Perceived Workplace Ostracism and Deviant Workplace Behavior: The Moderating Effect of Psychological Capital

Gnei Rushna Preena (Corresponding author)
Department of Human Resource Management, Faculty of Commerce and Management Studies,
University of Kelaniya, Sri Lanka
Email: preenar@kln.ac.lk

Nadira Janadari
Department of Human Resource Management, Faculty of Commerce and Management Studies,
University of Kelaniya, Sri Lanka
Email: njanadari@kln.ac.lk

Abstract

Many workplaces have paid more attention to employee behavior in a competitive, dynamic, and expanding business environment since it impacts productivity, efficiency, and effectiveness. These employee behaviors can either be positive or negative. Deviant workplace behaviors are such a form of negative behavior that fallouts as a result of workplace ostracism. The degree to which an employee practices any deviant workplace behaviors is determined by his/her level of psychological capital. Hence this study aimed at finding the moderating role of psychological capital on the relationship between perceived workplace ostracism and deviant workplace behaviors among software engineers in the Information Technology (IT) sector in Sri Lanka. Accordingly, the data collection was done from 186 software engineers using the simple random sampling method. Further, the data analysis was done using the Partial Least Squares - Structural Equation Modelling (PLS-SEM) method with Smart-PLS 3 software.

After the data analysis, the study findings revealed that perceived workplace ostracism positively impacts deviant workplace behavior, and psychological capital moderates the association between perceived workplace ostracism and deviant workplace behavior. Furthermore, the research findings brought valuable theoretical and managerial implications regarding human resources practices that could control workplace ostracism and deviant workplace behaviors while enhancing psychological capital, followed by implications and future research directions.

Keywords: perceived workplace ostracism, deviant workplace behavior, psychological capital, information technology sector, software engineers, Sri Lanka.

1. Introduction

Many organizations have paid more attention to employee behavior in a growing business environment as it significantly affects an organization's productivity, efficiency, and effectiveness. These behaviors can categorize as positive and negative behaviors. Positive behaviors contribute to the success of the organization, whereas negative behaviors harm the organization. Accordingly, deviant workplace behaviors (DWBs) are considered as negative behaviors. Agwa (2018) defined DWBs as any intentional behaviors of employees in the workplace that could hinder the norms of the organization and thereby adversely affect the well-being of employers, employees, and the entire organization.

Studying DWBs is very much important to any organization. Because it negatively influences all the workplace stakeholders, including supervisors, employees, co-workers, and customers. Further, it can even put the entire organization at enormous risk. Further, Akanni et al. (2018) have stated that these DWBs of employees have adversely contributed to the service delivery of both private and public sector organizations. Thus, DWB has become a widely discussed and concerned topic around the globe (Agwa, 2018).

When it comes to the workplace, the workplace is a social entity that cannot merely be ignored since the nature of today's work requires many employees to devote considerable time with other employees of the organization. Even though there are many advantages over teamwork with other corporate members, interpersonal associations do not continually take a positive outlook. Thus, workplace ostracism (WO) has evolved with the team working practices by challenging the organizations. Ostracism refers to intentional denial of social contact by others who might expect such interaction (Peng & Zeng, 2017). Evading eye contact, intentionally leaving the cubical or the room when an individual enters and failing to respond to co-workers' greetings are few such ostracized behaviors demonstrated by co-workers. Researchers have discovered that WO is linked to workplace behaviors such as interpersonal conflict, aggression, and job withdrawal (Chung, 2015; O'Reilly & Robinson, 2009; Ferris et al., 2008). Also, WO and the feeling of being ostracized could hinder one's ability to develop/preserve positive social relationships with others and achieve work-related success within one's workplace. Accordingly, workplace employees will start demonstrating DWBs in the organizational setting when they encounter WO.

Psychologists also discovered that ostracism stimulates the same brain parts that physical hurt does (Zheng et al., 2016). Similarly, many pedagogical, psychological, and sociology researchers have researched how ostracism affects employee attitude and behavior. However, the concept of WO has not captured enough scrutiny (Ferris et al., 2008). Accordingly, when people believe they are being left out of dialogues and that their ideas and opinions are being dismissed, they are more inclined to minimize their contribution to the workplace. Moreover, when individuals face the social stressor so-called WO, they put the effort from their end to cope with that stress successfully (Hobfoll, 2001). Accordingly, the ratio or rate of success often depends on an individual's psychological resources like self-efficacy, resilience, and optimism (Treadway et al., 2007). Thus, an individual's psychological resources play an influential role in acknowledging resource loss. This

resource loss may refer to perceived loss due to WO. Thus, employees with high psychological capital (PsyCap) often show higher confidence in accomplishing challenging tasks.

Further, Wu et al. (2012) have shown the necessity of an individual's PsyCap to mitigate the harmful effects of WO. Hence, it has been discovered that people with high PsyCap are more likely to endure and preserve their resources when confronted with challenges and hardship. Moreover, they also tend to be optimistic about their future despite stressful situations (Luthans et al., 2007). Thus, it was observed that antecedents of DWBs often come in the form that will lead to a rise in WO. Even though previous research studies focused on WO and DWBs, the moderating effect of PsyCap in this relationship is rarely researched. Hence, by considering all these gaps, this study focuses on finding the impact of WO on DWB and the moderating role of PsyCap on this relationship based on the conservation of resource theory (COR) and social exchange theory. Accordingly, this study enhances the COR theory's justification power by combining the social exchange theory to explain the determinants of DWBs while extending the prevailing theoretical literature by introducing the PsyCap of an individual as a moderator. It also highlights the importance of preventing perceived workplace ostracism (PWO) at the workplace, the importance of developing preventive actions to cope with PWO, and improving employees' PsyCap.

