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The Influence of Social Comparison, Perceived Organizational Justice, and Workplace Competition on Workplace Envy and Schadenfreude: The Moderating Role of Dark Triad Personality Traits among Senior Officials in Pakistan's Public Sector Organizations

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ABSTRACT

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This research examines the influence of social comparison, organizational justice, and competition in the workplace on workplace envy and schadenfreude, while considering the Dark Triad (narcissism, Machiavellianism, and psychopathy) personality traits as moderating factors. Here, the focus is on the government departments of Pakistan and the higher management level employees. Based on the Social Comparison Theory, the research suggests that upward social comparison, perception of injustice in an organizational setting, and envy in the workplace foster schadenfreude. The study also elaborates on the role of Dark Triad traits in the aforementioned relationships. Data were collected from a sample of 320 employees in the public sector in Southern Punjab, including the police, health, education, judiciary, taxation, and local government departments. Social comparison, organizational justice, workplace competition, envy (benign and malicious), Dark Triad traits, and schadenfreude were measured on standardized Likert-type scales. The findings contribute by offering an integrated framework of the antecedents and consequences of workplace envy, and address the gaps in the existing literature that have dealt with these variables in isolation. Concentrating on the public sector of Pakistan that is perceived to be corrupt and have scarce opportunities for advancement, and is highly bureaucratic, this research enhances our understanding of the emotional manifestations in organizations that are the result of an interplay of perceptions of competitiveness and justice and traits of the Dark Triad.



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Introduction

The scope of social responses and interactions encompasses certain type of feeling and responses from people involved. Feeling is a social construct and is formulated within the relationship that

exists between people and how they choose and decide to respond to the current social situation (van Kleef & Côté, 2022). There is an articulation of an individual's emotional expression that impacts the thoughts, the feelings, and actions of the others. This is the Social impact of emotions and it describes the relationship between the individual and the social world (van Kleef & Côté, 2022). This study focuses on a social emotion that is more sophisticated, which is called *schadenfreude*, which can simply be defined as petty or malicious joy. *Schadenfreude* is not an active emotion, and therefore has no active components like vengeful behavior or punitive behavior (Watanabe et al., 2022). Even though it is passive, it is not desirable in society. This is due to the hostile emotions like anger and jealousy, it is often associated with (Peplak et al., 2020). Sometimes, it is displayed in an obvious manner. For example, *schadenfreude* can lead someone to laugh when another person falls due to a banana peel. This emotion is important to understand when looking at relationships and the dynamics among different groups. This is especially true in situations involving social comparison (Okan et al., 2023). Its complexity, in terms of definition and meaning, lead to much research on *schadenfreude* across different societies and cultures. Some studies have found that *schadenfreude* can occur due to feelings of unfairness within a competitive setting (Riaz et al., 2023). Response to a competitor's trouble, even if it contradicts an interest of the organization, may be egocentric (Combs et al., 2009). In addition to this, social media features such as social distance, anonymity, and time compression, lead to an increase in the expression of *schadenfreude* (Wei & Liu, 2020). Given the relation of *schadenfreude* to social deviance, it is unsurprising that researchers focus on the association of *schadenfreude* with the Dark Triad personality traits, namely, narcissism, Machiavellianism, and psychopathy. The existing literature identifies this association, noting that people with Dark Triad traits tend to be more *schadenfreudian* than others (Sharafi Zadegan et al., 2024). At the macro level, considering the contextual variables of corruption and governance, the emotional and social aspects may be influenced further. Public sector corruption remains an area of notable concern in Pakistan, where the Corruption Perceptions Index places the country at 136 out of 182 countries. Survey results show 24% of respondents pointing to the police as the most corrupt profession, and this was reported with differing distributions across Punjab, Balochistan, Sindh, and Khyber Pakhtunkhwa. The judiciary and tender and procurement systems were also cited as corrupt, at 14% and 16% respectively. Bribery reported in the use of public services was rampant in Sindh at 46%, and Punjab, and Khyber Pakhtunkhwa at 39% and 20%, respectively. Corruption at the provincial level was perceived to be greater than at the local level by 59% of respondents. The most corruption-prone sectors of the administration were identified as weak accountability, insufficient transparency, limited access to information, and unresolved corruption cases. These contextual issues were the reason for focusing on the government sector for this study. Pakistan has been cited as one of the most corrupt countries in Asia (Luo, 2002), and the Global Corruption Barometer findings point to the civil service systems' weaknesses and the need for whistleblowing (Transparency International, 2021). *Schadenfreude* can be observed in everyday phenomena in competitive areas such as sports where a competitor may wish for their opponent to fail and take delight when misfortune befalls them. In the socio-political context of Pakistan, widening gaps in the socio-economic spectrum, diminishing middle-class levels, and growing frustration and envy can amplify such emotions. Political discussions exemplify this as parties and individuals attempt to "hit" the other and take pleasure in the reputational loss or political misfortune of the other (Aslam, 2017). All these factors indicate the growing complexity of *schadenfreude* and its significance in interpersonal and organizational relations.

Literature Review

Workplace Envy

As defined by Vecchio (2000), workplace envy is a pattern of thoughts, emotions, and behaviors that results from an employee's loss of self-esteem, in response to a referent other's obtainment of outcomes that one strongly desires. Most research has primarily examined workplace envy only with one instance of envy and separated by both peer-to-peer directed envy, which is one of the

most predominant examples of the negative outcomes of social comparisons (Lee & Duffy, 2019). The literature in anthropology has long supported the universal nature of envy (Foster et al., 1972; Schoeck, 1969). To conclude, social comparisons that are negative and invoke the feeling of envy are an inevitable reaction. Academic research has shown that workplace envy can occur in a wide range of environments and can even affect coworkers, teammates, subordinates, group members, professional networks, and job seekers (Duffy et al., 2020). Prior research has chiefly examined workplace peer envy originating from coworkers, managers, or organizational structures. For instance, Thiel et al. (2020) focused on unethical peer covetousness as an example of an envy trigger, while Tariq et al. (2019) analyzed abusive supervision in relation to a supervisor. As well, Wilkin and Connelly (2015) described the context of workplace envy as a trigger for workplace envy in relation to the perceived fairness of workplace outcomes. The consequences of envy are numerous, and in certain situations can even be chaotic.

The social functional model provides a useful perspective for considering workplace envy and suggests that feelings and emotions, including workplace envy, have social functions that are particularly useful within an organizational context (Keltner & Haidt, 1999). Envy, and emotions, in general, play a role in helping individuals succeed in socially important ways, like determining the appropriate level of collaboration versus competition with coworkers. Envy also indicates an imbalance in a person's position (status, power, etc.) in comparison to coworkers, and motivates that person to work to reduce that inequity (Duffy et al., 2020).

