

Informal Learning Strategies among Academic Leadership in Malaysian Research Universities

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ABSTRACT

Informal learning is recognised as part of the learning spectrum and considered complementary to formal and non-formal learning. A study on informal learning is widely discussed in the workplace context and has reported as a dominant learning which contributes to the employee's performance. In the context of academic leadership, leaders face challenges in fulfilling their responsibilities because they receive insufficient exposure and preparation before their appointment. The purpose of this study is to explore the informal learning strategies practised among academic leaders and identify the advantages towards academic leadership development. This study employed a qualitative case study design, with semi-structured interviews and document analysis as data collection methods. A total of 12 participants from five research universities in Malaysia were involved in this study and were selected using purposive sampling. Thematic analysis technique was used to analyse the data using the ATLAS.ti 9 computer software for Windows. Findings from the study revealed that academic leaders are actively engaging in learning through experiences, observation, social interaction and discussion as their significant informal learning strategies in leadership practice. These informal learning strategies provide advantages for academic leaders, as they serve as a medium for learning leadership, self-development, and mindset development. Therefore, these findings highlight the significance of informal learning as a strategic mechanism in strengthening and developing academic leadership in Malaysian Research Universities.

Keywords: Informal Learning Strategies, Informal Learning Advantages, Academic Leadership, Academic Leadership Development, Malaysian Research Universities,

INTRODUCTION

Learning is defined as a continuous process of collecting information that occurs throughout the lives of human beings (Mohd Azhar, 2012; Normala, 2023). An individual may experience the learning process from childhood, and even from prenatal stages. Learning is also considered a process that enables individuals to acquire knowledge and skills to adapt to their environment (Tang & Othman, 2023). Informal learning is one of the three learning spectrums, along with formal and non-formal learning (Ahmad Johari, 2010), and these spectrums are complementary. According to Leslie et al. (1998) and Ellinger & Cseh (2007), studies on informal learning are frequently discussed in workplace settings as they are reported to have a positive impact on organisations and employees' performance. Informal learning enables employees to enhance their knowledge and skills, thereby

improving their productivity. Previous study also stated that employees spent more time engaged in informal learning at a workplace (Conlon, 2004; De Grip, 2024; Van Der Heijden et al., 2009)

In the academic leadership context, previous studies have reported that academic leaders are facing challenges in their leadership role, as they have little exposure to formal training and professional development as preparation for their leadership position (Raines & Alberg, 2003). The academic leadership role is also complex and demanding, which basically relates to the higher level of stress and tension (Brown & Moshavi, 2002; Mohd Azraai, 2016; Muhammad Hasmi & Nasina, 2021). Moreover, academic leaders in higher education institutions are appointed to leadership positions based on their professional identities, work satisfaction, and achievements in their professional skills, which creates challenges for their leadership, as the knowledge and skills in management are insufficient to produce effective leaders (Mohd Azraai, 2016).

Previous studies have suggested that future research on academic leadership should explore how they address challenges in the higher education context. (Day et al., 2014) suggested that a study should be conducted on daily leadership activities that contribute to leadership development, while Muhammad Hasmi & Nasina (2021) recommended studying academic leadership in public universities in Malaysia. Therefore, this study aims to explore the informal learning strategies practised among academic leadership in Malaysian Research Universities and their advantages for academic leaders.

LITERATURE REVIEW

Informal Learning

Informal learning is most often defined by comparison with formal learning. (Clarke, 2004) stated that there is no mutual definition of informal learning that has emerged because the authors considered informal learning based on their perspectives. Even though informal learning has been defined in various ways, there is still no clear and common definition for the term and concept of informal learning received (Lecat et al., 2019; Manuti et al., 2015). This article describes informal learning as a form of lifelong learning that is basically unplanned, unstructured, experiential, flexible, and embedded in an individual's daily routine. Informal learning is usually self-directed by the learners (Marsick & Watkins, 2001) and influenced by other people's experiences (Fadilah et al., 2015).

Workplace learning can occur in both formal and informal learning (Tynjala, 2008). However, most of the learning occurs informally in nature (Lecat et al., 2019). In this context, informal learning is considered complementary to and integrated with formal learning in workplace learning, but it could have a greater impact because it occurs frequently in employees' daily routines. Previous literature reported that informal learning makes a significant contribution to employee knowledge and expertise (Bednall et al., 2014). Informal learning in the workplace may occur through various medium and Conlon (2004) stated that interaction with more experienced colleagues has a greater impact on employee performance. Fadilah et al. (2015) In their study, they revealed that informal learning at the workplace, through peers and colleagues, occurs through on-the-job learning, sharing experiences, observation, and interaction during training or seminars.

According to Bednall et al. (2014), employees' engagement in informal learning activities in the workplace contributes to their work performance and long-term career development. Cunningham & Hillier (2013) emphasised the importance of peers and colleagues in informal learning at the workplace, in which they are considered as valuable support for the learning process that provides feedback and opportunity for improvement in job performance. Despite this, informal learning is not limited to learning from peers and colleagues; it encompasses a range of activities practised by employees. From the literature, Jeong et al. (2018) identified the activities of informal learning which involve doing new task, working with others, observing others, trial and error, reading/ researching/ scanning professional magazines and journals, surfing and searching the web, reflection on action, mentoring, job rotation, networking, asking questions, sharing materials and resources, sharing and reflecting on other's practices and experiences, trying out new ideas and techniques, asking for feedback and evaluating finding from scientific research.

Academic Leadership

Nowadays, leadership at the tertiary level is widely discussed (Hassan et al., 2018) and it is reported to play a significant role in increasing the quality of higher education (Cetin & Kinik, 2015). The Ministry of Higher Education defines academic leadership as scholars who are experts in their field and engage in impactful academic pursuits (*Strengthening Academic, Career Pathways and Leadership Development*, 2017). Academic leaders are responsible for achieving ministry expectations, encouraged to obtain academic status and recognition, and to contribute to society. The definition of academic leaders among researchers is based on their context of study, and this has been provided by Muhammad Hasmi & Nasina (2021).

