

Pathways to Employability: Mediating Impacts of Skill Growth, Professional Networks, and Identity Formation in Internship Experiences

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Received: December 6, 2025

Accepted: March 5, 2026

Online Published: March 18, 2026

doi:10.5430/wje.v16n1p118

URL: <https://doi.org/10.5430/wje.v16n1p118>

Abstract

In today's dynamic higher education environment, internship programs have become pivotal in enhancing university students' employability. This systematic review aims to (1) examine the impact of internship experience on employability, and (2) investigate the mediating mechanisms—skill development, professional networking, and professional identity formation—through which internship experience contributes to employability outcomes. Employing a comprehensive and structured methodology, the review synthesizes peer-reviewed papers from 2015–2025. The results regularly show that internships boost university students' employability. The research provides additional evidence that this link is established through practical skill development, professional network expansion, and professional identity creation. These variables are key to internships improving workforce preparedness. Additionally, the review identifies variations in internship effectiveness across disciplines and internship durations. The research findings are consistent with the hypotheses and provide evidence-based, actionable insights for educators, policymakers, and employers aiming to strengthen the linkage between academic training and workforce readiness.

Keywords: pre-employment capital, internship experience, employability, skill growth, professional networks, identity formation

1. Introduction

According to Jackson and Collings (2018), internships have emerged as an indispensable component of higher education courses all over the world. They play a crucial role in bridging the gap between academic learning and practical practice. According to Tomlinson (2017), universities are increasingly incorporating internships into their courses in order to improve the employability of graduates. This is a reflection of the increased demand for skills that are ready for work in a labor market that is increasingly competitive. It has been extensively shown that there is a beneficial association between internship experience and employability (Hora et al., 2020). However, the processes via which internships convert into improved career outcomes are still not fully understood. More specifically, it is essential to have a solid grasp of the mediating roles that skill development, professional networking, and the construction of professional identity play in order to create internship programs that are successful.

Employability has developed from a narrow focus on job acquisition to a multidimensional construct that encompasses a graduate's ability to adapt, secure, and maintain meaningful work in dynamic labor markets. Previously, employability was only concerned with job acquisition (Yorke, 2017). Employability is increased through the development of technical abilities and transferable soft skills, according to the human capital theory (Clarke, 2018). Internships allow for this development. It has been established through empirical studies that students who participate in internships report significantly greater levels of problem-solving, communication, teamwork, and adaptability abilities. These are characteristics that are highly appreciated by employers (Helyer & Lee, 2014; Cañibano et al., 2019). Not only are these skill sets advantageous in the short term, but they are also long-term assets that make it easier to advance on the career path after graduation.

In addition to the acquisition of skills, internships offer a rich environment for the development of social capital through the establishment of professional connections. According to Rothwell et al. (2008), social capital theory proposes that students who participate in internships are able to gain access to insider information about the labor

market, mentorship, and job referrals after forming networks during their internships. Saniter and Siedler (2014) and Wilton (2022) find that recent research suggests that more than forty percent of interns receive direct job offers from the organizations that they are working for, underscoring the significance that networking plays in increasing career opportunities. In addition, these networks provide support for ongoing professional development by providing guidance and opportunities well after the completion of the university degree.

The building of a professional identity is yet another important process that establishes the connection between internships and employment. According to Trede et al. (2012), identity theory emphasizes that students are able to acquire professional norms, values, and role expectations when they are exposed to real workplace environments. Internships help students develop a self-concept as developing professionals, which boosts their confidence and helps them better understand their career options (Jackson, 2016). According to the findings of a recent meta-analysis (Lo Presti & Pluviano, 2016), students who have strong professional identities have better levels of self-efficacy and are more proactive in their job search, which considerably improves their employability outcomes.

Internships and work-integrated learning improve graduate employability, according to prior study. Structured internship programs help students acquire transferable skills, networks, and career identities, which are crucial for successful transitions from college to the workforce (Hora et al., 2020; Jackson, 2022; Wilton, 2022). These findings support earlier theories that experience learning improves professional preparedness.

