

The nexus between global disruption due to the covid-19 and performance of the construction project

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ABSTRACT

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In the current COVID-19 pandemic, this paper attempts to empirically find out the increasing workplace bullying effect on project performance with employee deviant behaviour as a mediator, internal, and external locus of control as moderators. The random sampling technique was used to gather data from 777 employees, working in construction companies in Pakistan. The examination was established using WarpPLS software version 7.0. The results revealed that workplace bullying is positively associated with employee deviant behaviour which in return negatively affects the project performance. It can be inferred from the results that the “moderating role” of internal “locus of control” is insignificant; whereas the external “locus of control” significantly moderates the relationship between workplace bullying & employee deviant behaviour. The proposed research and hypotheses support social exchange theory and social behaviour exchanges. This study has clarified some unique points that are equally important for the managers, employees, and project-based construction organization as a whole. It is also recommended that once the pandemic COVID-19 passes, it would be the dire need of that time to re-evaluate that, what has been changed in terms of professional thinking, working & behaving as for as their project work and communication between the team members is concerned.

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1. Introduction

Since the dawn of history, human societies have always been subject to disasters that ended hundreds of millions of people's lives. One of the most impacting is the outbreaks, for example, HIV-AIDS, Flu pandemic (Gagnon et al., 2015). Now, the recent Coronavirus Disease outbreak in 2019 is also recognized as COVID-19 (NHS, 2020). So far according to the World Health Organization report due to COVID-19 around 230,000 killed (WHO, 2020), also leading to a major worldwide economic downturn. In this study, we provide some first results on how this economic downturn is going to affect project-based construction companies by workplace bullying (WPB) and project performance, and what the main long-run outcomes for workplace bullying may be. WPB was commonly known for its emergence in many of the organizations where employees are facing critical issues from each other and their subordinates (Xu et al., 2019; Nielsen et al., 2020) and peers to account for many psychological pressures that result in the form of employee deviant behaviour that affects an individual from achieving the desired goals and objectives (Noermijati, Firdaus, & Baltimurik, 2020; Park et al., 2020). Also, a huge number of employ-

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ees have been endangered by WPB; many organizations are struggling to formulate policies to stop bullying (Salin & Notebaers, 2017). Research published by (Workplace Bullying Institute, 2010) recognized that bullying is not a rare phenomenon, but very common in project-based organizations. Surprisingly, one-third of employees are either directly victimized or witness WPB (Manners et al., 2016). Muniz et al. (2020) have estimated that approximately 10-15% of laborers working in European organizations are exposed to WPB. Naseer et al. (2018) also indicated that in developing countries like Pakistan 50% of the project-based organizations' workforce experiences bullying at the workplace. On the basis of its commonality, its impact is considered at the worldwide level (Branch et al., 2013).

In the current COVID-19 world, where jobs are at risk, many industries where "working from home" and governments taking feasible countermeasures, construction firms have job sites to run. Co-workers' becoming hyper-aware of their project team member's health (Fuchs, 2020). This can cause co-workers to act out a range of negative behaviours becoming bullying, due to fears of spreading the illness. WPB is defined as "... distressing, upsetting, socially eliminating somebody, or harmfully affecting somebody's project effort/tasks" (Einarsen et al., 2009). However, with the advancement of technology, increasing global competition, and a reducing economy, organizations need to adopt different adaptive approaches to sustain a competitive advantage, such as subcontracting, restructuring, or even dismissal of staff, which may also emerge the feelings of deviant work behaviour among employees (Mannix McNamara et al., 2018; Lempp et al., 2020), which ultimately reduces the project performance (Huang et al., 2020). Based on previous research, we emphasize on the mediating role of employee's deviant behaviour (EDB) (Ben Farr-Wharton et al., 2017; Rai & Agarwal, 2018). Through existing literature, we can see that WPB has a positive impact on EDB (Kluemper et al., 2018). According to the Social exchange theory, due to the bullying it would be required for the workforce to consume their requisite vigour to handle this uncertainty and therefore their capability to revolutionise (Glambek et al., 2014). In these years and days, EDB is the only variable which actually received so much consideration in the workplace environment, with the growths of working stress due of COVID-19 (khan, 2020), deviant behaviour in the project's working place environment including the increasing, passing with its greater rates of pressure. Marasi et al. (2018) recognized that human resources and capital are the key factors for the success of any project. Therefore, EDB does not comply with organizational ethical standards, which is very harmful to employees and organizations both face challenges in conducting and running the projects (Samnani et al., 2016; MannixMcNamara et al., 2018). This fact expresses that some people are unable to observe the link between their outcomes and actions (external), whereas others have the internal belief that consequences drive their actions (Ng et al., 2006). Mulki and Lassk (2019) identified that Locus of Control (LOC) is a person's own perception concerning those causes for his/her participation and the issues to which he/she would have the attributes of success as well as failure. Specifically, locus of control is about the belief of an individual on himself (Lam & Mizerski, 2005) and the outcomes of projects are solely based on inner problems i.e., individual exertion and skill in comparison to exterior problems such as fate chance of influencing others (Harris et al., 2009).

