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A Counterproductive Behaviours at Work: Can Psychological Capital Make a Difference?

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Abstract

The present study examined the predictive role of Psychological Capital (PsyCap) on Counterproductive Work Behaviours directed at individuals (CWB–I) and organisations (CWB–O). A purposive sample of 400 employees from the banking and insurance sectors in the Solan and Shimla districts of Himachal Pradesh, a state in the Union of India, was used in this study. The Data were collected using- the Psychological Capital Questionnaire–24 (PCQ–24; Luthans et al., 2007) and the Counterproductive Work Behaviour Checklist (CWB–C; Spector et al., 2006). Regression analysis indicated that, among females, Optimism accounted for a 14% reduction in CWB–I, while Optimism (11%), Resilience (2%), and Self-Efficacy (3%) together contributed to a 16% reduction in CWB–O. For males, Self-Efficacy reduced CWB–I by 4%, with Hope (17%) and Resilience (4%) collectively explaining a 21%variance of CWB–O. In the public sector, Optimism (11%), Self-Efficacy (16%), and Hope (7%) collectively explained 34% of the variance in CWB–I, while Hope (3%), Optimism (6%), and Resilience (2%) accounted for an 11% explained variance in CWB–O. In the private sector, Resilience (19%), Optimism (3%), and Self-Efficacy (5%) accounted fora 27% reduction in CWB–I, with Resilience (21%) and Self-Efficacy (4%) together contributing to a 25% reduction in CWB–Resilience and Self-efficacy have turned out to be common predictors for both genders and sectors.

Keywords: Psychological Capital (PsyCap), Counterproductive Work Behaviour (CWB), banking, insurance

Counterproductive work behaviour (CWB) encompasses a spectrum of detrimental actions and misconduct displayed by employees within organisational contexts. The literature on CWB draws from diverse theoretical frameworks to elucidate the origins and repercussions of such behaviours. Aggression, stemming from social-psychological theories, highlights the significance of hostile actions and intentions in workplace transgressions. Deviance, influenced by criminological perspectives, centres on actions that contravene organisational norms and standards (Spector & Fox, 2004).

Moreover, bullying, as a concept, underscores the repetition of harassment and intimidation as a manifestation of CWB (Bowes-Sperry, Tata & Luthar, 2003). Social exchange theory offers insights into the interaction between individuals and organisations, considering the costs and benefits of comprehending CWB. Psychological factors such as stressors, negative affectivity, and work dissatisfaction are also pivotal in elucidating CWB. Additionally, justice theory scrutinizes the effects of distributive, procedural, and interactional justice on workplace retaliation and counterproductive behaviours (Spector & Fox, 2004).

According to Griffin and Lopez (2005), Counterproductive Work Behaviours (CWBs) encompass intentional actions that harm the organisation or its members. These behaviours include a range of acts directed towards organisations (CWB–O) or individuals (CWB–I). Examples of CWB–O include destroying organisational property, purposely performing work incorrectly, and taking unauthorized breaks, while CWB–I includes behaviours like hitting a co-worker or engaging in verbal abuse.

Counter Productive Work Behaviour (CWB) is crucial because of its significant impact on organisations, especially in countries such as India, where resources are scarce and the demand for productivity is high. Understanding and addressing CWB can help organisations mitigate financial losses, improve productivity, and foster a positive work environment. With limited resources, organisations in India cannot afford the negative consequences of CWB, such as decreased efficiency, increased absenteeism, and damaged equipment, which directly affect their bottom line.

Research has identified various correlates of CWB, such as job dissatisfaction, perceived injustice, and personality traits like low conscientiousness and high neuroticism (Mount, Ilies & Johnson, 2006; Salgado, 2002). Situational factors, including job stressors and organisational climate, are also crucial in predicting CWB (Bowling & Eschleman, 2010). Such behaviours can significantly disrupt workplace harmony and decrease organisational productivity (Dalal, 2005).