Social Comparison

Buunk and Gibbons (2007) explained that employees in any highly competitive work setting try to compare their performance, abilities, and accomplishments, to that of their colleagues. Gibbons and Buunk (1999) stated that this activity, otherwise known as social comparison, affects employees' work lives in terms of motivation, performance of a given task, job satisfaction, and productivity. The current work environment pressures employees to engage in social comparison, particularly social comparison of a higher tier. This is because employees are attempting to keep their job and are coping with changes to their work environment. A major factor of concern is the gig economy, which is a major driver of the workforce transition from stable, permanent employment to temporary, short-term contracts and freelancing work (Kalleberg, 2000). Furthermore, remote workers social isolation from their coworkers and peers makes social comparison when self-assessing their work performance more prominent (Gajendran & Harrison, 2007). Analyzing the effects of upward social comparisons in the gig economy on job performance necessitates the understanding of job performance in relation to contemporary work challenges. In the simplest of terms, job performance is the efficiency with which an employee fulfills his/her job responsibilities, as well as the employee's contributions to the organization's overall success (Dajani, 2015). Job performance illustrates the employee's ability to achieve work-related goals as well as meet evolving job requirements (Griffin et al, 2007).

Perceived Organizational Justice

The term organizational justice describes employees' perceptions of fairness in the workplace (Greenberg, 1990). The scholarly literature identified three main components of organizational justice: distributive, procedural, and interactional justice. From the perspective of social exchange theory, distributive justice focuses on an individual's involvement in a comparison. The individual subjectively evaluates fairness based on the ratio of their inputs (e.g. effort, skills, and performance) and their outcomes (e.g., pay and promotions) in relation to relevant others (Adams, 1965). Procedural justice concerns the fairness of processes and their outcomes regarding the allocation of organizational resources and rewards (Thibaut & Walker, 1975). The third component, interactional justice, is about the interpersonal treatment received from the persons who control the distribution of organizational resources and rewards, and whether they have been treated with respect, truthfulness, and dignity (Bies & Moag, 1986).

Research spanning the past 40 years highlights the crucial importance of organizational justice for the achievement of favorable outcomes in the workplace. Fairness has been linked to phenomena such as job satisfaction, trust, commitment to the organization, performance of the tasks, and organizational citizenship behavior (Crow et al., 2012; Erkutlu, 2011; Klendauer & Deller, 2009; Palaiologos et al., 2011; Wang et al., 2010). Additionally, perceived organizational justice has been associated with a lessening of negative organizational outcomes such as intention to quit and counterproductive work behavior (Cohen-Charash and Spector, 2001; Colquitt et al., 2001; Nowakowski & Conlon, 2005).

Competition in the Workplace

Several authors have noted that organizations can be seen as a political battlefield in which people compete over money, prizes, recognition, resources, promotions, etc. (Mintzberg, 1985). Therefore, a certain amount of competition is commonplace in most organizations, especially those with profit as the central motive. Management can heighten competition by using a performance ranking reward system or using a merit system to allocate pay. These systems are established with the belief that increased competition among employees will lead to increased productivity (Gerhart et al., 2009). Workplace competition has its merits (Fletcher et al., 2008). Judging highly competitive organizations, a few authors have revealed that a competitive environment can encourage workplace bullying (WB) (e.g., Samnani & Singh, 2014). Utilizing knowledge structures framework, Bargh and Williams (2006) report that individuals envision competitive scenarios with greater aggression than in noncompetitive situations. An environment that promotes competition will likely trigger aggressive signals, and with that, the risk of bullying increases. The frustration–aggression hypothesis states that competition increases frustration under certain conditions (Berkowitz, 1989). Such conditions exist in workplace settings where employees have to compete for the same positions. When individuals become frustrated from recurrent hindrance of their personal goals, an aggressive mindset may develop. Aggression also falls under the purview of social interaction theory. However individual uses the hostile means to bring about changes in the target's behavior, which the aggressor believes are important (Tedeschi & Felson, 1994). When bullying behavior is viewed as a competitive environment, it may be regarded as rational and strategically aimed to attain desired outcomes (Ferris et al., 2007; Krčakel, 1997; Salin, 2003a).

Dark Triad Personality Traits

There are not many studies that analyze the effects of employee Dark Triad personality traits on innovative behaviors because of the limited amount of research on this subject. However, there is relevant research that may offer some pointers. Existing studies are primarily concerned with the links between narcissism and creativity. Creativity is a major contributor to innovation and is a direct result of the ability to think of new and useful ideas (West, 2002). Narcissists are drawn to creative and artistic professions (Jonason, Wee, li, & Jackson, 2014). They are likely to be no more creative than non-narcissists but tend to have a higher opinion of themselves and their levels of creativity (Furnham, Hughes & Marshall, 2013, Goncalo, Flynn & Kim, 2010). Additionally, narcissists have been observed to have some of the best analytical abilities when it comes to evaluating and persuading people to adopt other people's ideas (Hutton, 2017). Observably, people are more supportive of them when it comes to the promotion of ideas and they have good perception about the ability of the person to develop ideas, which is one of the innovative behaviors.

Narcissistic people are thought to be more creative when pitching ideas due to their charisma, humor, and enthusiasm (Goncalo et al., 2010). Self-promoting behavior is convincing when people do not have objective ways to assess creativity. Self-promoting behavior is often convincing due to the fact that it fits the stereotype of creative personalities (Elsbach & Kramer, 2003; Goncalo et al., 2010). CEO narcissism is positively related to how managers focus on and adopt biotechnical innovations (Gerstner, König, Enders, & Hambrick, 2013). In other words, it is believed that the

self-confidence of the narcissist leads to investment in innovation with the belief that the investment will be seen as innovative, thus gaining admiration.

Social Comparison and Workplace Envy

Social comparisons give rise to feelings of envy in self-evaluative contexts, and negative self-evaluations can lead to feelings of envy and self-doubt. From this vantage point, the employee who self-evaluates and compares him or herself to the others below the reference point of the employee feels the negative emotion of envy (Festinger, 1954). The social comparison hypothesis suggests an employee may evaluate their productivity in relation to their co-workers (Festinger, 1954). In an organizational context, employees are required to self-evaluate their productivity in relation to their co-workers by self-tracking, self-monitoring through mechanisms such as performance feedback reports and public recognition of employees through awards including monthly employee awards, and awards for top performers in a sales contest. Employees are prompted to engage in social comparisons by self-evaluating their performance relative to the performance of others whom they consider to be superior (Brown, Ferris, Heller, & Keeping, 2007). Jealousy occurs when an individual feel diminishing returns from their self-evaluation due to the high performance of others (Silver & Sabini, 1978). Employees who are jealous of their peers think comparably to their peers who are the focus of their comparison. As demonstrated above, social comparisons are likely to encourage negative self-appraisals and provoke feelings such as envy (Smith & Kim, 2007). Considering this, it can be assumed that:

H1: Social Comparison has a notable impact on Envy at the Workplace

Perceived organizational justice and workplace envy

Envy arises when social comparisons turn unfavorable and the individual feels disadvantaged (Haider et al., 2025). In public sector organizations, where competition is high and the opportunities for promotion are scarce, feelings of envy are very prominent. In this type of environment, envy can trigger a number of negative workplace behaviors, including social undermining, where employees attempt to minimize the success of a peer in order to get rid of the feeling of a gap (Reh et al., 2018; Song & Zhao, 2022). Most studies in organizational behavior have focused on the social undermining constructs from the perpetrator side, trying to understand the motivation behind the counterproductive behavior (Meier & Cho, 2019; Haider et al., 2025). In this sense, the current study is the social undermining of the envier; It focuses on how the social undermining is caused from feelings of envy and the perception of injustice. Moving from the actor to the target is a salient contribution to the literature and addresses the calls to study the implications of envy for the target (Song & Zhao, 2022; Khairy et al., 2025).

