SHAPING THE SKILLS AND STYLES OF FUTURE INNOVATIVE WOMEN LEADERS: THE MODERATING ROLES OF SELF EFFICACY AND PERSONAL INITIATIVE

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Abstract

Innovative leaders are crucial in the 21st century. In order to effectively manage the rising demands for innovation in many aspects of business organisations, innovative leaders must exhibit multiple skills and styles, particularly in promoting creativity and innovation. This paper critically analyses past literature on the skills and styles of innovative women leaders. Studies in this direction suggest that the boardroom presence of women leads to more innovative performance. Innovative women leaders play a crucial part in closing a significant gap between a stated desire for innovation and capabilities in order to optimise organisational innovativeness to attain business sustainability. Innovative women leaders will bring different perspectives, skills, and innovative ideas to the table, but the combination of these three will help create new perspectives that will lead to better decision-making for the business as a whole. Moreover, an innovative woman leader can bring out the best abilities in team members and motivate them to work together to achieve a shared innovative opportunity by identifying the appropriate skills and style. For this reason, the paper provides a holistic framework that conceptualises the six main variables as the skills and style in shaping innovative women leaders. This will provide new insights for organisations and an edge to utilise innovative women's leaders' resources in penetrating markets faster and provide a better connection to developing markets. Clearly, it could also investigate emerging opportunities and unleash human capital potential, resulting in more innovative female leaders and a greater impact on innovation.

Research paper

Keywords: Skills; Styles; Innovation; Innovative Women Leaders; Human Capital Development; Top-Management Team; Female Board Members; Malaysia

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Introduction

The world was presently amidst a technological transformation that would fundamentally change the way we lived and worked. Malaysia, one of the leading economies in Southern Asia, was a middle-income country that had unfailingly shown robust growth. Despite the fact that the current government had led the country's progress, Malaysia's economy had been and was progressively opening up and fast developing towards innovation and technology. Modern economies revolve around innovation. Innovation is a powerful tool for development and tackling social and global concerns in emerging economies (Bouzari et al., 2021). Malaysia relies heavily on innovation. It gives organisations an advantage in tighter market penetration and provides a better relationship to develop, which could lead to larger prospects. The definition of innovation has piqued the interest of both researchers and various industrialists, as there is no universally accepted definition of innovation. There were various definitions of innovation, but it was broadly defined to include a variety of types, such as new products or services, new process technologies, new organisational structures or administrative systems, and new plans or programmes pertaining to organisational members (Damanpour, 1996; Dana et al., 2021).

A recent study on innovation identified it as a significant obstacle for leading company growth. Innovation could not thrive at any organisational level in the absence of fully present leadership or the ability to lead individuals. Finding and retaining the appropriate people was a critical component of implementing innovation. It expects people to be open to new ideas and to share their knowledge. Innovation occurs on many levels, and as a result, the skill of a leader has been suggested to be the most essential aspect influencing innovation (Gumusluoglu and Ilsev, 2009). In order for organisations to adapt to new changes, the need for innovation has resulted in a new focus on the role of leaders in modelling the nature and completion of creative activities (Mumford and Licuanan, 2004). This refers to leaders creating or implementing innovative approaches in order to introduce new thinking and various activities to how they guide, manage, and carry out the task.

According to David Gliddon (2006), innovation leadership is a combination of philosophy and practise that uses various leadership styles to influence employees to develop creative ideas, products, or services. In the practise of innovation leadership, the role of the innovative leader was critical (Hosseini et al., 2022). An innovative leadership philosophy emerged in the early twentieth century and has since gained recognition as a new management thought used by leaders at work. However, some organisations believed that traditional leadership methods were even more effective (Dana et al., 2022 a, b). Yet, transitioning from traditional to innovative ways has rapidly become a requirement, especially when innovative leadership is the new adaptable way and it blends many traditional leadership styles with modern human, professional, organisational, and interactive twists (Campbell, 2012).

The concept of an innovative leader is especially relevant in organisations that must constantly innovate. In particular, in Malaysia, leadership in a multicultural setting necessitates adopting new attitudes and behaviours, while Heffernan (2002) claims that the future of business is dependent on women. According to Nicolai Foss and Jacob Lyngsie of Southern Denmark University, firms that wish to be more innovative should increase the number of women in leadership roles. Based on a survey of 400 Danish firms along with national data from Denmark's labour market, a positive relationship was

found between the proportion of women in top management teams and innovation (Jones, 2019). As a result, in order to build an environment for innovation within organisations, innovative processes, methods, and thinking that are crucial for organisational health and future viability, we must include the current rising workforce of women leaders (Hameed et al., 2021;Pereira et al., 2021).