Academic leadership in Malaysia is facing challenges in leading its institutions. The challenges may involve managing department staff, motivating them, developing their competencies, improving job performance, and the demand to maximise their contributions to the institution (Mohd Azraai, 2016). Therefore, academic leaders must prepare themselves with adequate leadership skills to become effective academic leaders in their universities (Thrash, 2009). Academic leaders should possess the ability to be role models for their followers, having the capabilities to lead their faculties and critical thinking skill (Samsudin et al., 2016) particularly in a complex decision-making process. Therefore, academic leaders are encouraged to adapt the appropriate leadership style which suits their followers (Nunn, 2008), this is important in the context of academic leadership to enhance institutional performance.

Theoretical Foundation of the Study

This study aims to explore the informal learning strategies among academic leaders and the advantages towards academic leadership development. In understanding informal learning and academic leadership development, this study anchors on the integration of three theoretical perspectives. David A. Kolb, through Experiential Learning Theory (ELT) describes how experience is transformed into learning and knowledge (D. A. Kolb, 2014). This theory emphasises that learning occurs through a concrete experience followed by reflective observation, abstract conceptualisation, and active experimentation (A. Y. Kolb & Kolb, 2017). In the academic leadership context, challenges encountered by academic leaders, such as conflict management and human resource issues, are considered as concrete experiences that trigger the reflective process and thus construct the leadership understanding.

The second theory for this study is Social Learning Theory (SLT) by Albert Bandura 1977 which complements the ELT theory. Social Learning Theory emphasises that learning does not occur through experience alone, but it also involves observation, social interaction and behavioural modelling (Md Abdul Aziz, 2023). This theoretical perspective aligns with the view that academic leadership develops not only through individual experience but also through dialogue with colleagues, observation of senior leaders' styles, and participation in the professional community.

Transformational- transactional leadership theory has become one of the most widely examined and prominent frameworks in leadership research (Pearce, 2007). Transformational leadership involves leader-follower interaction, focusing on change, inspiration, and individual development to benefit the entire organisation, while transactional leadership emphasises the mutual interaction between leaders and followers to meet their needs (Judge & Piccol, 2004). In the context of academic leadership, informal learning experiences among academic leaders enable them to facilitate the transition from transactional toward transformational leadership capabilities. Figure 1. illustrates the proposed conceptual model for this study.

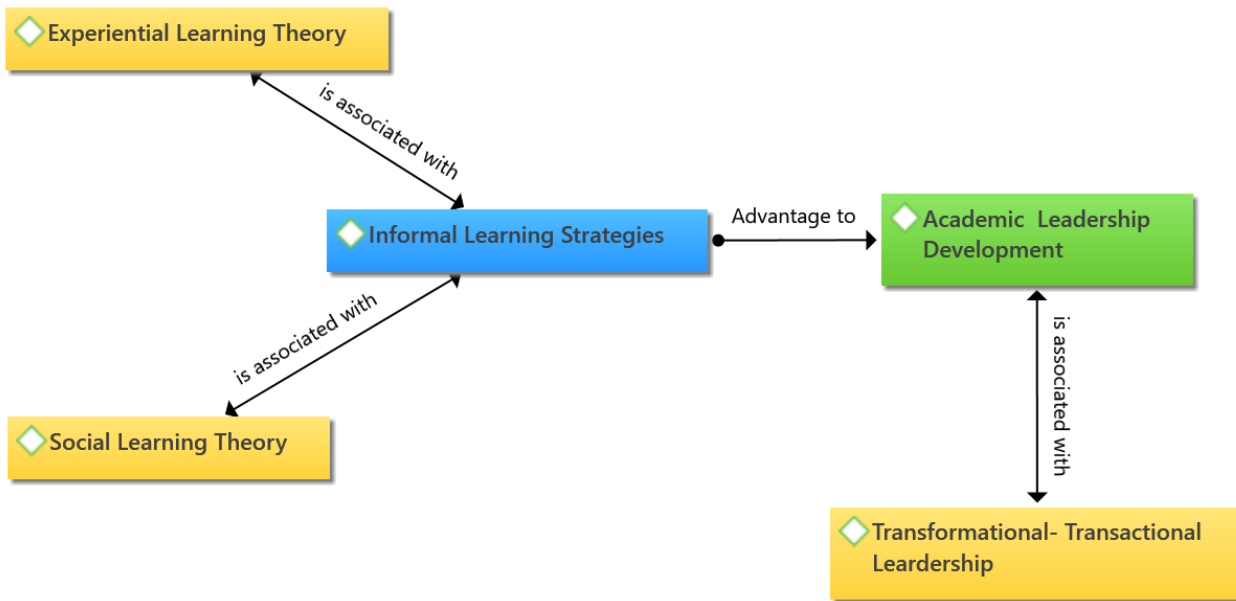


Figure 1 Proposed Conceptual Model of Informal Learning in Academic Leadership Development

METHODOLOGY

Research Design

This paper focuses on the strategies and activities of informal learning and their advantages for academic leaders at five research universities in Malaysia. This study applied a qualitative case study research design to explore the informal learning strategies practised by academic leaders. The purpose of conducting qualitative research is that the researcher needs a complex and detailed understanding of the issue (Creswell & Poth, 2018). By conducting a case study, the researcher can collect rich data (Salkind, 2022) and gain a better understanding of participants' experiences and behaviours.

Participant

This study was conducted among academic leaders in five research universities in Malaysia. The researcher used purposive sampling, a widely used technique in qualitative research, to identify participants based on specified criteria. A total of 12 academic leaders who hold formal academic leadership positions at the faculty level and institutional level, with a minimum of two years of experience in academic leadership, and who have faced a complex leadership situation were involved in this study. Participants in this study were identified by participant codes, such as PM1 (participant, male, number of interview) or PF5 (participant, female, number of interview), to ensure their anonymity.