The Social Identity Theory is applicable to understanding how workplace behaviors affect symptoms of envy (Johnson et al. 2024). Identity threats have been proven to create a workplace hostile environment. Employees who feel envious engage in workplace exclusion, sabotage, and gossip (Khairy et al., 2025). The perception of injustice, the feeling of being treated unfairly, can worsen the feeling of envy by increasing the negative emotions that the feeling of unfairly treated adds (Adamovic, 2023). Along with Envy, Organizational Justice Theory explains that mistreated individuals can, and often, see fairness in retaliated actions directed at formally unjust authorities to balance the workplace (Adamovic, 2023). In the public sector, the absence of a clear promotion structure and other forms of bureaucratic ambiguity lead to a heightened perception of injustice and an increased, envy-based resentment toward other employees (Boon & Brown, 2020). For example, Li et al (2021) stated that employees who perceived unfair treatment justified sabotage directed at rival employees. This is particularly true in civil service areas, where an absence of promotion leads to an increased competition and a heightened sensitivity to fairness (Sullivan et al. 2012, Iverson et al., 2018).

H2: Perceived organizational justice positively correlates with workplace envy

Workplace competition and workplace envy

The origin of envy in organizational settings can be traced back to a “structured competition for rewards, recognition, or status” (Fletcher & Nusbaum, 2010). In a competitive environment, there is a heightened sense of ambiguity and anxiety over who will get what in terms of the most coveted resources. Those who believe that a comparison referent will obtain a scarce resource will feel considerable envy (Ng, 2017; Reh et al., 2018). Competition can create threatening situations where employees feel that they might be outperformed or replaced by their peers (Reh et al., 2018). These perceived threats can compromise self-regulation. Discrepancies that individuals perceive between themselves and others can create a sense of discomfort and negative feelings that lead to envy. Competition is positively correlated to workplace envy. Fairness is a type of social judgement that is derived from social comparison that reflects “evaluations about justice rule adherence” (Koopman et al., 2020). Within the comparison process, the perception of fairness and social quality of interaction and positive emotions increase (Colquitt et al., 2013). However, perceptions of unfairness result in feeling devalued and disconnected which increases awareness of social standing and the associated risks (Koopman et al., 2020). These perceptions can amplify the envy of the targets of comparison. Hence, the absence of fairness is a significant workplace envy trigger. H3: Workplace competition is positively correlated to workplace envy.

Social Comparison, Workplace Envy, Schadenfreude, and Dark Triad Personality Traits

People who score highly on Dark Triad traits are primarily self-focused and self-centered when it comes to goal pursuits (Jonason & Webster, 2012). Their emotional detachment allows them to overlook others' feelings when it comes to goal achievement (Jonason et al., 2013). Given the strong relationships established between the Dark Triad and associated competitiveness (Jonason et al., 2010), such individuals are more likely to see others' misfortunes as positive, as these situations help them get closer to their self-serving goals. They are less likely to consider the impact of the situation on the unfortunate person and are instead more focused on the benefits the situation presents. One such benefit includes the opportunity to socially manipulate the situation by using the misfortune of others as a social demotion tool (Jonason & Webster, 2012). This practice of downward social comparison allows them to improve their competitive position at the expense of the misfortunes of others. Although individuals with high self-esteem tend to feel less schadenfreude (van Dijk et al., 2011), which is a trait commonly associated with the Dark Triad (Jonason et al., 2010), it appears to be more associated with individuals with ego self-initiated defensiveness (Rhodewalt, Madrian, & Cheney, 1998). Particularly with vulnerable narcissists, their self-worth is contingent on external positive feedback (Miller et al., 2010), and it is plausible to consider that it is schadenfreude that these individuals would quite conceivably employ to utilize that positive feedback as a self-esteem boost. Hence, higher levels of the Dark Triad traits, particularly vulnerable narcissists, is likely to be connected with greater instances of schadenfreude. Crusius et al. (2020), Ganegoda and Bordia (2019), Puranik et al. (2019), and Tai et al. (2012) have researched the antecedents and consequences of workplace envy from different angles, and most of them, however, have taken a holistic approach, and very few have looked at envy in a comprehensive manner. The understanding of how to define and measure envy and its antecedents and consequences is still lacking in the field, and the literature is perhaps at best contradictory (Cohen-Charash & Larson, 2016). The literature lacks a unified framework to account for situational dispositional and chronic envy. The purpose of this study is to develop a framework to do just that. The lack of integrated frameworks in the literature is perhaps the reason that most previous studies only examined the consequences of workplace envy. Elaboration on the integrated approach is what this study aims to achieve. We have posited, as an upward social comparison, that social comparison and the literature on envy (Smith, 2000) suggest that envy is as a result of upward social comparisons of the self. Social comparison involves feelings of anger and other negative feelings when the self is compared to a person who is perceived to be in a more advantageous position.

H4: Workplace envy serves as a mediator between social comparison and schadenfreude.

H5: Social comparison affects schadenfreude indirectly through workplace envy, such that the indirect effect is stronger at higher levels of Dark Triad personality traits.

Perceived organizational justice, workplace envy, Dark triad personality traits and schadenfreude

Some people derive pleasure from witnessing retribution for improper conduct, so long as the people on the receiving end of this punishment have done something wrong themselves (Watanabe et al., 2022). People tend to derive even more pleasure from witnessing the punishment of others to the extent that they feel this punishment is deserved and just, which explains the relationship between the pleasure of witnessing the punishment of others and the perception of justice (Liaquat et al., 2022). Hypocritical people not infrequently provide the opportunity for others to feel the pleasure of witnessing the punishment of others (Smith et al., 2009). People feel pleasure from witnessing the punishment of others when they feel that the punishment is in alignment or congruence with their perception of justice (Okan et al., 2023). Justice and balance contribute to the enjoyment of the situation, and in this context, spectators can engage without the situation being interpreted as selfish (Smith et al., 2009).