As per Idris (2009), Malaysian women entrepreneurs have superior inventive aptitude, as evidenced by their openness to new ideas when compared to men, and they use their leadership styles to meet innovative difficulties. Also from Santos et al., (2019), female leaders are more open to new experiences through new ideas, people, and networks, which benefits their company innovations. As a result, gender diversity continues to rise in boardrooms worldwide, including in Malaysia, and it is clear that the growing number of women on boards is a target specified in our policy makers' agendas. This is supported by Malaysian government policies requiring 30% female representation on corporate boards, which should be used and enforced on an ongoing basis to reap the benefits of having a male and female board composition. Hence, this paper will establish the top-management women's teams (TMTs) on boards as the sample selections. Furthermore, the capacity of an organisation to achieve its objectives is not exclusively dependent on the willpower of a single outstanding leader, or even on the efficiency of its chain of command.

The theory of an innovative leader was linked to the leader's skills and traits. Muthuveloo and Teoh (2020), in their I-TOP Strategic Agility model, give position for People-Human Capital Development, which in this context refers to the different types of characters and personalities that individuals

possess. Transformers are employees (top executives) who have high awareness, high agility, and novelty. This supported by Chemmanur et al., (2015) expressing that the effect of management team quality on innovative output will be stronger for firms facing financial constraints and for firms in competitive industries (Ebrahimi et al., 2021; Salamzadeh et al., 2019, 2021; Kawamorita et al., 2022). The goal of the human capital strategy is to transform human resources into more tangible assets, as well as to plan and match the organisation's employees to the firm's strategic goals (Koednok, 2011). As a response, top executives must have a varied set of skills and the capacity to select the best strategy at the right moment from a range of options, including low-cost leadership, innovative orientation, diversification strategy, manufacturing, and private brand development (Lin, Chang, and Dang, 2015). Since then, previous studies have demonstrated that the influence that gender diversity may have on board tasks and on strategic decisions is complex due to the factors surrounding the effects of gender diversity (Eagly, 2016). This paper tries to explain why the skills and styles of an innovative woman leader might be a viable alternative to a contemporary leader for unravelling innovation effectively. This would be the measurement for the government, organisations, and industries to envision the future trends of business, technology, and society. Clearly, it could also investigate emerging opportunities to unleash human capital potential, develop more innovative female leaders, and increase the impact of innovation.

In the background of this paper, independent variables which have relevance to shaping the future innovative women leaders observed are visionary, critical thinking, communication skills, emotional intelligence, trans-

formational and transactional styles, while moderating roles such as self-efficacy and personal initiative. Examining the theoretical framework of this study would provide theoretical evidence and assist individuals, primarily women leaders, and organisations in both the manufacturing and service sectors in better understanding the overall dynamics of innovation in the Malaysian context.

Problem Statement

Innovative leader is getting more prevalent as change has become the norm today and requires openness to continuous innovation. As an innovative leader, it is imperative to figure out how to adopt the unique skills that would set a team in order to create an environment for creativity, freedom, and innovation. In Malaysia, many organisations still fail to unleash their most valuable resources: human creativity, imagination, and original thinking. They lack a systematic approach to foster a culture of innovation. As a result, poor strategic planning, insufficient organisational infrastructure or development, and a failure to adopt emerging technologies may force us to embrace uncertainty and make measuring returns on investment more difficult. Based on a survey done by the World Economic Forum (WEF), Executive Opinion Survey 2017-2018, an inadequately educated workforce, business sophistication, which is the quality of individual firms' operations or strategies, and insufficient capacity to innovate are a few of the problematic factors in succeeding businesses in Malaysia (Royce Tan, 2019).

The outcomes of local and global surveys clearly show that women are still being side-lined in this standpoint as the systems, structures, practices, and thinking of society are prone towards patriarchal beliefs, which will not benefit and promote the nation's prosperity (Salamzadeh & Ramadani, 2021; Salamzadeh & Dana, 2021). In a year 2015 survey, the shortage in female economic roles and involvement in the business sector in Malaysia was reflected. At that time, less than 14% (percent) of all board members were female. This explains these statistics, which show the expectations placed on women to carry out the traditional role of caregiver in the family. Many organisations globally are ready to start leveraging an opportunity of a diverse workforce begin by implementing and re-assessing woman as a leader initiatives. This includes in Malaysia in past, committed to driving towards expanding women's participation in the labour market to 57% by 2020.