Although Salin et al. (2017) explain how WPB can create an intention to leave the job in the workforce and can increase employee turnover, there is still a gap in WPB literature and it impacts on the project performance. A recent study proposes that due to its high prevalence, WPB should be studied in much detail (Chia & Kee, 2018; McKeown & Ayoko, 2020). Therefore, pertaining to the existing literature on workplace bullying, the current study aims to empirically test how WPB affects project performance through the mechanism of EDB, and how internal and external LOC moderates this relationship. LOC as a moderator relates to workers' behaviours which are not described in the job description (Nykänen et al., 2019). This is an employee's hidden skill that supports him and the overall project performance beyond assigned duties. Moreover, locus of control is such behaviour that helps the employee to cope with the pressure in the environment (Klotz & Neubaum 2016). For this purpose, it is important to analyse the moderating factors which is a major contributor towards increased project performance. Further, variables altogether have not been studied in the Pakistani context and the findings would be very helpful for the project-based construction companies. There is a French dictum "when the construction industry prospers, everything prospers". Escalation and growth of the construction industry are beneficial for all the regions of an economy and also for all involved in this industry like labour, workers, contractors, architects, financiers and local people, etc (Malik et al., 2020). Therefore, light needs to be shed on this aspect. Furthermore, this is the first study that attempts to examine the relationship in the COVID-19 pandemics time frame.

2. Literature review

2.1 Supporting theory

Social exchange theory (SET) developed by Emerson (1976) is the underpinning theory for this study that provides support to each & every variable of this research study which generates a direct/indirect relationship between these variables. This research model has been established by using the constructs of this theory as mentioned in Figure no 1. Since this research study is explaining the effect & influence of WPB on project performance, using EDB & LOC. SET indicates social change and stability as a process of negotiation between parties (Roecklein & Jon, 2018). Rotter (1990) states if an individual perceives reinforcement as a chance of his or her behaviour then the result is either a negative or a positive reinforcement, which weakens or strengthens the behaviour to reappear in the same situation. If he/she notices that reinforcement is occurring outside of his/her control then that is dependent on luck and unpredictable that whatever happens in the workplace depends upon managers' behaviours (Cropanzano & Mitchell, 2005).

2.2. Workplace Bullying and Project Performance

There is great room for further study in the area of WPB that is basically a psychological and behavioural aspect (Morrison et al., 2015). WPB states about to repeat the irrational activities of the project team members closer to a worker, that is envisioned to threaten and ultimately generate a danger to the health & safety of the project team member (Nykänen et al., 2019; Jiang et al., 2020). WPB is further defined as an exercise that is frequently regarded as abuse or misuse of power (De Cieri et al., 2019). Bullying consists of behaviour that intimidates, degrades, offends, or humiliates a worker, frequently in front of others (Catley et al., 2017). For example, a good organizer will organize but not a good one would bully (Glambek et al., 2014). Bullying behaviour creates emotions of defencelessness within the goal and destabilises a person's right for self-respect at work place in contrast to routine pressure at work, (Spagnoli et al., 2017). Workplace bullying is a different experience and is an interpersonal, secondary incident that does not essentially have an influence on each and every worker, but possibly rather focussed to stated victims through impoliteness, social isolation, or oral abuse & violence (Kuhnen & Tymula, 2012). Workplace bullying and its impact on psychological violence are neglected areas of research which have many negative consequences (Noermijati et al., 2020; Nielsen et al., 2020). Bullying is a negative behaviour at work that increases health and psychological issues and adversely affects employee performance (Sheehan et al., 2018). Also, continue to prevail if the organization does not try to hinder it and continuous prevalence makes it difficult for the organization to retain the worker, hence increases the cost of the project for the organization (Becker et al., 2015). In businesses, continuous growth along with competitive pressure of the market, and fulfilling customers' demands are becoming more decisive for project and organization performance (Spagnoli et al., 2017). Henceforth, to study the field of project performance and elements affecting successful project implementation is emerging as a dominant area that needs research in multiple domains (Carvalho & Rabechini, 2017). The term project implies various definitions and can be explained in distinctive views but in particular, it is far related to a project plan as to how it is developed and the development of the project (Mohammadi et al., 2018). Joslin et al. (2016) defined the project as an activity to meet the development of unique services or products and as a result, an activity that might be accepted to accomplish routine activities cannot be considered projects. With the continuous development in businesses along with violent influence, and rapidity in product processing and satisfying the consumers' demands are becoming more critical to the performance of the organization (Hoel et al., 2014). Hence, the study on the performance of the project is becoming the main research area in various dominions (Xu et al., 2019). The performance of the project can be evaluated by efficiency, effectiveness, and goal achievement, cost, quality, and time (Malik et al., 2015). Mohammadi et al. (2018) defined that there are three sets of attributes that examine project performance. The enterprise perspective focuses on commercial and financial metrics. The client's perspective considers the scope & quality of the project and customer satisfaction. Lastly, the team perspective focuses its attention on how commodities were created. Keeping in view all three perspectives, project performance is different for different stakeholders (Joslin et al., 2016). Bullying affects the workforce negatively, hence they will not take part in innovation and idea generation, and ultimately projects may not be successfully implemented (Shah et al., 2020). For the performance of a project, employees need to be motivated and satisfied with their job. Job satisfaction is a positive feeling of an employee about his/her job (AIKhahtani et al., 2020). Therefore, the workforce in project-based organizations needs to be highly motivated for the performance and quality of the project, as the nature of the employment is temporary (Jiang et al., 2020). Moreover, a good professional will always get the job done no matter what the circumstances are and a bad one will find someone else to blame for his own inadequacies (Tepper et al., 2011). WPB and its negative effects are all mentioned above. Hence, the project with even good leadership or set strategies may fail because of workplace bullying. Therefore, based on the above arguments, it was hypothesized that:

H₁: *Workplace bullying is negatively associated with project Performance.*

2.3 Mediating Role Employee Deviant Behaviour

Deviant behaviours are the behaviours that do not observe organizational standards and are undesirable to the organization and harmful to their procedures (Whiteside & Barclay, 2013). Workplace deviance includes such performances as theft, detrimental the corporation's property, reaching late at work, taking illegal breakdowns, consciously ignoring boss's advice, or in front of public humiliating one's manager (Lian et al., 2012; Lempp et al., 2020; Mikkelsen et al., 2020). Because of workplace deviance, employee's express aggression and involvement in theft, and don't act in a way to fulfil assigned jobs or perform it in the wrong way (Khattak et al., 2020). Therefore, it costs too high for organizations (Xiao et al., 2018). Recently different reports show that the cost of workplace deviance annually is billions of dollars in the US economy, and increasing the toll (Bowling & Gruys, 2010). The reason for the employees to engage in deviant behaviour is that they perceive injustice from management or imbalance and they try to achieve some equality or justice (Xu et al., 2019). The person who has low self-control is more likely to be involved in deviant behaviour. When workplace deviance is spread at the organizational level and managers' instructions are not followed, chances of failure of business rise. SET explains the presence of a variety of outcomes from relations of people, like trust, organizational citizenship behaviours, and observed organizational support (Cappelli & Tavis, 2016). These outcomes are based on reciprocity (Emerson 1976), which means each party has to pay something in reward against the received benefit. With the compliance of the current model, we propose the exchange of negative behaviours. If an employee perceives negative workplace events or perceives negative behaviours, he will reciprocate negative behaviour, i.e., deviant work behaviour (Jiang et al., 2020). Resultantly, project performance will lead to danger and cause failure. SET posits that, if the employee observes unfairness in the organization, he/she will definitely take revenge on the committee, in the form of deviant behaviour (Spagnoli et al., 2017). Additionally, it has been argued that when victims of

bullying are unable to take revenge, they become frustrated and are also involved in bad activities that may damage the organization (Cropanzano et al., 2005). The victim of work stress may engage in non-work activities, which negatively affects employees as well as the organization's performance (Khattak et al., 2020). Therefore, Fig. 1 shows that workplace deviance mediates the relationship between workplace bullying and PP. Deviant behaviour is the outcome of workplace bullying and leads to reduced chances of project performance (Morrison et al., 2015).