One critical correlate of CWB is psychological capital (PsyCap), a positive psychological state that includes self-efficacy, hope, resilience, and optimism (Luthans et al., 2007). PsyCap is crucial in reducing CWB, as it fosters a constructive mindset, making individuals more resilient and adaptive to workplace challenges (Avey, Reichard, Luthans, & Mhatre, 2011). Studies show that higher levels of PsyCap are associated with decreased CWB, as it mitigates stress and enhances an individual's ability to handle adversity constructively, reducing the likelihood of negative behaviours (Avey, Reichard, Luthans, & Mhatre, 2011). Therefore, developing PsyCap within employees can not only reduce the risk of CWB but also contribute to a more positive work environment

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overall, with enhanced performance and engagement (Luthans et al., 2015). PsyCap's role as a buffer against CWB underlines the importance of organisational investments in employee development, including training programs that promote resilience and emotional regulation (Newman et al., 2014).

PsyCap, comprising hope, self-efficacy, resilience, and optimism is believed to shape employees' attitudes and behaviours in the workplace. Understanding how these positive psychological assets interact with Counterproductive Work Behaviour (CWB), detrimental to organisational goals, offers valuable insights into employee performance, job satisfaction, and overall organisational effectiveness. Investigating the nuanced interplay between PsyCap and CWB becomes important in countries like India where the phrase 'optimal use of resources' fits perfectly considering our limited resources and infinite population besides providing perspectives on approaches for fostering a positive work environment and curbing undesirable behaviours. The four dimensions of PsyCap have following relationships with CWB:

- **Self-Efficacy:** Employees with strong self-efficacy beliefs are more adept at confidently navigating challenging workplace situations, thereby decreasing the likelihood of engaging in CWB as they pursue constructive resolutions (Stajkovic & Luthans, 1998).
- **Resilience:** Resilient employees exhibit the capacity to rebound from setbacks and adapt to changes, managing stress and adversity in the workplace more effectively, subsequently reducing the inclination towards CWB (Luthans & Youssef, 2004).
- **Hope and Optimism:** Elevated levels of hope and optimism correlate with a positive mind-set and the belief in overcoming obstacles, guiding individuals towards positive outcomes through productive means, thus diminishing CWB (Luthans & Youssef, 2004).

Research suggests that individuals with higher levels of hope are less likely to engage in CWB–I. Hope, characterized by agency (goal-directed energy) and pathways (planning to meet goals), can reduce frustration and negative interpersonal behaviours in the workplace (Avey, Luthans & Jensen, 2011). Employees with high hope are more likely to find alternative ways to achieve their goals without resorting to harmful behaviours toward colleagues. Hope has been found to have a negative relationship with CWB–O. Employees with high hope are more likely to perceive opportunities for goal attainment within the organisation, reducing the likelihood of engaging in behaviours that harm the organisation (Luthans et al., 2007). They may also be more committed to organisational goals and less likely to engage in sabotage or theft.

Self-efficacy has been found to have a negative relationship with CWB–I. Individuals with high self-efficacy are more confident in their abilities to handle workplace challenges and are less likely to engage in harmful behaviours toward co-workers (Bandura, 1997). They may also be more likely to address interpersonal issues constructively rather than resorting to CWB. Self-efficacy has been negatively associated with CWB–O. Employees with high self-efficacy are more likely to believe in their ability to succeed within the organisation's framework, reducing the likelihood of engaging in behaviours that undermine organisational goals (Stajkovic & Luthans, 1998). They may also be more likely to address organisational issues through proper channels rather than resorting to CWB.

Resilience has been shown to mitigate CWB–I. Employees with high resilience are better equipped to handle workplace stressors and interpersonal conflicts without resorting to harmful behaviours (Luthans et al., 2007). They are more likely to bounce back from negative interpersonal experiences and maintain positive relationships with colleagues. Resilience has been shown to reduce CWB–O. Resilient employees are better equipped to handle organisational changes, setbacks, and challenges without resorting to harmful behaviours toward the organisation (Luthans et al., 2007). They are more likely to adapt to organisational demands and maintain a positive attitude toward the organisation even in difficult times.

