give identical results. Similarly in another two-wave model design agreeableness was found as a consequence of experiencing workplace bullying did also found a high and positive correlation between T1.

It recommends the worth of longitudinal studies with full two-wave (Podiosky, 2015), our results along with the previous study provides a base for further longitudinal studies should conduct with the big sample with mediation or moderation analysis. Results represent reducing agreeableness and enhancing neuroticism after experiencing workplace bullying; our study findings are in-line with (Tani et al., 2003; Podiosky, 2015), studies. It means after experiencing workplace bullying people become less trusting and helpful and becomes more anxious, moody, stressed, and emotionally unstable.

Consequently, it is possible to argue that suffering from negative experiences at the workplace reduces an individual's propensity toward managing emotions and cooperation. These outcomes were also according to existing research that recommends bullying victims are less submissive than non-victims (Gamian-Wilk, 2013) more anxious and moody (Connolly; O’ Moore, 2003), lack empathy for others (Olweus, 1993). These study outcomes are also in-line with Matthiesen and Einarsen, (2001) conclusions that specify an advanced degree of dishonesty amid employees who experience workplace bullying.

The study outcomes also support the causal relationship between rejection and aggression. Social denial spoils self-regulation which as a consequence reduces mental and communal functioning (Baumeister & Dewall, 2005). Thus experiencing bullying results in social exclusion which in response generates socially devalued behaviors that provoke more denial (Baumeister & Dewall, 2005). Thus, lesser agreeableness as an outcome of reduced self-regulation instigated by elongated rejection and victimization.
This study outcomes suggest that experience of bullying for a long time may result in an individual’s destruction in self-regulation and consequently condense the propensity to react positively towards social rejection. By reacting negatively bullying victims subsidize towards bullying escalation process.

4.2. The study outcomes are also discussable in case of personality change.

Our study test-retest reliability for personality traits are comparatively moderate but also analogous to other personality stability outcomes overtime (correlations from .31 to .79, after Bleidorn et al., 2012), (correlations from .27 to .44, after Brodsky et al., 2016). Personality stability traits were moderate in this study (.29-.48) and also lower in comparison with bullying relation to personality .49 to .64, .53 to .68, (Nielsen & Knardahl, 2015). There are two main factors for moderate reliability.

First, the current study population was selected from one organization with time duration one year as compared to two years in Nielsen and Knardahl, (2015) and six months in (Podsiadly & Gamian-Wilk, 2017). Bullying stability in this study was comparatively less than (Podsiadly & Gamian-Wilk, 2017) with six months duration and more than Nielsen and Knardahl, (2015) with two years duration.

It shows that personality instability may be an outcome of a long duration of bullying experience which existing research related to severe dysfunctions (Høgh et al., 2011). There is another plausible that longer time experience of bullying may also give enough time to develop prevention strategies against bullying (Høgh & Dofradottir, 2001). Future research with different time lags may be helpful in further analyzing personality instability after experiencing bullying.

There is another possibility that smaller time lags may produce immediate bullying consequences and longer time lags may provide enough time for developing coping strategies. While the victim may sometimes be not very different from non-victims after experiencing bullying as victims also vary in personalities (Gamian-Wilk, 2010; Glasø et al., 2007).

4.3. Theoretical contribution

Theoretically, this paper has changed the existing theoretical study discussion and results showed that personality rather than a predictor is an outcome variable of bullying, and bullying increases neuroticism and decreases agreeableness among employees.
4.4. Managerial implications

A very effective strategy to address workplace bullying is generating its awareness. Existing literature supported that raising awareness about bullying is effective to escape from after effects (Salin, 2013; Vartia & Leka, 2011). Therefore, information and attitude campaigns would help both managers and employees recognize bullying behavior and understand their consequences.

Secondly, Periodically Personality development training must also be provided to all employees serving at all levels which will help them to groom their personalities and especially for senior employees which will help them to better survive in this growing diverse environment.

Lastly, practitioners should help business institutions, while developing course content for business students to design a course based on bullying awareness and protection against bullying. Existing literature also supported the need for involving practitioners seeking inspiration to more developed disciplines to identify empirically evaluated intervention methods against bullying (Cassidy et al., 2019).

5. LIMITATIONS AND FUTURE DIRECTIONS OF STUDY

Among many limitations of the current study, first, this study was conducted in one industry, education sector only, it is better to carry longitudinal research within many sectors of different industries and to device a multilevel data analysis method to inspect the organizational matters manipulating study design. Further research may focus on the awakening of depressive moods, emotional exhaustion, or negative or hostile cognition. Other than personality which factors are the cause or consequences of bullying should be discussed in future studies. To know the relationship between bullying and personality change future studies should focus to control such antecedents like role conflict or uncooperative management in longitudinal studies.

6. CONFLICTS OF INTEREST

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