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The role prescriptions of women leaders to achieve competitive advantage

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Abstract
This study examines the differences between male and female leadership in the SMEs sector. It investigates the influence of innovative work behaviour preceded by psychological empowerment on competitive advantage in each dimension. This study uses a quantitative approach to distribute questionnaires to 254 Indonesian SMEs. Path analysis was used in this study by calculating factor loading, composite reliability, Average Variance Extracted (AVE), discriminant validity, and the structural model. To analyse the differences between female and male entrepreneurs, this study employs multi-group analysis, which can explain the phenomenon of this research. These findings explain that psychological empowerment has been found to increase innovative work behaviour, and innovative work behaviour has also been found to mediate the relationship between psychological empowerment and dimensions of competitive advantage. In addition, female leadership is superior in terms of time to market, where innovative employees led by a woman will develop new products faster to enter the market. On the other hand, male leadership is superior in the delivery dependability dimension, where innovative employees led by a man prioritise speed and responsiveness in serving customers.

Keywords:
competitive advantage; innovative work behaviour; psychological empowerment; women's leadership.

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Introduction

The gender gap in leadership refers to the lack of representation of women in top leadership positions in companies (Halliday et al., 2021). This disparity needs to be addressed as it limits both women as individuals and society as a whole. Studies show that gender imbalance in positions of power can be a significant factor in perpetuating gender inequality in work outcomes that reinforce gender inequality norms (Allen et al., 2019; Kanadlı et al., 2018). Additionally, gender injustice negatively impacts women, organisations, and society (Phipps & Prieto, 2021). Social mobility for women can be beneficial in addressing the gender gap in leadership. However, this is a complex process that requires addressing both internal and external factors. Women should be included at all levels and have equal access to the same opportunities as men to grow as leaders, develop their ability to influence and inspire, and advance in their careers (Shinbrot et al., 2019).

The phenomenon of women's leadership, especially in the Micro, Small, and Medium Enterprises (MSME) sector, includes many women leading businesses. Factors that drive this phenomenon include better opportunities and accessibility, support from governments and other organisations, recognition of women's unique skills and abilities, and the development of technology and social media (Nekhili et al., 2018). Women's involvement in decision-making processes in companies can provide a competitive advantage for the company (Longman et al., 2018). This is because gender diversity can enrich the sources of information and knowledge used in decision-making, resulting in better decisions and overall company performance. Furthermore, women can contribute significantly to achieving a competitive advantage in companies (Kanadlı et al., 2018).

MSMEs often face fierce competition from large companies or established industries in the market. However, by utilising the concept of competitive advantage, MSMEs can develop the right strategies to increase their competitiveness and win in the market competition (Gautam & Ghimire, 2017; Skordoulis et al., 2020). One way to achieve a competitive advantage is by maintaining low production costs, which can be achieved by improving production efficiency and using appropriate technology (Olarewaju & Msomi, 2021; Wasono & Furinto, 2018). MSMEs can also create unique value through product or service differentiation, making customers choose MSMEs over competitors (Rahardjo et al., 2020). In addition, dynamic capabilities such as creativity and innovative behaviour are crucial in creating added value for customers and providing a competitive advantage for MSMEs (Ferreira et al., 2020). Employing competent employees and empowering them psychologically can also enhance the competitiveness of MSMEs. In the context of MSMEs, improving competitive advantage can

also help improve the quality of products or services, increasing customer satisfaction and providing long-term benefits for the business (Safari et al., 2020).

In the business environment, it has become important for organisations to maintain their competitive advantage. Creativity and innovative behaviour of employees have been used interchangeably in the literature. However, innovative behaviour is a broader concept as it involves the combination of generating, disseminating, and implementing ideas (Newman et al., 2018). When an employee engages in innovative behaviour, these three phases can occur sequentially in a complete process. Employees can combine these activities anytime (Elidemir et al., 2020). When an employee generates an innovative idea related to their work, in the next phase, they need to sell the idea to relevant parties to gain support for the implementation phase. Thus, innovative behaviour becomes the competency companies need to solve problems and develop innovative processes (Wang et al., 2022).