Optimism has been negatively associated with CWB–I. Optimistic individuals tend to attribute positive outcomes to internal, stable causes and negative outcomes to external, temporary causes (Seligman, 1998). This outlook can lead to more positive interpersonal interactions and reduce the likelihood of engaging in harmful behaviours toward co-workers. Optimism has been negatively related to CWB–O. Optimistic employees are more likely to have a positive outlook on their future within the organisation, reducing the likelihood of engaging in behaviours that harm the organisation (Luthans, Youssef & Avolio, 2015). They may also be more likely to perceive organisational policies and practices in a positive light, reducing the motivation for retaliatory behaviours.

Underlying the importance of these factors, the present study is aimed at testing these formulations to understand the exact variance contributed by PsyCap in CWB–O and CWB–I of employees.

Method

Sample

The study was conducted on a sample of N=400 (*figure1*) which was divided into two comparable halves based on the sector of work i.e., N^{1}=200 from private sector and N^{2}=200 from public sector. These subjects were further divided into two halves on the basis of gender i.e., $n^{(1,3)}$=100 each for males of both the sectors and $n^{(2,4)}$=100 each for females. The data were collected from banking and insurance sector

organisations only. In order to control the possible effects of confounding, the sample only consisted of

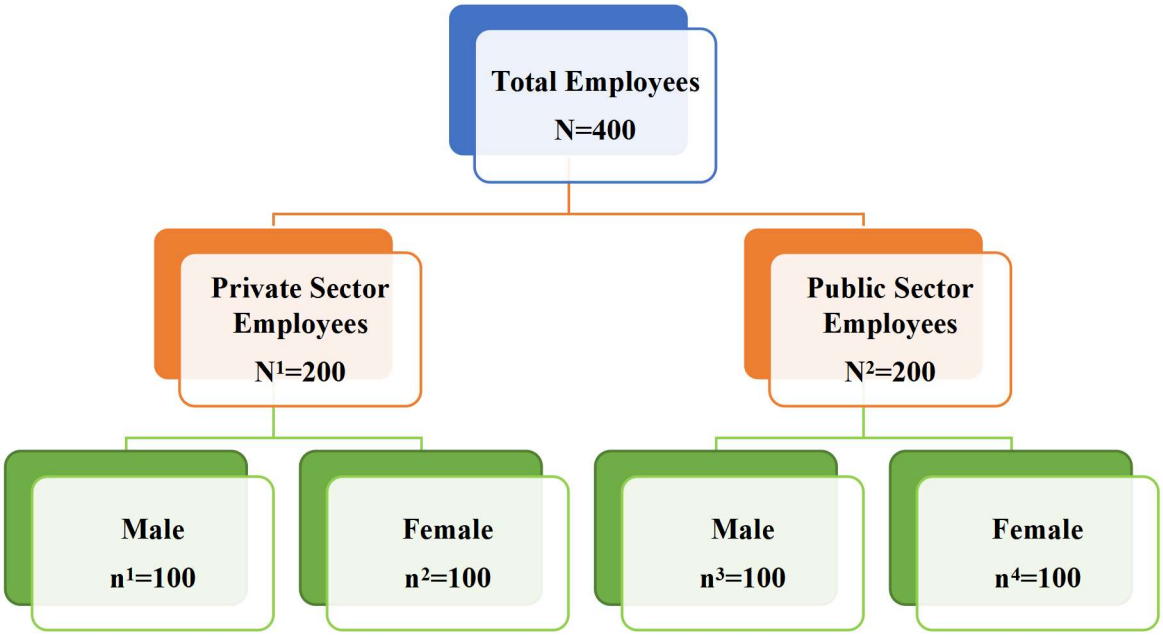

Figure 1: Layout of sample collected

males and females aged between 35 to 55 years and those who have been working with the organisation for more than 5 years.

Design

The research included a Cross-sectional correlational design. Further, regression analysis was computed separately for both the genders and sectors to find out the best set of predictors of Counterproductive Work Behaviour directed at individuals (CWB–I) and organisations (CWB–O).