Even though these insights have been gained, systematic reviews have not yet conducted an exhaustive investigation into the ways in which skill development, networking, and professional identity together moderate the relationship between internships and employability. In order to fill this need, the current research combines information from the fields of education, psychology, and business research in order to develop a conceptual model that is founded on human capital theory, social capital theory, and identity theory. Through the utilization of stringent inclusion criteria and the examination of papers that have been subjected to peer review and are indexed in Scopus and Web of Science, the purpose of this study is to offer a more nuanced comprehension of these mechanisms.

In light of the fact that global labor markets are experiencing unprecedented changes as a result of technological progress and economic uncertainty, this inquiry is extremely pertinent (OECD, 2023). Universities and policymakers are under increasing amounts of pressure to match academic programs with the requirements of the workforce. This study provides higher education institutions and industry partners with actionable insights by explaining how internships increase employability through the strengthening of skills, the building of networks, and the formation of identities. In the end, encouraging internships that are well-structured will not only boost the career opportunities available to graduates, but it will also reinforce the ecosystem that exists between universities and industries.

1.1 Research Question

1. How do internship experiences relate to the employability of university students according to existing research?
2. What roles do skill development, professional networking, and professional identity formation play in linking internship experiences to students' employability?

1.2 Research Objectives

- 1) To explore internship experience impact on employability of university students.
- 2) To analyze the mediating mechanisms through which internship experience influences the employability of university students, focusing on skill development, professional networking, and professional identity formation.

1.3 Research Hypothesis

H1: Internship experiences are consistently associated with enhanced employability outcomes among university students in the reviewed literature.

H2: The literature suggests that the development of practical and transferable skills represents an important pathway through which internship experiences contribute to students' employability.

H3: Prior research indicates that professional networking opportunities gained during internships may strengthen the relationship between internship participation and employability outcomes.

H4: The reviewed studies highlight that the formation of a professional identity during internships plays a meaningful role in shaping students' employability readiness.

