

Self-Efficacy and Work Engagement: A Sector-Specific Examination of Gender Differences in Employee Performance

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ABSTRACT

Aim of the Study: The current research study examines the connection between work engagement and self-efficacy, especially the gender difference of employees working in the private and public sectors.

Methodology: This study used a cross-sectional survey of 200 employees, equally divided between the public and private sectors. A quantitative approach examined the relationship between self-efficacy and work engagement, considering gender and sector differences. The Utrecht Work Engagement Scale (UWES) and Generalized Self-Efficacy Scale (GSES) were used for measurement. Data were analyzed using Pearson correlation, independent t-tests, and binary logistic regression to explore relationships and group differences.

Findings: The findings revealed that employees in the public sector reported significantly higher levels of self-efficacy, vigor, and absorption compared to their private sector counterparts. Moreover, the analysis highlighted substantial disparities in work engagement across sectors, underscoring the importance of designing sector-specific strategies to address these inequities. The gender variance suggests that men are more vigorous, whereas women tend to exhibit greater self-efficacy and devotion towards work.

Conclusion: These results highlight the need for sector-and gender-based interventions to improve organisational performance, outputs, and employee engagement, as well as a more tailored approach to organisational policymaking. The research helps us understand how self-efficacy and job engagement vary between sectors and gender, which may improve employee engagement approaches.

Keywords: Self-efficacy, Work engagement, Gender differences, Public vs. private sector, Employee performance.

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1. INTRODUCTION

An employee's self-efficacy is a key factor in their performance and behaviour since it determines whether they believe they can meet the demands of a job, complete a task successfully, and achieve their goals (Maddux, 2016). Thus, self-efficacy, as explained by Bandura's Social Cognitive Theory, fosters higher goals that lead to improved work performance and enhanced ability to manage barriers (Luszczynska & Schwarzer, 2015). Employees' levels of commitment to their jobs are measured by their level of work engagement (Cesário & Chambel, 2017). This has a positive correlation with self-efficacy, whereby confidence leads to increased engagement, which in turn produces positive results for organizational culture and productivity (Mazzetti et al., 2023). However, it is hypothesized that certain factors, such as work environment, organizational culture, and gender, moderate this relationship because previous research has found that men's and women's self-efficacy and work engagement differ, especially across government and private sectors (Tian et al., 2019). It is essential to study such relationships to gain insight into enhancing the organizational climate, which would positively affect employees' productivity (Mutonyi et al., 2020).

Further studies on work engagement have effectively supported this argument, as well as on the decisiveness of self-efficacy during the same, and the impact of gender (Preece, 2016). According to Musenze et al. (2021), self-efficacy plays a crucial role in predicting an individual's level of work engagement, as it is closely linked to the vigor and persistence with which employees approach their tasks. According to Hartman and Barber (2020), the dissimilarities of socialisation patterns and working experiences of men and women in the public and private sectors can be a possible explanation for the identified variations in levels of self-efficacy. Moreover, Lishinski et al. (2016) highlight that the difference between men and women in self-efficacy estimation depends on the levels of support in adopting the conventional gender roles in the business field and vocations, and significant disparities in self-efficacy were noted among the employees in the government sector (Lishinski et al., 2016). Song et al. (2018) found that self-efficacy has been established as one of the key aspects determining engagement in the work, where gender acts as a modifying factor in organizations (Song et al., 2018). The findings of both the governmental and the corporate sectors support the moderating effect of gender that should be placed between self-efficacy and work engagement.

2. LITERATURE REVIEW

Self-efficacy and work engagement are two of the most important ideas in organizational psychology, as they explain why some employees stay motivated, productive, and resilient at work while others struggle. Self-efficacy refers to a person's belief in their ability to complete tasks successfully (Bandura, 1997). Employees with high self-efficacy usually approach challenges with confidence, show persistence in difficult situations, and adapt more easily to change. Work engagement, on the other hand, is described as a positive and fulfilling state of mind where employees feel energized (vigor), dedicated, and fully absorbed in their tasks (Schaufeli et al., 2006).

Researchers have consistently found that self-efficacy is closely tied to work engagement. When people believe in their abilities, they are more likely to invest energy and remain dedicated to their jobs. This makes them more motivated and ultimately improves performance (Stajkovic & Luthans, 1998). Engagement also tends to reinforce self-efficacy, creating a positive cycle where confidence and motivation feed into one another (Xanthopoulou et al., 2009).