H₂: *Workplace bullying is positively associated with employee deviant behaviour.*

H₃: *Employee deviant behaviour is negatively associated with project performance.*

H₄: *EDB negatively mediates the relationship among WPB & project performance.*

2.4. The moderating role of Internal and External Locus

As per the definition of "Locus of control" it is the perception of any single person of any community about the consequences of his/her behaviours within the internal/external personal control (Schjoedt & Shaver, 2012). LOC Theory by Rotter (1990) states that different individuals cope with threats at the workplace with an internal & external locus of control correspondingly and adopt different strategies to overcome or mitigate such threats' effect (Malik et al., 2015). Literature posits two different kinds of LOC, internal locus of control based upon employee skills, abilities, and will power. On other hand, external factors are task demands and the actions of another person (Mulki et al., 2019). The difference between both is that employees with a high internal locus of control will always take charge of project success or failure upon their personal abilities and will power (Tuckey, & Neall, 2014). While an employee with a high external locus of control always tries to put performance or failure upon the task difficulty or luck (Kluemper et al., 2018). Earlier researchers have found that locus of control is an important factor for defining the project performance and related to work tasks and other outcomes including employee performance towards job satisfaction (Marasi et al., 2018). LOC has been found associated with well-being, job-related with emotional retorts, behavioural orientation, motivation and the connotation with behaviour and attitude is controlled by three cognitive related processes including a mental exposure of keeping vigorous behavioural regulation, self-appraisal of well-being, and intrinsic motivation, which are related to coping behaviours and social experiences (Park et al., 2020). The employee stops the negative assumption of self-evaluation which increases the probability of gaining the expected outcomes. Positive self-evaluation will motivate to confirm dynamic behavioural control over positive emotional rules and regulations (Ng et al., 2006). Employees who have high internal LOC perceive their work environment to be supportive, while externals do not believe so (Umeokafor et al., 2019). With high internal locus of control, individuals believe that environment is under their control, which gives individuals the strength and self-confidence to divert the negative effects of negative life events; therefore, employees with an internal locus of control will understand and react positively and level of job satisfaction is high, resultantly, job performance increases within employees. Thus, they experience less job-related stress (Nielsen et al., 2020). The literature suggests that individuals with an external LOC may feel helpless and thus unwillingly commit towards an organization when they perceive their work situation to be stressful. Workplace bullying consequently will depend on how the negative behaviours will be observed and how an individual will attach it internally (to self) or externally (to outer forces) (Shah et al., 2020). Hence, the following hypothesis has been developed; based on the literature reviewed:

H₅: *The moderating effect of external LOC increase employee deviant behaviour and decreases project performance.*

H₆: *The moderating effect of internal LOC decreases employee deviant behaviour and increases project performance.*

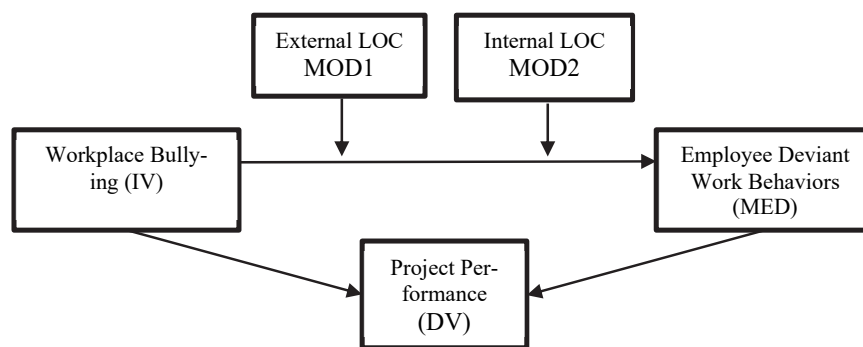


Fig. 1. Conceptual model

3. Research design and sampling

Data collection of the entire population is not possible due to resource and time; therefore, a simple random sampling technique was used to collect and evaluate data. Also, the probability simple random sampling technique reduces the common method bias in the data collection process (Tehseen, Ramayah, & Sajilan, 2017). The study focuses on the construction sector, and data collected from different public and private companies (i.e., Habib Rafiq, Bahria Town and Defense Housing Authority) operating in different cities of Pakistan (Rawalpindi, Islamabad, Lahore, and Karachi). The first author visited these organizations and obtained permission from staff to take part in the study, due to COVID-19 data also collected online. A

total of 1000 surveys were conducted and 777 participants returned the complete surveys with a list of questions. The response rate was very encouraging in such a difficult time for the COVID-19 pandemic, yielding a response rate of 77.7%. The respondents of the current study are: 75.2% were male and only 24% were female. The population of females in the construction sector of Pakistan is quite low. Most of the sample fell to 18-33 years of age. In terms of educational attainment, the vast majority of respondents are bachelor's degree holders and also majority job tenure of 1-5 and 6-10 years. The questionnaire consisted of 51-items in total. The Independent variable Workplace bullying (WPB) was based 21- items scale adapted from Einarsen et al. (2009) and the dependent variable the 12-items scale developed by Aga et al. (2016) was used for Project performance (PP). Moreover, the 12- items scale was used for mediating variable employee deviant behaviour (EDB) established by (Bennett & Robinson, 2000), and moderating variable locus of control comprised 6-items scale adapted from Lumpkin (1985) based on Rotter (1990) & Levenson (1973), internal LOC was measured by 3-items and external LOC have 3-items both are statistically independent of one another. The items were respondents at a Five-points Likert scale as suggested by Lumpkin (1985), where 1 (strongly disagree), 2 (Disagree), 3 (Neutral), 4 (Agree) and 5 (strongly agree).