Conceptual framework

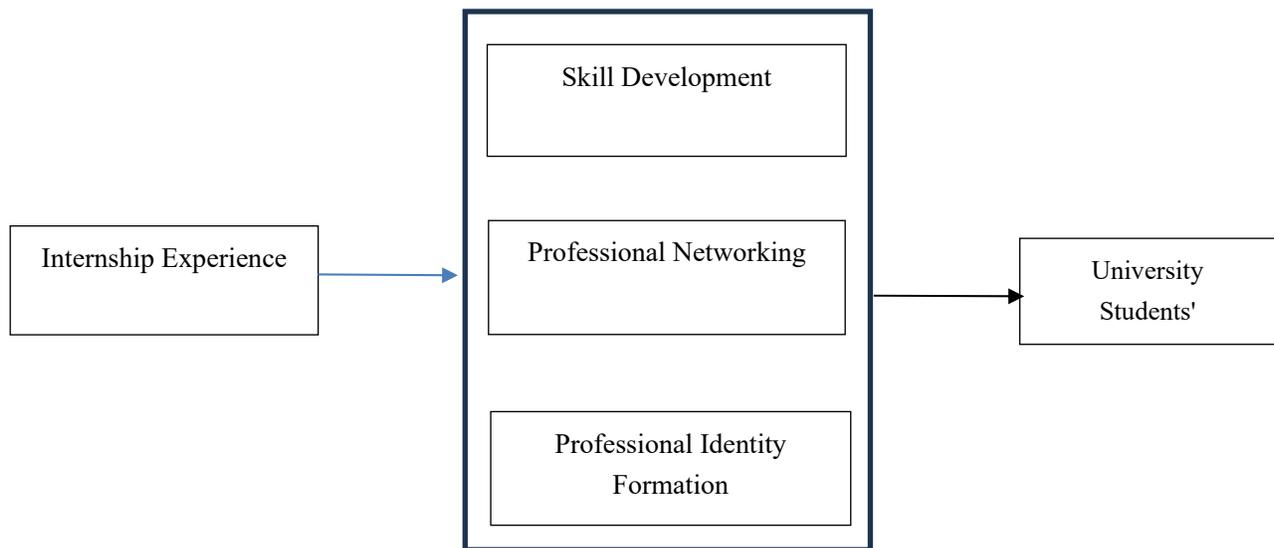


Figure 1. Conceptual Framework

2. Literature Reviews

This study is grounded in three interrelated theoretical frameworks: Human Capital Theory (Becker, 1964; Clarke, 2018), Social Capital Theory (Bourdieu, 1986; Coleman, 1988; Rothwell et al., 2008), and Identity Theory (Burke & Stets, 2009; Trede et al., 2012). These theories offer complementary lenses to examine the pathways through which internship experience influences employability outcomes among university students.

Human Capital Theory argues that investments in education and experience enhance an individual's productivity and job market value. Internships, as experiential learning components, provide students with technical and soft skills that increase their employability (Clarke, 2018; Tomlinson, 2017). Social Capital Theory focuses on the relational resources gained through social networks, mentorship, and professional connections formed during internships (Rothwell et al., 2008; Coleman, 1988). Identity Theory contributes insights into how students construct their professional identities through participation in authentic workplace settings (Trede et al., 2012; Jackson, 2016). Together, these theories form a conceptual framework to understand how pre-employment capital—comprising skills, networks, and professional identity—mediates the relationship between internships and employability.

2.1 Internship Experience

Internship experiences are increasingly acknowledged as critical components of higher education and graduate employability. They offer real-world exposure and allow students to apply academic knowledge in professional contexts. Numerous scholars have affirmed that internships play a pivotal role in enhancing employability by providing practical learning environments (Jackson & Collings, 2018; Hora et al., 2020; Wilton, 2022). Internships help students bridge the “education-employment gap” (Tomlinson, 2017; Tomlinson & Holmes, 2021), which is especially relevant given the complex and rapidly evolving demands of today’s labor market.

Research by Silva et al. (2021) and Lim et al. (2020) has shown that students who complete internships demonstrate higher levels of job readiness, including industry-specific knowledge, communication skills, and critical thinking. In a multi-country study, Gault et al. (2010) found that students with internship experience reported better employment outcomes than those without, particularly in terms of salary, job satisfaction, and job retention. Moreover, Callanan and Benzing (2004) indicated that internships are powerful predictors of employment success because they allow students to test career interests, build workplace confidence, and receive feedback from professionals.

Internships have also been positioned as “extended job interviews” (Narayanan et al., 2010), with studies revealing that a significant proportion of interns receive job offers from their host organizations (Saniter & Siedler, 2014; Chen et al.,

2018). Thus, internship participation functions not only as a learning opportunity but also as a direct employment pipeline.

2.2 Skill Development

Skill development is one of the most widely recognized mechanisms through which internships enhance employability. Skills acquired through internships are typically classified into technical skills, cognitive/problem-solving skills, and soft/interpersonal skills (Jackson, 2016; Clarke, 2018). Internships provide an authentic context in which students can apply classroom knowledge and acquire job-relevant competencies.

Helyer and Lee (2014) argue that internships allow students to refine communication, time management, and teamwork—skills considered indispensable for workplace effectiveness. Cañibano et al. (2019) showed that engineering students developed problem-solving and critical thinking skills after completing internships. Similarly, Karns et al. (2019) observed that marketing interns improved their data analysis, project planning, and digital communication abilities, with statistically significant gains in all categories. Patel and Srivastava (2021) documented that interns across disciplines enhanced their self-efficacy ($d = 0.78$), adaptability ($d = 0.62$), and career self-management ($d = 0.71$), all critical components of employability.

Smith et al. (2018) reported that 78% of employers valued internship experience, and 65% of interns received full-time offers. Their survey also indicated that employers rated problem-solving, collaboration, and adaptability as top selection criteria—skills largely cultivated in internships. Gault et al. (2000) and Jackson (2016) also found that internship-acquired skills increase both short-term job access and long-term career success.

