University Female Leaders and Imposter Syndrome:
An Exploratory Case Study in Malaysia

Nouran Tarek, University of Nottingham, Malaysia
Rozilini Mary Fernandez-Chung, University of Nottingham, Malaysia

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Abstract
Imposter Syndrome (IS) affects individuals, specifically high-achieving females, by causing them to experience self-doubt and feelings of being fraudulent. This study employed an innovative visual quasi-gamification tool to conduct semi-structured interviews aiming to investigate how IS affects female leaders in higher education in Malaysia and how IS could be managed. It concluded that IS is displayed differently than what literature shows, as the female leaders seem to be perfectionists who do not experience immense self-doubt but rather a pressure to appear ideal before colleagues and seniors. This Study shows that female leaders manage the negativities of IS through self-awareness and reflection. It recommends re-examining how IS is perceived by investigating multiple cultures and solutions, specifically focusing on females and how their background affects their leadership in education and other fields.

Keywords: Imposter Syndrome, Higher Education, Female Leadership

Introduction

Impostor Syndrome (IS) has gained prominence in recent years, notably since Michelle Obama highlighted this phenomenon in her 2018 memoir. Despite its contemporary recognition, the roots of this concept trace back to the 1970s, when psychologists Clance and Imes (1978) observed that accomplished women often grapple with self-doubt and a sense of fraudulence, coining the term Impostor Syndrome.

While research on IS has been ongoing since the 1970s, it has shown inconsistencies, and there is a notable dearth of studies focusing on non-medical fields, such as education and educational leadership (Bhama et al., 2021; Freeman & Peisah, 2022; Zaed et al., 2022). Furthermore, the scholarly attention given to IS in Malaysia and Asia is generally limited, with a particular oversight of females in leadership positions (Alsaleem et al., 2021; Khan et al., 2022; Shahjalal et al., 2021).

This study endeavours to fill these gaps by examining the impact of IS on female university leaders in Malaysia and investigating how IS is managed in this context. Employing an innovative approach, the research utilises an exploratory case study methodology, incorporating visuals and quasi-gamification into semi-structured interviews. The ensuing sections will provide a background to the study, followed by a comprehensive literature review, culminating in a detailed analysis, discussion, and recommendations.

The Context and Background

Female Leadership in Malaysian Higher Education
In Malaysia, the landscape of female representation among academics in higher education, particularly in public universities, stood at 56.5% in 2020. This figure slightly decreased to 54.5% in the private sector, as reported by the Higher Education Department in Malaysia (Jabatan Pendidikan Tinggi, 2020). However, it is crucial to note that this percentage diminishes significantly as one ascends the hierarchical ladder within public universities. In 2020, data indicated that only 48.4% of female academics held the position of associate professors, and a mere 34% had reached the status of professors (Ahmad, 2021).

A recent study on female leadership in higher education in Malaysia revealed that despite the majority representation of women in academia, they encounter substantial challenges in attaining leadership roles, particularly in higher administration. The persisting patriarchal notion prevails, suggesting scepticism about women's capability to lead major institutions (Badrolhisam et al., 2022). Notably, the existing studies and data primarily concentrate on governmental and public institutions, leaving a void in our understanding of female leadership in private universities in Malaysia. This gap prompted the selection of a private university for the current study.

The University Context
The chosen university, an international campus from the United Kingdom, boasts two faculties—the Faculty of Arts and Social Sciences and the Faculty of Engineering and Sciences. Despite having 47.6% female academics out of 267, only 11 women hold significant positions such as vice-provost, head, interim, program director, and deputy dean. This aligns with the broader trend observed in Malaysia, where female representation declines as leadership positions increase in importance.

Literature Review

Imposter Syndrome Behaviours and Effects

As outlined by Clance and Imes (1978, p. 1), many accomplished women grapple with pervasive self-doubt, sensing an inadequacy for the elevated positions they occupy. These women often believe that they have somehow 'fooled' their colleagues to attain success. Imposter Syndrome (IS) manifests as an overarching sensation of being undeserving or "not good enough" for the role held. Individuals grappling with IS navigate a landscape of uncertainty in decision-making and an enduring fear of exposure as incompetent or "fake" despite their diligence and proficiency (Sherman, 2013, p. 57). Instead of attributing their success to competence and self-worth, they often ascribe it to luck or fortuitous timing, minimising their agency in their accomplishments (Clance & Imes, 1978; Mullangi & Jagsi, 2019). This dynamic gives rise to two prevalent fears associated with IS.