One antecedent of innovative behaviour is psychological empowerment. The concept of empowerment is defined through different perspectives, such as mechanistic and organic, as well as structural and motivational (Ghosh et al., 2019). Psychological empowerment is a set of psychological states that focuses on employees' attitudes and perceptions of their work and organisation (Singh & Sarkar, 2019). It is manifested in four dimensions: competence, meaning, impact, and self-determination (autonomy), with an additional dimension of trust, added in some studies (Afsar & Badir, 2016; Gautam & Ghimire, 2017). Empowerment leads to employee engagement, motivation, and satisfaction, encouraging commitment and loyalty to the organisation. Organisations need to provide empowerment opportunities to enhance employees' self-confidence and intrinsic motivation, which can lead to improved performance and organisational excellence (Safari et al., 2020).

Many studies have described the relationship between organisational leadership characteristics and female representation on boards of directors is influenced by the national context of gender equality (Halliday et al., 2021). Female directors contribute positively to board decision-making. This effect is enhanced when the board chairman shows leadership and the board operates in an open atmosphere (Kanadlı et al., 2018). Meanwhile, gender diversity in leadership positions would improve organisational performance, especially in operational aspects (Moreno-Gómez et al., 2018). Female students can enhance their leadership skills to achieve diversity and promote sustainable leadership (Segovia-Pérez et al., 2019). Longman et al. (2018) developed a model that links women's leadership to organisational culture effectiveness and fit. Women's leadership is better in non-family firms. Based on these studies, there is a gap where there has not been any research

exploring women's leadership in achieving competitive advantage for companies with the variable of innovative work behaviour preceded by psychological empowerment variables, especially using mediate variables. Therefore, this research is essential in complementing the literature and understanding the role of women's leadership in achieving competitive advantage for companies through psychological empowerment and innovative work behaviour (Nekhili et al., 2018).

This study examines the differences between male and female leadership in the MSMEs sector. It investigates the influence of innovative work behaviour preceded by psychological empowerment on competitive advantage in each dimension. By identifying and strengthening the relationships between these variables, this research can help organisations and female leaders understand how to optimise their employees' potential through psychological empowerment and innovation. Additionally, this study can provide new perspectives and a broader understanding of the role of women in business and leadership, as well as inspire women who are advocating for gender equality in the business and leadership world.

Literature review

Psychological empowerment and innovative work behaviour

Empowerment has become a popular topic in organisational science in recent decades, with various definitions and understandings. It involves giving employees responsibility and autonomy, sharing resources, and enhancing self-efficacy, which leads to increased work motivation (Stanescu et al., 2020). Psychological empowerment is a psychological attitude that reflects an individual's response to empowerment approaches and leadership behaviour, which can also be related to affective commitment and job satisfaction (García-Juan et al., 2019). Psychological empowerment is manifested in four cognitions: competence, impact, meaning, and self-determination (Gautam & Ghimire, 2017). Competence refers to feelings of self-efficacy, impact to the degree of influence on organisational outcomes, meaning to the value placed on the work role, and self-determination to the level of autonomy in making job-related decisions. Psychological empowerment can mediate between different leadership styles and work-related attitudes, and psychological empowerment is also related to employees' innovative work behaviour (Singh & Sarkar, 2019).

Meanwhile, innovative work behaviour is crucial for an organisation's long-term survival and competitiveness. Innovative work behaviour involves employees' behaviours in generating, introducing, and implementing new and beneficial ideas, processes, products, or procedures (Munir & Beh, 2019). Innovative work behaviour is not limited to innovation-oriented organisations or jobs but is essential for the entire workforce of an organisation (Mielniczuk

& Laguna, 2020). Academics have identified four activities related to IWB: problem identification, idea generation, promotion, and realisation. Identifying individual and organisational factors that encourage innovative work behaviour is crucial for the high performance of an organisation (Teng et al., 2020).

Psychological empowerment stimulates change and flexibility by giving individuals intrinsic task motivation, autonomy, and responsible decision-making freedom (Stanescu et al., 2020). It makes employees feel less constrained by rules and regulations and act more innovatively (Grošelj et al., 2020). Employees who feel empowered display newer and more creative behaviours and produce innovative and better solutions (Safari et al., 2020). Moreover, the higher the employees' perceived autonomy and decision-making control, the higher their involvement in creative processes (Liu & Atuahene-Gima, 2018). Overall, this research provides evidence of the relationship between psychological empowerment and employees' innovative behaviour. This study proposes the following hypothesis.