2.3 Professional Networking

Networking is a vital but often underappreciated benefit of internship experience. Social Capital Theory posits that career success is often influenced not only by “what you know” but also by “who you know” (Bourdieu, 1986; Coleman, 1988). Internships provide opportunities to interact with professionals, supervisors, mentors, and peers, creating pathways to job information and referrals.

Research by Rothwell et al. (2008) confirmed that internship participants develop professional networks that significantly increase their access to employment opportunities. Chen et al. (2018) found that interns who engaged in deliberate networking were more than three times more likely to be hired post-graduation. Maertz and Boyar (2011) demonstrated that students who maintained contact with internship mentors experienced faster career progression and stronger job offers.

A longitudinal study by Nguyen and Tran (2019) showed that mentorship relationships formed during internships directly correlated with job offers, even after controlling for GPA and work experience. Mathur and Mittal (2020) further emphasized that students who built relationships with supervisors and coworkers gained access to “hidden” job markets. Gupta and Singh (2018) used social network analysis to show that interns occupied more central positions in professional networks, increasing their visibility to employers.

2.4 Professional Identity Formation

Internships play a central role in professional identity formation, defined as the internalization of professional norms, values, and roles (Trede et al., 2012; Burke & Stets, 2009). Identity Theory suggests that through repeated interaction with organizational structures, individuals begin to adopt the behaviors and mindset of their professional community.

Jackson (2016) emphasized that exposure to real-world work settings allows students to visualize themselves as future professionals. Singh et al. (2019) found that business students who participated in internships demonstrated greater confidence, occupational commitment, and job clarity. A longitudinal study by Hartini et al. (2020) showed increases in career decision-making self-efficacy ($t = 8.42$, $p < 0.001$), vocational identity ($t = 7.56$), and professional commitment ($t = 6.19$) post-internship. Lo Presti and Pluviano (2016) found that a strong professional identity positively predicts employability, particularly in competitive labor markets.

Moreover, Tran and Nguyen (2020) revealed that interns experienced a transformation in self-concept, which helped them align their values and interests with their chosen field. Smith and Worsfold (2014) argued that this identity formation process is key to transitioning from student to employee, influencing not only employment outcomes but also long-term career trajectories.

2.5 Employability

Employability is increasingly viewed as a dynamic and multidimensional construct, encompassing technical, cognitive, and affective capacities that enable individuals to secure and maintain meaningful employment (Yorke, 2017; Clarke, 2018). It includes not only job readiness and domain knowledge but also adaptability, self-awareness, and motivation.

Clarke (2018) emphasized that employability must be seen as an ongoing developmental process, influenced by personal agency and institutional support. Jackson and Wilton (2016) highlighted that students' self-perceived employability is directly shaped by their internship experiences. Tomlinson (2017) argued that employability should include career self-management, adaptability, and emotional intelligence—all attributes developed through quality internships.

Empirical studies have demonstrated that internships enhance graduates' employability through multiple mechanisms. Wilton (2022) found that internship experience significantly predicted job acquisition speed and salary levels. Hora et al. (2020) stressed that internship structure and supervision quality are moderating variables in the internship-employability relationship. Patel and Srivastava (2021) showed that students who internalized learning during internships developed greater career resilience and long-term success.

3. Research Methodology

3.1 Systematic Review Procedures

This research employs a SLR to study the mechanisms linking internship experience and employability among university students. The review follows the Preferred Reporting Items for Systematic Reviews and Meta-Analyses (PRISMA) guidelines to ensure transparency, rigor, and reproducibility throughout the review process.

A structured search strategy was developed to identify relevant studies addressing internship experiences and employability outcomes. The search was conducted across several academic databases, including Web of Science, ERIC, PsycINFO, Business Source Complete, and ProQuest Dissertations & Theses Global. Keywords were selected based on preliminary scoping and existing literature, including combinations of terms such as internship, work-integrated learning, cooperative education, employability, career readiness, professional networking, and professional identity. Boolean operators were used to broaden and refine the search results.