As Agwa (2018) described, the national poll of Australia has discovered that around one-third of employees are verbally abused or uncivilized by their immediate superior and colleagues. In contrast, the US Chamber of Commerce has revealed that one-third to three-fourth of employees have engaged in DWBs such as stealing, unfair and illegal practices, and deliberate destruction of company properties. These DWBs are more prominent and visible among Information Technology (IT) employees than in other sectors (Weatherbee, 2010; Joy 2016). Tapia (2006) noted that ICT workplace deviance includes stealing proprietary/patented information, executing viruses, sabotaging computer programs, and hacking into private computer space at the organization.

The recent research findings of Yang and Threadway (2018) indicated that the individuals who admire belongingness are more likely to grasp co-worker's ostracizing behaviors. He also mentioned that people with fewer political abilities are more inclined to participate in DWBs as a reaction to PWO. Although many studies examine the direct impacts of WO, only a few have looked into the underlying mechanisms that link WO to behavioral outcomes such as deviant/counterproductive work habits. Chung and Yang (2017) have found that only less than ten studies investigate the above relationships with moderating variables. The research examining the impact of WO on hospitality employees' counterproductive work behaviors (CWBs) has found that WO is positively linked to CWBs of hospitality employees (Zhao et al., 2016).

When perusing through the various literature, it was noticed that many studies related to WO had done coupling with job outcomes, CWBs, and performance outcomes. On the other hand, DWB has been measured as a dimensional component under each construct with the moderating effect of PsyCap or PsyCap-related dimensions. Moreover, most studies have used public and private organizations without focusing on specific sectors and

job categories. Thus, no research has been done related explicitly to PWO and DWBs with the moderating effect of PsyCap on the IT sector previously within the Sri Lankan context. Hence this study focuses on identifying the moderating impact of PsyCap on the association between PWO and DWBs among software engineers in the IT sector of Sri Lanka. Accordingly, the problem statement of the current study is to identify whether PWO impacts the DWBs of software engineers in the Sri Lankan IT industry and how an individual's PsyCap impacts the relationship between PWO and DWB.

2. Literature Review

2.1 Deviant Workplace Behavior (DWB)

Studying employee behavior in the workplace has become necessary with technological advancements, globalization, and industrialization. Accordingly, deviant workplace behavior is any intentional and volunteer behavior exhibited by an individual or group of employees in an organization that disrupts the organizational practices and policies (Muafi, 2011; Appelbaum et al., 2007; Robbins & Judge, 2007). When it comes to deviant workplace behaviors, they are voluntary actions created in socializing with work context that would violate the established norms of the organization as an outcome of personality resulting from the experience derived from work (Agwa, 2018).

Baharom et al. (2017) have proposed two significant workplace deviance types: organizational and interpersonal. The organizational deviances comprise stealing, intentionally damaging properties of the organization, late attendance to work without the supervisor's permission, and social loafing. In contrast, interpersonal deviances refer to deviant actions focused on the organization's employees, such as peers, subordinates, and supervisors. Few examples of such deviance are bullying others at work, pranks on others, physical aggression, unnecessary arguments, and being treated rudely. In contrast, Apelbaum et al. (2007) have indicated four types of DWBs; production deviance (behaviors that violate the officially prohibited norms), property deviance (intentionally damaging/destroying property of the organization, and using work property for personal use without any permission from the organization), political deviance (engaging social interactions that place other persons at a political and personal disadvantage) and personal aggression (behaviors that show hostility and intimidating mannerisms targeting other people). In many research studies, even though researchers have attempted to examine the implications of DWBs and categorized them under the form of misbehavior of the organization, it still lacks agreement or clarity on this construct's dimensions. Thus, in this research study, the researchers focused on the model developed by Robinson and Bennett in 1995 that applied in the research studies of Apelbaum et al. (2007), Joy (2016), and Agwa (2018).

Moreover, the psychology research and related literature suggest that ostracism and discrimination at the workplace trigger DWBs (Gürlek, 2021). Thus it can be argued that DWBs arise due to the workplace actions, settings, and treatments and as a result of behaviors of employees. Hence, an employee who perceives that others are ostracizing them tends to display DWBs as a counter-response.

2.2 Perceived Workplace Ostracism (PWO)

Every employee, as a human, values social bonding as a need. It is often fulfilling when accepted by others, whereas it makes them much hurt in a rejection situation (Jahanzeb & Fatima, 2018). The act of being ignored and excluded is referred to as ostracism (Williams, 2002), whereas workplace ostracism (WO) refers to a phenomenon where an individual perceives that other employees deliberately ignore them at work (Wu et al., 2012; Ferris et al., 2008). Further, Peng and Zeng (2017) have indicated that the feeling of ostracism would bring much pain and hurt for an individual. Researchers also showed that denial of social engagement or interaction results in adverse psychological impacts than aggressive mistreatment (Peng & Zeng, 2017). Thus, WO limits social contact and stops employees from participating in meaningful and long-term relationships inside the business (Jahanzeb & Fatima, 2018). The outcome of all these is emotional exhaustion, depression, or maladaptive behaviors that cause interpersonal deviances.