H1: Psychological empowerment affects innovative work behaviour.

Competitive advantage and its dimension

Competitive advantage is the main goal for organisations, achieved by doing things that are difficult to imitate competitors. One way to achieve this is through employee empowerment, which increases their intrinsic motivation and autonomy to make responsible decisions, leading to innovative and creative behaviour (Imran et al., 2018). Human resources can become a sustainable source of competitive advantage due to their value, scarcity, inability to imitate, and irreplaceability (Ferreira et al., 2020). Empowerment should be part of the organisation's long-term strategy in order to be sustained, and it increases personal power, commitment, product and service quality, and competitiveness in the global market (Chatzoglou & Chatzoudes, 2017). Studies have shown that empowered employees can contribute to business growth and development by increasing customer satisfaction (Banmairuroy et al., 2022; Niode, 2018). Dedication, commitment, and workforce competency are key sources of competitive advantage in the service sector (Brun et al., 2017). To succeed in today's business environment, companies require every employee's knowledge, ideas, energy, and creativity, which can be achieved through psychological empowerment (Safari et al., 2020). Innovation is considered a strategic asset that helps companies achieve superior performance in a competitive environment (Elidemir et al., 2020). Studies have shown that innovation is a key driver of business success. Companies that combine the capacity to innovate with resources are more successful in developing new capabilities and achieving competitive advantage (Rofiaty et al., 2022; Skordoulis et al., 2020).

The competitive advantage can be viewed from different perspectives, such as price, quality, delivery dependability, product innovation, and time to market which is explained as follows: First, price is defined as the monetary value of a product or service in the market, which represents the value of money that customers have to exchange to obtain a product or service (Li et al., 2006). In terms of the relationship between innovative work behaviour and price, innovative work behaviour can lead to the creation of innovative products or services that can be priced higher than their competitors (Anwar, 2018). Furthermore, innovative work behaviour can also help companies reduce costs and improve operational efficiency, ultimately leading to lower prices for customers. On other hand, innovative work behaviour can mediate the relationship between psychological empowerment and price. In other words, when employees feel psychologically empowered, they are more likely to engage in innovative work behaviour, which can lead to the creation of innovative products or services that can be priced higher than their competitors (Aitbar, 2021).

Second, quality is defined as a product's ability to perform its primary function. It can be measured by various aspects, such as the number of product attributes indicating higher quality. Innovative work behaviour can have a significant impact on the quality of products or services produced by an organisation. When employees engage in innovative work behaviour, they are more likely to generate new and creative ideas that can lead to the development of high-quality products or services. Innovative work behaviour can also lead to continuous improvement and innovation in product or service quality (Rahardjo et al., 2020). Furthermore, psychological empowerment can have an indirect effect on quality through its influence on innovative work behaviour. When employees feel psychologically empowered, they are more likely to engage in innovative behaviour that can lead to the development of high-quality products or services (Kurniawam et al., 2021).

Third, delivery dependability is consistently fulfilling delivery promises for products or services to customers. Innovative work behaviour can have a significant impact on delivery dependability, which refers to the ability of an organisation to deliver products or services on time and with consistent quality. When employees engage in innovative work behaviour, they are more likely to identify new and improved processes, technologies, and systems that can enhance delivery dependability (Sriboonlue & Puangpronpitag, 2019). Innovative work behaviour can serve as a mediator between psychological empowerment and delivery dependability. When employees are empowered, they are more likely to engage in innovative work behaviour, such as trying new approaches to work tasks or seeking out new solutions to work problems. This innovative behaviour can lead to improved delivery dependability, as employees are better equipped to respond to

changes in their work environment and to meet the demands of their customers and clients (Mohammed & Al-Qaisi, 2022).