Tools

The following tools were used in this study for the measurement of different variables:

- **Psychological Capital Questionnaire – 24 (PCQ – 24) (Luthans et. al., 2007)**

Psychological Capital was measured by the Psychological Capital Questionnaire developed by Luthans et al. (2007) which taps each of the four dimensions (hope, self–efficacy, resilience and optimism) of this construct. Each subscale consists of 6 items rated on a 6-point Likert scale ranging from 1 (strongly disagree) to 6 (strongly agree). Avey, Luthans and Jensen (2011) found the overall reliability to be .92.

- **Counterproductive Work Behaviour–Checklist (CWB–C) (Spector et.al, 2006)**

Counterproductive Work Behaviour Checklist (CWB–C) was developed by Paul E Spector and colleagues in 2006. The checklist is scored on a 5-point Likert scale where 1 = the least frequent response (Never) and 5 = the most frequent response (Everyday). It comprises45 items (23 items belong to CWB–O and 22 items belong to CWB–I sub-scale) and is designed to score as either all items or as two sub-scales that are classified into counterproductive work behaviour directed towards the organisation (CWB–O) and counterproductive work behaviour directed towards the individual (CWB–I). Internal consistency reliability estimates (coefficient α) of the checklist are .86 for both CWB–O and CWB–I and .90 for CWB-C (total).

Results

Figure 2 presents the inter-correlations between the facets of Psychological Capital (PsyCap) and Counterproductive Work Behaviours (CWB) for male and female sample, including both organisational (CWB–O) and interpersonal (CWB–I) dimensions. It shows that CWB–I is significantly and negatively correlated with Resilience and Optimism ($r = -.166$, $p < .05$; $r = -.375$, $p < .01$) for females and it is significantly and negatively correlated with Self-Efficacy and Optimism ($r = -.210$, $p < .01$; $r = -.149$, $p < .05$) for males.

It also shows that CWB–O is significantly and negatively correlated with Hope, Resilience and Optimism ($r = -.165$, $p < .05$; $r = -.242$, $p < .01$; $r = -.336$, $p < .01$) for females and it is significantly and negatively correlated with Self-Efficacy and Hope ($r = -.188$, $p < .01$; $r = -.410$, $p < .01$) for males.

Figure 3 provides the inter-correlations between the facets of Psychological Capital (PsyCap) and Counterproductive Work Behaviours (CWB) for public and private sector employees, including both organisational (CWB–O) and interpersonal (CWB–I)

dimensions. It shows that CWB–I is significantly and negatively correlated with Self-Efficacy(r = -.301, p < .01) and significantly and positively correlated with Hope, Resilience and Optimism (r = .149, p < .05;r = .242, p < .01;r = .326, p < .01) for public sector employees and it is significantly and negatively correlated with Hope, Resilience and Optimism (r = -.209, p < .01; r = -.431, p < .01; r = -.397, p < .01) for private sector employees.

