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Investigating the impact of internship experience on work readiness among hospitality program students: the moderating role of student mindfulness

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Introduction: The hospitality industry and its success are linked to the presence of a talent pool that is well-prepared to serve diversified customers. Saudi'a Vision 2030 focuses much on the tourism industry as it anticipates a surge in international tourists. This study evaluated the impact of internship experience on the work readiness of students pursuing degrees in the hospitality industry. Further, the study assessed the direct role of mindfulness over students' ability and role clarity and the moderating role of individual mindfulness between internship experience and work readiness (ability and role clarity).

Methods: The study employed a quantitative research method through a cross-sectional approach and evaluated the proposed model through structural equation modeling (covariance-based method). The path model was assessed using 5,000 bootstrapping samples of 361 responses from higher education graduates.

Results: Study findings highlighted that internship experience significantly and positively impacted students' ability and role clarity. The moderating role of individual mindfulness was significant, and it augmented the magnitude of the internship experience with students' role clarity and ability.

Discussion: Study findings suggest that incorporating mindfulness in the lives of students and organizations can be of great value from the learning and performance perspective. Providing students with enriched internship experience and introducing the workforce toward individual mindfulness will benefit academia, industry, and students.

KEYWORDS

internship experience, role clarity, ability, students, hospitality industry

1 Introduction

According to the Vision 2030 initiative of Saudi Arabia, a radical and swift transformation is ongoing, especially concerning the hospitality industry, since the country plans to attract millions of tourists and visitors in the coming years. The government hopes to become a prominent destination for global tourists (Govt of Saudi Arabia, 2016). Vision 2030 is not just to enhance the kingdom's tourism industry but to divert its national income sources from conventional means such as oil and energy. Consequently, the availability and readiness of the workforce for the hospitality industry is a must for the kingdom's swift and smooth transition (Joseph et al., 2022; Ruhi et al., 2021). Out of many job-related elements, the internship experience for fresh graduates seems pivotal in equipping them with pertinent expertise, practical experience, and hands-on training to be well-prepared for upcoming job and industry-related challenges (Chen and Shen, 2012; Lee and Chao, 2013). Considering the critical role of the internship experience of graduates in the hospitality industry, this study seeks to evaluate the intricate interplay between graduate's internship experience and their work readiness in terms of their ability and role clarity. Work readiness is how pupils move from the academic world to real-world work-related scenarios, which are considered rough and challenging for newcomers to adapt and perform (Reuter et al., 2022; van der Horst et al., 2021; Zhong and Xu, 2023). Contemporary literature has highlighted an increasing gap and incompatibility between the theoretical knowledge and the practical requirements of the industry at large. It has highlighted the rethinking and redesigning interventions to address such issues (Greenhaus et al., 2018).

The initiative from the Ministry of Higher Education and Technical and Vocational Training Corporation of Saudi Arabia expects to enhance and optimize the tourism sector by strengthening the quality of education and inculcating hospitality-related programs throughout higher education institutions. There is a surge and push from the governing bodies to the public and private institutions to embark on hospitality education and curriculum as challenges exist in the market, such as skills gap, public perception, and nominal enrolment in number from the students overall (Colliers, 2022). Further, with the rise and surge in Saudi Arabia's hospitality industry, the service quality and satisfaction of the diversified customers seem inevitable. Pertinent to this, one's comprehension of specific job roles, responsibilities, and duties for effective job performance is known as role clarity (Adil et al., 2023; Lyons, 1971). Customer experience can be enhanced only when the workforce is clear about its role; if one is clear about role-related responsibilities and organizational expectations, it will help enable smooth service and performance delivery, enhancing customer experience (Yadav and Rangnekar, 2015).

Correspondingly, the workforce's abilities are also expected to go hand in hand with effective task performance to make this customer-focused industry more successful (Narayanan et al., 2010). The perfect blend of employees' abilities and role clarity is paramount for the successful transformation of this industry for Saudi Arabia. Although prior literature attributed students' internship experiences with their enhanced practical knowledge skills and professional competencies (Gault et al., 2010; Narayanan

et al., 2010), there lacks specific empirical evidence from the hospitality industry that assesses how students' role clarity and their professional abilities can be impacted through their internship experience.

While talking about talent readiness for the hospitality industry in terms of graduating student's role clarity (ensuring the understanding of job demands and organizational objectives) and ability (having related knowledge and skills to perform the job) (Lee et al., 2024; Peersia et al., 2024), individual mindfulness seems much more relevant to tackling the workload and stressing the demands of global customers. Nonetheless, the role of mindfulness as a moderating construct between one's internship experience and work readiness has yet to be explored, thereby providing a key research area to work on (Sutcliffe et al., 2016). Pertinent to this, the concept of mindfulness entails an individual's ability to have heightened awareness and great focus by staying in the present/ongoing moment, which helps regulate cognition and emotional functions (Hoge et al., 2023; Hong et al., 2022; Jobbehdar Nourafkan et al., 2023; Liang et al., 2022); hence, it is high time to assess whether such mindfulness of hospitality graduates will enhance their internship experience toward their readiness in the professional settings. Task complexity and variation in the hospitality industry demand the utility of mindfulness, as its benefits for learning, adaptation, and stress control have been prominent in the past (Hülshager et al., 2013). Therefore, it is anticipated that individuals with a higher level of mindfulness practices may be more effective in learning and development while performing internships, leading to clarity in their roles and abilities.

Although the importance of mindfulness for graduates in the hospitality industry is no doubt of the importance, there remains a deficiency in the literature, with multiple studies assessing the general outcome of internship experience on outcomes such as one's role clarity and professional abilities in the hospitality industry, and specifically the moderating role of mindfulness in the hospitality context (Brooks and Youngson, 2016; Chen and Shen, 2012; Gault et al., 2010; Lee and Chao, 2013; Narayanan et al., 2010). In light of the increasing stress on mindfulness research and its positive outcomes (Sutcliffe et al., 2016), it is necessary to evaluate the interplay of individual mindfulness with internship experience and its consequential and intervening role on students' readiness for work, thereby this research empirically assesses the predictive role of student's internship experience over their role clarity and their ability, while considering individual mindfulness as the moderating variable in between. The rest of the article is as follows: literature review and hypotheses development, methods, findings, discussions, and conclusions.

2 Literature review and hypotheses development

2.1 Internship experience and role clarity

To begin with, it is essential to understand that generations are distinct and different from their predecessors and successors, such as the silent generation (1928-45), baby boomers (1946-64), Generation X (1965-80), Generation Y (1981-96), Generation Z (1997-2012), and Generation Alpha (2013-2020s) (Ozkan and

Solmaz, 2015). Studies advocate that Gen Z entails distinct work-related requirements such as flexibility, balance in work-life, meaningful work, career orientation, etc. (de Boer and Bordoloi, 2022). The increasing and widening gap between academics (curriculum-based activities) and the industrial requirements for the overall workforce is caused by generational gaps. It requires much of the attention from the research community as Gen Z faces unique and understudied challenges (Benitez-Marquez et al., 2021).