Fourth, innovation is vital for companies to survive in an ever-changing business environment and refers to successfully implementing creative ideas. Innovative work behaviour can affect innovation in several ways. It can lead to the creation of new products, services or processes that are more efficient, effective or better suited to meet the needs of customers and clients (Yeh et al., 2019). Innovative work behaviour can serve as a key mechanism through which psychological empowerment affects innovation in organisations. By empowering employees and encouraging them to engage in innovative work behaviour, organisations can create a culture of innovation that fosters creativity, experimentation, and risk-taking. This, in turn, can help organisations to stay competitive, adapt to changing market conditions, and achieve long-term success (Ranihusna et al., 2021).

Fifth, time to market refers to a company's time to identify opportunities, create products or services, and bring them to the market. Innovative work behaviour can play a critical role in reducing the time to market for new products, services or processes. By fostering a culture of innovation within the organisation and encouraging employees to engage in innovative work behaviour, organisations can accelerate the product development process, reduce delays and setbacks, and stay ahead of their competitors (Miesler et al., 2020). Innovative work mediates the relationship between psychological empowerment and time to market. In other words, when employees feel psychologically empowered, it can lead to a shorter time to market for new products or services. One possible explanation for this relationship is that employees who feel psychologically empowered have a greater sense of ownership and responsibility for their work, which motivates them to take initiative and come up with new and creative ideas (El-Hanafy, 2020). Based on this, this study proposes the following hypothesis:

H2: Innovative work behaviour affects competitive advantage.

H3: Innovative work behaviour mediates psychological empowerment on competitive advantage.

Leadership by gender, innovative work behaviour, psychological empowerment, and competitive advantage

Leadership plays a crucial role in creating value that contributes to corporate strategy. Gender diversity in leadership has attracted interest in understanding its impact on decision-making and business performance (Yang et al., 2019). While previous research has focused mainly on developed countries, recent studies have examined the relationship between diversity and performance in developing economies (Longman et al., 2018). Other studies also show that women are a valuable source of human capital,

bringing diverse skills, experience, and perspectives to decision-making, which enhances the quality of strategic decision-making (Kanadlı et al., 2018). The positive relationship between gender diversity and performance indicates the quality of the business governance system and how organisations utilise their human capital. Overall, diversity in more heterogeneous leadership tends to have a superior knowledge stock and consider a broader range of solutions to specific problems, improving the quality of strategic decision-making, particularly in decision-making with high knowledge intensity (Shinbrot et al., 2019).

Previous research stated that based on role congruity theory, innovative work behavior of female leaders sometimes gets different ratings from men because of the stigma of women as leaders who are ineffective and not risk takers (Johnson et al., 2008; Luksyte, 2018). Female leader produces or adopts novel ideas, products, and services that benefit multiple stakeholders (Janssen, 2004). It causes employees to be reluctant to change and innovate when led by a female leader (Unsworth & Clegg, 2020).

Previous research argues that there is a positive and significant relationship between empowering leadership and e creativity and there is a positive and significant relationship between psychological empowerment and creativity. However, moderating effect of psychological empowerment on a relationship between empowering leadership and employees' creativity suggesting that psychological empowerment does not additionally strength the influence of empowering leadership on creativity. Regarding gender differences between male and female, there is a significant difference in empowering leadership. Female employees put more value on empowering leaders. On the other hand, there was an insignificant difference in psychological empowerment between male and female (Knezovic & Musrati, 2018).

Women who exhibit leadership qualities typically associated with masculinity, such as assertiveness, confidence, and the ability to delegate tasks, are often negatively evaluated by both men and women, especially in male-dominated fields (Moreno-Gómez et al., 2018). Successful women may be seen as a threat and sometimes are feared, envied, and hated. Female leaders must strike a delicate balance between taking on traditionally masculine traits and maintaining communal feminine traits to avoid prejudice (Phipps & Prieto, 2021). Studies also show that women have a unique approach to building trust, focusing on conflict resolution, facilitating collaboration, and having a democratic transformational leadership style. Men tend to have an agent, transactional, and task-oriented leadership style (Halliday et al., 2021). Women as leaders tend to have a collaborative leadership style that enhances the dynamics of corporate management by improving communication, social support, and beneficial problem-solving for

all parties (Allen et al., 2019). Women's leadership styles also tend to be more consistent than men's (Segovia-Pérez et al., 2019). Women in leadership are also considered more effective in contemporary business environments, and they must demonstrate extra competence to achieve managerial and executive positions. Being flexible and handling ambiguity is critical for modern corporate success in an uncertain context (Longman et al., 2018; Nekhili et al., 2018).