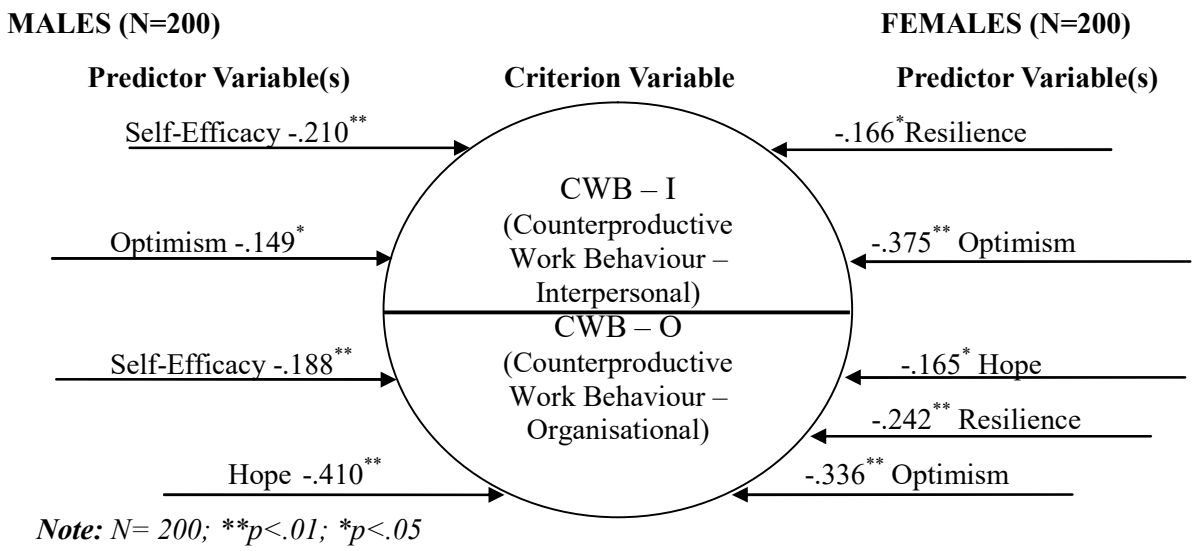

Figure 2: Correlation between PsyCap facets and CWB–I and CWB–O for male and females

Table 1a presents the stepwise regression analysis for males regarding Organisational and Interpersonal Counterproductive Work Behaviour (CWB–O and CWB–I). The results indicate that Hope and Resilience are significant predictors of CWB–O in males, accounting for 17% and 4% of the explained variance, respectively, for a combined total of 21%. In contrast, Self-Efficacy explained 4% of the variance for CWB–I in males.

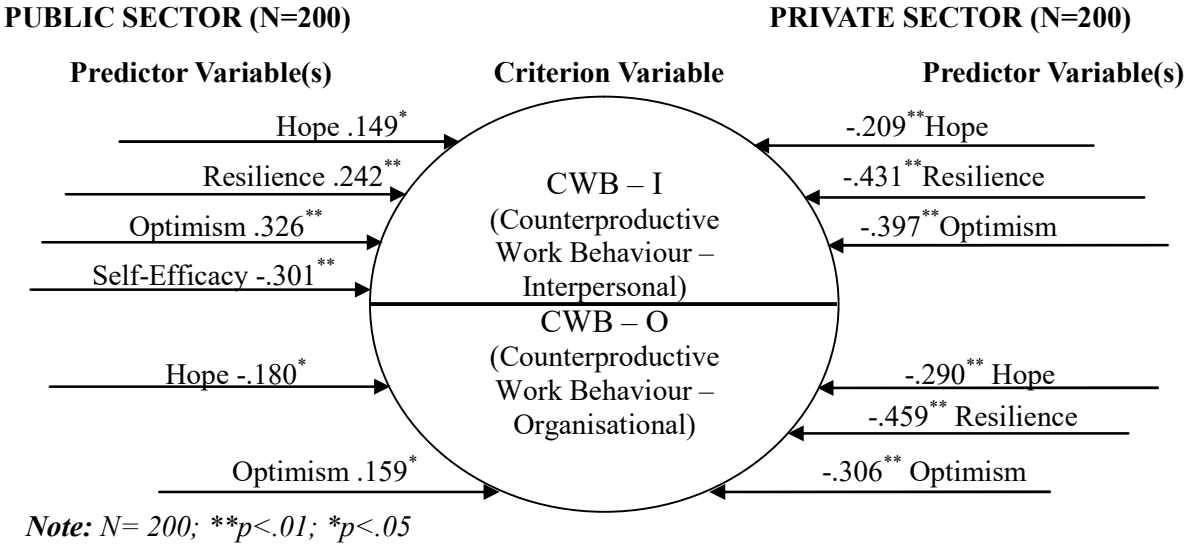

Figure 3: Correlation between PsyCap facets and CWB–I and CWB–O for public and private sector employees

It also shows that CWB–O is significantly and negatively correlated with Hope, (r = -.180, p < .05) and significantly and positively correlated with Optimism (r = .159, p < .05) for public sector employees and it is significantly and negatively

Table 1b shows that for females, Optimism, Resilience, and Self-Efficacy are significant

predictors of CWB–O, contributing 11%, 2%, and 3% of the explained variance, respectively. For CWB–I, Optimism alone accounted for 14% of the variance.