The relationship between self-efficacy and engagement is often explained through the Job Demands–Resources (JD-R) model (Bakker & Demerouti, 2007). This model highlights that employees need resources such as supportive colleagues, job security, and personal confidence (self-efficacy) to remain engaged. When demands are high, these resources help employees stay motivated and prevent burnout. Personal resources like self-efficacy play a particularly important role because they help people see challenges as opportunities rather than threats (Xanthopoulou et al., 2007).

Long-term studies show that when self-efficacy increases, work engagement also improves. For instance, Ouweneel et al. (2013) found that employees who became more confident also became more energetic and dedicated over time. Other research shows the reverse can also happen—higher engagement can make employees feel more capable, creating a “gain cycle” of motivation (Llorens-Gumbau et al., 2014). Experimental studies also confirm that self-efficacy and engagement improve when people work in supportive environments where they feel capable of succeeding (Salanova et al., 2003).

The sector where people work can shape how self-efficacy and engagement appear. Studies suggest that public-sector employees often feel more dedicated and absorbed because of greater job security and predictable work conditions (Borst et al., 2020). By contrast, private-sector workers may show higher vigor, as these environments are often more competitive and fast-paced, demanding high energy and flexibility (Sabu and Manoj, 2010).

Recent studies also confirm these differences. Hameli et al. (2023) found that in the education sector, self-efficacy helped teachers remain engaged, showing how personal resources strengthen motivation in structured public environments. Similarly, Susanto et al. (2024) demonstrated that private-sector employees in Indonesia were more engaged when leaders supported them and training programs built their confidence. These results show that sector matters—public and private organizations encourage different types of engagement.

Gender also plays a significant role in shaping self-efficacy and engagement. Research shows that men often report higher vigor, which reflects energy and stamina at work (Czerwińska-Lubszczyk & Jankowiak, 2024). Women, on the other hand, frequently score higher in dedication and commitment, particularly in environments that support their growth (Rožman et al., 2021). This suggests that men and women may bring different strengths to the workplace: men channel energy into their tasks, while women often demonstrate resilience and long-term commitment.

Recent studies give further evidence for these differences. For example, Rathnasekara et al. (2023) found that female employees in the Sri Lankan banking sector reported stronger self-efficacy and commitment when supported in online learning. Hartman and Barber (2020) also observed that policies promoting retention and work–life balance increased women’s confidence and engagement. This shows that organizations can close gender gaps by adopting strategies that enhance women’s self-belief and motivation.

Apart from gender, other factors such as age and education also affect self-efficacy and engagement. Airila et al. (2014) found that younger workers and engineers often had higher energy levels, while older employees relied more on self-efficacy to remain engaged. More recent work by Li et al. (2024) showed that self-efficacy and engagement mediated the relationship between professional identity and career development among Chinese nursing students. These findings suggest that different stages of life and career development influence how people experience engagement.

One of the most important contributions of this field is showing that self-efficacy is not fixed—it can be developed. Leadership practices such as encouragement, recognition, and mentoring help employees believe in their abilities, which boosts engagement. Training programs and job redesign can also build confidence by giving employees more control and opportunities to succeed (Knight et al., 2016). For example, Salanova et al. (2003) found that groups with strong collective self-efficacy performed better and reported higher engagement. This suggests that organizations can actively design strategies to improve both efficacy and engagement.

2.1 Study Objective

This study aims to explore the connection between self-efficacy and engagement in work, yet it also study the gender differences in the field of employment that exist between work in the private and governmental areas. This paper aims to determine the interconnectedness of these phenomena in the context of how they affect the performance and well-being of employees in these sectors.

2.2 Hypotheses of the Study

H¹ There is likely a significant relationship between self-efficacy and work engagement among government and private employees.

H² Employees in both the public and private sectors are likely to predict the traits of self-efficacy and work engagement.

H³ There are likely significant differences in work engagement and self-efficacy among government and private employees.

3. METHODOLOGY

The study design used in this research was cross-sectional. The participants of the study were 200 employees, out of which 100 were private employees and the remaining 100 were government employees who were selected based on purposive sampling. Primary data were obtained through surveys from private and government organizations.

3.1 Selection Criteria

The study participants were drawn from both the government and private sectors, with eligibility requiring at least three years of work experience. All participants were aged 18 years or older and had voluntarily provided their consent to take part in the research. Both male and female employees were represented in the sample, ensuring gender inclusivity. Additionally, only individuals fluent in English were included to facilitate clear understanding of the study instruments and procedures.