A number of studies have found positive feedback on gender diversity policy implemented in the country. Among others, Ariff et al., (2017) revealed positive association between gender diversity and innovation performance. In spite of these policies and regulations being structured based on the literature findings, only a few studies have been carried out related to the subject of innovation, in particular expressing the experiences of women leaders in Malaysia's context. During the panel discussion, the Institute of Corporate Directors Malaysia (ICDM) director and 30% Club Malaysia mentor, Datuk Seri Ahmad Johan Mohammad Raslan, said the board of directors and the human resources (HR) department must work hand-in-hand to drive and push women to step up the corporate ladder. Current talent management practises do not address how to holistically cultivate a new crop of talents or how to manage talent displacement to replace unproductive or untrainable skills for future business demands (Radovic Markovic et al., 2013; Palanisamy et al., 2021). With the reference provided, we are able to understand the critical role women in leadership positions play in driving better business performance

and building stronger corporate governance. Therefore, in line with the government's policy to increase the representation of women in leadership, the support and training will help innovative women leaders take ownership of greater responsibility and make a difference within their organisations.

What this paper tries to explore and identify the relevant skills and styles that shape innovative women leaders, since from an organisational perspective, the leader's responsibility may be seen as a hierarchy process in which the leader acts as an initiator, creating and improving the conditions for the team to apply their capacities in delivering creative innovation results (Shalley and Gilson, 2004). Henceforth, realising the relationship between innovative women leaders and their relevant skills and styles could offer practical insights for organisation management for two reasons. Primarily, management would be able to optimise policy-making processes as they concern a new output line, in particular, organisations that would like to shape or adopt and support the government's current strategies to empower women in the workforce. Secondly, this may assist in allocating resources further effectively.

Research Gap

According to Merican (2017) in his article, Malaysia is not yet fully leveraging the strength of its natural diversity. Especially as Malaysia shifts from resource-based and lower-end manufacturing to higher value-added services, it becomes more critical for us to embrace diversity as different perspectives spur creativity and innovation. Ab Rahman and Ismail (2018) stated that in Malaysia, to achieve these focuses, the public sector faces a few challenges that affect the management of innovation, which include a lack of leadership skills and a poor innovative culture to stimulate innovation. To cope with this, innovation leaders should combine strategies and skills to implement change within an organisation (Lazarova, 2014). It is also about nurturing their skills and abilities to produce efficient results. This is exhibited in Pagaura (2020) framework model, where innovation leadership is vital in attaining the mission and vision of the institution. Although there are various initiatives conducted to enhance management innovation, the innovative performance is still less than satisfactory.

Based on the Detouillon and Thiollière (2011) framework, it is essential to add skills to traits in order to have a complete vision of leaders' characteristics. They identified communication and relationship skills, the ability to identify new opportunities and solve problems, managerial skills, and vision skills as necessary. The first gap that this research would fill, according to the preceding, is emphasising the importance of each skill and style proposed for being a successful innovative woman leader. Clearly, the study can acknowledge the novel findings of a new theory model by investigating the extent to which these influence innovative women leaders in Malaysia as a result of a lack of knowledge about innovative leader complexity and its skills and styles. Following on from the previous research, the final gap that this research will fill is the practical contribution, which is the participation of women at leadership and policy-making levels in Malaysia.

Furthermore, prior research on innovative leaders has primarily used mixed methods or has been solely qualitative, and has been primarily focused on Western countries. As such, this study is quantitative in nature, whereby

the data will be collected from a sample of women leaders. The scope is narrowed down only among top management women leaders in Malaysia, and they would be a perfect representative for the research on women's leadership. Testing theoretical propositions in the current period is essential when being innovative means harnessing creative ability. This is a necessity in Malaysia as it may serve its purpose in any organisation's basis for a possible agenda to be incorporated into the regular strategic planning. And this is supported by Pagaura's (2020) stating that the innovative leadership styles that are applied within an organisation will result in many innovations within a short time.

Literature Review

The study of key variables of this research are presented in the following sections.