Pertinent to aforesaid, educational settings provide students with theoretical and bookish knowledge that is required to be employed and experienced in the actual industry, and through internship experience, students can practice the theoretical knowledge in a real-world setting, which helps them develop and then adopt new skills that are required for better job performance (Chen and Shen, 2012; Gault et al., 2010; Leufer and Cleary-Holdforth, 2020). Research suggests that through internship experience, fresh graduates can make and strengthen their professional networks, learn new skills, enhance their knowledge regarding jobs, and look for work possibilities (Anjum, 2020; Chen et al., 2011). Nonetheless, the exact mechanism between students' internship experience and their role clarity and ability is yet to be known and needs thorough exploration.

To bridge the gap between hospitality students' skills and theoretical knowledge, the role of internship experience is pivotal, as it equips them with practical industry knowledge and the implication of the knowledge in occupational settings. The association between internship experience and role clarity has been documented in multiple industries, except the hospitality industry (Lejonberg and Christophersen, 2015; Poltimäe et al., 2023). According to Rizzo et al. (1970), it is crucial for effective job performance for an individual to have clarity regarding their responsibilities, tasks, and expectations from the organization, which will help attain job satisfaction and performance but also help reduce job strain.

From the perspective of theoretical underpinnings that can explain the association between internship experience and role clarity, it could be the social learning theory and the experiential learning theory (Bandura, 1977; Kolb, 1984). Based on the theory of social learning, the learning of individuals is attributed to the observance of other's behaviors in a social context, and pertinent to this, graduates, while performing internships, are expected to interact and communicate with their fellow professionals, which helps them understand their role as well as the roles of their colleagues with much clarity. On the other hand, under the purview of theoretical propositions of experiential learning theory, much emphasis is given to learning on the job through practical and on-ground experience. This proposition suggests the actual deployment of freshers to be engaged in a real-world working environment where they face the exact scenario, which is expected to reflect deeper learning and knowledge integration for individuals.

Few empirical works have suggested the relationship between factors that can contribute to the practical internship experience for graduates. Specific to the hospitality industry, factors such as supervisor support, work environment, nature and level of task, and learning opportunities help enrich the internship experience for fresh graduates, which is expected to uphold the heightened role clarity for students (Lam and Ching, 2007). Literature also suggests that from the organizational perspective, the internship can provide

benefits such as experiential learning for both graduates and the organization (Maertz et al., 2014). Since the internship experience provides experiential learning for graduates, students are expected to understand their job roles. For fresh graduates in the industry, role ambiguity can be caused by work pressure, demanding tasks, and the naiveness of the individuals (Lyons, 1971). In contrast, a practical and well-planned internship experience can provide graduates with a clear understanding of their work path, leading to job satisfaction and overall performance.

The dynamic and purely service-oriented nature of the hospitality industry values internships as this industry demands individuals with hands-on experience. Prior literature suggests opting for a triangulation approach by the hospitality industry to improve the internship experience, where the involvement of graduates (students), educational institutions, and the local hospitality industry is emphasized (Zopiatis and Constanti, 2012). With the enhanced and collective efforts of these three key stakeholders, the intricacies of the hospitality industry operations, their norms, their service level and commitment to the customers, and team structure will help graduates have clarity about their roles and their expectations from all stakeholders. From an industry and organizational perspective, there needs to be an environment that is win-win for both the trainees and the organization, and by doing so, a clear and concise understanding of the operational nitty gritty can be instilled in the minds of hospitality industry graduates. Since the research is consistent in advocating the preparation of graduates for the hospitality industry, the role of organizations and industry is inevitable in eliminating role ambiguity and bridging the talent gap in the industry. Based on those mentioned earlier, clarity is essential in performing tasks, and internal experience is considered a necessary element in bringing this into the minds of hospitality industry graduates. Thereby, the following hypothesis is formed for empirical testing:

H1: Internship experience positively impacts role clarity.

2.2 Internship experience and ability

The importance of role clarity is undoubtful for an individual's performance and work compassion, yet it helps counter the role strain in the form of ambiguity (Kammeyer-Mueller et al., 2013). Through the internship, clarity regarding future jobs and responsibilities can be brought into the minds of hospitality graduates. On the other hand, ability at the workplace refers to the possession of required skills, abilities, and competencies that are essential to perform a specific task or an overall job role (Gault et al., 2010). Considering the elements of ability for individuals at the workplace, internship experience can offer an avenue for fresh graduates to exhibit and learn new skills and knowledge through work experience and colleagues. Although academic and vocational institutions instill professional expertise in the form of theory into the minds of graduating students, the internship experience is expected to provide graduates with professional experience and education via hands-on experience.

From the theoretical standpoint of the prominent theory of Experiential Learning and Social Learning Theory (Bandura, 1986;

Kolb, 1984), the interplay between internship experience and students' abilities can be explained. The premise of experiential learning theory is that an individual's learning is a continuous process, and knowledge, on the other hand, is transmitted or created through experience. Based on such theoretical propositions, it is justified to state that students' hands-on engagement with their professional activities will allow them to transcend their theoretical knowledge, which will reflect on their experience, thereby improving their skills and abilities. Nonetheless, Bandura's theoretical proposition states that learning is achieved by observing others in a social context (Bandura, 1986). While performing their internship, the students are expected to meet, observe, and learn new things from their experienced colleagues, which will help them imitate productive and acceptable organizational behaviors. Pertinently, industry-specific skills can be learned through students' observance when they are facilitated professionally through internship facilities in the actual industry.

Prior literature also suggests that internships in the hospitality industry may often lead to negative feelings and experiences about the industry, consequently reducing chances to pursue professional careers (Yiu and Law, 2012). Thereby, the perfect match between students, their institution, and potential employers is the need of time. On the contrary, the well-synchronized and organized internship may produce a workforce that is more inclined toward the hospitality industry and has more knowledge and abilities to tackle the pressing requirements of the customers. A successful internship where students are encouraged to achieve complex tasks, given the opportunity to provide solutions to the actual problems, are expected to transition their career from starters to well-trained professionals since they may have equipped them with the necessary knowledge and abilities.

Further, technical skills are critical in developing competencies required for career progression for hospitality industry graduates (Barron et al., 2007). Prior research from the hospitality industry indicates that students who have gone through an internship experience in areas such as office operations, utilities, and even beverage management have surpassed the ordinary role and exhibited enhanced professional abilities (Barron and Maxwell, 1993). Such findings support the notion that practical and well-organized internship experience not only brings new skills for the students but will assist them in preparing for their future endeavors. Research also supports that capabilities such as leadership, team player, and adaptability are enhanced through internship experience since all such qualities of an employee require specific abilities and knowledge (Fatoki, 2019). Concerning the career development of students, their soft skills are also considered essential for their career success in this industry.

Regarding high-quality customer services, aspects such as clear and concise communication, interpersonal communication, and awareness of the norms and cultural values are much considered. Students who have gone through effective internship programs are expected to learn soft skills to improve further their career prospects (Ladkin and Weber, 2011). Also, industry standards, overall expectations, and other things can be well thought out through internship experience (Chen and Shen, 2012), enhancing learning and hospitality industry students' overall abilities. Based on those mentioned above, the following hypothesis is formed for assessment.

H2: Internship Experience Positively Impacts the ability.