Based on the opinions of the experts above, it can be concluded that male and female leadership are significantly different. This study will reveal the differences in leadership between men and women for each variable examined in this study. This study proposes the following hypothesis:

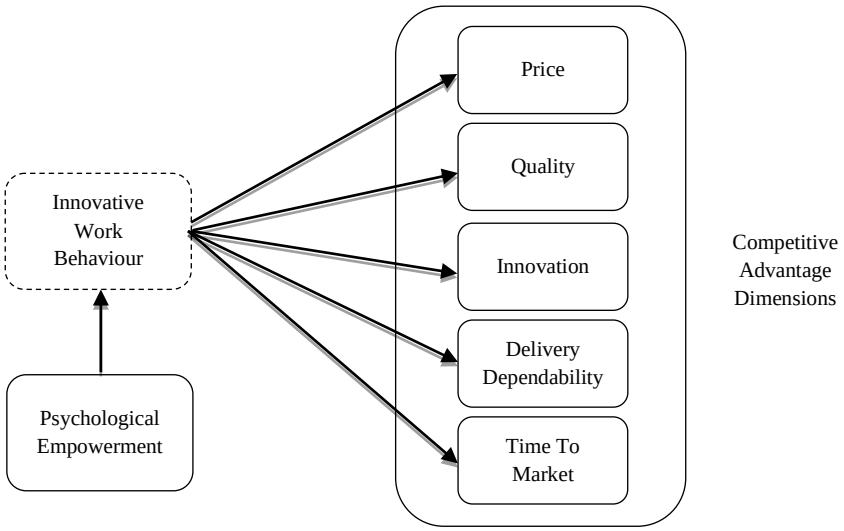
H4: There are significant differences of psychological empowerment effect toward innovative work behaviour in male and female entrepreneur.

H5: There is a significant influence of male and female leadership on the relationship between innovative work behaviour and competitive advantage.

H6: There is a significant influence of male and female leadership on the relationship between innovative work behaviour, which mediates the effect of psychological empowerment, and competitive advantage.

Figure 1 shows research framework of this study which include psychological empowerment, innovative work behaviour, and competitive advantage. Competitive advantage consists of five dimensions, i.e., price, quality, innovation, delivery dependendability, and time to market.

Figure 1.
Research Framework



Research method

This research employs a quantitative methodology by distributing questionnaires to small and medium-sized enterprises (SMEs) in Indonesia. There are 254 respondents returned the questionnaire, yielding a survey response rate of 66.3%. The questionnaires were distributed partly in person using paper-based questionnaires and partly through social media using online questionnaires (google form).

All variable measurements use a 5-point Likert scale. Psychological empowerment measurements were adopted from Safari et al. (2020). Innovation work behaviour measurements were adopted from Taherparvar et al. (2014). Competitive advantages measurements were adopted from Li et al. (2006).

The research methodology employed in this study involves path analysis using the Structural Equation Model - Partial Least Square (SEM-PLS) approach developed by Hair et al. (2014), which includes calculating factor loading, composite reliability, Average Variance Extracted (AVE), discriminant validity, and the structural model.

Data analysis and result

Respondents profile

The gender of the respondents was relatively balanced, with slightly more women (50.4%) than men. Furthermore, most respondents (61.1%) are below the age of 40, and the remaining are above 40 years old. It explains that the respondents in this study are young entrepreneurs. Regarding the size of their businesses, most respondents (53.5%) reported having between 2-10 employees, suggesting that the sample primarily consisted of small businesses. This information is essential as it provides insights into the characteristics of the population being studied and can help contextualise the results of the subsequent analysis.

Measurement model

Prior to conducting the analysis, it was necessary to perform an instrument testing, which included using the Fornell-Larcker Criterion, Average Variance Extracted (AVE), Cronbach Alpha, and Composite Reliability to confirm that the instrument was valid and reliable in measuring the intended constructs. The coefficient determination value (R-Squared) was utilised to assess the extent of the variables' contribution as shown in Table 1.