Innovative Women Leaders

The study on innovation subject shows its magnitude on businesses and at the same time, it's survival and growth by moving forward with innovation in today's technologically revolutionised world. In order to embrace an innovative mindset, it starts at the top of the hierarchy hence leaders are accountable to assemble teams where each employee learns to apply the changes that exist in one another for their own success and that of the organisation. Leader is an individual that able to spearhead and direct a group of people in order to achieve certain goals (Nejad and Rowe, 2009). Over the period, the perception of heroic individuals as the best figure of a leader, evolved into today's concept of leadership (Pearce, Manz and Sims, 2009). An effective leader is primary for an organisation ability to be creative and innovative due to the constantly develop and evolve; thus leaders need to be proactive, forward-thinking individuals (Sohmen, 2015). This study concentrates on innovative women leaders due to its nature, which encourages the creation of individual innovativeness at every level of an organisation. Assuming that, Denti and Hemlin (2012) confirmed that there are substantial indications that leadership is vital for innovation management. Kozioł-Nadolna (2020), stated a relatively new category is innovative leadership. She aimed to reflect on leadership and its contribution to stimulating innovation.

In the embraced concept, Zhu, Yang and Yang (2016) defined innovative leadership as a process of social impact through which leaders by means of innovative personal qualities, shaping the role of innovation and building innovative creative teams affect individual and team-based innovation in the workplace and the entire organisation. Furthermore, technologybased businesses require leaders who can maximise their companies' resources and capital in order to continually innovate and adapt to their environment's quick and discontinuous changes (Makri and Terri, 2010). Top managers' human talents are important in establishing innovative success. In other words, when the management team is more balanced in terms of men and women, managerial competencies have a higher impact on both product and process innovation (Ruiz-Jiménez and Fuentes-Fuentes, 2016).

Torchia et al., (2011) found that a top management team with at least three women (the size of the minority group) is more varied and has more interaction than homogeneous groups, allowing for higher-quality decision making and the production of more creative, innovative solutions. Firms with a gender-diverse board of directors had more patents, more original patents,

and a greater rate of innovative efficiency. (Griffin, Li and Xu, 2020). Women on top management teams, according to Ruigrok et al., (2007), offer not just distinct views, talents, and expertise, but also various values, norms, and understandings that are crucial to enhancing the team's functioning and the organisation's results. The findings of a recent study by Rangel et al., (2020) examined innovation across a broader range of companies across a variety of industries in Malaysia and showed that board heterogeneity can help firms innovate more effectively. However, based on the picture presented, it is clear that the perspective on innovative female leaders is still relatively new, but it is widely recognised for its value.

Based on the foregoing, we can expect the search for and allocation of resources that influence innovation to be performed with the contribution of new perspectives, knowledge, values, and socialisation experiences that are less present in more homogeneous groups in situations where the top management team is more diverse.

Skills and Styles

In terms of ideas, creativity, styles, and inventions, a diverse group of individuals delivers a variety of challenges and advantages to the workplace. In today's multicultural workplace, leaders must be prepared with the appropriate leadership skills. International organisations insist on cross-cultural managers with adequate leadership skills and styles to inspire and influence diverse employees, as well as a strategic vision of organisational innovation. Punnett (2004) asserted that different leadership styles and management approaches must be used based on the dynamics and conditions of the organisation.

The literature on gender, which argues that women have different management styles than men, reveals that gender diversity in senior management teams can increase the link between management capabilities and innovation performance by providing diverse work styles, talents, points of view, and experiences (Ruiz-Jiménez and Fuentes-Fuentes, 2016; Soleimani et al., 2022). According to a recent study, having similar director skill sets correlates to higher business performance (Adams et al., 2018). The findings on experience heterogeneity also imply that boards should be formed according to the necessary skill sets and expertise in business. Simplifying the search for directors with the relevant skill sets and experience particular to the firm's sector would result in minimal R&D cost savings (Rangel et al., 2020). Through a random sampling of studies conducted on innovative leaders from 2010 to 2020, a total of 50 published papers were identified from the research database as a means of determining possible skills and styles of innovative women leaders. In this case, six independent variables have been identified, which are: visionary, critical thinking, communication skills, emotional intelligence, transformational style, and transactional style.

Visionary

Visionary leadership has been defined as the communication of an image of a future for a collective with the intention to persuade others to contribute to the realisation of that future (Knippenberg and Stam, 2014). Mascareño, Rietzschel and Wisse (2020), highlighted that visionary leaders paint an image of the future with the intention to persuade others to contribute to the realisation of that specific future. A visionary leader guarantees that the organisation has a desired future. He or she is a dreamer, which indicates that

their primary purpose is to create attainable objectives. They instil enthusiasm in the workplace and use an innovative and creative approach (Otieno, 2020). Hence developing innovative women leaders capacity to lead change may be even more critical as women are often selected to lead in turnaround and high risk situation.