When it comes to the impact of PWO, various scholars in the international context have categorized it into three main aspects: (1). PWO may affect the mental state and health of the employees at the workplace and thereby hinder satisfaction; (2). WO would diminish organizational citizenship behavior (OCB), resulting in counterproductive behaviors; (3). WO act as an indicator that assists in explaining why employees perform poorly (Liu & Xia, 2016). By looking into these three aspects, the current research emphasizes more on the second and third aspects. So it can be expected that software engineers who need to work as a team being ostracized by their co-workers tend to practice DWBs as coping mechanisms to relieve their psychological pain or revenge.

Moreover, as described by Ferris et al. (2008), many research studies have revealed that employees who become victims of WO produce a range of reactions that are averse psychologically, like high tension or pressure in work, mental depression, emotional exhaustion, and lower work satisfaction. Further, Liu and Xia (2016) revealed that WO is significantly positively related to worker's psychological pressure that comprises work stress, depression, and emotional exhaustion. Thus, it can be said that when an employee faces severe WO at the workplace, their positive emotional bonding and feeling towards others might suddenly burst. Accordingly, employees needed social contact to share their thoughts and feelings to uplift emotional resources and sustain mental and physical health if they cannot cope with this burst individually. Further, it can be argued that a person with high PsyCap tends to see ostracism from a different aspect and manage it differently in a more successful manner than practicing DWBs than an ordinary person who does not have adequate PsyCap.

2.3 Psychological Capital (PsyCap) as a Moderator

Social capital, human capital, and PsyCap play a vital role in achieving sustainable competitive advantages in every organization. Social capital is associated with accumulating actual/potential resources related to forming a stable pool of relations. As a result, social capital is concerned with "whom you know," whereas human capital is concerned with "what you know?" On the other hand, PsyCap is linked to "who you are?" as well as '" whom are you becoming?" (Temizkan, 2019). Bogler and Somech (2019) explained PsyCap as developing a positive psychological state through hope, self-efficacy,

resilience, and optimism. In other words, it could say that PsyCap deals with positive psychology. Positive psychology aims to enhance the positive traits of individuals together with their positive experiences while upholding their mental health through effective programs and workshops that stimulate the well-being (DurukanKöse et al., 2018). Thus, PsyCap is beyond human capital as it is expressed as the stock of experience, tacit knowledge, and employee training (Luthans, 2012). Accordingly, the present study focuses on how hope, self-efficacy, resilience, and optimism of PsyCap moderates the intention of performing DWBs of software engineers that perceived or experience WO from their co-workers.

3. Theoretical Background

Two theories support the current research study: conservation of resource (COR)theory and social exchange theory.

3.1 Conservation of Resource (COR) Theory

As Koay (2018) indicated, the COR theory suggests that people are motivated and encouraged to protect and conserve their resources from being lost/drained further and gather novel resources to expand the existing stock of resources. Accordingly, based on COR theory, WO impends the four (04) essential employee needs; 1) sustain self-esteem, 2) belongingness, 3) perceive own control, and 4) meaningful survival. Hence, employees who undergo WO are vulnerable to reduced perceived control in social connections and low self-esteem (Koay, 2018). Thus, employees subjected to WO may try to preserve their resources from being exhausted further through numerous tactics to relieve WO (Koay, 2018). Moreover, Haq (2014) also stated that WO caused emotional exhaustion due to resource loss. Thus, in the work setting, ostracized/excluded employees have the liberty to involve in any DWBs. Accordingly, emotionally fatigued workers will develop negative attitudes toward their emotional fatigue and keep away cognitively and emotionally from their job (Haq, 2014).

Further, as Clercq et al. (2019) stated, when employees feel that they are being excluded and ignored without social backing/support, they tend to distress about losing their organization's position. Thus, the drainage of such energy prevents employees from dedicating adequate effort to meet their management's performance standards. Also, sometimes employees find it difficult to execute their tasks due to a lack of knowledge. In that context, WO leads to hinder further the achievement of pre-set performance standards (Clercq et al., 2019). So, it could be said that the social exclusion connected with WO thwarts employees from acquiring the knowledge required to face challenges in their daily work routine (Jones, Sowell, Kelly & Williams, 2009). Similarly, employees who feel neglected or alienated at work are not willing to contribute freely to improving other company members' well-being (Twenge et al., 2007). Thus, this obstructs their capability to trust others and their knowledge when meeting their performance targets (Jones et al., 2009). Therefore, it could conclude that according to COR theory, negative work situations result in low job performance as ostracized employees try to preserve their resources, especially their knowledge, to overcome the feeling of anger and frustration (Clercq et al., 2019).

3.2 Social Exchange Theory

As Alias et al. (2013) described, the social exchange theory was used first to describe the reasons behind attitudes and behaviors exchanged between individuals. As per this theory, individuals who perceive receiving adverse treatments from others tend to be more dissatisfied (Yekinni, 2019). Further, Yekinni (2019) indicated that when employees are unhappy with their employers, they reciprocate it with destructive behaviors. This theory also explains the connection between organizational-related factors and workplace deviance. Moreover, this theory has also been used frequently by many researchers to describe the occurrence of DWBs (Mitchell & Ambrose, 2007; Alias et al., 2013).