Data Collection

Data collection for a qualitative study basically involves a few methods: interview, survey, observation and document analysis (Lim, 2025). This study used semi-structured interviews and document analysis as data collection methods to generate the intended information. An interview is an active interaction between two or more people, and it is considered an essential part of the case study evidence. A total of 12 participants were interviewed, comprising Heads of Departments, Deans and Deputy Deans, Directors and Deputy Directors, and Vice-Chancellors of the universities. The interview was conducted via face-to-face and online platforms, depending on the participants' comfort. Document analysis is used in this study to supplement and enrich the information obtained from the interview (Normala, 2023). Document analysis is also used in qualitative methods as a triangulation approach, enabling the researcher to reduce the impact of potential biases in the study (Bowen, 2009). Conducting document analysis enables the researcher to represent meaning, enhance understanding and determine perspectives relevant to the research. This study considered several published books on academic leadership to support and triangulate the interview findings regarding informal learning strategies, thereby

enhancing the study's validity and reliability. Data saturation for this study was reached when the researcher received no new or additional responses to the interview questions. Throughout the interview process, the researcher assessed the consistency of the information and the relevance of each unit analysis, and the data were considered saturated when participants' responses showed a similar pattern, and no new themes emerged.

Data Analysis

Data analysis in qualitative research is conducted to derive meaning from the data set by systematically organising and presenting the information. To provide clear information and meaning of the data, a clear description of the analysis process is required (Othman, 2017). Qualitative data analysis may be challenging because the data in a qualitative study are dynamic and thus require greater persistence and patience from the researcher (Normala, 2023). In processing the interview data, the researcher needs to convert the audio into a written transcript. According to Mohd Azhar (2012), the researcher needs to repeatedly check the audio recording data with the transcript to ensure the accuracy of the transferred data. Interview transcripts were submitted to participants for review and validation before proceeding with further analysis.

The data for this study were analysed using computer software, ATLAS.ti 9 for Windows, and manual analysis of documents. This study involves both deductive and inductive coding processes. The researcher first determines the initial code based on the interview questions and examines the emergence of codes while reviewing the transcripts. Coding begins with identifying initial codes, and then the researcher groups excerpts from transcripts into the relevant code. The relationship between codes and themes was identified in the Networks manager in ATLAS.ti 9 by reviewing the codes and themes developed and by sorting and relating the codes to relevant themes. The code refinement process involved repeatedly verifying the codes and themes against relevant excerpts from the transcripts to ensure consistency with participants' responses.

Thematic analysis technique was used in this study to understand and describe the informal learning strategies practised among academic leaders. Thematic analysis involves the process of careful reading, focused re-reading and review of the data (Bowen, 2009; Fereday & Muir-Cochrane, 2006) to describe, analyse, identify, organise, and report the themes that emerged in the data set (David Sunday, 2020). This process requires the researcher to examine the selected data in depth before performing coding and constructing the category based on the characteristics of the data (Bowen, 2009).

To ensure the validity and reliability of the study, the research was conducted with audio verification, carefully cross-checking every written transcript against the original audio recording of the interview to correct possible errors during the data transfer process. The member checking technique was also applied, in which the researcher shared the interview transcripts with participants to confirm the accuracy of their responses. The triangulation method is used to evaluate and compare interview data with relevant academic leadership documents.

Semi-structured interviews for this study were conducted in dual language, English and Malay, and therefore the data were analysed in their original language. For this article, quotations are presented in the original language and followed by English translation. Quotations that were originally expressed and transcribed in Malay were translated into English using AI-assisted translation (ChatGPT). The purpose of using ChatGPT is solely as a language support tool that helps improve linguistic clarity. However, the researcher carefully reviewed and verified all the translated quotations provided in this article to ensure accuracy and maintain the original meaning of the participants' responses to the interview.

FINDINGS

This paper identifies four major themes of informal learning strategies among academic leaders, as identified in the study: learning through experience, observation, social interaction, and discussion. This study also identified three advantages of informal learning for academic leaders: self-development, medium to learn leadership and mindset development. Figure 2 shows the informal learning strategies and their advantages towards academic leaders.

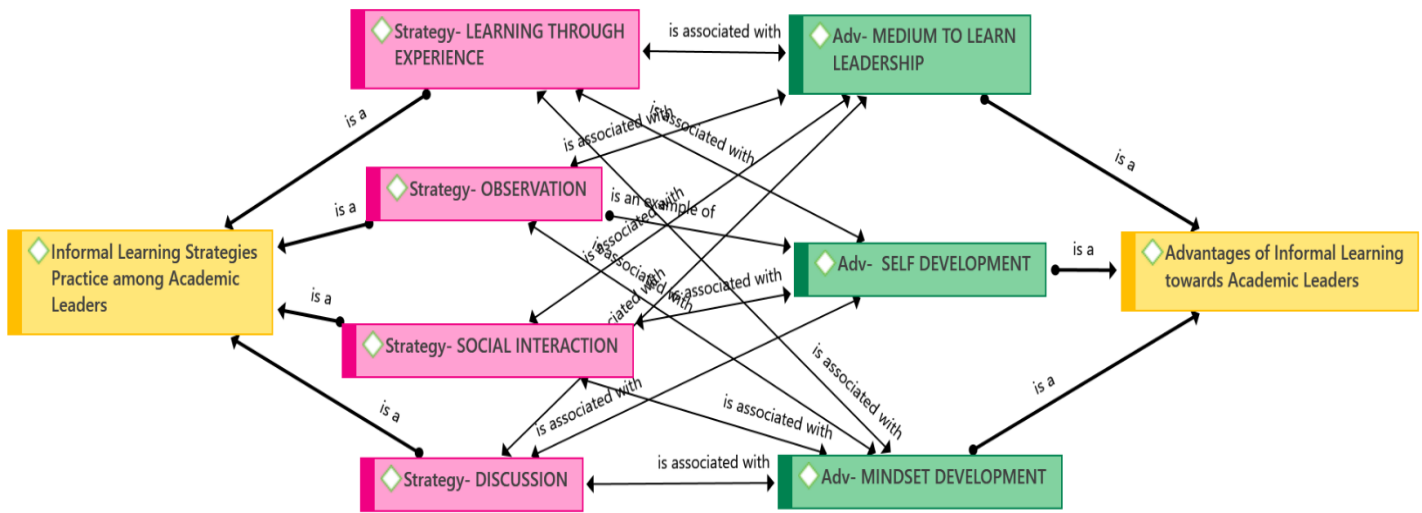


Figure 2. Informal Learning Strategies and Its Advantages towards Academic Leaders

Informal Learning Strategies among Academic Leadership

Learning through Experience

Reflection on Experience in Developing Academic Leadership Practice

Academic leaders consistently highlighted that they are actively engaging in learning through experience. Learning through experience is an informal learning strategy that occurs through direct involvement in real-life situations. The situation enables academic leaders to acquire knowledge, skills and leadership understanding without relying on formal training. Learning through experience, which emphasises active participation and reflection on learning, is considered an important aspect of academic leadership, as it exposes academic leaders to the real challenges of their leadership experiences. An academic leader, PM6, reported that his experiences gathered while studying abroad contribute to his leadership development in real-life situations. Experience leading a student community exposed academic leaders to the real challenges of leadership.