Extending the existing literature, some works have documented the positive correlation of Dark Triad traits and schadenfreude (Yee & Lee, 2022; Sharafi Zadegan et al., 2024). Such research indicates that people with Dark Triad personalities enjoy the most watching other people suffer. According to James et al. (2014), the Dark Triad descriptors, e.g. lack of empathy, being competitive, and being mean, strongly coincide with the behavior of schadenfreude. Concentrating on the lack of empathy, which is a constituent of all three traits of the Dark Triad, provides a direct link of these personalities to the inclination to schadenfreude (Erzi, 2020; Sharafi Zadegan et al., 2024). Additionally, Erzi (2020) and Sharafi Zadegan et al. (2024) analyzed the role of moral disengagement in the association of the Dark Triad and schadenfreude.

Erzi (2020) explains: "Moral disengagement is some form of reinterpreting or misrepresenting the effects of an action as a result of a process of dehumanization or an act of minimizing the harm". It is suggested that a person who tends to morally disengage is more prone to experience schadenfreude because they do not feel guilt or empathy concerning the misfortune of others (Erzi, 2020; Sharafi Zadegan et al., 2024). Roger that. Someone who is devoid of empathy is more likely to experience schadenfreude.

H6: Workplace Envy serves as the mediator between perceived organizational justice and Schadenfreude

H7: Perceived Organizational justice affects Schadenfreude through Workplace envy; so that indirect effect will be stronger at different levels of Dark triad personality traits.

Workplace Competition, Workplace envy, Schadenfreude and Dark Triad personality traits

Workplace schadenfreude reflects a cognitive, emotionally grounded response, illustrating employees' engagement in social comparisons with relevant peers. Such comparisons may evoke feelings of inferiority, and, in turn, generate a desire to see others' positions reduced. This study works with the hypothesis that schadenfreude can diminish employees' motivations to act pro-socially, addressing the idea that enjoyment of others' misfortunes sways sentiments of collaboration within a team. Relational dynamics are a unique characteristic of schadenfreude (Smith et al., 1996). This phenomenon is often most pronounced when the individual has an advantage over the individual experiencing misfortune (Chen et al., 2020), and the disadvantage is perceived to be at the level of the individual and therefore 'deserved' (Smith, 2018). In terms of

schadenfreude in the workplace, employees are more likely to feel these emotions when they see mistreatment of a colleague that is perceived to enhance or protect a target's goals (Li et al., 2019; van Dijk et al., 2011a, 2011b). Both colleagues and managers are potential provocateurs of schadenfreude. A case in point is that managers are likely to evoke this response when doing public reprimands of employees, and competitive intergroup relations among colleagues competing for scarce resources (Benoliel, 2016).

Competitive workplaces are built on the principles of “winning,” rewarding employees for outdoing their coworkers, and creating an environment of antagonism for recognition (Arbour et al., 2014). Much intra-organizational rivalry is prevalent, with Baumann et al. (2019) noting more than 25% of Fortune 500 companies in the U.S. practicing internal business unit performance metrics. Competitive behavior is by performance data accessibility, and the resultant comparisons guide employee behavior. Employees are seen to become more competitive for manager attention, status, resources, and promotion. Competition reinforcing localized rivalry is also seen in HR practices, where reward systems sort out top performers for exclusive weekly or monthly cash bonuses.

Although such systems may promote motivation and performance (Bonner et al., 2000), they may also inhibit knowledge sharing and organizational citizenship behaviors, encourage incivility, and attack important strategic assets (Durmusoglu et al., 2014). Likewise, talent management practices that single out high achievers from the rest of the workforce may increase rivalry (Meyers & Van Woerkom, 2014). Furthermore, the perceived unreliability and unfairness of some HR practices add to the distrust and ambiguity, and reinforce employees' views of the competitive climate within the organization (Vanhala & Ahteela, 2011).

H8: Workplace Envy serves as the mediator between Workplace competition and Schadenfreude

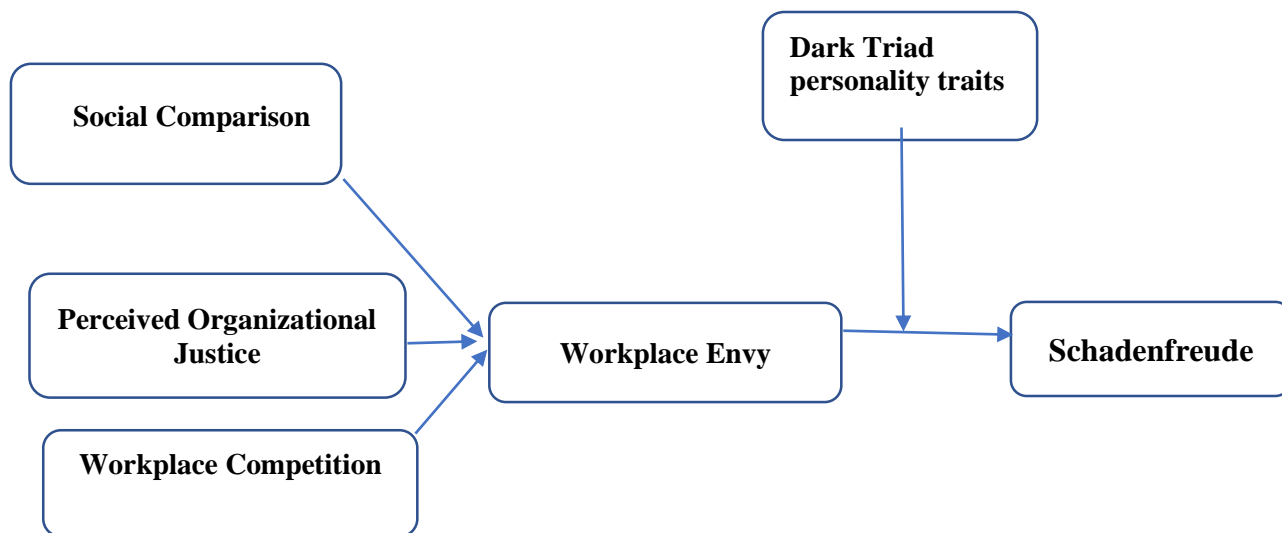
H9: Workplace Competition affects Schadenfreude through Workplace envy; so that indirect effect will be stronger at different levels of Dark triad personality traits.

Theoretical framework

As noted by Festinger (1954) and Tariq et al. (2019), Social Comparison Theory (SCT) posits that people assess what they can do and what they know by juxtaposing themselves against those in their proximity. The self-assessment triggered by social comparisons can also lead an individual to see others as having relative superiority, causing a range of negative psychological effects (Khan et al. 2018; Smith, 2000). Although some of these phenomena can be offset by motivative factors and self-enhancing interpretations (Wood & Wilson, 2003), social comparison evidence has a positive correlation with emotional control in individuals (Koopman et al., 2020). Previous studies have largely focused on peer-directed envy as a typical result of negative social comparisons in a given organizational context (Lee & Duffy, 2019). The anthropological literature also confirms the cross-cultural consistency of envy (Foster et al., 1972; Schoeck, 1969), indicating that envy is a common and often inescapable reaction to adverse upward comparisons. Employees compare themselves to colleagues as they seek to achieve their goals (Lee & Duffy, 2019). In cases where a person is perceived to be better than others in terms of qualities, accomplishments, or resources, that person is likely to experience the 'pain from unfavorable or upward social comparisons' (Tai et al. 2012).