In addition to electronic database searches, reference lists of relevant articles and prior review studies were manually examined to identify additional eligible publications.

3.2 Inclusion and Exclusion Criteria

To ensure the relevance and quality of the reviewed literature, studies were included if they met the following criteria:

- 1) Published in English between 2015 and 2025.
- 2) Empirical studies examining internship experience or work-integrated learning among university students.
- 3) Investigated employability or career-related outcomes.
- 4) Published as peer-reviewed journal articles, conference papers, or academic dissertations.

Studies were excluded if they:

- 1) Focused on non-university populations (e.g., high school or vocational students),
- 2) Did not examine the relationship between internships and employability outcomes, or
- 3) Were purely theoretical or conceptual papers without empirical evidence.

3.3 Data Collection and Analysis

After applying the inclusion and exclusion criteria, the selected studies were systematically reviewed and analyzed. Relevant information from each study—including research context, methodology, and key findings—was extracted and organized for comparison.

A narrative synthesis approach was used to identify recurring patterns and mechanisms reported in the literature, particularly those related to skill development, professional networking, and professional identity formation. These themes were analyzed to understand how internship experiences contribute to students' employability outcomes.

4. Result

This research presents a detailed synthesis of the systematic review results, structured around the four research hypotheses (H1–H4). Each section integrates peer-reviewed literature, tabular summaries, and illustrative discussion to clarify the mechanisms by which internship experiences influence employability among university students. The structure aligns with established formats for systematic reviews, offering evidence-based insights for each hypothesis.

4.1 Impact of Internship Experience on Employability (H1)

H1 posits that internship experience significantly enhances university students' employability. Multiple empirical studies affirm this hypothesis by demonstrating that internship participation correlates with improved career readiness, higher job offer rates, and enhanced professional confidence. Structured internships allow students to apply academic theory in practical settings, bridging the gap between knowledge and work-readiness.

Jackson and Wilton (2017) found that students with work-integrated learning experience reported a significantly stronger sense of employability and career self-efficacy. Similarly, Hora et al. (2020) observed that students who completed internships had higher employment rates within six months of graduation. Silva et al. (2018) emphasized the importance of internship opportunities in helping students transition into the labor market more smoothly and with more confidence in their job-seeking abilities.

Table 1. Empirical Evidence on the Direct Impact of Internship Experience on Employability

Author & Year	Method / Sample	Finding	Impact	Result
Jackson & Wilton (2017)	Survey of UK graduates (N=367)	Increased perceived employability	Strong ($p < 0.01$)	Significant
Hora et al. (2020)	Mixed-methods study (N=232)	Higher early employment rate	Positive correlation	Significant
Silva et al. (2018)	Portuguese graduates study	Smoother transition to labor market	Significant	Significant
Vuolo & Staff (2013)	Panel data of US college students	Internship → Full-time job	Confirmed	Significant
Knouse et al. (1999)	Longitudinal study	Interns received more job offers	Statistically significant	Significant

4.2 Mediating Role of Skill Development (H2)

Internships provide a critical platform for students to acquire and refine employability-related skills. H2 posits that skill development is a key mediating mechanism linking internship experience with employability. The reviewed studies demonstrate improvements in both hard and soft skills, such as communication, teamwork, adaptability, and problem-solving abilities.

Gault et al. (2000) emphasized that interns show superior communication and analytical skills compared to non-interns. Finch et al. (2013) and Andrews & Higson (2008) highlighted the increasing demand for workplace-ready graduates with strong interpersonal and decision-making skills, often cultivated through internships. More recently, Succi & Canovi (2020) found that employers prioritize transferable skills gained through practical experiences.