3.2 Psychological Assessment

These variables have been measured using the following instruments:

3.2.1 Utrecht Work Engagement Scale (UWES)

The UWES is commonly used to measure work engagement. It consists of 17 items divided into three subscales: vigor, dedication, and absorption. It consisted of 24 items, but the number was reduced to 17 following psychometric validation, which improved reliability and validity. The UWES has a total score range of 0-6, and its Cronbach's alpha values, which vary between national samples, range from 0.60 to 0.87, showing strong internal consistency (Schaufeli et al., 2002).

3.2.2 Generalized Self-Efficacy Scale

It is another well-known self-efficacy questionnaire designed by Schwarzer and Jerusalem in 1995. It comprises 10 items that measure an individual's perceived self-efficacy in various challenging situations. The items are measured on a 4-point Likert scale, with options ranging from 1 (not true at all) to 4 (exactly true), making it easy to use as an assessment tool for self-efficacy in various domains. The internal reliability of the scale ranges between 0.76 and 0.90 (Schwarzer & Jerusalem, 1995).

3.3 Procedure and Ethical Considerations

For this study, 200 government and private employees from various organizations participated, and questionnaires were administered that included demographic details, self-efficacy, and work engagement scales. The participants were requested to complete the questionnaires objectively and return them; consequently, the response rate was 100%. Ethical issues were addressed by providing participants with information about the purpose of the research, ensuring that they remained anonymous, and respecting their right to withdraw from the study at any time. It was assured that the participants' privacy was protected by obtaining their agreement and ensuring that they remained anonymous. The collected data was analyzed using the SPSS 29th version.

4. RESULTS

Table 1. Demographic composition of a sample of the study (n=200)

Demographics	N	Weighted %
Institutional Sector		
Private	100	50%
Government	100	50%
Gender		
Male	100	50%
Female	100	50%

Table 1 displays the demographic composition of the participants in the research. These demographics are organizational sector, private and government, and gender, male and female.

Table 2. Relationship between self-efficacy and vigor, dedication, and absorption (N=100) among government employees.

Measures	n	M	SD	1	2	3	4
Vigor	100	4.52	1.16	---			
Dedication	100	4.50	1.08	0.71**	---		
Absorption	100	4.37	1.07	0.72	0.73	---	
GSE	100	31.55	4.32	0.37**	0.42	0.45**	---

Note: M=Mean, GSE=Generalized Self-efficacy Scale, SD=Standard Deviation.

Pearson's Correlation was used to analyze the relationship between self-efficacy and work engagement among government employees. The analysis showed a strong positive relationship between vigor and dedication. This means government employees with strong vigor are more committed to their work. The results also showed a significant weak correlation between dedication and self-efficacy and a significant moderate relationship between self-efficacy and absorption, meaning that government employees with strong self-efficacy are more absorbed and dedicated to their work.

Table 3. Relationship between self-efficacy and vigor, dedication, and absorption (N=100) among private sector employees.

Measures	n	M	SD	1	2	3	4
Vigor	100	2.10	1.08	---			
Dedication	100	3.84	3.58	0.91	---		
Absorption	100	3.16	0.97	0.37**	0.15	---	
GSE	100	28.34	4.88	0.24*	-.08	0.01	---

Note: M=Mean, GSE=Generalized Self-efficacy Scale, SD=Standard Deviation.

In this study, Pearson coefficients of correlation were used to establish the relationship or correlation among self-efficacy, vigor, dedication, and absorption of the private employees. There was also a strong positive relationship (**p< 0.01) between vigor and absorption. Furthermore, the relationship between vigor and GSE was revealed to be a significant and weak positive relationship (*p<0.05). This implies that people in the private sector who have positive energy and who also show much energy towards their work are also people who have high levels of personal initiative.

Table 4. Relationship between self-efficacy and vigor, dedication, and absorption (N=100) among male employees.

Measures	n	M	SD	1	2	3	4
Vigor	100	4.08	1.35	---			
Dedication	100	4.26	1.19	0.78**	---		
Absorption	100	3.96	1.18	0.67	0.63**	---	
GSE	100	31.39	4.23	0.36***	0.35	0.39	---

Note: M=Mean, GSE=Generalized Self-efficacy Scale, SD=Standard Deviation.

Pearson Correlation coefficient was also applied in determining the level of relationship in vigor, dedication, absorption, and self-efficacy of the workers within the private sector. It was also demonstrated in the study that vigor significantly correlated with dedication (**p< 0.01), and dedication significantly correlated with absorption. This implies that male employees with high energy display a higher level of organizational commitment than those with low energy, indicating that more committed employees are more fully employed in their employment.