In Table 1c, the stepwise regression analysis for public sector employees reveals that Hope, Optimism, and Resilience are significant predictors of CWB–O, explaining 3%, 6%, and 2% of the variance, respectively. For CWB–I in the public sector, Optimism, Self-Efficacy, and Hope accounted for 11%, 16%, and 7% of the explained variance, respectively.

Finally, Table 1d shows the stepwise regression analysis for private sector employees regarding CWB–O and CWB–I. Resilience and Self-Efficacy emerged as significant predictors of CWB–O, explaining 21% and 4% of the variance, respectively. For CWB–I, Resilience, Optimism, and Self-Efficacy accounted for 19%, 3%, and 5% of the explained variance, respectively.

Table 1: Gender wise and Sector wise Stepwise Regression Analysis: Predictors of CWB–O and CWB–I

CWB	PsyCap	Order of Entry	r	R	β	R^2	R^2 Change	F	Variance Explained	Total Variance Explained
a. MALE										
CWB-O	Hope	1	-0.410**	0.41	-0.41	0.168	0.168	40.042**	17%	21%
	Resilience	2	0.033	0.453	0.207	0.206	0.038	9.284**	4%	
CWB-I	Self-Efficacy	1	-0.210**	0.21	-0.21	0.044	0.044	9.139**	4%	4%
b. FEMALE										
CWB-O	Optimism	1	-0.336**	0.336	-0.336	0.113	0.113	25.243**	11%	16%
	Resilience	2	-0.242**	0.368	-0.156	0.135	0.022	5.049*	2%	
	Self-Efficacy	3	-0.043	0.404	0.196	0.163	0.028	6.464*	3%	
CWB-I	Optimism	1	-375**	0.375	-0.375	0.141	0.141	32.388**	14%	14%
c. PUBLIC										
CWB-O	Hope	1	-0.180*	0.18	-0.18	0.032	0.032	6.594*	3%	11%
	Optimism	2	0.159*	0.308	0.273	0.095	0.063	13.635**	6%	
	Resilience	3	0.063	0.336	0.151	0.113	0.018	4.011*	2%	
CWB-I	Optimism	1	0.326**	0.326	0.326	0.106	0.106	23.586**	11%	34%
	Self-Efficacy	2	-0.301**	0.521	-0.423	0.272	0.165	44.731**	16%	
	Hope	3	0.149*	0.583	0.328	0.34	0.068	20.145**	7%	
d. PRIVATE										
CWB-O	Resilience	1	-0.459**	0.459	-0.459	0.211	0.211	52.893**	21%	25%
	Self-Efficacy	2	-0.115	0.501	0.251	0.251	0.04	10.593**	4%	
CWB-I	Resilience	1	-0.431**	0.431	-0.431	0.186	0.186	45.200**	19%	27%
	Optimism	2	-0.397**	0.467	-0.221	0.218	0.032	8.156**	3%	
	Self-Efficacy	3	-0.137	0.518	0.296	0.268	0.05	13.392**	5%	

Note: *N= 200; **p<.01; *p<.05*

Discussion

The current study's findings offer a nuanced understanding of the relationship between Psychological Capital (PsyCap) and Counterproductive Work Behaviours (CWB) across gender and organisational contexts. The results highlight the complex and often unexpected nature of these relationships, particularly within the public sector.

The study found gender-specific patterns in the PsyCap-CWB relationship. For female employees, Optimism was negatively correlated with CWB-I, while Optimism, Resilience, and Self-Efficacy emerged as significant predictors of CWB-O (Armstrong, Galligan & Critchley, 2011). This suggests that for women, building psychological resources like optimism and resilience may be particularly beneficial for reducing both interpersonal and organisational counterproductive behaviours.

In contrast, for male employees, Self-Efficacy was negatively associated with CWB-I, while Hope and Resilience were the primary predictors of CWB-O (Gibson & Sanbonmatsu, 2004). This indicates that enhancing self-efficacy and optimism may be more effective in mitigating interpersonal deviance among male employees, while fostering hope could help reduce organisational counterproductive behaviours. Armstrong, Galligan and Critchley (2011), also emphasize the importance of considering individual differences in the development of psychological resources and their subsequent impact on workplace behaviours.