Firstly, the fear of failure exacerbates the stress levels experienced by individuals throughout their careers and personal lives (Crawford et al., 2016; Sherman, 2013; Wang et al., 2019). Importantly, the higher an individual's level of success and leadership, the more pronounced the stress becomes for those grappling with this phenomenon (Nihalani, 2021). Secondly, the fear of success manifests as a reluctance to embrace success due to apprehensions about potential losses, such as strained relationships with colleagues and acquaintances (Neureiter & Traut-Mattausch, 2016). These fears intricately complicate the experience of IS, exerting a discernible impact on both mental health and work behaviour.

Imposter Syndrome Effect on Mental Health and Work Behaviour

Characteristics associated with Imposter Syndrome (IS) have been linked to heightened anxiety, as evidenced by research (Bernard et al., 2002). Notably, studies indicate a higher prevalence of anxiety related to IS among females compared to males (Cusack et al., 2013), and this heightened anxiety has the potential to impact work patterns significantly.

Thompson et al. propose that IS can manifest in a cyclical pattern, initially marked by procrastination and followed by a phase of over-preparation frenzy (Thompson et al., 2000). Additionally, Bowker & Schubert's (2019) study establishes a direct correlation between IS and an individual's self-esteem, emphasising its significance as a critical factor impairing normal functioning (Neureiter & Traut-Mattausch, 2016).

Individuals grappling with IS often exhibit tendencies towards workaholism, perfectionism, and difficulties in delegating tasks (Bechtoldt, 2015). Apart from striving for perfection, IS individuals feel compelled to maintain an idealised image at all times in the workplace, focusing on how they are perceived by those around them (Fields, 2020; Hoben et al., 2022). It is noteworthy, however, that despite these negative aspects, individuals with IS consistently excel in fulfilling their work and tasks effectively (Sakulku & Alexander, 2011). The paradoxical nature of overworking oneself while still achieving tasks underscores the complexity of IS.

Given the intricate interplay between work behaviour and mental health in the context of IS, comprehending the effects of IS on females in academic leadership becomes particularly crucial.

IS characteristics could lead to anxiety (Bernard et al., 2002); a study found that more females suffer from anxiety emerging from IS than men (Cusack et al., 2013), which could affect work patterns.

Thompson et al. believe IS could lead to an initial phase of procrastination followed by a phase of over-preparation frenzy (Thompson et al., 2000). Furthermore, Bowker & Schubert (2019) conducted a study that revealed this phenomenon directly correlates with one's self-esteem (Neureiter & Traut-Mattausch, 2016). This is claimed to be one of the most important factors that impair one's ability to function normally when suffering from IS.

IS individuals experience workaholism, perfectionism tendencies, and struggles in task delegation (Bechtoldt, 2015). Besides perfectionism, IS individuals need to appear ideal all the time at work and focus on how they are perceived by those surrounding them (Fields, 2020; Hoben et al., 2022). However, despite all these negative notions, it must be explained that IS individuals fulfil their work and tasks very well (Sakulku & Alexander, 2011), even though they overwork themselves. Since work behaviour and mental health are involved in IS, an understanding of the effects of IS on females in academic leadership is important.

Imposter Syndrome in Academic Female Leadership

Academics experience IS since they believe the institution did them a favour by hiring them. They become reluctant to attend leadership meetings as they do not feel worthy of their position or future promotions (Ladonna et al., 2018). In addition, female academics could miss out on leadership opportunities due to the IS notions, as they might refuse leadership positions in higher education institutions since they feel undeserving of these offers (Arleo et al., 2021).

Delving deeper into women's experiences in academia, lecturers offer their insights through a published article that takes an anecdotal approach yet provides a unique perspective on Imposter Syndrome (IS). In an engaging narrative, Hoben et al. (2022) articulate how university lecturers often navigate a realm where they feel like they are merely playing the role of "princesses of academia," grappling with a persistent struggle to establish a sense of belonging in their academic pursuits.