“Makna semua pengalaman ini... kan pengalaman- pengalaman ini mengajar kita.... dia jadi.... secara tidak langsung... kat sana ada elements of leadership, walaupun tidak directly itu academic, tapi di sana ada elemen- elemen leadership di mana pengalaman itu kita boleh gunakan apabila kita... aaaa... menjadi pemimpin akademik kan kita... boleh ooo... macam ni nak organize benda ni kena buat macam ni...macam ni...macam ni... so, itu kaitan di antara secara itu lah, itu baru pengalaman dekat UK lah dengan orang lain ni banyak lagi kan...”- PM6

(The meaning of all these experiences... these experiences teach us. They become, indirectly, a source of learning. Within them, there are elements of leadership, even though they are not directly academic in nature. However, those leadership elements can be applied when we become academic leaders. We can reflect and think, ‘Oh, to organize this matter, it should be done this way... and this way... and this way.’ So that is the connection. That example is just from my experience in the UK; there are many other experiences as well.)- PM6

Academic Leader Practice Lifelong Learning through Experience

As an academic leader, PM7 illustrates the importance of learning through experience by treating his three years of leading a unit at a research university as equivalent to obtaining a ‘PhD’. This demonstrates that accumulated experiences are a significant learning process for academic leaders. Experiences also serve as a medium for academic leaders to develop leadership skills and thus gain valuable knowledge and understanding of the role and function of leadership in real contexts. Academic leaders also emphasise that learning through experiences enables the development of competencies.

“Ha, itu di Pejabat A selama tiga tahun. Saya masuk tanpa ada pengalaman, bila saya keluar, saya kata, ah ini nampak, eh, you boleh quote ni.... saya keluar daripada Pejabat A, saya kata, saya dapat satu PHD daripada

pengalaman saya di Pejabat A. Ha, saya bagitahu dia orang, tiga tahun saya di sana, lepas tu saya jadi TNCP kan. Saya kata di sana tiga tahun saya belajar... nampak tak semua perkataan saya belajar, belajar, belajar, belajar... ha, dan saya cukup takut nak sebut saya mengajar, ha, saya takut. Sebab tu kalau saya cakap pun saya kata saya share, saya share, saya share. Saya tak ada niat nak mengajar sebab bagi saya itulah pengalaman saya kan"- PM7

(Yes, that was at Office A for three years. I entered without any experience, and when I left, I said, ah, now I see... you may quote this... when I left Office A, I said that I had obtained a PhD from my experience there. I told them that during my three years there, before I became Deputy Vice-Chancellor, I learned so much... do you notice that I keep saying learned, learned, learned, learned... and I am quite afraid to say that I teach. I am hesitant. That is why, even when I speak, I prefer to say that I share, I share, I share. I have no intention of claiming that I teach, because for me, it is all based on my own experience.)- PM7

Results from document analysis also support the findings from semi-structured interviews, in which the results indicate that academic leaders are engaged in learning through experience, and this provides academic leaders with valuable information and may be the guidance for their upcoming appointment.

Overall, learning through experience enables academic leaders to develop their leadership competencies through direct involvement in real situations in institutions. Leadership development among academic leaders occurs through the process of interpreting and evaluating real-life experiences in a work-based context. Findings of this study show that experiences in managing previous community and administrative challenges provide an opportunity for context-based learning. These experiences were not regarded as routine occurrences but as a source of significant learning through critical reflection on past events, decision-making processes, and strategies employed in managing situations. This reflection provides academic leaders with an in-depth understanding of leadership practice and challenges. The process of experiencing, evaluating and applying learning into new situations enables continuous leadership development, which is embedded in the daily work routine. This illustrates that experiential learning among academic leaders in higher education is a significant mechanism for strengthening and developing academic leadership competencies.

Observation

Observation on Leadership Style as Social Learning

Observation is an informal learning process in which academic leaders learn by watching how others work in their roles, making decisions, and handling their leadership responsibilities in real contexts. The majority of academic leaders report observing people in their surroundings. Observation enables academic leaders to learn and adapt strategies, actions and practices into their leadership roles. Academic leaders also discover how to manage their institutions, set directions and build external relationships mostly through real leadership practice. According to PF8, observation enables academic leaders to learn and follow best practices in their leadership.

"First saya observe the informal learning take place when I observe especially in the meeting, bagaimana this leader make a decision, how fair is this leader, how, how well is the leader is decide on something. Itu... itu selalunya saya observe, saya observe benda tu, I observe his or her style, I look into apa yang bagus, apa yang saya rasa I can follow I can benchmark again, that's part of my informal learning lah based on observation, based on observation and I follow lah, if I thought that the person really really make me can learn new thing in leadership saya akan follow the way that they handle the meeting and sometimes I replicate it also in my own practice as a leader that is the first stage lah yang saya buat"- PF8

(First, I observe how informal learning takes place, especially during meetings, how a leader makes decisions, how fair the leader is, and how well the leader decides on certain matters. That is what I usually observe. I observe those aspects; I observe his or her style. I look at what is good and what I feel I can follow or benchmark. That is part of my informal learning, based on observation. If I think that the person truly enables me to learn something new about leadership, I will follow the way they handle meetings, and sometimes I replicate it in my own practice as a leader. That is the first stage of what I do.)- PF8

Benchmarking through Global Observation

Observation is not limited to the surroundings; it extends across institutions. Academic leaders observe by examining and comparing how other leaders in other institutions operate and perform in their institutions. Observation provides academic leaders with the opportunity to analyse the strategies, standards and approaches applied by other leaders in their institutions. PM6 further emphasises that the leadership capabilities of academic leaders are often developed through observing the practices of previous and senior leaders.