The study also revealed notable differences between public and private sector employees in the PsyCap-CWB relationship. In the public sector, the unexpected positive correlation between Optimism and CWB-O aligns with Grant and Schwartz's (2011) nonmonotonic effects theory, suggesting that excessive levels of normally beneficial traits can become detrimental. This is particularly relevant in public sector settings where, as Bellé and Cantarelli (2017) note, organisational constraints can create unique pressures that affect behavioural outcomes.

Additionally, the positive relationship between Hope, Optimism, and CWB-I can be understood through the lens of Welsh and Ordóñez's (2014) findings on how high achievement orientation can lead to unexpected interpersonal behaviours. In the public sector context, Perry and Vandenabeele's (2015) work suggests that strong public service motivation might interact with psychological capital in complex ways.

Conversely, in the private sector, the negative correlations between PsyCap and both CWB-O and CWB-I indicate that resourceful, adaptable, and optimistic employees are less likely to engage in counterproductive behaviours, aligning with previous research (Grant & Schwartz, 2011). This underscores the importance of considering organisational context when examining the effects of PsyCap on workplace behaviours.

In a nutshell, the findings of this study highlight the need for tailored PsyCap interventions that account for both individual and organisational factors. Gender-specific strategies, such as emphasising optimism for female employees and self-efficacy for males, may be more effective in mitigating CWB-I (Borst et al., 2020). Similarly, sector-specific approaches should address unique public sector constraints, fostering hope and practical optimism to help employees productively handle frustration, while promoting adaptability and innovation in the private sector to harness PsyCap's protective benefits (Bellé & Cantarelli, 2017; Tummers et al., 2016).

Limitations and Suggestions

The cross-sectional nature of the study limits the ability to draw causal inferences about the PsyCap-CWB relationship (Newman et al., 2014). Future research should employ longitudinal designs to capture the dynamic interactions between these constructs over time. Additionally, the sample may not fully represent the diversity of public and private sector organisations, potentially limiting the generalizability of the results (Haar, Roche & Luthans, 2018; Vogel & Kroll, 2019). Incorporating a broader range of organisational variables, such as leadership styles, job characteristics, and organisational culture, could provide a more comprehensive understanding of the contextual factors shaping the PsyCap-CWB relationship (Esteve et al., 2017).

References

Armstrong, A. R., Galligan, R. F., & Critchley, C. R. (2011). Emotional intelligence and psychological resilience to negative life events. *Personality and Individual Differences, 51*(3), 331-336.

Avey, J. B., Luthans, F., & Jensen, S. M. (2011). Psychological capital: A positive resource for combating employee stress and turnover. *Human Resource Management, 48*(5), 677–693.

Avey, J. B., Reichard, R. J., Luthans, F., & Mhatre, K. H. (2011). Meta-analysis of the impact of positive psychological capital on employee attitudes, behaviors, and performance. *Human Resource Development Quarterly, 22*(2), 127-152.

Bandura, A. (1997). *Self-efficacy: The exercise of control*. W.H. Freeman and Company.

Bellé, N., &Cantarelli, P. (2017). What causes unethical behavior? A meta-analysis to set an agenda for public administration research. *Public Administration Review, 77*(3), 327-339.

Borst, R. T., Kruyen, P. M., Lako, C. J., & de Vries, M. S. (2020). The attitudinal, behavioral, and performance outcomes of public service motivation: A quantitative review. *Review of Public Personnel Administration, 40*(4), 535-562.

Bowes-Sperry, L., Tata, J., & Luthar, H.K. (2003). *Comparing sexual harassment to other forms of workplace aggression. In A. Sagie, S. Stashevsky, & M. Koslowsky (Eds.), Misbehaviour and dysfunctional attitudes in organizations* (pp. 33-56). Hampshire, England: Palgrave Macmillan.

Bowling, N. A., &Eschleman, K. J. (2010). Employee personality as a moderator of the relationships between work stressors and counterproductive work behavior. *Journal of Occupational Health Psychology, 15*(1), 91-103.