3. Research finding

The research was developed using WarpPLS to investigate the effects of variability announced in a hypothetical study. There are certain requirements when analysing WarpPLS; that must first be fulfilled in relation to the various relevant models and quality indicators, to ensure that the instrument is reliable (Kock, 2017) Test results have shown that all appropriate model standards meet the prescribed procedure; good, large, and ideal as shown in Table 1. Additionally, to guarantee the inward consistency of the examination, Cronbach's alpha (α) was checked. Cronbach's alpha qualities more prominent than 0.70 were viewed as worthy (Field, 2013). Factor stacking assessment of 0.70 is best yet in the examination which is exploratory in nature esteem 0.40 or more prominent is top notch (Hair et al., 2014). Besides, the theory of the particular pointer can be surveyed by examining the specific and factor loadings, where it is recommended that the loading > 0.50 on at least two elements is reflected critical (Hair et al., 2014). For inside consistency of development, assessment of Composite reliability (CR) should be 0.70 or higher, yet 0.60 or higher is valuable if there be exploratory examination. As indicated by Fornell and Larcker (1981) if the average variances extracted (AVE) is underneath 0.5, notwithstanding, the joined dependability is higher than 0.6, the united legitimacy of the development is as yet satisfactory. Subsequently, the Table 2 uncovered that all assessments of factor loadings, Cronbach's alpha, CR and AVE quality are more prominent than the proposed cut off rules; in this way, the estimation model has a merged legitimacy.

Table 1
Model fit and quality indices

No	Model fit and quality indices	Criteria fit	Results	Remarks
1	Average path coefficient (APC)	$P < 0.001$	0.265	Good
2	Average R-squared (ARS)	$P < 0.001$	0.354	Good
3	Average adjusted R-squared (AARS)	$P < 0.001$	0.352	Good
4	Average block VIF (AVIF)	acceptable if ≤ 5 , ideally ≤ 3.3	1.386	ideally
5	Average full collinearity VIF (AFVIF)	acceptable if ≤ 5 , ideally ≤ 3.3	1.754	ideally
6	Tenenhaus GoF (GoF)	small ≥ 0.1 , medium ≥ 0.25 , large ≥ 0.36	0.492	large
7	Sympson's paradox ratio (SPR)	acceptable if ≥ 0.7 , ideally = 1	1.000	ideally
8	R-squared contribution ratio (RSCR)	acceptable if ≥ 0.9 , ideally = 1	1.000	ideally
9	Statistical suppression ratio (SSR)	acceptable if ≥ 0.7	1.000	ideally
10	Nonlinear bivariate causality direction ratio (NLBCDR)	acceptable if ≥ 0.7	0.900	ideally

After confirming the convergent validity of the model that met the pre-set criteria, the subsequent step was to affirm the model's discriminant validity is evaluated by using Fornell and Larcker criterion (Fornell & Larcker, 1981). According to this criterion, the square root of AVE for each latent variable should be greater than the values of its bivariate correlations (Ringle et al., 2015). The correlations of latent variables in Table 2 revealed the latent constructs are distinct from each other.

Table 2
Discriminant validity

Constructs	α	CR	AVE	1	2	3	4	5	6	7
WPB	0.954	0.958	0.523	0.723^a	0.244	0.377	0.610	-0.721	-0.475	-0.303
EDB	0.886	0.909	0.485	0.244	0.696	0.059	0.259	-0.118	-0.106	-0.228
ILOC	0.669	0.820	0.603	0.377	0.059	0.776	0.229	-0.233	-0.410	-0.041
ELOC	0.749	0.857	0.668	0.610	0.259	0.229	0.817	-0.498	-0.427	-0.421
PP	0.911	0.926	0.516	-0.721	-0.118	-0.233	-0.498	0.718	0.461	0.278
ELOC×WPB	1.000	1.000	1.000	-0.475	-0.106	-0.410	-0.427	0.461	1.000	0.359
ILOC×WPB	1.000	1.000	1.000	-0.303	-0.228	-0.041	-0.421	0.278	0.359	1.000

Notes: ^a The Items displayed in boldface represents the square roots of the AVE. Abbreviations: EDB, employee deviant behavior; ELOC, external locus of control; ILOC, internal locus of control; PP, project performance; WPB, workplace bullying; α , Cronbach's alpha; CR, Composite reliability; AVE, Average variances extracted.