“So benda-benda macam tu kan merupakan bagi saya satu informal learning satu kaedah pembelajaran sebagai pemimpin ni yang sangat berguna kita kena observe what others has done kita kena tahu kita kat mana kita RU1 kita kat RU1 kita RU1 as compared tu katalah kita nak benchmark kita dengan mana kita nak macam Manchester ke Cambridge ke Oxford ke Scandinavia ke Harvard ke China Beijing University ke US ke Australia ke kita nak benchmark kita kat mana university mana yang kita nak..”- PM6

(So, things like that, for me, constitute informal learning, an approach to learning as a leader that is very useful. We need to observe what others have done; we need to know where we stand. If we are a research university (RU1), then as RU1, who are we benchmarking ourselves against? Are we benchmarking ourselves against universities such as University of Manchester, University of Cambridge, University of Oxford, institutions in Scandinavia, Harvard University or universities in the US or Australia? We must be clear about which university we want to benchmark ourselves against.)- PM6

Based on the analysis of the documents, the majority of academic leaders are reported to practice observation as part of their informal learning strategies. Thus, this result supports the findings from the interview and demonstrates that observation is a significant strategy of informal learning among academic leadership. Academic leaders are enabled to continuously learn leadership practice through observation by analysing, benchmarking and adapting the best practice to their context.

Observation significantly contributes to the development of academic leadership when academic leaders learn from observing the leadership styles and practices of other leaders and benchmark their institution against international standards. Based on the findings of the study, academic leaders actively conduct observation through evaluating decision-making processes and the degree of fairness of the decision before adapting the practice in their context. On the other hand, observation of international institutions enables academic leaders to make a strategic comparison and thus set the standard and future directions of their institutions. The observation process involves critical assessment and contextual adaptation, which contribute to strengthening capability in decision-making, a mature leadership style and increasing the institution's competitiveness. Thus, observation plays an important role in strategic social learning that continuously supports academic leadership development.

Social Interaction

Spontaneous Learning through Daily Social Interaction

Social interaction as a form of informal learning refers to learning which occurs naturally through casual conversations, spontaneous and daily social engagement, without involving any structured or formal training. The majority of participants agree that they engage in social interaction in their daily activities. In the context of academic leadership, social interactions enable academic leaders to obtain practical knowledge and information relevant to their context spontaneously through conversations with peers or colleagues. Informal learning through social interaction is embedded in daily routines in personal and workplace settings. PF5 highlights that daily conversation within an office setting provides academic leaders with continuous knowledge exchange, the development of professional relationships and encourages mutual understanding in the working environment.

“Besides that, you know, sometimes you meet people, you bump into people, colleagues, or you just happen to be chatting, talking on the phone or WhatsApping with a colleague or emailing with a colleague... and you... informal learning can also happen through there. And it happens in the office among colleagues who work in the

same team or who work in the same office, people in your team, and informal learning occurs there as well”- PF5

(Besides that, sometimes you meet people, you bump into colleagues, or you happen to be chatting, talking on the phone, WhatsApping, or emailing with a colleague, and informal learning can also take place in those moments. It happens in the office among colleagues who work in the same team or within the same unit. Informal learning occurs naturally in those interactions as well.)- PF5

Social Interaction in Non-formal Context

Informal learning through social interaction also occurs in non-formal contexts, for example, during a non-formal training session. PM1 states that academic leaders are involved in casual conversation and discussions with peers or fellow participants while attending training. These engagements enable academic leaders to acquire knowledge, particularly regarding managing staff, developing new models, and addressing challenges in real leadership practice.

“Tapi dalam masa informal activity tu you banyak nanti you akan bergaul dengan orang lain, kat situ you belajar, banyak perkara- perkara informal you belajar kalau saya belajar sebagai contoh kalau saya pergi training semua tu.. semua duduk dalam pengurusan akademik kan, banyak belajar dengan diaorang.. dia kata staff dia macam ni, staff dia macam ni.... macam mana dia buat.. dia create new model dia create ni...ummm... saya boleh kata banyak belajar daripada sekeliling daripada depan la. bukan lah saya kata yang depan tu tak bagus, kadang-kadang tu ilmu dia hampir sama dengan kita kan.. dia.. dia menyampai dengan sebaik- baiknya kan... tapi kita pernah dengar mungkin kita pernah belajar.. bagus la untuk refresh”- PM1

(But during those informal activities, you interact a lot with other people, and that is where you learn. There are many informal things that you learn. For example, when I attend training programs, especially those attended by people in academic management, I learn a great deal from them. They share about their staff, how their staff behave, how they handle certain situations, how they create new models, and how they implement new initiatives. I can say that I learn a lot from the people around me, from peers rather than only from the front (the trainer). It is not that the person in front is not good, sometimes their knowledge is very similar to ours, and they deliver it very well—but perhaps we have heard it before or learned it previously. It is still good as a refresher.)- PM1

Findings from document analysis also indicate that academic leaders are actively involved in social interactions, as these interactions are naturally embedded in individuals’ daily routines. Therefore, social interactions are assumed to be a significant informal learning strategy among academic leaders. Social interactions provide exchange of ideas and knowledge, experiences, reflection and contextual understanding regarding academic leadership practice.

Spontaneous social interactions in daily life and during non-formal events play a significant role in leadership development among academic leaders. The findings indicate that casual conversation and meetings, as well as exchanging ideas and spontaneous communication through messaging or other channels, serve as important opportunities for sharing experiences, obtaining new perspectives, and understanding the issues in their institutions. Through these interactions, academic leaders are not restricted to acquiring knowledge of leadership practice; they also develop interpersonal communication skills. Academic leaders may increase their sensitivity, empathy and understanding towards the dynamic needs of the staff. Informal learning through social interaction also strengthens professional networks and interpersonal trust in the team, which is considered a crucial aspect in effective academic leadership practice. Therefore, social interaction serves as a significant informal learning mechanism in continuous academic leadership development in higher education institutions.