Dalal, R. S. (2005). A meta-analysis of the relationship between organizational citizenship behavior and counterproductive work behavior. *Journal of Applied Psychology, 90*(6), 1241-1255.

Esteve, M., Schuster, C., Albareda, A., & Losada, C. (2017). The influence of sample bias in public administration research. *International Public Management Journal, 20*(3), 387-412.

Gibson, B., &Sanbonmatsu, D. M. (2004). Optimism, pessimism, and gambling: The downside of optimism. *Personality and Social Psychology Bulletin, 30*(2), 149-160.

Grant, A. M., & Schwartz, B. (2011). Too much of a good thing: The challenge and opportunity of the inverted U. *Perspectives on Psychological Science, 6*(1), 61-76.

Griffin, R., & Lopez, Y. (2005). "Bad behavior" in organizations: A review and typology for future research. Journal of Management, 31(1), 1-18.

Haar, J. M., Roche, M. A., & Luthans, F. (2018). Ethnic resilience and wellbeing of indigenous Māori in New Zealand: The moderating role of family and community. *Journal of Developmental and BehavioralPediatrics, 39*(4), 330-337.

Luthans, F., & Youssef, C. M. (2004). Human, social, and now positive psychological capital management: Investing in people for competitive advantage. *Organizational Dynamics, 33*(2), 143-160.

Luthans, F., Avolio, B. J., Avey, J. B., & Norman, S. M. (2007). Positive psychological capital: Measurement and relationship with performance and satisfaction. *Personnel Psychology, 60*(3), 541-572.

Luthans, F., Youssef, C. M., & Avolio, B. J. (2015). *Psychological Capital and Beyond.* Oxford University Press.

Mount, M. K., Ilies, R., & Johnson, E. (2006). Relationship of personality traits and counterproductive work behaviors: The mediating effects of job satisfaction. *Personnel Psychology, 59*(3), 591-622.

Newman, A., Ucbasaran, D., Zhu, F., & Hirst, G. (2014). Psychological capital: A review and synthesis. *Journal of Organizational Behavior, 35*(1), S120-S138.

Newman, A., Ucbasaran, D., Zhu, F., & Hirst, G. (2014). Psychological capital: A review and synthesis. *Journal of Organizational Behavior, 35*(S1), S120-S138.

Perry, J. L., & Vandenabeele, W. (2015). Public service motivation research: Achievements, challenges, and future directions. *Public Administration Review, 75*(5), 692-699.

Salgado, J. F. (2002). The Big Five personality dimensions and counterproductive behaviors. *International Journal of Selection and Assessment, 10*(1-2), 117-125.

Seligman, M. E. P. (1998). *Learned optimism: How to change your mind and your life.* Pocket Books.

Spector, P. E., & Fox, S. (2004). Workplace aggression and violence: Understanding the costs, causes, and consequences. *Journal of Management, 30*(4), 597-622.

Spector, P. E., Fox, S., Penney, L. M., Bruursema, K., Goh, A., & Kessler, S. (2006). The dimensionality of counterproductivity: Are all counterproductive behaviors created equal? *Journal of Vocational Behavior, 68*(3), 446-460.

Stajkovic, A. D., & Luthans, F. (1998). Self-efficacy and work-related performance: A meta-analysis. *Psychological Bulletin, 124*(2), 240-261.

Tummers, L. G., Steijn, A. J., Nevicka, B., & Heerema, M. (2016). The effects of leadership and job autonomy on vitality: Survey and experimental evidence. *Review of Public Personnel Administration, 36*(4), 429-450.

Vogel, R., & Kroll, A. (2019). The stability and change of PSM-related values across time: Testing the adaptation to the organizational context hypothesis. *Public Administration Review, 79*(3), 357-369.

Welsh, D. T., & Ordóñez, L. D. (2014). The dark side of consecutive high-performance goals: Linking goal setting, depletion, and unethical behavior. *Organizational Behavior and Human Decision Processes, 123*(2), 79-89.