Further, as Yekinni (2019) described, this theory has frequently been used to study organizations to understand the organization's and employees' mutual relationships. If an employer treated their employees fairly, those employees would perceive high support from their organization, and they automatically become obliged to the organization. So employees who receive high support from their organization tend to contribute to the organization's goodwill creation. Not only that, Yekinni (2019) argues that employee's perception of low organizational support would result in DWBs. Researchers like Mitchell and Ambrose (2007) explained that employees with a high exchange rapport with their supervisors are less likely to be involved in DWBs.

Furthermore, subsequent studies have also found few factors related to the organization that makes employees inclined towards DWBs (Yekinni, 2019). They include organizational ethical climate, organization justice, perceived organizational support, supervisory support, job demand, and corporate trust. When it comes to underpinning theories, many previous empirical studies mentioned above have only used the COR theory to provide the theoretical justifications for the variables (PWO and DWB) concerned in this study. But the current research study enhances the COR theory's justification power by combining the social exchange theory to introduce PsyCap as a moderator to the above-said relationship making it more theoretically sound.

3.3 Hypotheses Development

3.3.1 The Impact of Perceived Workplace Ostracism (PWO) on Deviant Workplace Behavior (DWB)

DWB is any intentional behaviors that an individual or group of employees exhibits in an organization that disturbs the organizational practices and policies (Muafi, 2011; Robbins & Judge, 2007; Appelbaum et al., 2007). PWO refers to a phenomenon where employees perceive that other employees are deliberately ignoring them at work (Aliza, 2021; Gürlek, 2021; Wu et al., 2012; Ferris et al., 2008). Accordingly, many research studies done by various researchers have indicated that ostracized workers tend to exhibit DWBs or CWBs at the workplace (Fatima, 2016; Yan et al., 2014; Hitlan & Noel, 2009; Ferris et al., 2008). A recent study by Shafique et al. (2020), using 417 nurses employed in public sector hospitals of Pakistan to inspect the effect of WO on DWB, revealed that ostracism is positively related to the DWBs. Also, Jiang et al. (2019), in their study on coping with WO and the roles of emotional exhaustion and resilience in DWBs, have revealed that emotional exhaustion mediates the association between WO and DWBs.

Further, Jehanzeb and Fatima's (2018) study conducted using 320 service-sector employees in Pakistan argued that WO contributes to interpersonal deviance. Also, the research studies done by several researchers to investigate the association between WO and DWB stipulate a positive correlation between WO and DWB (Gürlek, 2021; Shafique et al., 2020). This means that when an employee encounters norms that disrupt their practice at work, they tend to involve in similar behavior as an exchange (Yang & Treadway, 2018; Zhao et al., 2016; Koay, 2018). The study of Peng and Zeng (2017) revealed an association between WO and 360-degree feedback on helping behavior and interpersonal deviance of Chinese and North American employees. Also, the study of Türkmen et al. (2016) to examine the impact of ostracism on work effort found that WO decreases the amount the work effort. Here, reducing the amount of work or working slow is considered a form of production deviance under DWBs (Appelbaum et al., 2007).

Furthermore, Yekinni (2019), who researched organizational predators of DWB in the hotel industry, revealed that supervisory support, ethical climate, job demand, and organizational trust have a significant positive relationship with DWB. Here, receiving supervisor support implies that an individual is not subjected to any ostracism at the workplace. Also, the study by Mahfooz et al. (2017) revealed that WO and workplace incivility have a significant negative association with turnover intention. From all of the above previous empirical studies, it is clear that most of the studies have focused on different employment categories and sectors to investigate the impact of PWO on DWB. But the study of Joy (2016) to explore whether gender affects DWB by employees using 312 employees working in five large IT firms of India revealed that female employees perceived low levels of DWB than male employees. This study is among the very handful of research studies that target investigating the DWBs of IT sector employees. Accordingly, the below hypothesis was formulated based on the above evidence to find the impact of PWO on DWB of software engineers of the IT sector of Sri Lanka.

> **H₁:** There is a significant impact of perceived workplace ostracism on deviant workplace behavior.

3.3.2 The Moderating Effect of Psychological Capital (PsyCap) on the relationship between Perceived Workplace Ostracism (PWO) and Deviant Workplace Behavior (DWB)

PsyCap indicates how individuals develop a positive psychological/mental state through resilience, self-efficacy, optimism, and hope (Bogler & Somech, 2019). Various literature revealed that when individuals face a social stressor of WO, they exert efforts to cope with that stress (Hobfoll, 2001). The triumph of these efforts is determined by the psychological resources of an individual (Treadway et al., 2007). Zheng et al. (2016), in their research study on WO and its adverse outcomes with the moderating effect of PsyCap, revealed that WO is connected positively with employee quitting. They also concluded that PsyCap moderated WO's impact on leaving and affective commitment. In contrast, Chung (2017) showed that perceived stress mediated the association between WO and helping behavior.