Table 1.
Fornell-Larcker Criterion

	DD	IN	IWB	PR	PE	QU	TM
DD	0.722						
IN	0.551	0.823					
IWB	0.556	0.590	0.802				
PR	0.577	0.532	0.667	0.782			
PE	0.515	0.533	0.523	0.661	0.829		
QU	0.626	0.504	0.541	0.532	0.593	0.795	
TM	0.656	0.503	0.680	0.629	0.663	0.521	0.736

Table 2.
Reliability test

Construct	Cronbach Alpha	Composite Reliability	AVE
DD	0.666	0.762	0.522
IN	0.764	0.862	0.677
IWB	0.721	0.843	0.643
PR	0.693	0.822	0.611
PE	0.774	0.868	0.688
QU	0.711	0.838	0.633
TM	0.672	0.778	0.542

Table 2 shows that the constructs measured in the study are reliable. This is supported by the fact that the AVE values for each construct are greater than the recommended threshold of 0.5. Furthermore, the composite reliability value should be > 0.70, although a value of 0.60 is still acceptable. The results of the discriminant validity test using the Fornell-Larcker Criterion revealed that the correlation between different latent variables in the model must be smaller than the AVE value of each respective latent variable (Hair et al., 2014). The composite reliability values for all constructs are greater than 0.7, and Cronbach's alpha threshold of 0.6 indicates that the constructs are reliable measures of their underlying concepts. Meanwhile, the R-Squared value can be seen in Appendix 1.

A value of R-squared equal to 0.75, 0.50, and 0.25 indicates a strong, moderate, and weak model, respectively (Sarstedt et al., 2017). Thus, the contribution of psychological empowerment to innovative work behaviour is categorized as moderate. Meanwhile, the contribution of innovative work behaviour to price is moderate, to quality is moderate, to delivery dependability is moderate, to innovation is strong, and to time to market is weak.

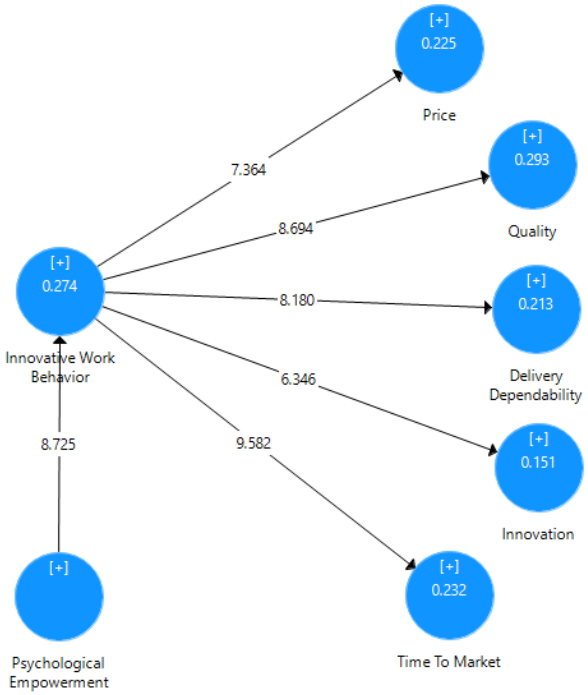
Structural model and hypothesis testing

The study utilised SEM-PLS to test the direct effect of the variables of interest. The bootstrapping approach was employed, which involved estimating the direct, indirect, and overall effects using 5000 subsamples with

95% interval bias-corrected evidence. In addition, grouping data was applied in the analysis to observe differences between the bootstrapping results for males and females. (Hair et al., 2014). Figure 2 shows bootstrapping result. Based on Figure 2, all of the research constructs met the requirements for the analysis.

Table 3 shows the bootstrapping results. In Table 3, β shows original sample, T-S shows T-Statistics, and P-V shows P-Value. show several differences between the female model and male model. In female model, innovative work behaviour does not significantly affect delivery dependability, while in male model, innovative work behaviour can significantly increase delivery dependability. In addition, from female model, it can be seen that innovative work behaviour has a significant effect on time to market, while in male model, it has no significant effect. In other hypotheses, all P-values are below 0.05 (Hair et al., 2014), which means there is a significant effect in the model.