The combination of the Dark Triad, envy, and schadenfreude can also be viewed through Social Comparison Theory. Researchers such as Crusius et al. (2022) have built on the 1954 work of Festinger, which theorized individuals consider and evaluate their opinions, feelings, and behaviors by looking at others. Social comparison can take two forms - upward and downward. Upward comparison is when individuals see themselves in comparison to others whom they view as more successful, and this may even lead to motivation towards self-improvement. On the other hand, downward comparison is when individuals view themselves as superior to other, leading to

improved self-esteem. This context can be applied to schadenfreude. In social comparison contexts of misfortune, an individual determines social position, working out an inferior/superior comparison to the target (Lin & Liang, 2021). When the other is perceived to be better and misfortune befalls them, schadenfreude is likely to occur. The gap of perceived social position is reduced, and therefore, the misfortune decreases the social distance with the target. In contrast, schadenfreude is often associated with upward social comparison and is not limited to this (Boecker et al., 2022). Downward comparison usually brings subjective relief or self-esteem, observing more difficulty of a person already disadvantaged may strengthen superiority and an urge to take control. In this framework, schadenfreude is not only comparison and envy, but an expression of power, status, and psychological control.



Conceptual Framework Measures

Perceived Organizational Justice: To measure perceived organizational justice, we used a six-item scale created by Niehoff and Moorman (1993) based on study of procedural justice. This subscale evaluates employees' consideration of organizations' formal procedures as fair and addresses their concerns. Respondents rated their level of agreement on a five-point Likert-type scale. (1) means (strongly disagree) and (5) means (strongly agree). **Social Comparison:** Social comparison in this study used a six-item subscale from Gibbons and Buunk (1999) which includes items such as, "I often compare myself with people who are doing better than me." Respondents rated their level of agreement on five-point Likert-type scale. **Workplace Envy:** The assessment of workplace envy used a ten-item scale created by Lange and Crusius (2023), with five items each for benign and malicious envy. Respondents rated the items on a five-point scale. **Workplace Competition:** The absence of workplace competition was assessed with the four-item Coworker Competition Scale (Fletcher & Nusbaum, 2010) which measure employees' perceptions of competition among coworkers using (1) totally disagree to (5) totally agree. One of the items states: "My coworkers are constantly competing with one another." **Dark Triad Personality Traits:** The employees and their direct supervisors performed the 12 item Dirty Dozen scale (Jonason & Webster, 2010) relating to the Dark Triad personality traits. It was done in its Dutch version, which was shown to have a good construct validity as well as strong structural characteristics (Jonason & Luévano, 2013). **Schadenfreude:** Schadenfreude was captured using the Crysel and Webster (2018) scale which measures the extent to which one enjoys other people's misfortunes. The scale consists of two subscales: benign schadenfreude (six items) and malicious schadenfreude (six items).

Methodology: The survey-based questionnaires chosen focus on 320 employees of government institutions in southern Punjab. The head offices of these institutions are in these southern Punjab districts. The employees are from different government departments, including Police, Power, Health, Land, Education, Taxation, Judiciary, and Local Government under managerial positions. The government sector was chosen in this case because it is notorious for unethical behavior, which is useful for this study. To combat the non-response bias, some strategies were employed, such as survey distribution, respondent personal contact, completion reminders, and organizational visits aimed at collecting the completed questionnaires after two reminders. This strategy resulted in high-response rates and reduced non-response bias.

Analysis and Findings

Demographical Statistics:

Table 1.
Demographic Characteristics

Demographic Variable	Category	Frequency	Percentage (%)	Cumulative (%)
Gender	Male	129	54.2	54.2
	Female	109	45.8	100.0
Age	18–23 years	60	25.2	25.2
	24–29 years	80	33.6	58.8
	30–35 years	55	23.1	81.9
	Above 35 years	43	18.1	100.0
Qualification	Undergraduate	110	46.2	46.2
	Graduate	70	29.4	75.6
	Postgraduate	40	16.8	92.4
	Other	18	7.6	100.0

The demographic characteristics of the respondents from the workplace show a well-balanced representation in terms of gender, age and educational qualifications. The male workforce constitutes 54.2% of the respondents and the female workforce constitutes 45.8% which is a balanced representation. In terms of age 25.2% of the workforce is represented by employees aged 18-23 years, 33.6% are represented by employees aged 24-29 years, 23.1% are represented by employees aged 30-35 years and 18.1% are represented by employees above 35 years which is a also balanced representation of employees in the early to mid-life stages of their careers. In terms of educational qualifications 46.2% of the respondents are undergraduates, 29.4% are graduates, 16.8% are postgraduates, and 7.6% have other educational qualifications.

Data Review and Initial Assessment:

The initial and important step in the process of data analysis is data screening which is intended to reduce errors and guarantee data accuracy and reliability. Based on Arkelin (2014), data screening was performed using SPSS to determine normality and missing data to ensure that the data satisfied the assumptions necessary for further statistical analysis.

After data collection, all responses were added to the SPSS program for data screening and preparation. This process included the evaluation of missing data, outlier and normality of variables where missing data was treated using mean substitution or case deletion depending on the type and extent of the missing data. After the data screening, descriptive statistics were run to analyze demographic constructs such as gender, age, educational level and work experience. These helped to create a clear profile of the respondents and verified the representativeness of the sample. Initial validity verification confirmed the appropriateness and homogeneity of demographic data providing a clean dataset for further more analysis such as reliability analysis, validity evaluation and structural modeling etc.

PLS-SEM Model:

Researching a particular subject necessitates the implementation of a particular program for an

accurate interpretation of the findings. Mathews et al. (2018) stated that applying certain types of programs will assist in the analysis of higher-order variables in a multifaceted manner. One of the popular programs in this context is that of Partial Least Squares Structural Equation Modeling (PLS-SEM) because of its versatility, easy-to-use visualization and analytical tools, and ability to manage detail in smaller sample sizes, among other features (Hair et al, 2011). PLS-SEM is also highly regarded for its ability to perform exploratory and predictive types of research whereas, during such research, the analyst aims to optimize the variance accounted for the endogenous constructs (Hair et al, 2012). The current research investigates the measurement and structural models of PLS-SEM. The measurement model examines the constructs' indicators for their reliability and validity, whereas the structural model investigates how the variables interact. Hair et al. (2016) stresses that the measurement model should be evaluated and tested more thoroughly, especially in the presence of intermediary or moderator variables, before any interpretation of the structural relationships. Having done this, the last step in this model is to evaluate the other relationships and to verify the accuracy of the theoretical model.