Further, Haq (2014) determined that high PsyCap weakens the negative correlation between WO and job performance and the association between WO and job stress and turnover intent. The previous empirical studies had also found that high PsyCap would

result in low WO (Erkutlu & Chafra, 2013). Moreover, the study done by Avey et al. (2010) revealed that PsyCap is negatively correlated with intentions to quit, organizational cynicism, and CWBs. Accordingly, many previous empirical studies emphasize the moderating role of PsyCap rather than the mediator between the main variables considered in this study. Thus, founded on the above evidence, the below hypothesis was formed for the present study.

> **H₂:** There is a significant moderating effect of psychological capital on the relationship between perceived workplace ostracism and deviant workplace behavior.

Accordingly, the current study will test the above-hypothesized relationship with the surveyed data using the following conceptual framework.
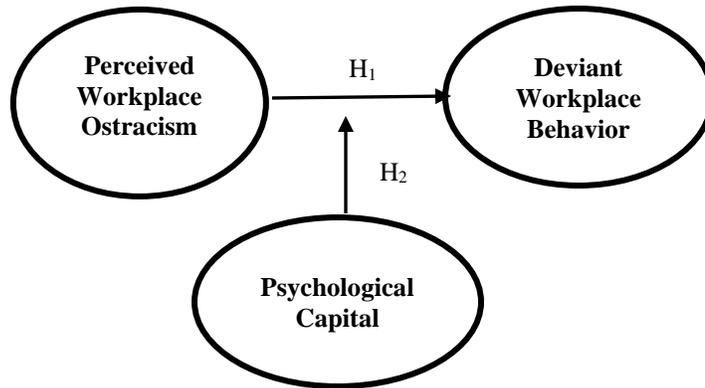

Figure 1: Conceptual Framework

4. Research Methodology

4.1 Data Collection

A self-administered questionnaire survey technique was used to test the stated hypotheses. The researchers focus on software engineers working in the 21 Knowledge Process Outsourcing (KPO) IT companies from the database of 130 large, medium, and small-scale IT companies registered in the Sri Lanka Association of Software and Service Companies (SLASSCOM, 2020). Out of the population of seven hundred and seventy-two (772) software engineers, a sample of 257 was determined based on the sample size table of Krejcie and Morgan (1970). In addition, since the population was known and available, simple random sampling was used in this investigation. The unit of analysis is individuals. Accordingly, two hundred fifty-seven (257) questionnaires were distributed among software engineers. Out of that, one hundred and eighty-six (186) questionnaires were returned during the intended period, reflecting a 72 percent response rate. Concerning the gender of the respondents, 138 were males, and 48 were females. When it comes to age split, most respondents were born between 1980 to 1994, which is 161 in total. Further, 24 were born between 1965 and 1979, and 01 was born between 1946 and 1964.

4.2 Measures

A 7-point Likert scale was used to assess each component since it offers a perfect evaluation of the participant's actual state/ genuine response (Finstad, 2010). Further, when it comes to a 7-point Likert-type response scale, the respondents intuitively assess and provide their response making it more accurate than a 5-point Likert scale (Leung, 2011). The measurement scales used to measure those constructs are as follows.

PWO construct was measured by the 13-item workplace ostracism scale developed by Ferris et al. (2008), ranging from 'Never' (rating 1) to 'Always' (rating 7). Few sample items of the scale are 'Others ignored you at work' and 'others left the area when you entered.'

Bennett and Robinson's (2003) 28-item scale was used to measure the DWB construct. Accordingly, respondents were requested to indicate their feedback on a 7-point Likert scale. The scale anchors were never (1) to daily (7). Few sample items of the scale are 'Spent too much time fantasizing or day-dreaming instead of working,' and 'Worked on a personal matter instead of work for your employer,'

The PsyCap construct was measured by the 24-item PsyCap Questionnaire (PCQ) developed by Luthans et al. (2007). The PCQ assesses PsyCap's four (04) dimensions: hope, self-efficacy, optimism, and resilience. A sample indicator for evaluating the hope facet is 'There are lots of ways around any problem.' A sample item for self-efficacy includes 'I feel confident presenting information to a group of colleagues.' Likewise, optimism is measured with items such as 'When things are uncertain for me at work, I usually expect the best.' and a sample resilience item is 'I can get through difficult times at work because I've experienced difficulty before.' The responses were collected via a 7-point Likert scale, ranging from 'Strongly Disagree' (rating 1) to 'Strongly Agree' (rating 7).

4.3 Analytical Strategy

Structural Equation Modeling (SEM) using SmartPLS 3 was undertaken to evaluate the conceptual framework. Initially, the measurement model was run by researchers to check each construct's reliability and validity. Then the structural model was used to assess the advanced hypotheses. Also, the researchers conducted a preliminary data cleaning process before analyzing the data. Accordingly, Box plots were used to identify common outliers of the data set, and there were no outliers for the construct perceived workplace ostracism and psychological capital. But there were few minor/ mild outliers for the construct DWB. Since they were mild outliers, no cases were detached from the original data set. Thus, one hundred and eighty-six (186) respondents' original data set was forwarded by researchers to data analysis.

5. Results

5.1 Construct's Reliability and Validity

The reflective measurement (RM) model was used to assess the internal consistency reliability and validity appropriately. Thus, to determine the internal consistency reliability, composite reliability was utilized by the researchers. Further, the researchers used the AVE

(Average Variance Extracted) to assess the convergent validity and the Fornell-Larcker criteria and cross-loadings to determine the discriminant validity.