The structural equation model is figured after the estimation model is done. To analyze the intervening results of Employee Deviant Behavior and moderating role of internal and external locus of control, we followed the techniques suggested by Henseler et al. (2015). To analyze both the direct and indirect effects of the models, four explicit rules were utilized: Firstly, assessing the degree of R^2 , for endogenous dormant factors to decide the measure of difference clarified by all develops (Hair

et al., 2016). In spite of the fact that, the palatable evaluation of R^2 relies upon the examination setting (Faul et al., 1998) shows the appraisal of 0.26, 0.13, and 0.09 shows high, moderate, and low, separately. Nonetheless, in the current investigation R^2 values for an endogenous variable, the immediate impact model explained representative degenerate conduct is 0.129, which suggests that 12.9% difference in EDB is anticipated by working environment tormenting. Additionally, the R^2 for venture execution is 0.579, which infers that a 57.9% difference in PP is anticipated by WPB. The model shows high prescient exactness as appeared in Fig. 2. Structural modelling is calculated after the measurement model is made. To assess the mediation effects of Employee Deviant Behavior and the role of the internal and external locus control role, Henseler et al. (2015) methods were used to analyze both the direct and indirect effects of the structural equation model, using certain specific settings: Firstly, the R^2 value is measured, with continuous internal variables to determine the amount of variance specified by all constructive elements (Hair et al., 2016). Faul et al. (1998) proposed the assessment values for R^2 the 0.26, 0.13, and 0.09, which shows high, moderate, and low. Although, the direct effect model elucidated employee deviant behavior is 0.129, which implies that 12.9% change of EDB is predicted by workplace bullying. Also, the R^2 for project performance is 0.579, which implies that a 57.9% change of PP is predicted by WPB. Fig. 2 presents the high predictive accuracy of the model. As suggested by Hair et al. (2014) to measure the estimated value of the investigative model a cross-validation redundancy measure was also used for the predictive relevance (Q^2). The result indicates the $Q^2=0.100$ for the endogenous latent variable the direct effect of WPB and EDB. Moreover, the indirect effect of WPB to PP is $Q^2=0.570$ also greater than zero. Therefore, the predictive relevance (Q^2) values of the model are acceptable as shown in Table 3.

Table 3
Coefficient of Determination in the PLS method

Construct	R Square	R Square Adjusted	Q^2
EDB	0.129	0.125	0.100
PP	0.579	0.578	0.570

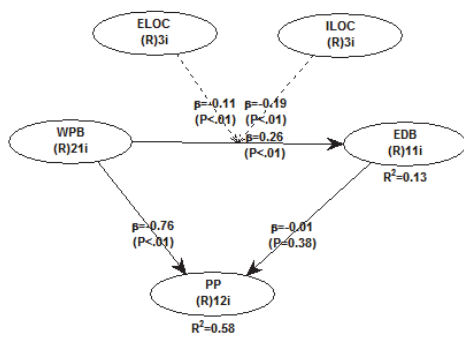


Fig. 2. WarpPLS Analysis Results

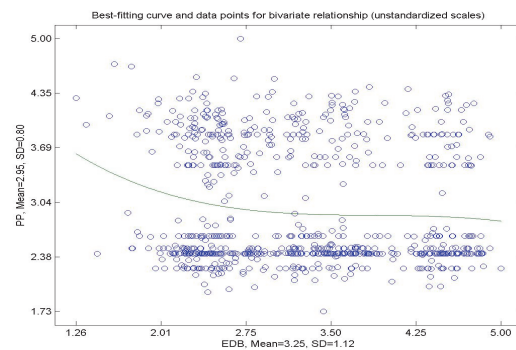


Fig. 3. Mediation analysis

Fig. 2 and demonstrated the hypothesis results. The result revealed that WPB has negative and significant effect on PP ($\beta = -0.761$, $p < 0.001$). However, WPB has significant and positive effect on EDB ($\beta = 0.255$, $p < 0.001$). Moreover, the direct effect of EDB to PP insignificant ($\beta = -0.011$, $p = 0.375$). Therefore, hypotheses H_1 , H_2 were accepted and H_3 was rejected.