Discussion

Collaborative Learning in Problem-Solving

Discussion is an informal learning strategy in which most academic leaders are involved. It is a learning process that occurs through the exchange of ideas, perspectives and experiences among individuals. In the context of academic leadership, discussion takes place in a setting where leaders learn by listening to others and reflecting on others' viewpoints to reach a shared understanding of a related issue. Discussion is considered a medium for acquiring input from others and an opportunity for members to be heard and appreciated by respecting colleagues' perspectives. According to PF10, the discussion also involves consulting with and referring to relevant parties to clarify issues, exchange information, and explore potential solutions. This process provides academic leaders with the opportunity to learn about the procedures of the institution and to respect different viewpoints. Discussion also serves as a platform for academic leaders to develop their capabilities in collaborative problem-solving, particularly in addressing complex human resources issues within their institutions.

“Ya, selalunya saya akan buat, aaa..., apa ni, aaa..., perbincangan lah ataupun rujukkan, ya aaa... ke pihak yang berkaitan, contohnya kalau ianya berkaitan dengan promotion, kenaikan pangkat dan sebagainya itu dengan human resource, sumber manusia. Ya, dan pada masa yang sama juga saya akan, aaa..., kalau di pusat pengajian ini kita ada satu jawatankuasa yang memang lihat tentang aaaa... kerjaya aaa..., staff akademik di sini, aa..., contohnya kerjaya guru bahasa tadi, jadi, mereka akan aaa..., bagi cadangan ini apakah cadangan yang mereka hendak lakukan sebagai, aa..., guru bahasa, dan, aaa..., saya akan bawa cadangan ini dan berbincang dengan human resource, sumber manusia dan cari jalan tengah lah untuk selesaikan masalah ini”- PF10

(Yes, usually I will initiate a discussion or make a referral to the relevant party. For example, if the matter concerns promotion or career advancement, I will refer it to Human Resource. At the same time, at the faculty level we have a committee that specifically oversees the career development of academic staff. For instance, in the case of language teachers, the committee will propose recommendations on what actions should be taken regarding their career pathway. I will then bring these proposals forward, discuss them with Human Resource, and work towards finding a middle ground to resolve the issue.)- PF10

PF12 also shared her experience in dealing with challenging situations where there is limited information and knowledge regarding the specific issue. The COVID-19 pandemic has brought new changes in academic practice. For example, the transition of physical to online classes becomes a challenge for academics to adapt to the new approach. Academic leaders were struggling to manage attendance in online sessions with limited exposure to the application, so they initiated an informal learning strategy by discussing it with colleagues and team members. Through discussion, academic leaders can generate a possible resolution to the issues. Instead of providing a solution, informal learning through discussion also facilitates the task delegation process by assigning responsibilities to team members.

“Contohnya macam mana nak manage online session, macam mana nak pastikan kedatangan, semua-semua tu a lot of things yang saya tak tahu. So saya berbincang untuk memikirkan kaedah yang terbaik ataupun kaedah alternatif yang possible daripada awal tu untuk menjayakan program-program ni. So bukannya saya yang kena belajar macam mana nak buat account apa YouTube ke apa semua tu. Tapi kita bincang dan kemudian kita assign. Okay siapa buat apa and then kita jalanlah betul-betul tengok and then from there we learn more macam mana nak baiki”- PF12

(For example, how to manage an online session, how to ensure attendance, there were so many things that I did not know. So I discussed with others to think of the best method or possible alternative approaches from the very beginning to make these programs successful. It wasn't that I personally had to learn how to create a YouTube account or all those technical things. Instead, we discussed it and then assigned tasks, okay, who will do what and then we implemented it properly, monitored the process, and from there we learned more about how to improve.)- PF12

Document analysis supports the main findings from the interview, which academic leaders practice discussion as informal learning in their academic leadership. Through discussion, academic leaders gain new ideas and better understand their institutions' needs from various perspectives.

Discussion, as an informal learning strategy, particularly through collaborative problem-solving, contributes significantly to academic leadership development. This enables academic leaders to develop their competencies through dialogue, collaborative planning, and collective implementation. The findings show that academic leaders initiate discussions instead of acting individually when facing challenges in their tasks. This action provides an opportunity for academic leaders to collaboratively identify the most appropriate approaches and alternatives to the issues and to delegate the task to the team members. This process contributes to the development of inclusive decision-making skills, enhances coordination and delegation capabilities, and fosters a teamwork culture in their institutions. Furthermore, reflection on implementation allows for continuous improvement, which strengthens institutional effectiveness, and thus discussion through collaborative problem-solving is important for academic leadership development.

Advantages of Informal Learning towards Academic Leadership

Medium to Learn Leadership

Informal learning provides direct learning embedded in the daily routine of an individual. It's a learning process based on daily experiences, interactions with colleagues, and the challenges of real leadership practice. PF5 states that academic leaders learn to understand leadership responsibilities, giving instruction to subordinates and ensuring the achievement of institutional goals through engagement in informal learning.

"I'm still at that stage of learning what the responsibilities of leadership is, besides just taking responsibility and looking out for your staff. It's also taking, setting the scene, setting the eemm... you know, setting the work and instructing people to do work and making sure that work is done and that goals are achieved. So, all this I learned through informal learning"- PF5

(I am still at the stage of learning what the responsibilities of leadership are, beyond simply taking responsibility and looking after your staff. It also involves setting the direction, establishing the work context, assigning tasks, ensuring that the work is carried out, and making sure that goals are achieved. All of this, I learned through informal learning.)- PF5

Academic leaders emphasise that experiences gained during study and social interactions that occurred previously serve as a medium for learning about leadership in a practical sense. Informal learning has a significant impact on academic leadership development, as it provides real-life experience and exposure towards leadership practice.

Self-Development

Self-development in an academic leadership context is a continuous process involving learning, expanding knowledge, and improving leadership skills. This process may occur through active effort and the readiness of academic leaders to learn from other people's experiences. The self-development process requires academic leaders to observe and continuously learn from colleagues and more experienced leaders. According to PM7, real-life experiences may include painful, joyful, and challenging moments that contribute to the self-development of academic leaders.