Review of Factor Loadings and Measurement Model Researcher Hair et al., (2014) states that measuring the model is one of the considerations in measuring the SEM; especially when using the variance-based measuring approach like the PLS -SEM the first step is measuring the reliability of the item and achieving the ideal value of above 0.70 is ideal, whilst that of between 0.5 and 0.70 can be retained when there is construct validity. To measure EMC (internal consistency), composite reliability was measured and values above 0.70 is said to be satisfactory. This means that Cronbach Alpha is also a measure with a minimum of 0.60 and above to 0.70 is said to indicate high reliability. Examining the reliability of convergent validity is measured with AVE, where the variable was above 0.50. The author Comrey and Lee (1992) is one of the authors who applied factor analysis and removed 2 of the 4 authors with a factor value below 0.50 to increase the value of the model. To measure the validity of Differentiation, cross-loading is also used, where each item that is presented is measured to be more correlated with its construct than the other constructs. Measurement models that meet the criteria for reliability and validity will provide a solid foundation for evaluating the structural model.

The table below shows the combined results of reliability, internal consistency, convergent validity, and cross-loadings of the variables.

Table 2.

Variables	Items	VIF	Cross Loading	Cronbach's alpha	Composite reliability (rho_a)	Composite reliability (rho_c)	Average variance extracted (AVE)
Dark Triad	DPT1	2.725	0.671	0.903	0.908	0.919	0.510
Personality	DPT10	2.205	0.753				
Traits	DPT11	2.489	0.765				
	DPT2	2.827	0.632				
	DPT3	2.463	0.710				
	DPT4	1.753	0.663				
	DPT5	1.978	0.767				
	DPT6	2.184	0.713				
	DPT7	2.276	0.656				
	DPT8	2.342	0.749				
	DPT9	2.431	0.760				
Perceived	POJ1	1.844	0.722	0.905	0.917	0.927	0.679

Organizational	POJ2	2.340	0.824				
Justice	POJ3	2.412	0.828				
	POJ4	3.264	0.887				
	POJ5	2.553	0.838				
	POJ6	2.424	0.838				
	Social	SC1	2.094	0.800	0.881	0.887	0.910
Comparison	SC2	1.950	0.731				
	SC3	2.019	0.780				
	SC4	2.170	0.806				
	SC5	1.975	0.796				
	SC6	2.343	0.833				
Schadenfreude	SF1	2.669	0.802	0.887	0.891	0.909	0.527
	SF11	1.906	0.745				
	SF2	1.965	0.681				
	SF4	2.198	0.763				
	SF5	2.076	0.739				
	SF6	1.785	0.640				
	SF7	2.060	0.686				
	SF8	1.813	0.737				
	SF9	2.049	0.728				
Workplace	WC1	1.504	0.751	0.812	0.816	0.877	0.641
Competition	WC2	1.481	0.759				
	WC3	1.988	0.837				
	WC4	2.059	0.850				
Workplace Envy	WE1	1.642	0.645	0.890	0.893	0.912	0.566
	WE2	2.528	0.770				
	WE3	2.570	0.707				
	WE4	3.117	0.834				
	WE5	2.776	0.793				
	WE7	2.736	0.749				
	WE8	2.957	0.718				
	WE9	2.386	0.787				

Fornell-Larcker Criterion:

The Fornell-Larcker criterion was run to test the discriminant validity. According to Fornell & Larcker (1981), discriminant validity is resulted when the square root of the variables AVE is greater than the correlation between constructs. In this study, all constructs satisfied this condition and this ensured that the latent variables were unique and that the measurement model was valid.

Table 3.

	1	2	3	4	5	6
Dark Triad Personality Traits	0.714					
Perceived Organizational Justice	0.823	0.824				
Schadenfreude	0.897	0.719	0.726			
Social Comparison	0.927	0.870	0.792	0.792		
Workplace Envy	0.838	0.770	0.779	0.818	0.800	

Competition						
Workplace	0.888	0.643	0.892	0.749	0.812	0.753
Envy						

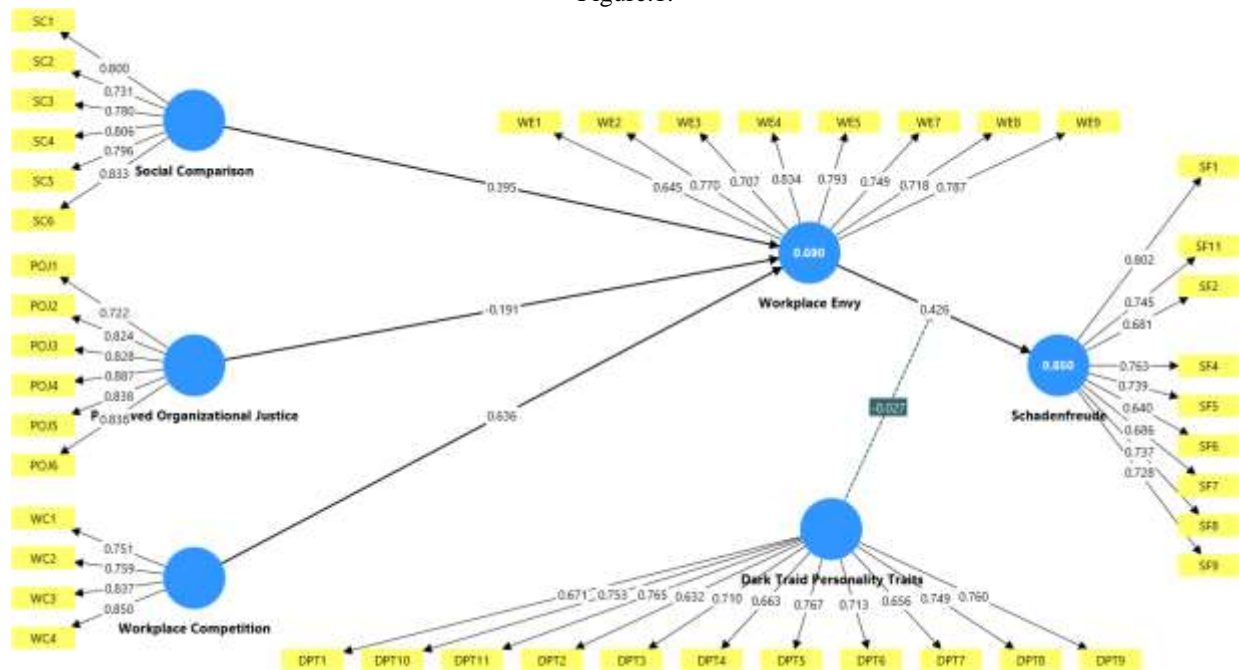
Heterotrait – Monotrait (HTMT):

The ratio of HTMT was employed together with the Fornell-Larcker criterion to test the discriminant validity. HTMT is regarded as superior because of its ability to detect variables that overlap (Henseler et al., 2015). HTMT involves the comparison of between-construct correlations (heterotrait) to the within-construct correlations (monotrait), and a ratio close to 1 shows a lack of discriminant validity. A ratio of HTMT below 0.90 is acceptable, with more rigorous research using 0.85. In this research, all the ratios of HTMT were below 0.90, indicating excellent discriminant validity and the uniqueness of all the latent constructs.