Moreover, a study conducted by Arloe et al. (2021) sheds light on how IS acts as a formidable obstacle hindering women from assuming leadership roles and progressing in such positions. This corroborates the notion that female leaders are particularly susceptible to the impacts of IS (Sherman, 2013). Notwithstanding these challenges, the literature suggests the existence of management interventions aimed at addressing IS in academic settings.

Interventions and Solutions of Imposter Syndrome

Scholars have proposed various solutions and interventions to address Imposter Syndrome (IS). One organisational approach involves creating opportunities for women in leadership roles, recognising and commending their contributions, and routinely evaluating the organisational system to ensure inclusivity and fairness (Mullangi & Jagsi, 2019). Additionally, mentorship programs, strategic onboarding processes, and fostering a safe environment for individuals to share their challenges within a trusted professional network have been suggested as effective strategies (Lacey et al., 2017).

Conversely, Sherman (2013) advocates for a more personal approach, emphasising the importance of individuals engaging with mentors, actively acknowledging and monitoring their self-talk, avoiding the trap of perfectionism, and gaining a clear understanding of their strengths while working to overcome personal fears. This individualised perspective aligns with the notion that addressing IS involves a combination of self-awareness and proactive self-management. Similarly, seeking support from a therapist or confiding in a trusted person is highlighted as a viable personal strategy to cope with IS (Martinez & Forrey, 2019). The duality of organisational and personal interventions underscores the multifaceted nature of combating Imposter Syndrome.

Methodology

This section describes how the innovative visual and quasi-gamification instrument was drafted, how participants were chosen, and how the study met ethical requirements. This research is a case study employing qualitative methodology. Yin Field (2018) states that case studies explore answers involving how something happens, hence understanding the details of issues and their manifestations.

The Instrument

Interview questions in this study were based on the research questions relevant to recent literature on IS, drafted gradually, starting with simple and general questions to more specific ones (Britten, 2006). This followed a semi-structured interview methodology, where questions are designed and used to comprehend responses from participants regarding a phenomenon or situation they have experienced or have been subjected to via a relatively detailed interview (McIntosh & Morse, 2015).

The number of questions recommended for interviews is between five and ten (Creswell & Creswell, 2018). Therefore, an innovative methodology was employed; the same material used for the interview was transformed into a visual tool in a PowerPoint presentation (PPT). It was extracted from web pages about the topic, published by a website that raises awareness of mental illness and biological disease (Charleson & Gans, 2021; Cuncic & Morin, 2021). Images and infographics were designed to attract the participants' attention. Great value is gained by using visual tools to facilitate and simplify the process of interviewing participants in qualitative research since it enhances the understanding of the participants (Glegg, 2019). The interview was also interactive and similar to gamification methods, which fostered a higher level of motivation (Sailer et al., 2014). Participants viewed the displayed infographics, took a minute to process the information, and were asked to speak about how relevant it is to their lives and experiences.

Piloting the Instrument

Piloting the PPT interview resulted in positive feedback and a clear understanding of the topic and questions; only a few edits were made, such as adding animation to some slides and rewording some points. The methodology was interesting, kept participants engaged, and displayed information clearly. This aligns with the notion that piloting qualitative research aids in refining the instruments, whether questionnaires or interviews, revealing gaps and vague matters. This also contributes to maintaining ethics and research verification methods (Sampson, 2016).

The validity of qualitative research was taken under consideration is the investigator's responsiveness, including the categorisation of themes of the interview, what is omitted and what is kept, and the general decision-making process affecting the outcome of the analysis and results (Morse et al., 2016), in addition to sending the interview questions to a scholar colleague to achieve face validity (Noble & Smith, 2015). As for measuring the reliability of the results, the repeatability and frequency of common answers from participants ensure consistency, duplication, and unification of outcomes (Long & Johnson, 2000). Also, trustworthiness is of utmost importance in this research, particularly since it depends on collecting raw qualitative, in-depth data from participants relating to details, deep thoughts, and ideas. Therefore, the points noted down by Elo et al. (2014) was taken into account. This entails a non-biased, neutral and hospitable environment that allows the participant to respond freely during the interview without leading the dialogue towards certain answers, whether online or in person.