2.3 Student mindfulness and role clarity

Individual mindfulness is described as one's ability to remain in the present moment by paying proper attention to the moment (Hülshager et al., 2013; Hülshager et al., 2014). In the prior literature, mindfulness and its positive attribution with cognitive functioning and emotional regulation, as well as the overall wellbeing of individuals, is well-established (Brown and Ryan, 2003). Mindfulness has been proven to enhance academic performance, counter mental strain, and improve individuals' learning abilities and outcomes (Shapiro et al., 2011). Pertinent to those mentioned earlier, it is plausible to maintain that mindfulness has the potential to impact the role clarity for hospitality industry students positively.

Specifically, one's awareness from moment to moment, along with a non-judgmental attitude toward the external world, can be classified as mindfulness (Hülshager et al., 2013), which is now becoming a much-anticipated construct for predicting numerous individual and group-level outcomes (Sutcliffe et al., 2016). In connection with the educational context, mindfulness is expected to positively impact the clarity of students' roles. Rizzo et al. (1970) posited that role clarity entails comprehending tasks, responsibilities, and organizational expectations, all essential for a productive workforce. The positive outcomes of individual mindfulness can facilitate the navigation of students' journeys throughout their internship experience. The attenuation of individual's thoughts, feelings, and behaviors by being mindful at the workplace (Good et al., 2016; Li et al., 2023; Saleem et al., 2023; Sutcliffe et al., 2016) is expected to heighten their awareness and overall responsiveness to their environment, which is expected to give them edge over their environment.

Two key concepts can explain the underpinnings of the relationship between internship experience and role clarity for students, i.e., self-regulation and cognitive flexibility. When individuals are mindful, they are expected to stay mainly in the present moment and forgo past and future thoughts, which can be classified as controlling one's thoughts and emotions (Adams, 2011; Brown and Ryan, 2003). Role clarity can be increased for students by increasing such self-regulation, which will help them process information better and classify or prioritize their mental resources. Mindfulness also allows individuals to choose between alternatives and exhibit flexibility, enabling them to mold and adapt based on the scenarios and expectations (Good et al., 2016). Adapting to multiple scenarios in the hospitality industry is valuable for performing better.

Empirical evidence suggests that mindfulness practices can help individuals cope with emotional exhaustion and mental strain and enhance their job satisfaction (Hülshager et al., 2013). Individuals are expected to have more clarity of role when they are tuned to their present moment, which can counter their mental exhaustion and ultimately enhance their job satisfaction. Students can focus on their tasks by reducing mental fatigue, eliminating or reducing ambiguity, and bringing clarity to their roles. Literature also advocates that mindfulness training is proven to aid students

with enhanced role clarity and academic performance. Through mindfulness interventions, students could attain augmented focus, enhanced self-regulation, and abilities to cope with stressful events (Rupprecht et al., 2019a). Further, the cognitive flexibility achieved through mindfulness is also expected to bring adaptability for students regarding the ever-changing landscape of the hospitality industry.

In summary, role clarity is expected to be positively impacted by individual mindfulness as it helps individuals attain self-regulation, enhanced cognitive flexibility, and stress-couping strategies. When individuals are equipped with such elements through mindfulness, they are expected to have reduced role ambiguity, improving their performance. Therefore, the following hypothesis is formed for assessment:

H3: Student mindfulness positively impacts role clarity.

2.4 Student mindfulness and ability

For individuals, being mindful tends to focus on the present moment with a non-judgmental attitude toward the external world (Bergomi et al., 2013), which can help in individuals' personal and professional contexts. Hospitality industry graduates must fulfill the demands of diverse customers with good service quality, which requires multitasking and sound abilities. The role of mindfulness in this context has become evident and necessary (Osin and Turilina, 2020); it can aid job performance and individual skills by helping them attain superior cognitive functions, enhance emotional control and regulation, and mitigate occupational stress.

Numerous psychological and cognitive phenomena could be rooted in explaining the relationship between mindfulness and enhanced ability in individuals. For learning, developing, and performing up to the mark, the role of self-regulation and cognitive development through mindfulness is inevitable (Baer, 2003; Bishop et al., 2004). Individuals can be more adaptive to their dynamic environment, process information more efficiently, and focus on their tasks through enhanced awareness and attention by being mindful at work, which can ultimately strengthen their abilities to perform tasks (Shapiro et al., 2005). From the hospitality industry perspective, the availability of such cognitive and psychological skills for students is expected to directly contribute to their personal and professional abilities by aiding them in being more effective in problem-solving and making sound decisions.

The literature emphasizes the benefits of mindfulness, such as sustained attention, enhanced working memory, and flexibility in cognitive functions through mindfulness training (Jain et al., 2007). When students are equipped with such elements while working in the industry, they are expected to handle multiple challenges efficiently. The efficiency and ability of students can be strengthened by opting for mindfulness exercises. Further, it is evident from the hospitality industry work environment that the workforce is subjected to experience emotional labor and rough customer interactions, and mindfulness seems to be an element that can help students counter such challenges by regulating their emotions, which is a pivotal part of professional ability. Empirical evidence from prior literature suggests that employees

who practiced mindfulness controlled their emotions efficiently, which helped them prevent emotional exhaustion, ultimately improving their profession (Hülshager et al., 2013). There is no doubt that the hospitality industry workforce is susceptible to encountering stressful encounters with their customers, who are from diverse backgrounds, and the intervention of individual mindfulness may help them to be more composed, emotionally resilient, and a person with much empathy and control, which will also help develop individual abilities.

Research also suggests that, by introducing individual mindfulness practices through training, a significant change can be brought to the psychological wellbeing of the professionals, who have a more resilient attitude toward untoward customer encounters. Students from the hospitality industry are more susceptible to such encounters, which can deter or limit their learning and abilities. A resilient, robust, well-prepared mindset is needed to combat those challenges (Grossman et al., 2004). By attaining such cognitive capabilities, individuals can achieve better performance and enhance their ability to meet their job demands without compromising their work quality. In summary, individual mindfulness will help hospitality industry graduates be more cognitively strong, enhancing their work abilities. Therefore, the following hypothesis is formed for assessment:

H4: Student mindfulness positively impacts the ability.

2.5 Assessing the moderating role of student mindfulness between internship experience, role clarity, and ability

To be professionally ready, the internship experience for students is pivotal, providing them with real industry experience and learning. For the hospitality industry, students need role clarity and a good match of abilities with given tasks to succeed in future jobs. However, for every student, the effectiveness and experience of an internship may vary based on several factors. Of the many other factors, mindfulness may influence the effectiveness of the internship experience for students. Being mindful is the ability to stay in the present moment, be non-judgmental toward every situation, and pay attention to only the issues that are at hand (Li et al., 2023; Saleem et al., 2023); thereby, individual mindfulness may play its moderating role in enhancing students' internship experience with regards to their abilities and role clarity in the hospitality industry.