Table 4
Path coefficient direct effect and indirect effect

Hypothesis		Direct Effect of Path Coefficient			Remarks
		β	P Values	Effect size	
H1	WPB → PP	-0.761	<0.001	0.578	Supported
H2	WPB → EDB	0.255	<0.001	0.069	Supported
H3	EDB → PP	-0.011	0.375	0.002	Not Supported
Indirect Effect of Path Coefficient					
H5	MOD effect of ELOC on WPB → EDB		Negatively Significant		Not Supported
H6	MOD effect of ILOC on WPB → EDB		Negatively Significant		Supported
H4	WPB → PP → through EDB		Negatively Significant		Supported

Thirdly, effect size (f^2) is the effect by exogenous variable unequivocal to the endogenous variable to perceive how gigantic the effect of exogenous (independent variable) is apparent to endogenous (dependent variable) (Hair et al., 2014). As shown by the Faul et al. (1988) rule, the f^2 gauges between 0.02, 0.15, and 0.35 as having close to nothing, medium, and enormous impact, correspondingly. Table 4 decides sway size 0.578 for WPB to PP, 0.069 for a WPB to EDB, 0.002 for EDB to PP. The result facilitates close to nothing, medium, and enormous impact size of these exogenous expands on the endogenous develop, individually. In conclusion, the model proposes and approves for this examination assessed that EDB would intercede the relationship among WPB and PP. To see how large the effect of an independent variable (exogenous) ultimately appears

on the dependent variable (exogenous), we measure the effect size (f^2) (Hair et al., 2014). the Faul et al. (1988) explained to estimate f^2 values, the lays range between 0.02, 0.15, and 0.35 as having small, medium, and large, respectively. Although, the result indicates the effect size 0.578 of WPB to PP, 0.069 of WPB to EDB, and 0.002 of EDB to PP. As presented in Table 4, the result directs the small, medium, and large effect size of these independent variables on the dependent variable, respectively. Lastly, this study hypothesized that EDB would mediate the relationship between WPB and PP. As described in Figure 3, the indirect effect of WPB on PP is negative and significant. However, the indirect effect is less than the direct effect of WPB to PP, so reflected as partial mediation. Furthermore, the moderating effect of both ELOC and ILOC is negative and significant as presented in Fig. 4. Therefore, the hypotheses H₄ and H₅ were accepted and H₆ was rejected.