Figure 2.
Bootstrapping result



Psychological empowerment affects innovative work behaviour

Psychological empowerment positively affects innovative work behaviour, as psychological empowerment enhances employees' motivation, self-efficacy, and risk-taking tendencies, essential elements in promoting innovation (H1 accepted). Additionally, empowered employees are inclined

to explore new prospects and resources to facilitate innovation, including acquiring new knowledge, collaborating with colleagues, and experimenting with new ideas and approaches (Grošelj et al., 2020). As a result, organisations can stimulate innovation by empowering their workforce and supplying them with the necessary resources and backing to undertake innovative work behaviours (Ghosh et al., 2019).

Table 3.
Differences between the female model and male model

Predictors	Female Model (FM)			Male Model (MM)			MGA
	β	T-S	P-V	β	T-S	P-V	
IWB → PR	0.511	4.767	0.000	0.444	6.464	0.000	0.593
IWB → QU	0.585	5.812	0.000	0.502	7.211	0.000	0.488
IWB → DD	0.153	1.683	0.076	0.398	6.422	0.042	0.016
IWB → IN	0.436	5.220	0.000	0.351	4.829	0.000	0.444
IWB → TM	0.494	6.391	0.020	0.173	1.249	0.061	0.034
PE → IWB	0.507	5.330	0.000	0.527	7.393	0.000	0.878
PE → IWB → PR	0.259	2.772	0.006	0.234	4.347	0.001	0.847
PE → IWB → QU	0.297	3.379	0.001	0.264	4.567	0.004	0.779
PE → IWB → DD	0.280	3.180	0.001	0.210	4.377	0.000	0.492
PE → IWB → IN	0.221	3.056	0.002	0.185	3.973	0.001	0.694
PE → IWB → TM	0.251	3.580	0.000	0.249	4.678	0.000	0.999

Innovative work behaviour on competitive advantages

Innovative work behaviour can impact pricing in multiple ways to gain a competitive edge (H2 accepted). Companies that innovate and offer unique products or services in high demand can command a premium price compared to their competitors (Pokrovskaia et al., 2021). On the other hand, innovative companies can also find more cost-effective ways to produce their products, offering lower prices while still being competitive. Additionally, innovation can improve product quality, which can justify a higher price as customers often pay more for superior products. In addition to enhancing innovation, psychological empowerment can also improve job satisfaction, organisational commitment, and overall well-being. Empowered employees are more likely to feel valued and respected, which can lead to higher levels of motivation and engagement. As a result, they are more likely to be committed to their organisation and willing to go the extra mile to help it succeed (Ullah et al., 2021).

A company can gain a competitive advantage by fostering innovative work behaviour by improving its product or service quality. Employees engaged in innovation are likely to generate new and improved ideas that enhance the quality of the company's offerings, appealing to customers who prioritise quality over price (Friedman & Carmeli, 2018). Moreover, when employees feel psychologically empowered, they are more likely to have a

sense of ownership and pride in their work. They are more likely to take responsibility for their work and strive for excellence, which can result in the development of high-quality products or services that exceed customers' expectations (Santoso et al., 2019). By empowering their workforce and encouraging innovative work behaviour, organisations can create a culture of creativity, experimentation, and risk-taking that leads to the development of new and improved products and services, which can differentiate them from their competitors and improve their position in the marketplace.

Innovative work behaviour mediates psychological empowerment on competitive advantages

Psychological empowerment can impact a competitive advantage in various ways, such as price, quality, delivery dependability, innovation, and time to market (H3 accepted). Innovative work behaviour can mediate between psychological empowerment and these competitive advantage dimensions, enhancing the effects of psychological empowerment (Teng et al., 2020). For instance, psychological empowerment can motivate employees to generate new ideas that can justify higher pricing and develop new and improved products and services that meet or exceed customer expectations (García-Juan et al., 2019). Moreover, psychological empowerment can lead to higher employee engagement, motivation, and commitment, reducing turnover and improving work quality, leading to more dependable and efficient delivery (Stanescu et al., 2020). Lastly, psychological empowerment can promote a culture of creativity and experimentation that leads to the developing of new and innovative products and services, reducing time to market and potentially increasing market share (Singh & Sarkar, 2019). Innovative work behaviour can facilitate this process by encouraging employees to seek new ideas and resources, leading to faster innovation and time to market (Rather, 2020). Psychological empowerment plays a crucial role in promoting innovative work behaviour, which in turn can lead to competitive advantages in various dimensions such as price, quality, delivery dependability, innovation, and time to market.