Table 5. Relationship between self-efficacy and vigor, dedication, and absorption (N=100) among female employees.

Measures	n	M	SD	1	2	3	4
Vigor	100	3.44	1.28	---			
Dedication	100	4.08	3.58	0.18	---		
Absorption	100	3.47	1.11	0.66**	0.21*	---	
GSE	100	28.50	5.06	0.40**	-.019	0.24*	---

Note: M=Mean, SD=Standard Deviation, GSE=Generalized Self-efficacy Scale.

The relationship between self-efficacy, energy, devotion, and absorption of private sector workers has been determined using Pearson's correlation. The study revealed a strong, significant relationship (**p<0.01) between vigor and absorption, as well as a considerably weak relationship (**p<0.01) between vigor and generalized self-efficacy. It signifies that female workers who possess vigor exhibit high levels of self-efficacy and are deeply engaged in their profession. The study also showed a weak, significant positive relationship between absorption and dedication (*p<0.05) and a weak, significant positive relationship (*p<0.05) between self-efficacy and absorption. It means that female employees who are dedicated and have strong self-efficacy are more dedicated to their work.

Table 6. The mean, standard deviation, and t-value of government and private company employees on vigor, dedication, absorption, and self-efficacy.

Scales	Government (N = 100)		Private (N=100)		t(200)	P	95% CI		Cohen's d
	M	SD	M	SD			LL	UL	
Vigor	4.52	1.25	2.10	1.08	9.63	0.01**	1.21	1.83	2.07
Dedication	4.50	1.08	3.84	3.59	.42	0.70	-.06	1.40	0.25
Absorption	4.27	1.08	3.16	.97	7.72	0.04*	0.83	1.40	1.08
GSE	31.55	4.32	28.34	4.88	4.92	0.001***	1.92	4.50	0.70

Note: LL = Lower Limits; CI= Confidence Interval; UL= Upper limit; GSE= Generalized Self-efficacy scale.

The above table shows the Mean, standard deviation, and t-value of government and private company employees on the self-efficacy and work-engagement scale. A significant, strong positive difference is found based on self-efficacy, absorption, and vigor among government and private sector employees. It means that government employees have more self-efficacy, absorption, and vigor than private sector employees.

Table 7. *The mean, Standard Deviation, and t-value of male and female company employees on vigor, dedication, absorption, and self-efficacy.*

Scales	Male (N = 100)		Female (N=100)		t(200)	P	95% CI		Cohen's d
	M	SD	M	SD			LL	UL	
Vigor	4.08	1.35	3.44	1.28	3.40	.001***	.26	1.03	0.49
Dedication	4.08	3.58	4.26	1.19	.46	0.04*	-.57	.92	0.15
Absorption	3.96	1.18	3.47	1.11	3.05	.64	.17	.81	0.43
GSE	28.50	5.06	31.39	4.23	4.38	.01**	1.59	4.20	-0.61

Note: LL = Lower Limits; CI= Confidence Interval; UL= Upper limit; GSE= Generalized Self-efficacy scale.

A comparison of male and female workers' self-efficacy and work-engagement levels is shown in the table above, along with their mean, standard deviation, and t-values. Significant positive differences are found based on self-efficacy, dedication, and vigor among government and private sector employees. It means that males have more vigor than females; meanwhile, females have more self-efficacy and are more dedicated to their work than male employees.

Table 8. *Binary Logistic Regression Showing self-efficacy, vigor, dedication, and absorption as Predictors of the organizational sector among employees (N=200).*

Predictors	B	S.E	Wald	OR	95% CI	
					LL	UL
Vigor	0.84	0.21	16.58***	0.43	0.29	0.65
Dedication	0.08	0.15	0.34	1.09	0.82	1.46
Absorption	0.42	0.21	4.24*	0.65	0.44	0.98
GSE	6.20	0.04	2.31	0.94	0.87	1.02
Model χ^2 (df)	23.21***(8)					
Negel kerke R^2	0.74					

Note: ^a coding for Sectors (Government = 1; Private= 2)

A binary logistic regression was performed to ascertain the vigor, dedication, and absorption of the likelihood that participants are government or private employees. The Hosmer–Lemeshow goodness-of-fit test confirmed that the logistic regression model adequately fit the data. The model was statistically significant, $\chi^2(8) = 23.21, p = .001$, correctly classifying all cases and accounting for 74% of the variance in job status. Among the predictors, vigor and absorption emerged as significant factors. The results suggest that employees with higher levels of vigor and dedication are more likely to be associated with the private sector than with the public sector.