Critical Thinking

Critical thinking sits atop the World Economic Forum's top ten list of skills workers recently (Whiting, 2020). From the year 2020 onwards, the Fourth Industrial Revolution has produced advanced robotics and autonomous transport, artificial intelligence and machine learning, advanced materials, biotechnology and genomics (Alex Gray, 2016). In the year 2018, Peñalver, Mas and Fleta further investigated and further took a literature review as a point of departure, aimed at the identification of the behavioural indicators of innovators at the workplace, and one of their classification were thinking differently, analysing and identifying, globalising, evaluating and foreseeing. Thinking innovatively as an individual isn't adequate, rather, a leader's component is how the innovative thinking scales up from the corporate ladder to become a reality to an actual idea. Critical thinkers are generally an active communicators (Ay, Karakaya and Yilmaz, 2015). At present, complex businesses required innovative leaders in every level allowing for soft skills, critical thinking to be functional throughout the organisation. An effective innovative leader should know how to think critically.

Communication Skills

In today's enthusiastic and constantly evolving world, we bank heavily on sharing information through emerging technology, resulting in greater importance being placed on developing good communication skills. In the year 2018, Weman and Kantanen examined different dimensions of leadership communication that promote creativity and innovativeness and suggest that to promote organisational innovativeness, all four dimensions: cognitive, affective, conative, and social must be taken into account. Furthermore, Dunne, Aaron, McDowell, Urban, and Geho (2016) examine the impact of the individual entrepreneur on fostering new product innovation within firms. Specifically, they found evidence to support the idea that small business leaders who are inspirational, who negotiate competitively, and who lead efficacious organisations establish environments that are more likely to yield new product innovations. Luo, Song, Gebert, and Feng (2016) explored the structure of a leader's communication style in the context of organisational change. In doing so, the authors intended to shed more light on how leaders can effectively communicate change projects to their subordinates, which is viewed as the key to implementing change initiatives. Emotional intelligence is an interpersonal and is a relatively new construct, but its force on how we work will be significant moving forward. Current literature finds women have higher emotional intelligence ability than men based on common ability tests such as MSCEIT and the newer Test of Emotional Intelligence (Cabello et al., 2016).

Emotional Intelligence

Tsakalerou (2016) indicated that emotional intelligence improves team interactions, facilitates the management of intellectual capital and does indeed affect innovation performance. Apart from this, Jenkin et al., (2020) stated that rising rates of loneliness, depression, and mental health concerns represent an opportunity for companies and leaders to embrace emotional intelligence in order to re-engage people at work and in life. This is further adopted by Shojaei and Siuki (2014), whose results indicate that there was a positive and significant relationship between emotional intelligence and its components with the innovative work behaviour of managers. Khalili (2016), in his paper, investigated whether leaders' emotional intelligence competencies may enhance and nurture employees' creative performance and innovative behaviour. Findings indicated that leaders' emotional intelligence competencies positively and significantly affect employees' creative performance and innovative behaviour in all three nations.

Transformational Style

Female directors bring unique perspectives, experiences, and working styles that are different from their male counterparts (Daily and Dalton, 2003; Huse and Solberg, 2006). In the present study, transformational style has been identified as one of the variables in shaping innovative women leaders. A leader with a transformational style is able to inspire followers and does so by focusing on a vision that is competent to change the structures around the organisation. In the year 2017, Kakkuri conducted research to determine the appropriateness of transformational leadership in leading creative and inno-

vative individuals. Kakkuri's results indicated that transformational leadership is an appropriate style for the leadership of creative people. In particular, intellectual stimulation and inspirational motivation should be applied when leading creative individuals and innovators. Innovative leaders with a transformational style must recognise the importance of vision and of working with subordinates in order to deliver success. This is supported by Harbi, Alarifi and Mosbah (2019), in their study, a significant positive relationship was found between followers' creativity and organisational innovation. They emphasised that organisations must have leadership qualities in order to nurture the growth of transformational leaders.