5.1.1 Reflective Measurement (RM) Analysis

The below results were derived from the consistent PLS Algorithm for reflective indicators. Accordingly, the construct reliability and validity results are shown in Table 1.

Table 1: Construct Reliability and Validity

Construct / Items	Cronbach's Alpha	Composite Reliability	Average Variance Extracted (AVE)
Deviant Workplace Behavior	0.982	0.981	0.658
Perceived Workplace Ostracism	0.987	0.987	0.855
Psychological Capital	0.961	0.961	0.510

5.1.2 Internal Consistency Reliability

The Cronbach's Alpha for the construct DWB was 0.982, and PWO was 0.987. On the other hand, Cronbach's Alpha for the moderator construct PsyCap was 0.961. Accordingly, all three constructs satisfy the accepted lower boundary for Cronbach's Alpha in terms of reliability, as the accepted lower boundary for Cronbach's Alpha is 0.7 (Hair, Black, Babin & Anderson, 2010)

5.1.3 Convergent Validity

Convergent validity evaluates the degree to which a particular indicator positively relates with other indicators of the same construct (Hair et al., 2016). This is measured through the AVE and indicators' outer-loadings. Accordingly, the AVE value should be 0.50 or higher. Moreover, the outer-loading values equal to 0.4 or higher are also acceptable if AVE scores are greater than 0.5 (Hulland, 1999). Accordingly, the AVEs of the constructs and factor loadings of the current study's indicators satisfied the needed condition recommended by Hair, Sarstedt, Matthews and Ringle (2016) as well as Hulland (1999).

5.2 Discriminant Validity

Fornell-Larcker standard uses to measure discriminant validity. Hair et al. (2016) detailed that each construct's $\sqrt{AVE}$ should be more significant than its highest correlation with other constructs to ensure discriminant validity. Table 2 represents the discriminant validity (Fornell-Larcker) for the constructs of the current study.

Table 2: Discriminant Validity (Fornell-Larcker)

Constructs	Deviant Workplace Behavior	Psychological Capital	Perceived Workplace Ostracism
Deviant Workplace Behavior	0.811		
Psychological Capital	-0.489	0.714	
Perceived Workplace Ostracism	0.725	-0.522	0.925

Furthermore, the indicator's loadings connected to a construct should be greater than its cross-loadings with other constructs to prove the cross-loading criterion's discriminant validity (Vinzi et al., 2010). When it comes to each construct's cross-loadings, the data ensures the discriminant validity of the selected constructs of the study. Accordingly, the outer loadings of all indicators of the associated construct were higher than those of other constructs.

The Heterotrait – Monotrait (HTMT) criteria is also used to evaluate the discriminant validity. HTMT is the dis-attenuated correlation between constructs. Thus, an HTMT value near to one (01) indicates a low discriminant validity. As Gold, Malhotra, and Segar (2001) suggested, the threshold for HTMT stands at HTMT$_{.90}$. The relevant HTMT results for the constructs of the current study are given in Table 3. Accordingly, it satisfies relevant HTMT criteria.

Table 3: Discriminant Validity (HTMT)

Constructs	Deviant Workplace Behavior	Psychological Capital	Perceived Workplace Ostracism
Deviant Workplace Behavior			
Psychological Capital	0.485		
Perceived Workplace Ostracism	0.719	0.520	

5.3 Structural Model Evaluation and Hypotheses Testing

The structural model evaluation is conducted to examine the association between latent variables which is known as path coefficients. Accordingly, the R^2 is frequently used to assess the relationship among constructs. Hair et al. (2016) described R^2 as an indicator of the model's predictive accuracy. It is computed as the squared correlation between a specific endogenous construct's actual and projected values. The coefficient denotes the exogenous latent variables' collective effects on the endogenous latent variable. Table 4 depicts the R^2 results of the endogenous construct, i.e., DWB.

Table 4: R-Square (R^2) Results

Endogenous Construct	R Square	R Square Adjusted
Deviant Workplace Behavior	0.555	0.547

For significant, moderate, and poor predictive accuracy levels in endogenous constructs, the R^2 should be 0.75, 0.50, and 0.25, respectively (Hair, Sarstedt, Hopkins & Kuppelwieser, 2014). Accordingly, the R^2 value of DWB is at a moderate level.

Further, the effect size (F^2) is also used to evaluate each exogenous construct's effect on the endogenous construct. The standards for evaluating the effect size of exogenous constructions on endogenous constructs as small, medium, and large, respectively, are 0.02, 0.15, and 0.35 (Hair et al.,2014). Accordingly, Table 5 presents the F^2 results.

Table 5: Effect Size (F^2) Results

Exogenous Constructs	Deviant Workplace Behavior	Effect Size
Psychological Capital	0.031	Small
Perceived Workplace Ostracism	0.685	Large

5.4 Hypotheses Testing

In the current study, the structural model is used to test the H_1 and H_2 hypotheses. Hence to measure the significance of the correlations and impacts among latent variables, the path coefficients derived by the bootstrapping were employed. Accordingly, the structural model was employed by using consistent PLS bootstrapping (at 5000 subsamples). Further, it was a one-tailed test as the study tests the positive association between PWO and DWB at the significance level of 0.05. The relevant path coefficients are outlined in Table 6.