From the underpinning perspective of the moderating role of mindfulness between internship experience and work readiness, the Transactional Model of stress and coping can provide the underlying reasoning (Lazarus and Folkman, 1984). The model states that the individual's perception of stress and ways to address that stressful situation/factor determines the outcome of such an experience. Keeping this perspective in view, by utilizing mindfulness practices, students can attain the best match of emotional regulation, resilience, and stress control, which can help them manage their challenging role in the industry. By managing the occupation stress and pressing demands efficiently, students can allocate their other available cognitive and physical resources

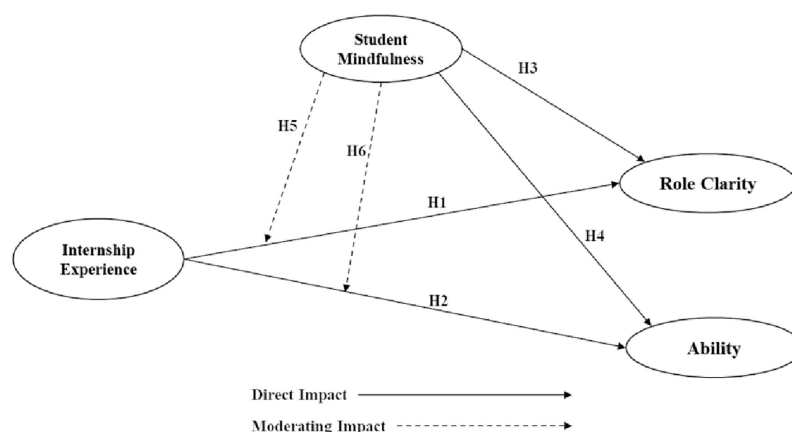


FIGURE 1
Theoretical framework.

to comprehend their role and their related expectations (Loucks et al., 2024). Also, when stress and harmful elements are countered through mindfulness practices, students can leverage their current professional abilities to excel in their field and overall performance.

Based on the prior literature, the role of mindfulness in emotional regulation, stress reduction, enhanced focus/attention, and improved learning outcomes for individuals is plausible (Brown et al., 2021; Loucks et al., 2022). It is also possible to state that the work readiness of hospitality industry students can be augmented. Students who are doing internships can take advantage of mindfulness activities to develop role clarity and abilities. While performing their internship, students can utilize mindfulness to remain focused and have reflective capabilities that will ultimately aid their internship experience toward their skills and abilities. Emotional exhaustion can be another challenge for students working on internships that can cause cognitive and physical damage. By opting for mindfulness, students can also save themselves from emotional exhaustion (Hülshager et al., 2013), which will help them conserve their energies, thereby providing more focus on their specific roles and professional abilities required to complete jobs.

The integration of information and its processing during internship experience is critical for every student. Integrating and utilizing information through mindfulness practices may help students process the given feedback constructively. Mindful intervention may also help the student pay attention to understanding their job demands, market and company situations, and details peculiar to the industry. In summary, accumulating positive cognitive resources and benefits from individual mindfulness practices may help students during their internship experience to be more explicit about their organizational role (through a reflective mindset) and leverage their abilities for optimum performance. Overall, the anticipates that individual mindfulness will moderate the relationship between students' internship experience and their readiness for work in terms of their abilities and role clarity. That means if the students are more mindful while performing their internships, they may enhance their role clarity and ability. Figure 1 represents the proposed theoretical model for the study. Pertinent to those

mentioned above, the following hypotheses are formed for evaluation:

H5: Student mindfulness moderates between internship experience and role clarity.

H6: Student mindfulness moderates between internship experience and ability.

3 Data analysis and results

3.1 Methods and measures

The study sample size was calculated based on a 95% confidence interval with an error margin of 5%, a population proportion of 50%, and an estimated population of 5,500 ± students from the hospitality industry (Colliers, 2022; Krejcie and Morgan, 1970). Based on the analysis, the minimum representative sample was 360. The study utilized a sample of 361 respondents, which exceeded the required number for statistical validity. A purposive sampling technique was employed, as the selection criteria were restricted to individuals aged 18–26 years who had completed at least one or two internships in the hospitality industry. Additionally, respondents enrolled in diploma or degree programs related to the hospitality industry in Saudi Arabia were included. The final sample comprised 76% male respondents and 24% female respondents, with 24% aged between 18 and 20 years, 63% between 21 and 23 years, and 14% between 24 and 26 years. Both currently enrolled students and graduates were included in the study. Regarding internship experience, 47% of the respondents had completed one internship, 18% had completed two internships, 10% had completed more than two internships, and 25% had no internship experience.

The survey was conducted between September and December 2023 and was hosted on Google Forms, which allowed for efficient distribution and systematic data collection. To ensure that only respondents within the targeted age group participated, an age screening question was included at the beginning of the survey. Responses from individuals outside this range were automatically

TABLE 1 Constructs reliability, composite reliability, and AVE.

Research constructs	Cronbach's alpha (standardized)	Composite reliability (rho_c)	Average variance extracted (AVE)
Ability	0.900	0.900	0.530
Internship experience	0.931	0.931	0.551
Role clarity	0.768	0.769	0.527
Student mindfulness	0.910	0.910	0.558

TABLE 2 Cross loadings (standardized).

Variables	Ability	Internship experience	Role clarity	Student mindfulness
ABI1	0.748			
ABI2	0.728			
ABI3	0.701			
ABI4	0.740			
ABI5	0.759			
ABI6	0.714			
ABI7	0.712			
ABI8	0.720			
IE1		0.757		
IE10		0.732		
IE11		0.736		
IE2		0.742		
IE3		0.761		
IE4		0.741		
IE5		0.761		
IE6		0.734		
IE7		0.740		
IE8		0.722		
IE9		0.737		
MF1				0.749
MF2				0.745
MF3				0.755
MF4				0.744
MF5				0.755
MF6				0.749
MF7				0.722
MF8				0.755
RC1			0.752	
RC2			0.679	
RC3			0.744	

TABLE 3 Outer loading (standardized).

Observed variables ← constructs	Outer loadings (standardized)
IE1 < - Internship experience	0.757
IE5 < - Internship experience	0.761
ABI6 < - Ability	0.714
MF2 < - Student mindfulness	0.745
IE8 < - Internship experience	0.722
MF8 < - Student mindfulness	0.755
ABI4 < - Ability	0.740
ABI5 < - Ability	0.759
RC1 < - Role clarity	0.752
MF6 < - Student mindfulness	0.749
ABI2 < - Ability	0.728
MF3 < - Student mindfulness	0.755
MF7 < - Student mindfulness	0.722
IE4 < - Internship experience	0.741
IE10 < - Internship experience	0.732
ABI1 < - Ability	0.748
IE6 < - Internship experience	0.734
IE9 < - Internship experience	0.737
IE11 < - Internship experience	0.736
MF1 < - Student mindfulness	0.749
ABI3 < - Ability	0.701
ABI8 < - Ability	0.720
RC2 < - Role clarity	0.679
IE2 < - Internship experience	0.742
MF4 < - Student mindfulness	0.744
MF5 < - Student mindfulness	0.755
ABI7 < - Ability	0.712
RC3 < - Role clarity	0.744
IE3 < - Internship experience	0.761
IE7 < - Internship experience	0.740

filtered out, and any discrepancies identified during data cleaning were addressed by removing ineligible responses. To prevent duplicate submissions, the survey platform restricted multiple entries from the same IP address. Since Google Forms does not provide CAPTCHA verification, a custom verification question was used to minimize bot responses and prevent duplicate entries.

Specifically, respondents were required to rearrange a given word in reverse order (e.g., Type the word “HOSPITALITY” in reverse), ensuring that only genuine participants completed the survey. Responses that failed this verification step were excluded.

Respondents were recruited from various colleges and universities across Saudi Arabia, although specific institutional

TABLE 4 Fornell-Larcker criterion for discriminant validity.