Table 4.

	1	2	3	4	5	6
Dark Triad Personality Traits	1					
Perceived Organizational Justice	0.842	1				
Schadenfreude	0.876	0.798	1			
Social Comparison	0.884	0.865	0.887	1		
Workplace Competition	0.861	0.892	0.816	0.864	1	
Workplace Envy	0.874	0.705	0.891	0.831	0.852	1

Figure.1.



Evaluation of Structural Model:

The structural model has been analyzed in the context of the variables' proposed relationships as well as the mediating and moderating roles of the variables. In the direct path analysis, it is found that Dark Triad Personality Traits have a strong and significant positive influence on Schadenfreude ($\beta = 0.487, t = 7.291, p < 0.001$). It is also found that, while Perceived Organizational Justice has a negative influence on Workplace Envy ($\beta = -0.191, t = 2.237, p = 0.025$), Social Comparison ($\beta = 0.395, t = 4.282, p < 0.001$) and Workplace Competition ($\beta = 0.636, t = 8.166, p < 0.001$) have strong and significant positive influences on Workplace Envy. There is a positive and significant influence of Workplace Envy on Schadenfreude ($\beta = 0.426, t = 6.711, p < 0.001$), thus, establishing it as a mediator. The results of the mediation analysis indicate that Workplace Envy mediates the effects of Workplace Competition ($\beta = 0.271, t = 5.145, p < 0.001$), Perceived Organizational Justice ($\beta = -0.081, t = 2.166, p = 0.030$), and Social Comparison ($\beta = 0.168, t = 3.691, p < 0.001$) on Schadenfreude.

Moderation analysis indicates that Workplace Envy exhibits a small moderation effect on the relationship between the Dark Triad Personality Traits and Schadenfreude ($\beta = -0.027, t = 2.191, p = 0.029$). The direct, and both the indirect and moderated effects are significant, which confirms the proposed model and sets a function for workplace envy in the context of Schadenfreude. The confidence intervals for all paths further substantiates the findings and illustrates the reliability of the findings.

Table 5.

	<i>Original sample (O)</i>	<i>Sample mean (M)</i>	<i>Standard deviation (STDEV)</i>	<i>T statistics ((O/STDEV))</i>	<i>P values</i>	<i>CI Lower</i>	<i>CI Upper</i>
Dark Triad Personality Traits -> Schadenfreude	0.487	0.487	0.067	7.291	0.000	0.350	0.612
Perceived Organizational Justice -> Workplace Envy	-0.191	-0.186	0.085	2.237	0.025	-0.344	-0.012
Social Comparison -> Workplace Envy	0.395	0.394	0.092	4.282	0.000	0.203	0.566
Workplace Competition -> Workplace Envy	0.636	0.634	0.078	8.166	0.000	0.492	0.792
Workplace Envy -> Schadenfreude	0.426	0.427	0.064	6.711	0.000	0.303	0.556

Table 6. Mediation Effect:

	<i>Original sample (O)</i>	<i>Sample mean (M)</i>	<i>Standard deviation (STDEV)</i>	<i>T statistics ((O/STDEV))</i>	<i>P values</i>	<i>CI Lower</i>	<i>CI Upper</i>
Workplace Competition -> Workplace Envy -> Schadenfreude	0.271	0.271	0.053	5.145	0.000	0.175	0.381
Perceived Organizational Justice -> Workplace Envy -> Schadenfreude	-0.081	-0.079	0.038	2.166	0.030	-0.154	-0.005
Social Comparison -> Workplace Envy -> Schadenfreude	0.168	0.168	0.046	3.691	0.000	0.084	0.261

Table 7.

Moderation Effect:

	Original sample (O)	Sample mean (M)	Standard deviation (STDEV)	T statistics ((O/STDEV))	P values	CI Lower	CI Upper
Dark Traid Personality Traits x Workplace Envy -> Schadenfreude	-0.027	-0.028	0.012	2.191	0.029	-0.053	-0.005

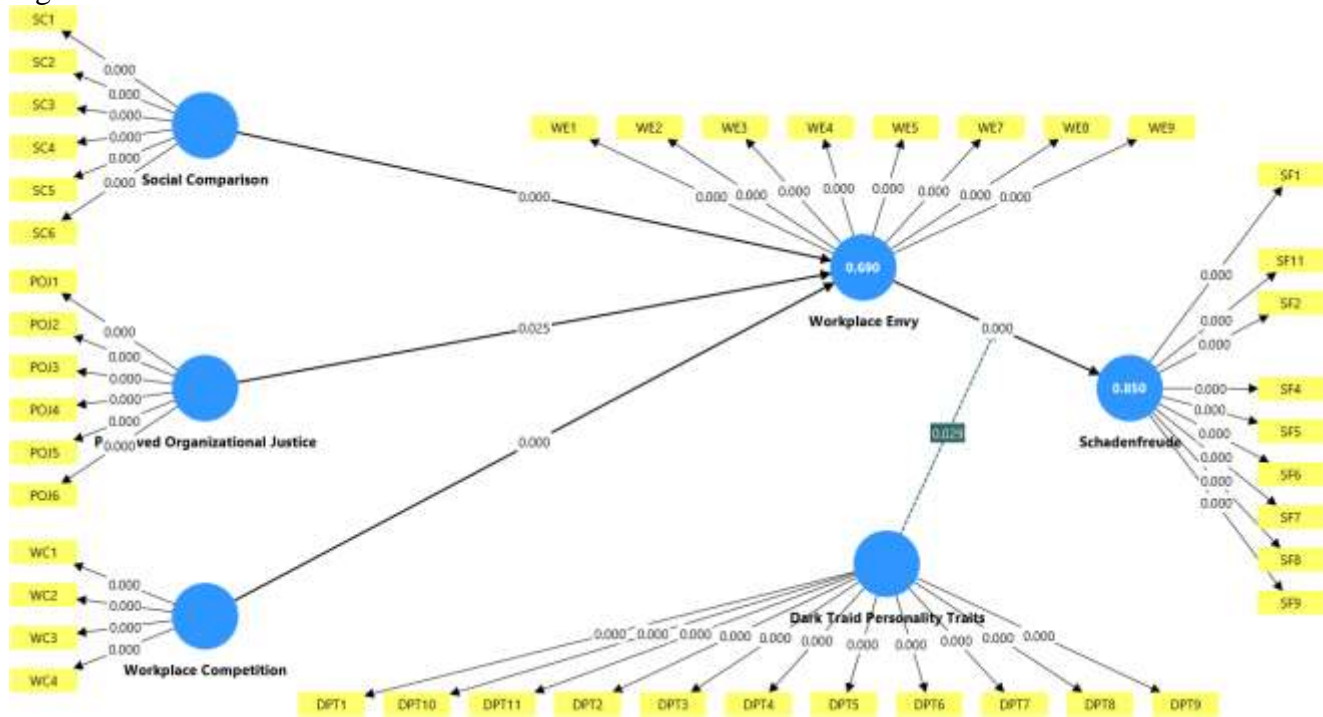
R Square Value:

The R-squared (R²) value shows how much of the variance of the dependent variable is accounted for by the independent variable. It is a measure of how well a model “fits” or how well a model “predicts” (Hair et al., 2010). Chin (1998) considers R² values of 0.60 to be strong, 0.33 to be moderate, and 0.19 weak. In the present study R² values of 0.850 and 0.690 show strong explanatory fits which means the model is adequately explaining the variance of the dependent variable considering the complexity of the model (Elliott & Woodward, 2007).

Table 8.

Variables	R-square	R-square adjusted
Schadenfreude	0.850	0.848
Workplace Envy	0.690	0.686

Figure 2.



Conclusion

This paper breaks ground in the understanding of the emotional interplay in government organizations in Pakistan, by merging structural contextual factors in the workplace and the personality dimension. Social comparison, perceived organizational justice, and workplace competition were the independent variables, while schadenfreude, or pleasure from the misfortune of others, was the dependent variable. The mediation was workplace envy, while the Dark Triad of personality (narcissism, Machiavellianism, and psychopathy) was the moderating variable. Social comparison, workplace competition, and perceived organizational justice shape the emotional experiences of employees. In the case of social comparison, specifically upward social comparison, employees in a workplace where opportunities are limited end up feeling inadequate and

experiencing resentment. In workplaces characterized by a competitive structure, employees tend to become rivals and become sensitive to differences in organizational rank, which adds to the competition. In workplaces characterized by procedural and decisional justice, employees are unlikely to feel disadvantaged because of others' success. Unfortunately, perceived justice to be weak or inconsistent leads to emotional dissatisfaction and further social comparison competition. This structural situation's association to schadenfreude has to do with the psyche of workplace envy. The feeling of workplace envy is seen when employees utilize social comparisons, heightened competition, and feelings of injustice. Employees then use this feeling to transfer their emotional anxiety and feelings of inferiority to joy when an unfortunate event befalls others. In short, an employee without feelings of envy will not suffer from schadenfreude. This also shows that workplace envy is not just a symptom of an outcome, but rather an active process that results from emotional stimulus from a workplace setting. The process of the Dark Triad of personality traits acts as an amplifier. Narcissism, Machiavellianism, and psychopathy individuals are seen to operate in a self-centric manner, and possess the least empathetic and emotional concern, as well as operate in a competitive manner. With this, envy is likely to be a contributing factor to schadenfreude, as the hold of moral control is weak. While workplace setting generates envy, Dark Triad type personality traits dictate the extent to which this envy transforms into joy from seeing the misfortune befall others.

The main conclusion this study will provide is that schadenfreude is an emotional response that is influenced by more than chance in public sector organizations. Environments that encourage social comparisons unit to their fairness stimuli, and social comparisons lead to envy. Envy is the emotion that fuels schadenfreude. With the presence of Dark Triad traits, the influences of social comparisons, the organizational emotional climate is determined by a combination of social structures and personal dispositions. Schadenfreude has individual and systemic responses. Building fairness in the processes, transparency in competition structures and zero-sum rewards, the injury and social envy triggers can be subdued. Personality traits, Dark Triad traits, in leadership roles, have the potential to worsen the social emotional toxicity of the hierarchical systems. This research shows that social comparison, inter employee rivalry, and perceived organizational justice are the principal independent variables that impact envy at the workplace, while workplace envy functions as the mediator and Dark Triad personality traits serve as the moderator, with schadenfreude as the outcome variable. The proposed model illustrates how emotional deviance in bureaucratic contexts is produced by the convergence of organizational and dispositional structures, and by bringing together all these variables into one model, the study articulates, in a clear and systematic fashion, the mechanisms at play in the development and amplification of emotional responses rooted in envy in the context of heightened competition in public administration.

Managerial Implications

In the public sector, the findings suggest new initiatives that maintain the perceptions of Organizational Justice for the public sector. The Envy Reduction Theory explains how managers can lower workplace envious behaviors through Organizational Justice. So, workplace managers can theorize transparent promotions, rewards, and evaluations of employees. Focusing on Procedurally Just Organizational climates, managers can construct Procedurally Just Organizational climates by developing and following procedural guidelines that aid consistency in their decisions. This procedural structure can lower perceptions of Organizational Favoritism and Organizational Injustice. Positively rewarding employee behaviors can create an Organizational Justice environment. However, it can create or enhance envious and schadenfreude behavior in employees. Hence, policies that motivate employees to work together as opposed to individually have been shown to minimize envious and schadenfreude behaviors in the workplace. Specifically, a collaborative team reward structure, a team knowledge sharing system, and a team cooperative performance measure have the potential to minimize emotional and psychological hostility. Given

that the Dark Personality Traits have a strong impact on the schadenfreude behavior, it would be useful for an Organization to consider a Personality Profile for potential Leaders as part of their selection process. In order to achieve and maintain emotional and psychological goals, it may be necessary to include and maintain deviant behavior and citizenship behaviors as part of the psychological and emotional Workshop programs for members of an Organization.

Limitations

While this study brings value to the understanding of this issue, there are shortcomings worth mentioning. The most important of which are the cross-sectional data which do not support causal reasoning. Longitudinal designs would provide better evidence of directional claims. The scales used were validated, but self-reporting, along with the use of social desirability bias in reporting may be present. The sample was restricted to public servants in Southern Punjab, which limits generalizability to other geographical areas and to other statuses in the private sector. Justice was predominantly procedural in this study, and in order to have a fuller picture, the dimensions of distributive and interactional justice would have to be included. The public sector of Pakistan has its own cultural peculiarities that may impact the emotional reactions to the study and would not be expected to be in the same way to other Western and non-bureaucratic societies.

Future Implications

Future studies may build on this work in some meaningful ways: Longitudinal or experimental designs will likely provide stronger causal explanations for the relationships among the variables. A study contrasting the different countries or organizational contexts will likely improve the external validity of the model. A study examining distributive and interactional justice, in addition to procedural justice, will likely provide a more complex understanding of the model. Future studies may want to consider whether benign envy is associated with more self-improvement or innovative behaviors or whether it is simply a more passive form of schadenfreude. Including supervisor ratings, peer reviews, and objective measures of performance will likely mitigate the common method bias. Some combination of emotional intelligence, ethical climate, leadership style, and psychological safety may explain the weakening effect of envy on schadenfreude.

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