Table 6: Path Coefficient (Direct Effect) Results

	Hypothesis	Original Sample	Sample Mean	Standard Deviation	β Value	T Statistics	P Values	Decision
H_1	PWO -> DWB	0.697	0.698	0.056	0.706	12.378	0.000	Significant

According to Table 6, at a 5% confidence level, the impact of PWO on DWB is significant. Thus, the observed data supported the H_1 hypothesis (β Value = 0.706, p-value < 0.000), and it interprets a significant impact of PWO on DWB. Also, there is a significant positive connection between PWO and DWB. Hence, the H_1 hypothesis was accepted. These findings were consistent with the research findings of Gürlek (2021), Shafique et al. (2020), and Fatima (2016), where they determined that WO is positively related to DWB, showing that WO is a vital antecedent of DWB.

Further, to achieve the objective of examining the moderating effect of PsyCap (PC) on the relationship between PWO and DWB, the H_2 hypothesis was advanced. A moderation effect happens when a third construct changes the association between two related constructs. Table 7 describes the moderating effect results for the H_2 hypotheses.

Table 7: Moderating Effect Results

Hypothesis		Original Sample	Sample Mean	Standard Deviation	T Statistics	P Values	Decision
H$_2$	PWO*PC -> DWB	-0.126	-0.125	0.060	2.089	0.018	Significant

According to Table 7, the moderating effect of PsyCap on the relationship between PWO and DWB is significant at a 05% confidence level. Hence, the H$_2$ hypothesis was accepted as p = 0.018. Therefore, it can be concluded PsyCap has a significant moderating effect on the relationship between PWO and DWB. Figure 2 shows the simple slope analysis extracted from the SmartPLS software, which pictorially depicts the above-said moderating effect. Further, these findings are supported by literature (Mahfooz et al., 2017), suggesting that PsyCap moderates the association between WO and DWB.
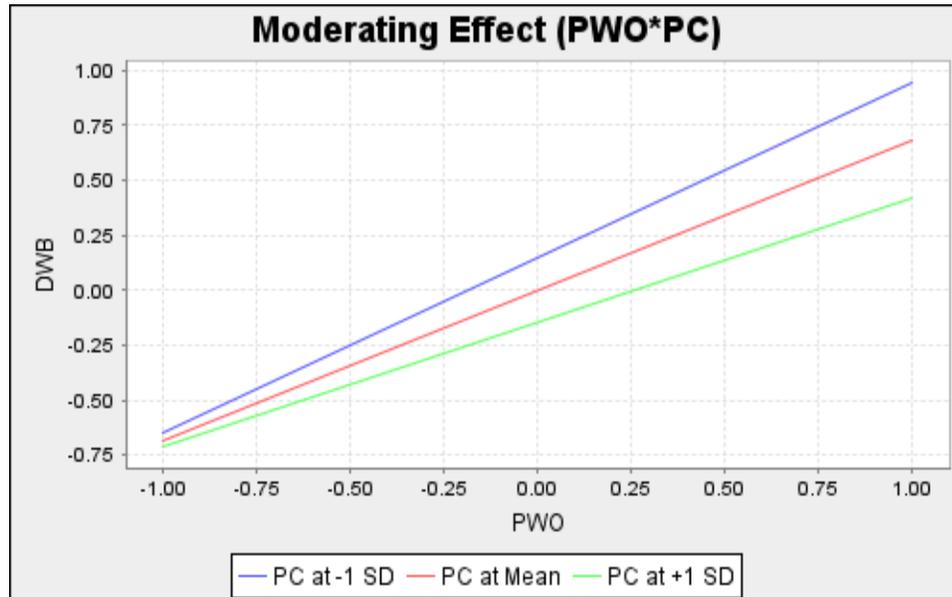

Figure 2: Simple Slope Analysis

6. Discussion of Findings

6.1 Impact of Perceived Workplace Ostracism and Deviant Workplace Behavior

The current study found that PWO positively impacts DWB (β= 0.706, p = 0.000) of software engineers in the IT sector of Sri Lanka. The results indicate that when the PWO increases, software engineers' DWBs also increase. It nearly has a 70% impact of PWO on DWBs. This research finding was consistent with the research findings of Gürlek (2021), Shafique et al. (2020) and Koay (2018), even though they conducted their studies using different units of analysis like nurses and Syrian migrant workers. When it comes to the

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study of Shafique et al. (2020), using 417 nurses of Pakistan's state hospitals revealed that ostracism is positively related DWBs of nurses. Also, they have discovered that WO has a 51.7% impact on DWB. That is a much lower rate than in Sri Lanka. On the other hand, Koay's (2018) research study revealed that WO has a significant positive relationship with cyberloafing (a form of DWB) with a β value of 0.223 and a p-value of 0.000 supporting the accepted H_1 hypothesis.