	Ability	Internship experience	Role clarity	Student mindfulness
Ability	0.728			
Internship experience	0.263	0.742		
Role clarity	0.212	0.208	0.726	
Student mindfulness	0.273	0.091	0.215	0.747

TABLE 5 Heterotrait-Monotrait ratio (HTMT) for discriminant validity.

	Ability	Internship experience	Role clarity	Student mindfulness
Ability				
Internship experience	0.263			
role clarity	0.214	0.213		
Student mindfulness	0.272	0.103	0.208	–

TABLE 6 Measurement model fit assessment.

	Estimated model	Null model
Chi-square	411.368	5817.678
Number of model parameters	66.000	30.000
Number of observations	361.000	n/a
Degrees of freedom	399.000	435.000
P-value	0.324	0.000
ChiSqr/df	1.031	13.374
RMSEA	0.009	0.185
RMSEA LOW 90% CI	0.000	0.181
RMSEA HIGH 90% CI	0.021	0.189
GFI	0.931	n/a
AGFI	0.920	n/a
PGFI	0.799	n/a
SRMR	0.037	n/a
NFI	0.929	n/a
TLI	0.997	n/a
CFI	0.998	n/a
AIC	543.368	n/a
BIC	800.034	n/a

GFI, Goodness of fit index; AGFI, Adjusted goodness of fit index; PGFI, Parsimony goodness of fit index; SRMR, Standardized root mean square residual; NFI, Normed Fit Index; TLI, Tucker-Lewis Index; CFI, Comparative Fit Index; AIC, Akaike's information criterion; BIC, Bayesian information criterion.

affiliations are not disclosed to maintain confidentiality. The survey was disseminated through multiple academic channels, including university mailing lists, faculty assistance, student resource centers, alumni support departments, and student portals. Official student groups on platforms such as WhatsApp, Telegram, Facebook, and LinkedIn were also utilized for distribution. Personal contact

was also ensured to collect samples with defined criteria. Follow-ups were ensured from institutions and responses via email and individual meetings to ensure participation.

To measure study constructs such as internship experience, an already developed scale was utilized with no significant changes, using the 5-point Likert scale (Nghia and Duyen, 2018). Scales for mindfulness, role clarity, and ability were also adapted from the prior literature and were measured on the 5-point Likert scale (Brown and Ryan, 2003; Kapareliotis et al., 2019).

3.1.1 Ethical considerations

Ethical approval was provided through a local ethical committee at King Abdulaziz University, Saudi Arabia, dated 01/02/2023, as required by the local procedures after providing the research proposal and informed consent forms. Participants were assured of the confidentiality of their responses. Respondents provided their consent before answering the questionnaire while doing them online. Respondents provided informed consent by clicking a checkbox (written form) indicating their participation agreement, granting them access to the online questionnaire.

3.2 Measurement model assessment

3.2.1 Convergent validity

To validate and measure the measurement model for reliability, confirmatory, and discriminant validity analysis, SMART-PLS CB-SEM was used. This approach is also known as the two-step approach, in which first, the convergence of the scale items is assessed by constructs' discriminant validity, a technique associated with structural equation modeling (Dash and Paul, 2021; Hair et al., 2010). The Cronbach's alpha values for all the research constructs were in line with the prescribed threshold of 0.7, meaning the attainment of internal consistency for all items (Nunnally, 1978). An additional measure of average variance extracted was utilized to verify further the validity and reliability of the research constructs (Hu and Bentler, 1999; Sijtsma, 2009). Overall reliability findings are presented in Table 1.

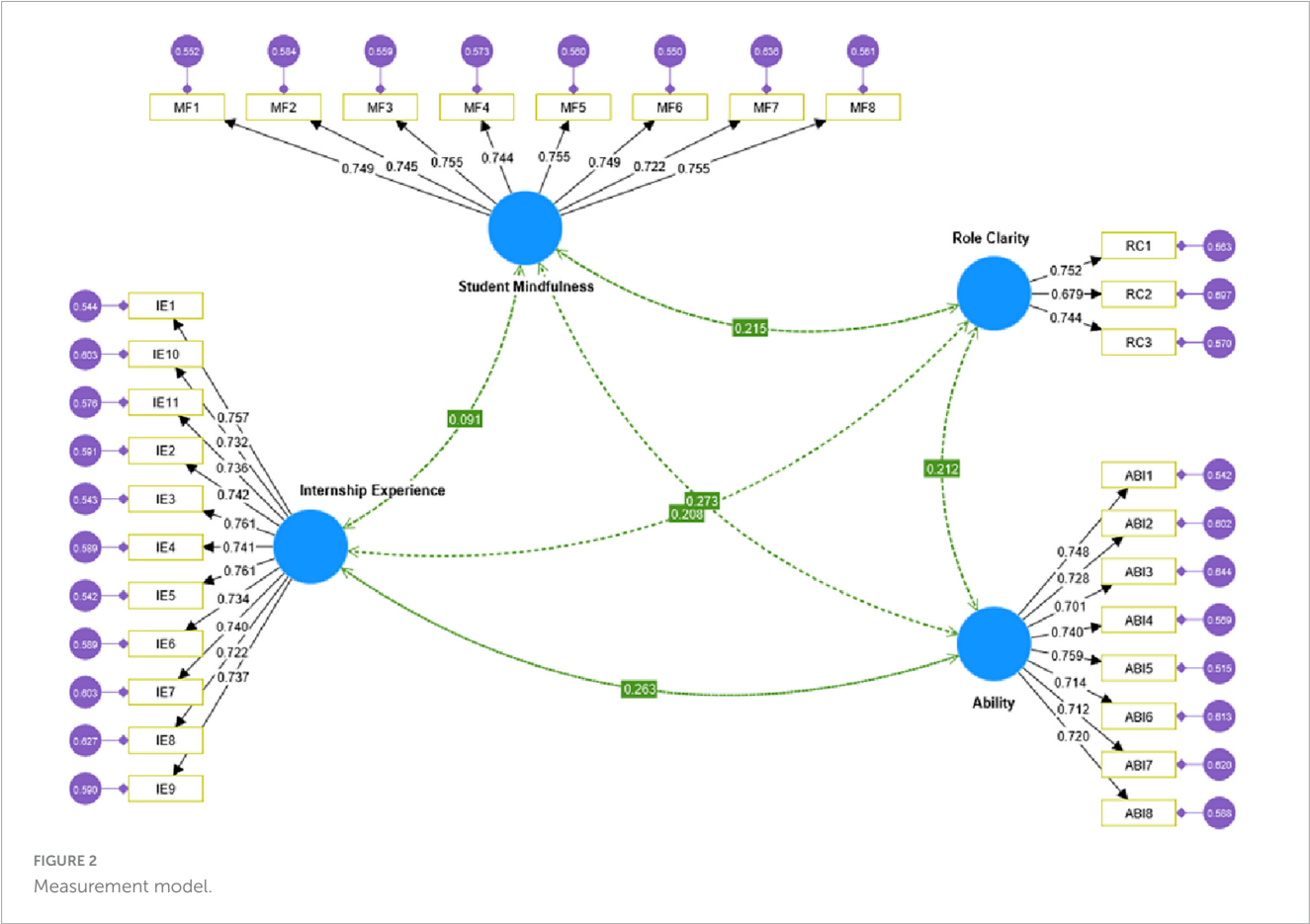


TABLE 7 Path model assessment.