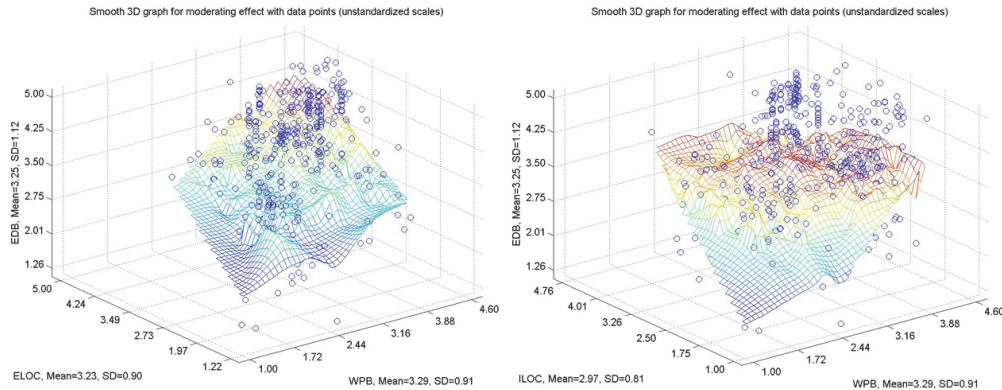


Fig. 4. Moderating analysis external and internal Locus of control

5. Discussion

This study aimed to assess how WPB and EDB influence the project performance of construction companies of Pakistan, in the face of a global health pandemic, the COVID-19 virus (NHS, 2020). Due to lockdown, there is a fear of mass dismissals and temporary unemployment is expected for 10.5 million workers (Mamun & Ullah, 2020). In the first hypothesis, this study proposed that there is a negative correlation between WPB, project performances. Consistent with previous cross-sectional research (Chia et al., 2018; Huang et al., 2020) project performance always decreases due to workplace bullying. Moreover, SET also reveals these relationships that there is an indirect relationship between WPB and project performance. Though, the SET predicts the best explanation of workplace behaviours (Emerson, 1976). We found that SET has a basic tenet of reciprocity. It is about social exchange, under which one party has to trust that the tendency to treat the other party either positively or negatively will be reciprocated without any formal contract (Cropanzano et al., 2005). Literature fosters to find the best mechanism of WPB and project performance (Naseer et al., 2018); we used EDB as mediation of bad management has also been symbolized as one form of direct bullying interaction between the victim and the supervisor (Tepper et al., 2011). Also, Rai et al. (2018) proposed more than one case; bearing bullying workplace urges negative emotions, attitudes, and behaviours among employees. The victim also affects the whole project performance with his low confidence, low self-esteem, rigidity, disagreement, and non-participatory behaviour (Spagnoli et al., 2017). Under this study, we hypothesized that EDB mediates the relationship between WPB and PP. The results revealed that EDB significantly mediates between WPB and PP. Moreover, internal LOC and external LOC both are selected as moderators between WPB and EDB. The hypothesis suggests that internal locus of control reduces EDB and supports project performance while external LOC increases EDB and decreases PP. The result indicated that internal LOC had a significant and negative effect on EDB and increased project performance. Therefore, the internal locus of control is about the control and belief of oneself on his skills, abilities, and efforts. So, they are less likely to move towards deviant behaviour even while leaving a bullying workplace (Xiao et al., 2018). On the other hand, employees with a high external locus of control have faith that they cannot change things and they should go with the flow (Spillane & Spillane, 1998). So, they most often move towards deviant behaviour. Thus, the project threatened towards failure (Park et al., 2020). Fig. 4 presents that external LOC also has a negative effect on EDB and increases project performance.

6. Practical and theoretical implications

The present study has identified the negative relationships between WPB and PP. Thus, this study has clarified some unique points that are equally important for the managers, employees, and project-based construction organizations as a whole. The project manager must manage the workplace environment and to satisfy employees to improve project performance at COVID-19 time. Therefore, the present study is worth mentioning for the project managers. The proposed research and hypotheses support social exchange theory and social behaviour exchanges. This study has fulfilled all the assumptions that are accepted. By examining the impact of WPB on PP, this study adds a very unique aspect of the project manager's oversight from past literature of project failure. In this research study, novel associations have been examining, which is very significant for the achievement of the competitive advantage within this varied & inventive working environment of developing project-based construction companies within the country i.e., Pakistan. This study is equally important for subordinates, supervisors, and employees because Pakistan is facing a higher degree of power distance culture and requires a large number of new

researches to overcome this aspect of Pakistani culture in construction companies. Due to the collectivistic culture, newcomers also inherit the old culture and try to confirm the environment. Hence, they will show negative behaviour in the form of deviant behaviour. For project managers, the research depicts that there is a dire need to understand the WPB and tries to diminish the power distance culture in construction organizations (De Cieri et al., 2019). So, we can say that a leader has influencing ability over their followers. Through proper training or counselling, the failure of the project could be overcome. Additionally, employees must have a high internal locus of control.

7. Limitation and future research

There are numerous limitations to this research study. 1stly, there is a limitation in terms of COVID-19 time and the presence of financial constraints during data collection in the field the data has limited the external validity of these results. Furthermore, data were collected only from project-based construction companies in the context of Pakistan, limiting the generalizability to a broader scope because there may be differences in organizational culture in the respective places. Therefore, future research might be able to replicate and extend again the scope of the study, especially in different work environments. Moreover, WPB can be studied in the future with multiple factors i.e. self-efficacy, individual-level stress-related outcomes, and it should also check the impact of employee counseling, training against bullying in the workplace. Moreover, EDB is used as a mediator in the present study to support the relationship between WPB and PP. In the future, researchers can add mediator's ego depletion, frustration to check the impact of WPB and PP if employees become frustrated from workplace bullying. Also, future researchers can explore the impact of diversity of the workplace and WPB on project performance in the context of COVID-19. Future research studies are essential to discourse, once the immediate risk of the virus has passed, what will have changed in the way we think & behave, how workers perform their duties on the project sites, and with the help of digital channels communication between project team members could be enhanced.

8. Conclusion

The histrionic spread of COVID-19 has troubled lives, sources of revenue, societies, & business practices worldwide. The concept of workplace bullying attracted the researchers and practitioners because of increasing WPB and its detrimental outcomes on employees' health and well-being. The purpose of this study was to investigate the relationship between WPB and PP within an integrative framework under the underpinning assumptions of SET theory. Hence, the study, within the given framework tested the mediating effect of EDB and moderating effects of internal and external LOC. Based on the quoted theory, the findings are in line with the proposed hypotheses, explaining the role of personal dispositional traits and aggressive behavioural state in WPB. It is considered the most important and popular area of research to compete globally amongst the emerging project-based construction companies in Pakistan and around the world. The focus of this study was to find out the antecedents of project failure. Project managers found it difficult to save them from failure. In this study hypothesis 1, 2, 4, 5 were accepted and 3, 6 were rejected.

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