Thus, by considering all, the following argument was forwarded by researchers of the current study based on the social exchange theory, i.e., software engineers who are subjected to frequent WO or PWO may reciprocate with destructive behaviors. This situation is prominent in the Asian context. Because in a country like Sri Lanka, individuals prefer collectivism rather than individualism. Hence many individuals prefer to work collectively with others than working individually. Thus, if an individual feels mistreated/ostracized, it would affect their psychological state. Therefore, employees tend to engage in DWBs as a counter behavior to cope with that psychological stress situation. Hence, the findings of this study support the prevailing literature by indicating that when the individuals experience or perceive WO, it causes employees to engage in DWB as a mechanism to cope with the social stressor of WO.

6.2 The Moderating Effect of Psychological Capital on the relationship between Perceived Workplace Ostracism and Deviant Workplace Behavior

The study's research findings revealed that PsyCap moderates the association between PWO and DWB (p = 0.018) of software Engineers in the IT sector of Sri Lanka. The study by Mahfooz et al. (2017) to assess the role of WO and incivility in employees' turnover intentions by focusing on the moderating influence of PsyCap revealed that both WO and workplace incivility as a form of DWB have a significant negative association with turnover intentions. Further, previous empirical studies have found that high psychological capital would result in low workplace ostracism (Erkutlu & Chafra, 2013). Also, Avey et al. (2010) have revealed that psychological capital is negatively correlated with intentions to quit, organizational cynicism, and CWBs. Hence, by considering all, the following argument was forwarded by researchers based on both COR theory and social exchange theory. That is, software engineers with high PsyCap can handle unpleasant situations at work arising from WO without demonstrating DWBs as a counter-response. In other words, they would minimize the adverse feelings and effects/thoughts arising from PWO through their PsyCap to cope with the negative thoughts and feelings, which significantly dilute the intention to engage in DWBs. Hence, high PsyCap would lead to low DWBs. Accordingly, this research study also expands the boundaries of PWO and DWBs to introduce PsyCap as a moderator.

7. Limitations

There are some drawbacks in this present study as well, which require additional investigation and research. One such limitation is that this study used the cross-sectional design to assess the connection among three variables. But, the longitudinal design has been emphasized by several researchers as contributory in investigating the impact of changes in the dependent variable over time. The dependent variable of the current study (DWB) is measured simultaneously as of the other two variables. But future research

studies can adopt a longitudinal design to offer a rigorous investigation in examining the associations among variables.

Another drawback of this study is the generalizability of the research findings, as the current study was limited to the Sri Lankan IT industry. As a result, the data were obtained only from software developers working in the IT industry. As a result, the study's scope is confined to the chosen industry. Therefore, the findings' generalizability to other industries and nations should be weighed carefully.

8. Directions for Future Research

Researchers can explore the relationship between PWO and DWB with or without the moderating effect of PsyCap across different industries with different employee categories. In addition to that, the current study was carried out only to check the moderating role of PsyCap. But further studies can be implemented to investigate the reasons for this moderate effect in a qualitative study form. Moreover, it can also test the association between PWO and DWB using other moderator variables. Such suggested moderating variables are emotional intelligence, gender, organizational citizenship behavior, organizational culture, and self-esteem. Moreover, it is also recommended to do a future research study as a longitudinal study since the present study is a cross-sectional study.

9. Implications

9.1 Theoretical Implications

None of the previous studies have focused explicitly on moderating the effect of an individual's PsyCap on the association between PWO and DWB. Accordingly, this study contributed to bridging the existing vacuum by explaining the impact of PWO and DWB and the moderating effect of an individual's PsyCap on the relationship between PWO and DWB. This study bridges the above-said theoretical gap by combining the justification power of the COR and Social Exchange theories since there are no previous research studies that examine PWO, DWBs, and Psychological Capital on a single platform. Accordingly, the research contributes towards projecting or predicting DWB due to the direct effect of PWO and the moderating effect of an individual's PsyCap backed by two underpinning theories.

9.2 Practical Implications

The study findings revealed that perceived workplace ostracism prevailing in the Sri Lankan IT sector affects DWB. Thus, this can be considered an alarming issue that needs all the related parties' attention in an organization to take necessary actions to mitigate such activities and ensure a conducive healthy workplace and environment for all the employees. First, the organizations must eliminate workplace ostracism from the work environment by using various team-building strategies to avoid DWBs. Second, they can introduce workplace policies that outline the punishments and penalties related to DWBs as this will prevent demonstrating DWBs due to fear of punishments and penalties. Third, managers need to educate employees about the importance and role of psychological capital and use intervention techniques to increase psychological capital.

10. Conclusion

The current study's findings indicated that PWO has a significant positive impact on DWB, and PsyCap moderates the correlation between PWO and DWB of software engineers in the IT sector of Sri Lanka. Moreover, this study also enhanced the COR theory's justification power by integrating the social exchange theory to explain DWB determinants and introduce PsyCap as a moderator while forwarding new arguments. Hence, this contributed to filling the existing literature gap by introducing PsyCap as a moderator for the relationship between PWO and DWB.

Also, this study's findings have important management implications, particularly in terms of organizational policies that could use to regulate DWBs of workers. Such consequences underlined the need to prevent PWO, adopt preventative steps to deal with PWO, and increase employees' PsyCap. Moreover, the study's primary limitations arise from the research findings' generalizability. Because the current study was confined to the Sri Lankan IT industry as the data was collected exclusively from software engineers. Finally, the study mentioned future research directions, recommending testing the current theoretical model in different industry and country contexts by incorporating new moderating variables.

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