Direction of relation	Original sample (O)	Sample mean (M)	Standard deviation (STDEV)	T statistics (O/STDEV)	P-values
Internship experience - > ability	0.184	0.183	0.077	2.387	0.017
Internship experience - > role clarity	0.182	0.185	0.072	2.519	0.012
Student mindfulness - > ability	0.254	0.254	0.079	3.196	0.001
Student mindfulness - > role clarity	0.166	0.165	0.079	2.113	0.035

Further, to assess the convergence validity for each item/question statement for research constructs, standardized factor loading was used (Chin, 2010; Hair et al., 2021). According to the findings, all items converged onto their relevant construct with the factor loading > 0.7, reflecting the convergent validity attainment. The convergent validity can be seen in Tables 2, 3, 4.

3.2.2 Discriminant validity

Measures such as the Fornell-Larcker criterion and the Hetrotrait-Monotrait Ratio (HTMT) were utilized to measure the distinctiveness of each research construct (Fornell and Larcker, 1981). About the Fornell-Larcker criterion, the discriminant validity is attained if the minimal correlation between variables is observed (the square root of the AVE of each variable should be less than its correlation with other variables) (Henseler et al., 2016; Henseler et al., 2015; Rönkkö and Cho, 2022). Further, for the HTMT Ratio, values less than 0.85 are considered acceptable

fit (Hair et al., 2016; Henseler et al., 2016; Henseler et al., 2015). Based on the findings, both values for HTMT and Fornell-Larcker were in line with the defined parameters, depicting the attainment of discriminant validity. Tables 4, 5 report the findings for both measures.

3.2.3 Assessment of measurement model fit assessment

To measure the goodness of fit for the measurement model measures such as Chi-Square, P-Value, Chi-square/Degree of freedom, RMSEA, GFI, AGFI, PGFI, SRMR, NFI, TLI, CFI, AIC = Akaike's information criterion and were and BIC = Bayesian information criterion were utilized. The ascertained values were well under the acceptable criteria (Hu and Bentler, 1999). Table 6 explains the findings for such metrics for model fit assessment. The overall measurement model is also displayed in Figure 2.

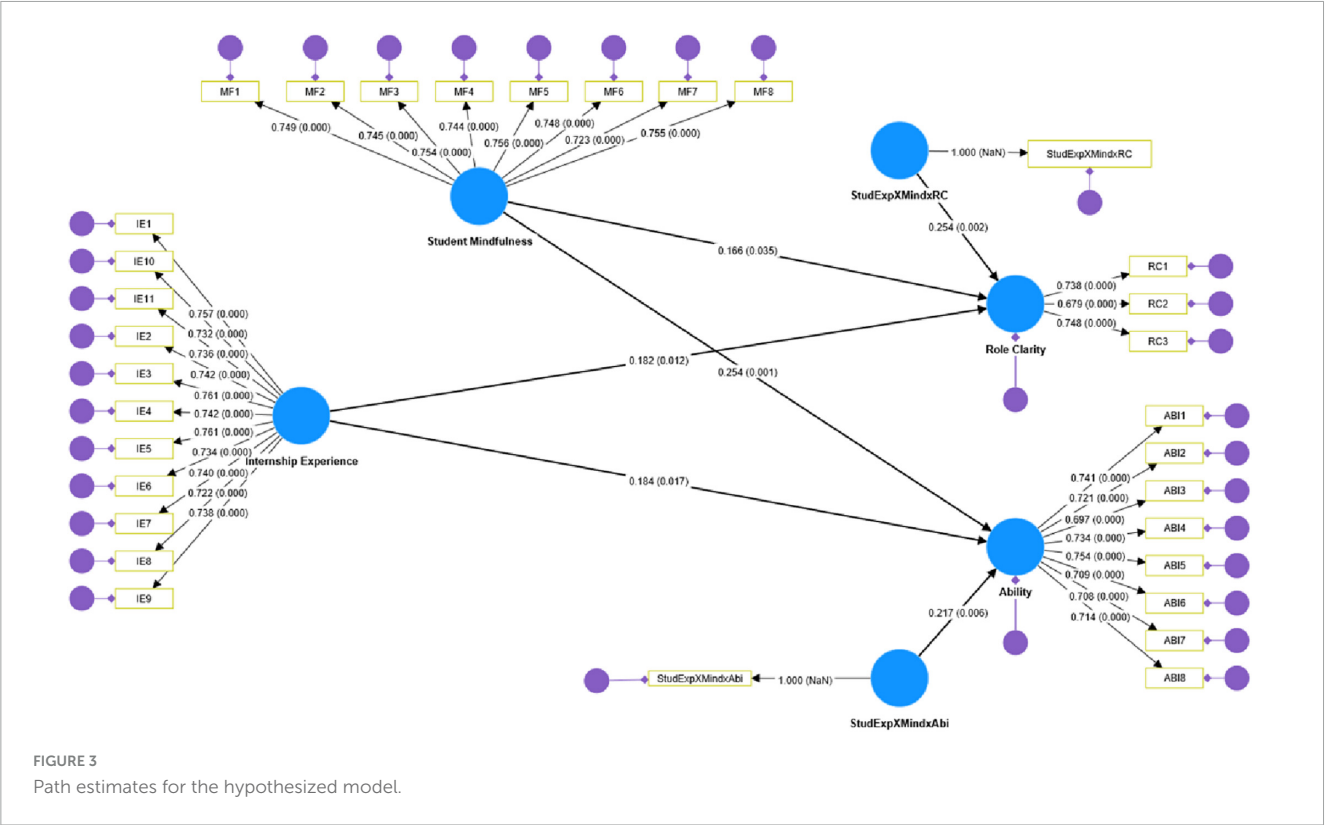


TABLE 8 Moderation impact assessment.

	Original sample	Sample mean	Standard deviation	T statistics	P-values
Internship experience × mindfulness × Abi → ability	0.217	0.210	0.078	2.764	0.006
Internship experience × mindfulness × RC → role clarity	0.254	0.250	0.083	3.070	0.002

4 Hypothesis testing

Four direct hypotheses were tested to assess the impact of internship experience and student mindfulness on role clarity (H1 and H3) and ability (H2 and H4). Hypothesis 1 stated that internship experience would positively impact role clarity. As anticipated, there was a positive and significant impact of internship experience on role clarity $\beta = 0.182$ ($t = 2.519, p < 0.012$). Hypothesis 2 stated that internship experience would positively impact the student’s ability to perform, and based on the findings, there was a positive and significant impact observed $\beta = 0.184$ ($t = 2.387, p < 0.017$). Hypothesis 3 anticipated the positive association between student mindfulness and role clarity, and our finding met the expectations with the positive and significant association between student mindfulness and role clarity $\beta = 0.166$ ($t = 2.113, p < 0.035$). Lastly, hypothesis 4 positively postulated the impact of students’ mindfulness on their ability to perform, and based on the findings, a positive and significant impact was observed between students’ mindfulness and their ability to perform $\beta = 0.254$ ($t = 3.196, p < 0.001$). Path coefficients and their P-Values (for direct impacts) for the hypothesized relationship are mentioned in Table 7 and Figure 3.