Interview Modes

There were two ways to introduce the semi-structured interview: one was virtual via the Zoom online platform, and the other was face-to-face. All potential participants were given the choice to provide them maximum comfort. The interviews were mostly conducted via Zoom; however, two interviewees opted for a face-to-face setting. It was a great chance for the author to notice the participants' body language, facial expressions, and reactions to understand what they experienced on a deeper level.

Transcription

The interviews were recorded, and the audio files were extracted and transcribed verbatim; transcription was done through a high-quality speech-to-text programme and then reviewed manually for errors. The verbatim transcription method was chosen to record all the interview details and interpret the participants' body language or facial expressions to increase reliability, validity, and trustworthiness (Easton et al., 2000; Seale & Silverman, 1997). After transcribing the data, a thematic analysis was conducted using the inductive methodology proposed by Braun and Clarke (2012). This approach allowed for the emergence of themes directly from the data, providing a comprehensive exploration of the content. The analysis delved into addressing the research questions in-depth and establishing connections with the relevant literature introduced at the study's outset, as outlined by Braun and Clarke in 2006.

The Participants' Sample Size

This study reached out to female leaders in a private university in Malaysia, and only females from the non-medical and non-STEM faculties were approached to bridge the gap in research by focusing on arts and social sciences. Participants were approached through purposive sampling via university email.

The choice of participants depended on the role they played in their department as leaders, where education leaders are the individuals who have the authority or autonomy of decision-making to influence learners' lives, outcomes, and learning environment (UNESCO, n.d.). Practically, this was applied by corresponding with female educators who lead teams or units, can shape the university, and influence students, such as programme directors, heads of schools, and directors of teaching and learning.

The headcount of the number of female leaders fitting the criteria was 28. Hence, all of them were approached. According to the literature, the average participant response rate in interviews is 36.6% (Yang et al., 2006). The response rate of this study is 42.2%, as it generated 12 participants. Finding the perfect sampling size for qualitative research is a challenging task. It could be based solely on the researcher's experience and instinct provided by the surrounding conditions of the study (DiCicco-Bloom & Crabtree, 2006). Yin (2003, 2018) does not recommend a specific number of participants in case studies specifically, and that in-depth semi-structured interviews that are designed to elicit the details of a social and emotional phenomenon would not profoundly rely upon specific sample size numbers but rather on the level of depth and saturation of data, the interviewees provide. This was conducted with ethical considerations in mind.

Ethical Considerations

The topic of IS does not hold any sensitivities in general, as it is a phenomenon that could affect any member of society and not only females (Abdelaal, 2020), even though this study focuses on females in particular. The name "imposter" could give the wrong impression to participants. Hence, explanations and infographics about the syndrome were presented. To address any sensitivities or socially awkward issues, the questions were drafted within a professional scope, graded from general to more specific, and subtly phrased not to trigger any participants, even though this point is minor in the study.

The confidentiality and anonymity of the participants were clearly stated in the information sheet and consent form. Coercion was not a concern in this study, as the interviewer did not know the participants in advance, except that they were education leaders in the university. There was also no conflict of interest, as the interviewer does not work at the university. The results provided by this study did not benefit the authors in any way other than fulfilling the investigation query. Bias was an irrelevant point, as the author is not Malaysian and is interviewing the participants as an international student; the only shared factor between the participants and the researcher is that both parties are female. Finally, this study fully complied with British Educational Research Association (BERA) guidelines (*Ethical Guidelines for Educational Research, Fourth Edition*, 2018), which ensured participants' protection while reaching valid results as displayed in the next section.

Analysis and Discussion

The results reveal how female leaders in higher education in Malaysia experience IS, what characteristics are displayed in this context, and the different solutions they use when faced with this issue.

Prominent IS Characteristics

Feeling Fraudulent and Experiencing Self-Doubt
Contrary to prevailing literature expectations, female leaders in this study did not exhibit a strong inclination towards Impostor Syndrome (IS), which encompasses doubts about one's deservingness of a leadership position and feelings of inadequacy (Clance & Imes, 1978; Sherman, 2013). The anticipated self-doubt commonly associated with IS was not a prevalent theme among the participants. In contrast to scholarly beliefs, these leaders did not express feelings of being fraudulent, fake, or incompetent. Some participants acknowledged experiencing self-doubt early in their careers, but such concerns diminished with time and

experience, a departure from the commonly held belief that seniority exacerbates IS-related stress (Nihalani, 2021).