Transactional Style

When it comes to traditional kinds of leadership, one of the most familiar approaches used recently is known as transactional leadership. Yanxia, Estifo and Raza (2018), stated that transactional leadership is based on traditional, bureaucratic authority and legitimacy, where followers lead to positive work outcomes like innovative work behaviour when they act according to the leader's wishes. Prasad and Junni (2016) indicated that chief executive officer transactional leadership behaviours positively influence organisational innovation. They argued that past researchers have put forward that transactional leadership may decrease the ability and motivation of organisational members to put forward new ideas (Bass et al., 2003), which could impede the introduction of new organisational structures, processes, and practices. Chief executive officer of start-ups and entrepreneurial companies may find it helpful to know that their transformational and transactional leadership capabilities can indeed motivate their managers to work innovatively (Kang,

Solomon and Choi, 2015). Possibly as this style is more task-focused and promotes status-qua for accomplishing desired performance, which might not seem applicable for innovation.

Moderators

Self-Efficacy

For moderators, we're particularly interested in self-efficacy, which has been linked to innovative leaders. To begin, Bandura (1997) defines selfefficacy theory as a person's confidence that he or she can perform well in a given situation. Self-efficacy in leaders is described by Bobbio and Manganelli (2009) as a special type of efficacy beliefs connected to leadership behaviours, and it is concerned with individual self-efficacy beliefs to successfully complete leadership roles in groups. Strengthening leadership styles alone, according to Osman (2020), is insufficient. The rationale for this is that through increasing self-efficacy, individuals will be able to see the influence of leadership styles on employee performance. Regardless of managerial behaviour as the primary motivating reason, employee self-efficacy is critical for innovation. Self-efficacy affects a person's functional abilities as well as their odds of completing a task. Self-efficacy is one of the most essential personal qualities that affects functional abilities and the likelihood of completing tasks (Mokhber et al., 2016). Richter et al., (2012) also suggested looking at the self-efficacy interaction effect. They also argued that having a strong conviction in one's self-belief people to seek advice and help when it comes to implementing creative behaviours. In response to Richter et al., (2012), this study tries to address that gap by looking into the role of self-efficacy in the link in moulding the skills and style of innovative women's leaders.

Personal Initiative

To go on to the next moderator, the notion of personal initiative has its origins in a variety of empirical and practical settings. Personal initiative was characterised by Frese, Fay, Hilburger, Leng, and Tag (1997) as a behaviour syndrome in which an individual takes an active and self-starting approach to work objectives and tasks and persists in overcoming hurdles and failures. Proactive personality is one of the determinants of innovative behaviour, according to a research by Seibert et al., (2001). Rank, Pace, and Frese (2004) focused on possible study trends in this growing area of creativity and innovation that might benefit from the incorporation of recently discovered proactivity ideas like personal initiative and voice behaviour. Furthermore, proactive personalities are less susceptible to the environment's manipulative influences, whereas non-active personalities are more prepared to accept environmental impositions (Crant, 2000). Kickul and Gundry (2002) found that proactive personality is a strong predictor of innovative targeting processes, innovative organisational systems, and innovative boundary supports. When employees have dominant proactive personality qualities, problem-solving demand predicts creative behaviour more strongly. Task conflict, according to Giebels et al., (2016), strengthens the beneficial association between proactive personality and creative employee behaviours. In light of the abovementioned explanations, we propose personal initiative as a moderator role in shaping innovative women leaders' skills and styles.

Underpinning Theory

Shaping innovative women leaders is the key to unravelling innovation effectively. The theory of an innovative women leader connects to the

leader's skills and traits. The underlying theories that support this framework are trait theory and behaviour theory, both of which have a significant impact and respond to the need to shape innovative women leaders. Historically, the characteristics associated with good leadership have been traits and behaviours associated with masculinity. In the vast literature on leadership, gender has been ignored. In reviewing the literature on leadership, discernible patterns become evident. The leadership trait theory attempts to explain distinctive characteristics in leader effectiveness through the identification of assets and personal traits. It was assumed that potential leaders could be identified by observing and identifying personality traits. The individual had to have the leadership traits as part of their personality. However, the traits can be honed through practice, training, and experience (Goff, 2003; Salamzadeh et al., 2022). Drawing on the trait theory, many authors have anticipated that individuals vary in their potential to innovate (George and Zhou, 2001; Niu, 2014; Raja and Johns, 2010). The behavioural leadership theory attempts to explain the distinctive styles used by effective leaders through the nature of their work. Bass (1990), in defining the behavioural leadership theory, focused on two essential behavioural characteristics of a leader. The University of Michigan leadership model stated that a leader is either more job-centred or more employee-centred (Lussier and Achua, 2015). Those two behavioural elements are: genuine concern for people (employee-centred) and a strong desire to complete the task (job-centred). The theory insinuates that an effective leader is the result of many learned skills. Most importantly, the theory emphasises that a leader's capability can be learned rather than being inherent from trait theory.