In addition to assessing the direct impacts, the study tested the moderating role of student mindfulness between internship experience and role clarity (H5) and Ability (H6). According to prior literature, moderating variable influences (strengthens or weakens) the direct relationship of the predicting variable with the outcome variable, or in another sense, it moderates the relationship among multiple constructs by reducing or enhancing their relationship strength (Hair et al., 2016; Hair, 2013). To assess the overall model and the moderating role of the construct “student mindfulness,” the structural equation modeling technique was utilized alongside the 5,000 bootstrapping technique to make the research findings more robust. According to hypothesis 5, student mindfulness would positively moderate students’ internship experience with their role clarity, meaning that the more mindful students are, the more their internship experience will enhance their role clarity. According to the findings, student mindfulness positively moderated the relationship of internship experience with role clarity $\beta = 0.254$ ($t = 3.070, p < 0.002$), meaning that by being mindful, student’s internship and its impact on their role clarity would be strengthened, hence meeting the research expectations. Lastly, the sixth hypothesis anticipated the positive moderation role of student mindfulness between students’

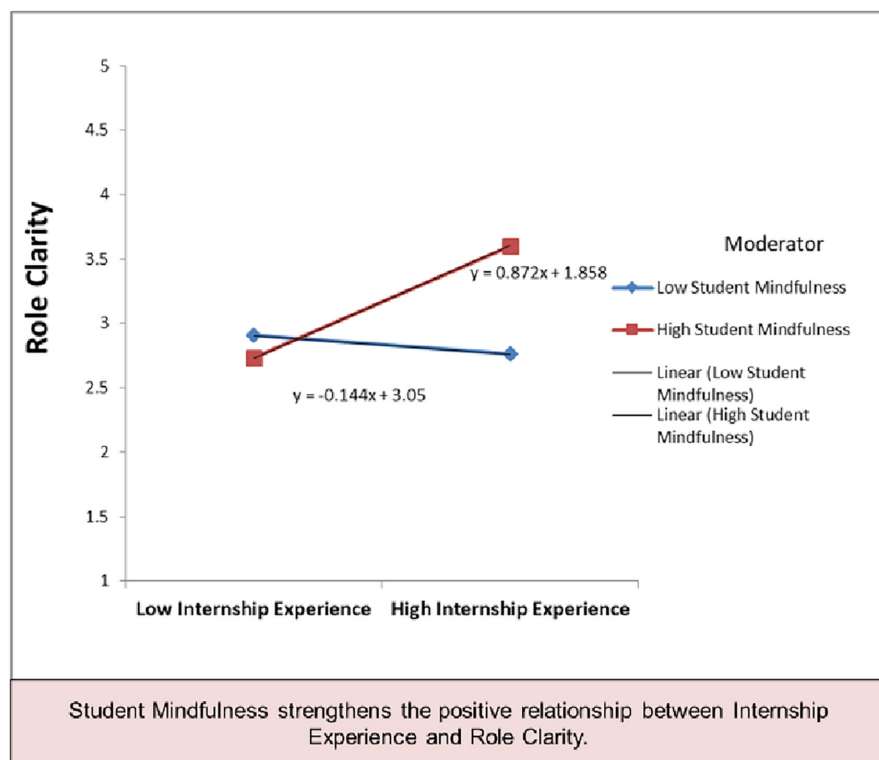


FIGURE 4

Interaction between internship experience, mindfulness, and role clarity.

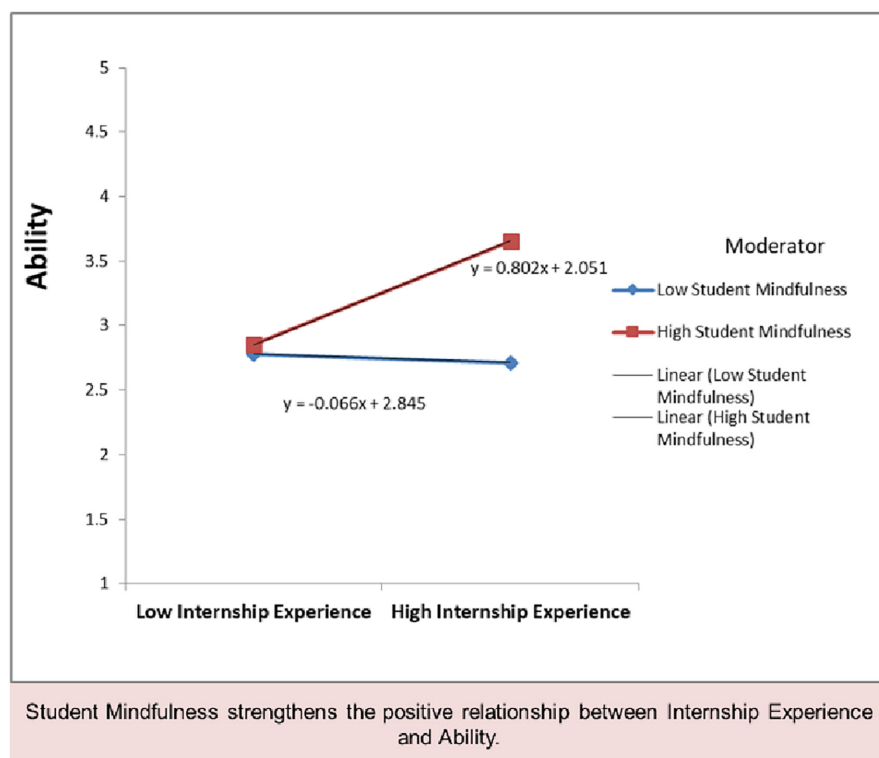


FIGURE 5

Interaction between internship experience, mindfulness, and ability.

internship experience and their ability. According to the findings, student mindfulness positively moderated the relationship between internship experience and student ability $\beta = 0.217$ ($t = 2.47$, $p < 0.006$), supporting the argument that being mindful helps students toward their abilities at work. Table 8 represents findings for moderation hypotheses, and Figures 4, 5 represent the interaction effect of moderating variables between predictor and outcome variables.

5 Discussion and conclusion

The study empirically tested factors such as internship experience and individual mindfulness and their influence on work readiness for hospitality industry students in Saudi Arabia's context regarding their role clarity and ability. The study offers significant findings and actionable interventions for the hospitality industry, institutions, and students. Study findings highlighted that internship experience is an essential and positive predictor of both students' ability and their role clarity in the context of the hospitality industry, meaning that to be more explicit and practical about the professional role and bring about more professional skills for the hospitality industry students, practical internship experience could be a significant contributing element. The study's findings emphasize that to bridge the crucial gap between academic learning and the real-world application of the attained knowledge, it is paramount for graduates to have preliminary experience in the form of internships.

The study findings are in harmony with prior literature that affirms the significance of practical exposure and learning brought to the students through internship experience (Yiu and Law, 2012). Institutions, in general, enable and equip pupils with theoretical knowledge that still requires actual world application, and internships can be one of the tools to transform that theoretical knowledge into a real-world experience that can help students gain hands-on experience in the operations of their relevant industry. Internships are considered immersive experiences (Poltimäe et al., 2023), where the application of theoretical knowledge and the lesson learned are observed in a real-world scenario, ultimately resulting in the students' enhanced exposure to the evolving work dynamics. The acquisition of such experience is paramount for the professional development of the students, which will help them with their job role expectations and the set abilities that are essential to compete in the industry.