Participant E exemplified this trend by recalling initial doubts about deserving the leadership position but noting that these doubts dissipated with two years of experience on the job. This unexpected finding challenges the conventional understanding of IS, suggesting a potential influence of the international campus setting and institutional policies on leadership perceptions.

Instead of grappling with personal doubts, female leaders in the study were notably preoccupied with how their colleagues perceived them. The need to maintain an ideal professional image was a recurrent theme, often interlinked with concerns about confidence in decision-making (Fields, 2020; Hoben et al., 2022). Participant G exemplified this by expressing anxiety about the consequences of not addressing a problem effectively, fearing it would tarnish her reputation. She emphasised the significance of colleagues' perceptions, stating, "I am very, very concerned... about how my colleagues perceive me and whether they think I'm good to work with and whether they're happy with the way the school is run."

This focus on external perceptions aligns with the experiences of well-established academics who face constant pressure to appear flawless and competent (Hoben et al., 2022). The study further revealed instances where female leaders admitted to struggling with confidence in decision-making, expressing uncertainty about their abilities compared to potential alternatives (Arleo et al., 2021; Sherman, 2013). Participant B exemplified this by suggesting that others might be more skilled in leadership roles, leading to apprehensions about their own efficacy.

In summary, the unexpected findings from this study challenge established notions about IS in female leaders. While the anticipated self-doubt associated with IS did not prominently feature in their experiences, concerns about colleagues' perceptions and the pressure to appear ideal emerged as significant factors. The emphasis on external validation and occasional doubts in decision-making point towards a nuanced manifestation of challenges faced by female leaders, distinct from traditional IS narratives.

Understanding the Fear of Failure and Success
Impostor Syndrome (IS), characterised by fears of success, fear of failure, and attributing success to luck, typically induces workplace stress (Crawford et al., 2016; Sherman, 2013; Wang et al., 2019). Surprisingly, female leaders in this study did not exhibit a pronounced fear of success; instead, the fear of failure emerged as a significant concern. Participants A, B, F, and K articulated apprehensions related to how failure might be perceived by others, highlighting stressors impacting both personal and career aspects (Crawford et al., 2016; Sherman, 2013). Notably, their fear of failure centred around external perceptions, emphasizing how colleagues view them rather than their own self-perception—a unique manifestation of IS in this context.

Furthermore, the study identified a weak tendency among participants to attribute success to luck or timing, contrary to established IS characteristics (Clance & Imes, 1978; Mullangi & Jagsi, 2019). Instead, success was often attributed to factors such as hard work, parental upbringing, and persistence, reflecting a divergence from conventional narratives.

Procrastination

Procrastination emerged as a coping mechanism employed by female leaders to manage burnout associated with overwhelming workloads. Contrary to the literature suggesting that procrastination is linked to anxiety and negative emotions (Thompson et al., 2000), participants attributed their procrastination to the sheer volume and complexity of tasks. For instance, Participant A acknowledged procrastinating when fatigued, while Participants E and J admitted procrastinating when faced with challenging tasks, opting to complete easier ones first as a strategy to alleviate stress.

Methods of Managing Imposter Syndrome

Self-Awareness and Personal Management of Imposter Syndrome

In terms of managing IS, several female leaders employed self-awareness and personal strategies. Participant D emphasized the importance of self-awareness, encouraging women to identify strengths, weaknesses, and set goals to counter IS negative emotions. This aligns with Sherman's (2013) recommendation of understanding one's strengths and weaknesses as a key strategy. Similarly, Participant J advocated for self-awareness in acknowledging problems, identifying their causes, and seeking solutions. Participant K suggested seeking professional help and engaging in hobbies as creative outlets, aligning with Martinez and Forey et al.'s (2019) emphasis on therapy and personal pursuits as remedies for IS.