Psychological empowerment on innovative work behaviour in male and female entrepreneur

Under female leadership, employees' innovative behaviour can significantly impact the time it takes to bring a product or service to the market (H4 accepted). At the same time, it may have little effect under male leadership. This means that women in leadership positions may be better at creating an innovative culture that speeds up product and service development, allowing their organisations to compete better in the market. In contrast, male leaders may have a different impact on innovation within their

organisations, so the time it takes to bring products or services to the market may not significantly affect their employees' innovative behaviour (Rather, 2020; Shinbrot et al., 2019).

Finally, considering some differences between female and male leadership to achieve a competitive advantage, this study's findings explain that female leadership is superior in terms of time to market, where innovative employees led by a woman will develop new products faster to enter the market. On the other hand, male leadership is superior in the delivery dependability dimension, where innovative employees led by a man prioritise speed and responsiveness in serving customers.

Innovative work behaviour on competitive advantages in male and female leadership

Improved delivery dependability is a critical factor in ensuring customer satisfaction and loyalty (H5 accepted). It refers to the ability of an organisation to respond to changes in the work environment, meet the demands of customers and clients, and deliver products or services on time and within budget. Moreover, when employees feel psychologically empowered, they are more likely to have a sense of ownership and pride in their work. They are more likely to take responsibility for their work and strive for excellence, which can result in the development of high-quality delivery services (Kanadlı et al., 2018; Newman et al., 2018). On other hand, there is a difference in how innovative work behaviour affects delivery dependability depending on whether the leader is female or male. The impact of innovative work behaviour is not significant under female leadership, but it is significant under male leadership. It is important to note that while innovative work behaviour may not have a significant impact on delivery dependability under female leadership, it can still be valuable in other areas, such as enhancing product quality, increasing efficiency, and driving innovation. However, it is important to note that there are some differences in the impact of innovative work behaviour depending on whether the leader is female or male, with female leadership being more effective in promoting time to market and male leadership being more effective in promoting delivery dependability. Overall, companies that prioritise and encourage innovative work behaviour among their employees are better equipped to adapt to changes in the market and gain a competitive advantage.

Innovative work behaviour mediates psychological empowerment on competitive advantages in male and female leadership

In order to gain a competitive advantage through innovation, companies must prioritise and encourage innovative work behaviour among their employees (H6 accepted). This can lead to the developing of new ideas and

products that meet customers' changing needs, positioning the company as a leader in its industry and better equipped to adapt to changes in the marketplace (Lasminiasih et al., 2018). Additionally, innovative work behaviour can result in cost savings and increased efficiency, allowing companies to offer their products or services at a lower price while maintaining profitability. Encouraging innovation is, therefore, vital for companies striving to achieve a competitive advantage in today's fast-paced business environment (Chen et al., 2018).

Conclusion

Psychological empowerment affects innovative work behaviour. Innovative work behaviour on competitive advantages. Innovative work behaviour mediates psychological empowerment on competitive advantages. Psychological empowerment on innovative work behaviour in male and female entrepreneur. Innovative work behaviour on competitive advantages in male and female leadership. Innovative work behaviour mediates psychological empowerment on competitive advantages in male and female leadership. It is interesting to include other variable such as leader's, education background, length of business, type of business, and scale of business. Hence, those variables also can be analysed by multi group analysis in further study.

Author contribution

Lucyani Meldawati: Conceptualisation, Formal analysis, Supervision, Validation, Visualisation, Writing – original draft. **Fisy Amalia:** Validation, Data curation, Formal analysis**. Andi Cahiril Furqan:** Validation, Visualisation, Writing – original draft. **Nur Faliza:** Supervision, Validation, Visualisation, Writing – review & editing **Tonny Yuwanda:** Conceptualisation, Data curation, Project administration, Investigation, Methodology, Writing – review & editing.

Declaration of interest

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Appendix 1.
R-Squared

Construct	R Squared
DD	0.513
IN	0.751
IWB	0.674
PR	0.525
QU	0.593
TM	0.432