Development of Research Conceptual Framework

The proposed research conceptual framework has been developed based on the research gap that has been identified and underpinning the theory, as exhibited in Figure 1. The dependent variable and independent variable are Innovative Women Leaders; the skills and styles and moderating variables are self-efficacy and personal initiatives, respectively.



Figure 1. Proposed Research Conceptual Framework

Research Hypotheses

The relationship between key variables and appropriate hypotheses are formulated as below:

Relationship between Skills and Style, Moderators and Innovative Women Leaders

Using a frame of the trait activation theory, Woods et al., (2013) argued for the longitudinal dynamic effects of personality traits on work outcomes including performance. They theorised that work demands act as contexts to activate certain traits at different job and career stages, and that over time, influences of traits may increase or decrease. In University of Michigan

Leadership Model, Job-centred behaviour defined as the extent to which the leader rises to the occasion of getting the job done. Employee-centred behaviour refers to how much a leader focuses on providing employees' human needs while building connections (Lussier and Achua, 2015).

Therefore, this leads to the construct of the hypotheses as stated below:

Hypothesis 1: Skills and styles (visionary, critical thinking, communication skills, emotional intelligence, transformational style and transactional style) has a positive significant influence on innovative women leaders.

Hypothesis 2: Self-efficacy moderates positively and significantly the relationship between skills and styles (visionary, critical thinking, communication skills, emotional intelligence, transformational style and transactional style) and innovative women leaders.

Hypothesis 3: Personal initiative moderates positively and significantly the relationship between skills and styles (visionary, critical thinking, communication skills, emotional intelligence, transformational style and transactional style) and innovative women leaders.

Research Methodology

The research methodology covers the research design, population, sample size, sampling technique, measurement, data collection method, statistical tool, and data analysis to be carried out as described below:

Research Design

Mouton (1996) has quoted that the research design serves to plan, structure and execute the research to maximise the validity of the findings. The research design is critical because it lays out the methods for gathering essential and correct data in order to produce empirical evidence in response to the study's research objectives. It employs correlational research, which collects data using quantitative research methodologies to fulfil research objectives. This is also a cross-sectional study, which means that data is collected just once during a brief period of time in order to answer the research objectives. The research design is appropriate for this study because it best matches the time, cost, and resource restrictions that must be met.

Population and Sample Size

The population may include all the individuals of a particular type or a more restricted group. Thus, the right population chosen for this study consists of women who hold positions in senior management, which includes C- Suite Level executives, director positions, or any other top management level. Sufficient sample size is essential to meet the rule of thumb (Roscoe, 1975, Sekaran, 2000), which sets forth a number of aspects to determine the effective sample size. Lastly, in multivariate research (including multiple regression analysis), the sample size should be more than a few times (preferably 10 times or more) as large as the number of variables utilised in this study. Hence, in this study, the total number of items to measure all variables is 20. Therefore, the acceptable minimum sample size required is 10 multiplied by 20 items, that is, 200 respondents.

Sample Technique and Data Collection Method

This study used a non-probability judgment, or non-random sampling method. In non-probability sampling, randomisation is immaterial in selecting a sample from the population of interest. In this research study, the sampling method chosen was convenient sampling. Etikan, Musa and Alkassim (2016) cited that convenience sampling methods place primary emphasis on generalisability (i.e., ensuring that the knowledge gained is representative of the population from which the sample was drawn). With this sampling technique, the samples must be willing to take part in this research study and must be available participants based on the criteria mentioned in the sample frame. The survey methodology in this research study included some demographics for the participants to ensure that they are indeed the samples that meet the criteria stated. As a result, the sampling frame of these studies includes women leaders in senior management, which includes C-Suite executives, director positions, or any other top management level in any industry.

Data Analysis Techniques

Data will be analysed using the Statistical Package for Social Sciences (SPSS) and, consequently, the Partial Least Squares-Structural Equation Modelling (PLS-SEM) techniques using SmartPLS 3.0 will be applied on acquired data from innovative women leaders in Malaysia. Data analysis includes descriptive analysis, factor analysis, reliability analysis, correlation analysis, and multiple regression analysis.