"Tapi saya kata hari ni saya ada satu slide, saya kata semua benda yang saya buat tu apa, siapa, siapa yang dapat? Saya, I build myself tau, saya membina diri saya melalui semua pengalaman tadi, sakit ke, menangis ke, gembira ke semuanya balik kepada saya"- PM7

(But I said that today I have a slide where I reflect on everything I have done, who actually benefits from it? It is me. I build myself; I develop myself through all those experiences, whether they were painful, whether I cried, whether I felt happy, ultimately, all of it comes back to me.)- PM7

Academic leaders emphasise that stress, challenges, and the difficulties of leadership responsibilities provide opportunities for informal learning. Those experiences contribute to and benefit the development of inner strength and the maturity of academic leaders.

Mindset Development

In the context of academic leadership, mindset development refers to the process of transforming thinking and judgement into a more flexible, reflective and context-based approach. Mindset development enables academic leaders to understand the reality of their institutions, which involves human factors, multiple situations and demand for wisdom in the decision-making process. Academic leaders are gradually developing their mindset through experiences and practice of informal learning. PM1 shares his experience of mindset development through informal learning as an academic leader in the following excerpt.

“Dia... dia jadi improve la of course sebab dia banyak pembelajaran. Macam saya katakan is always 70-30 tadi kan, 70% tadi kan .. dia banyak belajar daripada... samada daripada skill, dari segi knowledge atau pun dari segi attitude change kan, saya ... dulu.. saya lain masa mula- mula jadi pentadbir saya jenis orang yang very strict very yang... ikut buku lah kalau buku say yes, yes ... no, no... dia tak ada ... tapi sebenarnya being academic leaders ni dia ada dia kena ada grey areas ...aaa... dia tak boleh.. tak boleh macam...hukum.. dia macam.. iyalah kata macam.. dia ada sunat, makruh kan macam tu kan.. dia ada sunat dan makruh tu... dia bukannya wajib dan haram... aaa... so you kena acknowledge yang tu.. dalam.. dalam...apa nama tu...aaa.. ada setengah orang macam jadi mentadbir dia jadi...aaa...tak boleh, tak boleh... tak boleh tak boleh....aaaa.. very strict tak boleh macam tu, dalam... dalam... dia ada grey areas, tak ada pendekatan kita kena apply yang itu belajar hanya dapat daripada pengalaman saja.. tak ada pengalaman belajar daripada informal learning... kan. dia change your attitude tu.. dia banyak mengajar saya la..”- PM1

(It definitely improves you, of course, because there is so much learning involved. As I mentioned earlier about the 70–30 concept, 70% of learning comes from experience. You learn a lot, whether in terms of skills, knowledge, or even changes in attitude. In the beginning, when I first became an administrator, I was very strict and very by-the-book, if the book said yes, then yes; if it said no, then no. There was no flexibility. But in reality, being an academic leader requires an understanding of grey areas. You cannot lead as if everything is simply right or wrong, mandatory or prohibited. There are areas that require discretion and judgment. As an administrator, you cannot always say ‘cannot, cannot, cannot’ and be overly rigid. There are grey areas where different approaches need to be applied. This kind of understanding can only be gained through experience; it comes from informal learning. It changes your attitude. That is something that has taught me a great deal.)- PM1

Informal learning practices among academic leaders contribute to broadening perspectives and understanding of academic leadership, particularly regarding the concept and role of leadership. Mindset development among academic leaders reflects a mature understanding of leadership practice, gained through informal learning.

DISCUSSION

This article focuses on the informal learning strategies practised among academic leadership. More specifically, this study was conducted with academic leaders at five research universities in Malaysia who held leadership positions from Head of Department to Vice-Chancellor. Despite examining the informal learning strategies, this article also identifies the advantages of informal learning towards academic leadership development.

The study's findings indicate that academic leaders actively engage in informal learning at their institutions. Learning through experience, observation, social interaction and discussion is considered significant learning among academic leaders. Findings of the study indicate that the majority of academic leaders learn through four informal learning strategies, in which knowledge and skills are acquired through reflection and direct involvement in real-life contexts. Academic leaders emphasised that learning through experience enables them to understand the role and function of leadership, particularly regarding organising tasks, managing people in their institutions and making decisions. This process occurs in an unstructured, spontaneous and continuous daily working context.

Kolb's experiential learning style explains that experience-based learning involves a concrete experience, reflective observation on the new experience, abstract conceptualization and active experimentation (A. Y. Kolb et al., 2014). This demonstrates that learning through experience contributes to knowledge and skill development by reflecting on action and applying new understanding in future situations. In the context of academic leadership, real-life experience serves as a 'learning laboratory' which enables academic leaders to develop their tacit knowledge and practical wisdom, which is difficult to gain through formal training. This finding also supports the view of Eraut (2004) who claims that the majority of professional learning occurs through informal learning in the workplace setting. This learning process involves engaging in problem-solving, challenging tasks, and social interaction. In academic leadership, daily leadership challenges drive engagement in significant informal learning within their institutions.

This study finds that academic leaders observe the leadership styles of previous leaders, including how they make decisions and handle their responsibilities, and thus develop their contextual understanding of effective leadership practice. This process enables academic leaders to analyse, replicate, and adapt the practice to the context. In the context of academic leadership, observing more experienced leaders offers insights into their institutions and leadership practices that formal training does not provide. This finding is in accordance with Eraut (2011) which is considered an observation on real work practice as a part of informal learning through active participation at work. Therefore, observation is a reflective learning strategy that contributes to the development of competencies in academic leaders.

The majority of academic leaders assume social interaction and discussion as an important mechanism in informal learning among academic leaders. These two strategies provide the opportunity for academic leaders to exchange ideas and construct collective meaning within the daily work context. This finding supports the recent study by Rozkwitalska-Welenc (2024) which emphasises that informal learning mostly occurs in spontaneous social interaction and serves as an important learning in the modern work environment. The findings are also consistent with Cunningham & Hillier (2013), who found in their study that employees learn from others through interactions with staff with expertise and consider consultation with peers an invaluable opportunity for learning. As for academic leaders, daily discussion and interaction with colleagues become a collaborative medium that enables them to adapt leadership practice based on experience and feedback. Likewise, Lokhtina & Faller (2024) in their recent study report that effective learning in a workplace is closely related to social relationships in which dialogue and the exchange of experiences may generate reflective and contextual learning.