Moreover, the study demonstrated a significant and positive statistical impact of students' mindfulness on their role clarity and ability, where mindfulness entails an individual's ability to stay in the present moment, regulate emotions, and focus on issues to counter stress and process information more efficiently (Loucks et al., 2024). Through individual mindfulness, students can enhance their learning experience by staying in the present moment and focusing more on what is on their table or in hand. Our study findings are consistent with the prior literature in other industrial and research contexts, highlighting the benefits of being mindful, i.e., it helps cognitive functioning. It enhances

the emotional and personal wellbeing of the individual, which is relevant in this research's case since all of such elements are necessary for hospitality industry students to succeed in their professional careers (Atak and Artan, 2024; Cole, 2022; Hülshager et al., 2013; Jobbehdar Nourafkan et al., 2023; Rupprecht et al., 2019b). Mindfulness helps individuals maintain their stress levels at a much lower level, enhance their focus on what they have at the moment, and nourish their emotional intelligence and resilience (Hoge et al., 2023; Li et al., 2023; Loucks et al., 2022), all of which are considered critical for successfully navigating through the challenging terrain of professional life, especially the hospitality industry which is prone to service failure at an instance (Akarsu et al., 2023). The clarity brought by mindfulness will not only vividly describe the abilities of students to perform their tasks but will also increase their understanding of individual and group dynamics. Henceforth, this research's findings reflect mindfulness's positive impact on the students' role clarity and abilities, which are relevant and can be pivotal for hospitality organizations to ponder their energies and efforts.

Further, this research empirically tested and provided evidence of individual mindfulness's moderating role between individual internship experience and work readiness (ability and role clarity). Findings emphasize the critical role one's mindfulness can play while performing an internship experience, i.e., mindfulness is expected to enhance the internship experience with one's role clarity, meaning that if students are more mindful (they stay in the present moment, focus on things at hand, manage stress effectively), they can ultimately focus more toward given role and responsibilities. Internship experiences are considered transformative for newly graduated students (Adams, 2011; Loucks et al., 2022), and practicing mindfulness during those times will alleviate their awareness about themselves and their surroundings, ultimately assisting them to internalize their experience and apply their knowledge in a real-world scenario. The attenuation of students with their expertise will enable them to restructure their strengths and weaknesses, enhancing their overall abilities. One is expected to be more cautious and attentive when they are well-versed in their work environment, and by being mindful, students can have better clarity about their surroundings, which will help them perform their tasks more effectively. It is also anticipated, based on the study findings, that students can enhance their abilities, i.e., effective skill development, be they personal or professional, while performing their internship experience by practicing mindfulness, as mindfulness helps eradicate things that are not important and focus on the present moment (Dutt et al., 2018; Pepping et al., 2013; Yiu and Law, 2012). This study evidenced and recorded the need for mindfulness for graduates who are inexperienced and inexperienced in the hospitality industry and its intricacies, which can help them attain maximum benefit during their course of experience.

The study establishes the theoretical contribution by integrating social learning theory and experiential learning theory (Bandura, 1986; Kolb, 1984) to explain the intricate role of mindfulness in enhancing students' internship experience and their ability and role clarity. Based on social learning theory, learning also occurs through the individual's observance and

modeling. In this study context, the students are expected to enhance their knowledge through experience and interaction with peers or senior professionals. Congruence to this, practicing mindfulness is expected to support this learning by improving attention, awareness about self and others, and emotional regulation, consequently allowing students to reflect and absorb desired behaviors. Also, the experiential learning theory suggests learning through direct exposure and reflection, whereas the presence of mindfulness is expected to deepen the learning and productivity of students while performing internships. Both social and experiential learning are to be enhanced with the compliment of mindfulness. The aforementioned theoretical integration extends and deepens the understanding of individual mindfulness and its relevance to learning outcomes in real-world scenarios. It also suggests the fruitfulness and effectiveness of observational and experiential learning aspects for hospitality industry graduates.

6 Research practical implications

The study offers multifaceted implications for both the hospitality industry and the academia. Academic institutions providing programs related to the hospitality industry should incorporate the internship into their curricula. Their efforts should not be limited to designing internships in the program. Still, more serious efforts must be undertaken in collaboration with the hospitality industry to secure internship opportunities with feasible terms and conditions for students and institutions. Further, since the occupations in the hospitality industry are known to be stressful and challenging for new hires (O'Neill and Davis, 2011; Yousaf et al., 2020), the integration of mindfulness practices at the institutional level in the curriculum is recommended, which can provide substantial benefits to the students. Through curriculum-based mindfulness programs, students can be trained to extract benefits from mindfulness, such as strategies to cope with stress, emotional regulation, and enhanced focus.

From the industrial contribution aspect, the realization and the consequent introduction of mindfulness interventions for those doing internships can provide ample support for interns and their employees to improve performance. The induction of formal mindfulness practices enhances employee morale, overall wellbeing, and the service they are expected to offer customers/clients. Moreover, from the organizational and managerial perspective, hospitality managers are recommended to emphasize personnel needs fulfillment through internships, as it will help them with energetic and energetic resources to grow with the organization. The required skills and abilities can be developed by focusing on internship programs, as it will be easy to mold new talent according to the organizational demands. The readiness of the new talent pool can be ensured through well-designed internship programs by the organizations.

7 Limitations and future research

Every study has certain limitations; in this case, our study is no exception. Firstly, the study was conducted

in the cultural context of Saudi Arabia, which limits its generalizability in the broader context; hence, further validation is required. Second, the study utilized self-reported measures subjected to reporting bias, and respondents are expected to report under or over-rated experiences. The cross-sectional design of the study also limits its generalizability. It covers only the research participants' single point and time response, whereas the longitudinal data could counter this limitation.

Further, the study is limited to the hospitality industry in a specific country, and respondents were only from the educational sector, restricting the representation of responses. In the future, adding multiple industries from the respondents' point of view and additional geographical locations will lead to further insights. Lastly, samples from larger populations and locations will add value to the literature. Scholars are encouraged to conduct longitudinal studies to explore how mindfulness practices sustained role clarity and their abilities when they were provided with the internship experience. Adding an industrial context to the research further helps generalize the findings of this study. Also, adding multiple cultural contexts to the framework will broaden the research community's knowledge. Moreover, empirical validation of the direct antecedent role of individual mindfulness with students' abilities and their role clarity merits a research inquiry. Scholars may also consider adding other contextual variables to the proposed model to deepen their understanding of this exciting research avenue. Lastly, the qualitative investigation from the industry, academia, and students inquiring about mindfulness intervention and the internship experience is expected to yield interesting insights and multiple research avenues.

Data availability statement

The raw data supporting the conclusions of this article will be made available by the authors, without undue reservation.

Ethics statement

Ethical review and approval was not required for the study on human participants in accordance with the local legislation and institutional requirements. Written informed consent from the participants was not required to participate in this study in accordance with the national legislation and the institutional requirements.

Author contributions

TA: Funding–acquisition, Resources, Software, Supervision, Visualization, Writing – review & editing. MA: Conceptualization, Formal Analysis, Methodology, Writing – original draft, Writing –

review & editing. MS: Conceptualization, Formal Analysis, Investigation, Methodology, Software, Validation, Writing – original draft.

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Conflict of interest

The authors declare that the research was conducted in the absence of any commercial or financial relationships that could be construed as a potential conflict of interest.

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