Moreover, participants highlighted the significance of open communication with close associates—family, friends, and colleagues—as a means of seeking support for managing negative emotions associated with IS. Importantly, they stressed the need for females to openly discuss IS and related issues, emphasizing an individual responsibility rather than attributing it to organizational initiatives. Participant B articulated the transformative power of speaking up and sharing experiences, viewing it as a personal effort among females to foster change, contrary to the literature proposing organizational reforms (Mullangi & Jagsi, 2019).

Support Groups and Work Environment Enhancement

Regarding organisational interventions, mentoring, a safe work environment, and support groups were mentioned by participants as potential solutions. However, there was a lack of clarity on how these initiatives could be implemented. Participants acknowledged the need for trustful networks, indicating a preference for confiding in selected female colleagues and leaders, potentially forming the basis for the trust networks suggested in the literature (Lacey et al., 2017). Despite acknowledging some room for organisational improvements, participants expressed skepticism about the impact of gender equality programs and training initiatives, suggesting that these interventions may not address deep-rooted issues like IS effectively.

In conclusion, the study challenges traditional notions of IS among female leaders, revealing unique manifestations and coping mechanisms. The focus on external perceptions, the preference for personal strategies, and the emphasis on individual responsibility in managing IS shed light on a nuanced experience that diverges from mainstream literature. The study also highlights the importance of open communication and trustful networks among female leaders, providing insights for both individual and organisational interventions to address IS in the workplace.

Conclusion

This study investigated how IS affects female higher education leaders in Malaysia. It explores IS manifestations and management solutions in a private higher education institution in Malaysia. The study employed an innovative visual quasi-gamification method to facilitate and simplify the interviewing process with participants, which provided an appropriate environment to discuss the phenomenon in depth. Moreover, procrastination is regarded as an issue, and a lower level of self-confidence in decision-making exists, which impedes leadership.

This research concludes that IS manifests uniquely in the context of females leading higher education in Malaysia. Participants do not suffer from significant self-doubt notions or perceive themselves as fraudulent. However, they experience an immense need to appear ideal in the eyes of their colleagues and those who surround them, in addition to a need to perfect many work aspects.

As for the management of IS, female leaders believe that individual self-awareness and reflection are the solutions to the problem. According to the participants, awareness needs to be raised, and leaders need to educate their subordinates and colleagues about female leadership issues such as IS.

Recommendations

The outcomes of this study do not agree with many of the points in the literature, proving a need for further investigation of the phenomenon in different cultures and regions. What emerges from Europe, the US and the West does not necessarily apply and fit the context in other parts of the world due to cultural variations and norms. Hence, more studies focusing on Malaysian and Asian contexts are needed.

Moreover, this study recommends that higher education institutions in Malaysia and Asian countries raise awareness about IS as a female leadership issue. There is a need for IS empirical research in this context that could build the fundamental theoretical basis of awareness campaigns and programmes. These campaigns could be integrated into higher education as part of onboarding strategies. Mentoring, support groups, and professional therapy services for higher education leaders, especially females, are heavily required. These campaigns could also include undergraduate and postgraduate students as preventive measures to minimise the occurrence of IS at an early stage of female leaders' careers.

Furthermore, innovative visual aids and quasi-gamification methods have been very beneficial during the interviews. Thus, finding research methods outside the box is recommended to ease the interview process, specifically when tackling complex topics involving highly personal issues.

Limitations

The lack of literature about IS in Malaysia and Asia mentioned previously is considered a limitation, as it does not allow contextual comparison. Moreover, since it is a small-scope case study, the number of participants does not represent all Malaysia or all female leaders in Malaysia. However, it provides a preliminary indication of how IS affects female education leaders. Another limitation is the university, as it is a private international campus and not a

public one representing many of the universities in Malaysia. Nevertheless, the female leaders are Malaysians or females working and living in Malaysia under Malaysian law; hence, they are affected daily by the dynamics and work culture of the country.

Finally, the findings of this study are limited since an interpretation from a psychological perspective could further clarify many issues. Hence, a professional psychological understanding could have strengthened the results. In addition, the study focuses on female participants only and does not include any comparison to male leaders and how they experience IS.

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Contact emails: Tarek.nouran.790@gmail.com
Rozilini.Fernandez-Chung@nottingham.edu.my