5. DISCUSSION

This study seeks to explore gender- and sector-based disparities in self-efficacy and work engagement, while also investigating the relationship between these two constructs. These findings demonstrate that compared to their private sector colleagues, government workers exhibit far higher levels of self-efficacy, vigour, and absorption. This finding aligns with previous studies that found higher levels of employee engagement and confidence in public sector organisations when workers had more control over their work schedules and their jobs were more secure (Borst et al., 2020).

Additionally, this study found that self-efficacy and job engagement differ according to gender. Male workers scored more positively on vigor, which aligns with earlier research findings that men can experience greater energy or motivation at work in specific situations (Czerwińska-Lubczyk & Jankowiak, 2024). However, the female employees were more self-efficacious and dedicated, which proves this notion that women are stronger and more committed, especially when a conducive environment is presented to them. Gender-related differences in self-efficacy and engagement carry important organizational implications, particularly for designing effective engagement strategies

(Mascarenhas et al., 2022). For example, enhancing self-efficacy among female employees can be achieved through policies that strengthen commitment and retention (Hartman & Barber, 2020). The study further revealed that vigor and absorption were significant predictors of sectoral employment, with employees exhibiting higher levels of these qualities being more likely to work in the private sector. This finding aligns with the view that private-sector environments are more dynamic and therefore require employees to demonstrate greater energy and motivation (Sabu and Manoj, 2010). Overall, the results highlight the importance of sector- and gender-specific interventions to enhance employee engagement and organizational performance. By addressing these factors, organizations can foster a more inclusive, motivated, and productive workforce.

6. CONCLUSION

This study set out to explore the influence of gender and sector on self-efficacy and work engagement, while also examining the relationship between these two constructs. The findings reveal important variations that highlight how workplace context and individual characteristics shape the way employees experience and demonstrate engagement. Public sector employees were found to display higher levels of self-efficacy, vigor, and absorption, which may be explained by the greater sense of stability, structure, and job security often associated with this sector. In contrast, the private sector appeared to demand greater levels of energy and motivation, with vigor and absorption emerging as significant predictors of employment in this context.

The study also uncovered gender-based differences in self-efficacy and engagement. While male employees expressed greater vigor, female employees demonstrated stronger levels of self-efficacy and dedication. These findings suggest that both genders bring unique strengths to the workplace, and that supportive organizational environments can further enhance these qualities.

Overall, the results highlight the need for organizations to recognize and respond to differences across sectors and genders. By tailoring engagement strategies to reflect these variations, employers can build a more inclusive, motivated, and productive workforce. Fostering self-efficacy and engagement is not only beneficial for individual employees but also contributes to improved organizational performance, sustainability, and growth. Future research can extend these insights by including a broader range of sectors and demographic factors, thereby deepening the understanding of how engagement and self-efficacy interact in diverse organizational settings.

6.1 Limitations

- **Cross-sectional Design:** The research used a cross-sectional design that restricts making causal relationships between work engagement and self-efficacy. Longitudinal studies would give stronger directions regarding the directional relationships and long-term effects of these variables.
- **Purposive Sampling:** Although purposive sampling was employed in choosing the participants, the method could present a bias in the selection, thus the results may not be generalised to the entire population. Random sampling methods may be helpful to improve the external validity of future research.
- **Sectoral and Gender Specific attention:** The research was limited to the government and private sectors and had a gender based comparison. This localized approach does not necessarily consider other noticeable factors that may also play a role in terms of self-efficacy and work engagement, including organizational culture, job type, or regions.

6.2 Recommendations

- **Future Research:** A longitudinal research design should be used in future studies to determine the time-based change of work engagement and self-efficacy, as well as the effectiveness of

sector-related and gender-based interventions in the long run in terms of their effects on employee performance.

- **Add Qualitative Approaches:** Qualitative approaches (interviews, focus groups) may be used to enhance quantitative evidence and fill the gap in understanding the psychological processes that cause gender differences in work engagement and self-efficacy.
- **Broader Sample Size:** To improve the generalizability of findings, future research should consider employing more diverse samples that include additional sectors, such as non-profit organizations. Moreover, examining other demographic variables—such as age and educational attainment—may provide deeper insights into how these factors influence the relationship between self-efficacy and work engagement.

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