Discussion

The study is entirely conceptual in nature. As a consequence, the predicted outcome would be confirmation of the hypotheses stated. The goal of all three hypotheses is to demonstrate that the skills and styles (visionary, critical thinking, communication skills, emotional intelligence, transformational style, and transactional style) have a significant positive impact on the development of future innovative women leaders in Malaysia. If the hypotheses are fully supported, it signifies that visionary, critical thinking, communication skills, emotional intelligence, transformational style, and transactional style can be used to develop innovative women leaders in the future. Directly, this could provide organisations with a different set of skills, imaginative perspectives, and, importantly, structural and cultural differences that drive effective solutions. Ultimately, the study findings verifying the hypotheses will show how the correct talents and styles can mould innovative women leaders in the future, bringing fresh experiences and viewpoints that will eventually help to bring much-needed innovation into the organisation.

Research contribution

The knowledge generated in this study can be of significance to both policy-makers and business management. This research focuses on the skills and styles of innovative women leaders and might clarify whether current regulation provides enough importance for innovation, and whether organisations think that the appropriation of research and development efforts is sufficiently supported. Furthermore, by analysing the skills and styles that shape innovative female leaders, this research aims to provide recommendations to organisations on the underlying forces that drive firm dynamics in

order for firms to be more innovative in this competitive environment. Together, they are able to design suitable human capital strategies and programmes for women leaders to address the skills and styles that are important in the achievement of successful innovation through (i) leadership training and development, (ii) talent management, (iii) job crafting, and (iv) innovation culture. From the theoretical perspective, this study is able to enhance the perception of innovation management in Malaysia. This work corroborates the views of previous researchers, such as Osman et al., (2016), who acknowledged the indication that management should focus on innovation. This was affirmed by Ruiz-Jiménez and Fuentes-Fuentes, (2016) research that supports the conclusion that gender diversity in the top management team positively moderates the relationship between management capabilities and product and process innovation performance. Gender diversity in the top management team, in need of this, provides different work styles, abilities, values, points of view, and experiences that can strengthen the relationship between management capabilities and innovation performance (Ruiz-Jiménez and Fuentes-Fuentes, 2016). Moreover, Muthuveloo and Teoh (2020), in their I-TOP Strategic Agility model, emphasised People- Human Capital Development which, in this context, refers to the different types of characters and personalities that individuals possess. Identifying some key leadership skills, qualities, and styles required for success in each generic type of innovation effort. Hence, top management must fully understand the importance of matching the skills and styles of innovative women leaders with the specific tasks and roles they will face in specific situations, and this study tackles the absolutely current question of recognising the skills and styles of innovative women leaders. Secondly, this study will develop a research theoretical model using trait theory and behavioural leadership theory. Trait theory suggests that leaders have certain attributes or qualities that make them effective leaders. Thang and Anh (2015) posited from their study that the leader must exhibit inherent traits, show skills, and engender change depending on the situation that presents itself. Further consideration of innovative leadership is important to improve the body of behavioural leadership theories, which mainly stress the capability of individuals or leaders (Adjei, 2013). This paper will add to the existing body of literature on innovation towards enriching knowledge management and will generate a new dimension for further research pertaining to the relationship of innovative women leaders overall. This research expands knowledge on strategic planning in any organisation by studying these antecedents, ensuring the relationship between innovation and women's leadership is strengthened.

Conclusion

This section elaborates the limitation faced in conducting this research and the final conclusion of this research as stated below:

Limitations

There are various limitations to this study. To begin, this study's focus on innovative women leaders is limited to the demographic profile of senior management roles, as they are the organisation's decision-makers. As a result, any respondent who is ineligible will be excluded from the research. Second, while studying innovative women leaders, researchers only looked at six crucial factors. The scope, however, is not restricted to those aspects.

Research Conclusions

Innovative leaders are getting more prevalent as change has become the norm today and requires openness to continuous innovation. Many organisations around the world are ready to begin capitalising on the opportunity of a diverse workforce by implementing and re-evaluating women leadership initiatives. Women tend to have distinct qualities in their working styles, and such differences can contribute to preferable behaviours, thought and leadership. As a result, based on a review of the literature, this study attempts to address the skills and styles required to shape more innovative women leaders in Malaysia, such as visionary, critical thinking, communication skills, emotional intelligence, transformational style, and transactional style. This effort can be seen as strengthening the ongoing national innovation strategy and strategic plan in developing innovative human capital to increase the nation's economy.

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