The majority of academic leaders state that informal learning has a significant impact on academic leadership development. This has been proven by a recent study, which indicates that informal learning is a main driver for human capital development in a workplace (De Grip, 2024). The findings are also supported by previous research by Bednall et al. (2014), which found that employee participation in workplace informal learning activities has a positive impact on work performance and career development. Social interaction among academic leaders goes beyond information exchange, functioning as a participatory learning process that shapes professional identity and reflective practice within their institutional setting.

The findings of this study bring significant implications for university governance in Malaysian Higher Education. First, the university should provide a mentoring programme for newly appointed academic leaders to assist them with their leadership responsibilities and reduce the challenges of transition. Recognition of the mentoring system may foster adaptation to new job scopes. Second, informal learning practice should be acknowledged by including it in the succession planning framework. The university may provide exposure to leadership roles by conducting consultations with fellow academics prior to the appointment. Lastly, universities should recognise informal learning as significant workplace learning that benefits academic leadership development and thus increases academic leaders' motivation for continuous learning.

This study does not suggest that informal learning replace formal leadership training programmes provided for academics in universities. Instead, the findings show that informal learning is a great support to formal learning. As formal training provides theoretical knowledge and policy orientation, informal learning complements the learning process by facilitating contextual adaptation and the acquisition of tacit knowledge embedded in daily practice.

Limitation Of The Study

This study has several limitations that must be acknowledged. First, this study involved a small sample size, which may limit the transferability of the findings, although it is acceptable in a qualitative study. Even though data saturation has been reached, the study's findings are limited to the participants involved. The second limitation concerns the study's context. This study was conducted in Malaysian Research Universities; therefore, the results are limited to the Malaysian context and cannot be generalised to other higher education institutions. Third, potential researcher bias in this study cannot be fully eliminated because the data analysis process involves subjective interpretation. However, the repeated data review and member checking were conducted to minimise the potential bias.

PRACTICAL RECOMMENDATIONS

The findings of this study highlight learning through experience, observation, social interaction and discussion as dominant strategies of informal learning among academic leaders in Malaysian Research Universities. Therefore, several practical recommendations are proposed for further consideration.

First, Higher Education Institutions in supporting learning culture and leadership development should implement a structured mentoring system, particularly among academic leaders. This recommendation aligns with the findings of this study, in which academic leaders are actively involved in social learning through interactions with colleagues, peers, senior leaders, and staff within their institution. Those interactions can be organised through a structured mentoring system that pairs new academic leaders with experienced leaders, such as former Deans or Vice-Chancellors. Even though a mentoring system is proposed, its implementation should preserve the nature and characteristics of informal learning to prevent it from becoming formalised and rigid.

Second, universities should introduce institutional recognition for staff who are actively involved in informal learning, including academic leaders. The findings of this study indicate that academic leaders engage in learning through experience, observation, discussion and social interaction when dealing with real leadership challenges. However, these informal learning practices often remain invisible in formal development records; thus, universities should consider the informal learning log or recognition aspect as part of a key performance indicator (KPI) for academic leaders. The institutional recognition of informal learning serves as validation for development efforts among academic leaders, and thus, it can be a catalyst for continuous academic development through informal lifelong learning.

Third, universities may consider developing a blended formal- informal leadership development framework at their institutions. This framework integrates formal and informal learning to support continuous learning in the workplace. Workshop and training programmes are important for exposing academic leaders to a theoretical and conceptual basis, whereas informal mechanisms such as cross-faculty discussion, dialogue among colleagues, and benchmarking institutional achievements may provide and support practices in real contexts. This indirectly illustrates the complementary nature and function of formal and informal learning. This approach demonstrates the findings of this study, in which academic leadership capabilities develop through continuous interactions and social learning, without relying solely on formal training.

Overall, the recommendations above align with theoretical considerations for this study, which emphasise learning through experiences, social interaction, observation, and discussion, thereby strengthening the conceptual orientation of informal learning practice and academic leadership development in this study.

CONCLUSION

This study explores the informal learning strategies practised among academic leaders in Research Universities in Malaysia and the advantages of those strategies towards academic leadership development. As informal learning is reported as dominant learning in a workplace, likewise in the academic leadership context. Findings from interviews and document analysis reveal that academic leaders in research universities are actively involved in informal learning.

Academic leaders highlighted that they learn informally through experiences, observation, social interaction and discussion rather than formal training in their leadership practice. Experiences in real-life situations exposed academic leaders to challenges in leadership environments. This provides an opportunity for academic leaders to be mentally prepared and imagine nature in real leadership practice. Although future situations may differ, experience can serve as guidance for academic leaders in their actions. By observing others as they perform tasks, particularly those of previous, more experienced leaders, one can gain an understanding and develop perspectives on leadership practice. Observation through research towards other leaders' or institutions' achievements enables academic leaders to examine and analyse their performance and provide opportunities for improvement.

Social interaction and discussion are regarded as a broad form of informal learning strategy that occurs through various processes in an academic leadership context. Interestingly, informal learning through interaction and discussion in academic leadership emerged simultaneously with non-formal learning. This has been emphasised by the majority of academic leaders, who learn more with peers and fellow participants during seminars or training sessions. This situation enables academic leaders to acquire knowledge on both platforms at once.

The findings support a previous study that found that informal learning makes a significant contribution to academic leadership development. As academic leaders received inadequate management knowledge and skills prior to their appointment, informal learning emerged as a critical mechanism that enables academics to acquire the required leadership competencies without relying on non-formal training. The challenges inherent to real leadership practice may offer opportunities for significant informal learning in developing and strengthening the competencies of academic leadership in the higher education context.

Ethical Consideration

This study involves participants among academic leaders from five research universities in Malaysia. Therefore, official permission to conduct the study at these universities was obtained from the faculty prior to data collection. A copy of the approval letter and a formal invitation letter as a resource person for the study were submitted to participants. Informed consent was obtained from participants, which states their voluntary involvement in the study. To ensure confidentiality and anonymity, pseudonyms were used in referring to the participants and their institutions in analysing and reporting the data. All data were securely stored in protected files accessible only to the researcher.

Data Availability

All data supporting the findings of this article are not publicly available due to confidentiality agreements with participants and institutional privacy considerations.

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