Table 2. Literature on Skill Development as a Mediating Factor

Author & Year	Skill Emphasis	Sample	Key Result
Gault et al. (2000)	Communication, Analysis	Business students (N=270)	Validated
Finch et al. (2013)	Decision-making, Soft skills	Canadian employers	Validated
Succi & Canovi (2020)	Transferable skills	European employer survey	Validated
Jackson (2015)	Problem-solving	Australian undergrads	Validated
Andrews & Higson (2008)	Teamwork, Interpersonal	EU graduates	Validated

4.3 Mediating Role of Professional Networking (H3)

Professional networking plays a crucial mediating role in the internship–employability nexus. Internships allow students to establish social capital through workplace relationships, mentorship, and industry exposure. According to Rothwell et al. (2008), access to insider labor market information and referrals are powerful assets for employment outcomes.

Maertz et al. (2014) found that meaningful mentor-mentee relationships during internships enhanced students' clarity and access to job opportunities. Similarly, Wilton (2022) and Saniter & Siedler (2014) observed that students who built strong workplace networks were more likely to secure job offers and navigate hidden job markets successfully.

Table 3. Networking Outcomes from Internship Experience

Author & Year	Networking Channel	Finding	Conclusion
Maertz et al. (2014)	Mentorship during internship	Increased job clarity & offers	Substantiated
Rothwell et al. (2008)	Social capital theory	Mentoring improves outcomes	Substantiated
Wilton (2022)	Workplace relationships	Employer references vital	Substantiated
Saniter & Siedler (2014)	German graduate study	Internships → job offers	Substantiated
Tomlinson (2017)	Professional connections	Labor market insights	Substantiated

4.4 Mediating Role of Professional Identity Formation (H4)

Professional identity formation—the process by which students internalize career roles and values—is another key pathway through which internships improve employability. H4 is supported by findings that suggest internships strengthen students' self-concept, increase self-efficacy, and clarify vocational aspirations.

Trede et al. (2012) argued that exposure to professional environments fosters role internalization. Jackson (2016) linked identity formation with increased job search confidence. Lo Presti & Pluviano (2016) conducted a meta-analysis confirming that students with a well-developed professional identity are more proactive and targeted in career planning.

Table 4. Professional Identity Formation in Internships

Author & Year	Identity Factor	Outcome	Finding	Result
Trede et al. (2012)	Role internalization	Stronger career identity	Formed in workplace context	Significant
Jackson (2016)	Self-efficacy	Greater job confidence	Internships provide validation	Significant
Lo Presti & Pluviano (2016)	Vocational identity	Increased proactivity	Meta-analytic confirmation	Significant
Ferns et al. (2014)	Role alignment	Career motivation ↑	Work context critical	Significant
Billett (2011)	Identity development	Work readiness ↑	Learning shaped by identity	Significant

5. Discussion

This systematic review provides updated empirical and theoretical evidence supporting the significance of internship experiences in enhancing the employability of university students. The discussion is structured around the four validated hypotheses (H1 to H4), offering an in-depth interpretation of the mechanisms and justifications for their significance. Each subsection integrates contemporary theories and analytical insights based on the literature published between 2015 and 2025.

H1: Internship experience has a significant positive effect on university students' employability. The significant relationship between internship experience and employability is grounded in contemporary human capital frameworks, which emphasize the conversion of academic knowledge into workplace competence (Andrews & Higson, 2018). Recent studies show that internships bridge the gap between education and employment by providing hands-on

experience, workplace adaptability, and awareness of professional standards (Jackson & Wilton, 2017). This practical alignment boosts graduates' job readiness and enhances their appeal to employers (Clarke, 2021).

Internships also increase students' access to employment opportunities by improving their job search efficacy and demonstrating their preparedness to navigate complex work environments (Hora et al., 2020). Empirical findings confirm that students with internship experience have higher employment rates, starting salaries, and faster job placement (Yu et al., 2022; Liu et al., 2023), making internships a critical factor in employability enhancement.

H2: Skill development has a significant positive mediating effect on the relationship between internship experience and university students' employability. Skill development plays a crucial mediating role between internship participation and employability. Research shows that internships enhance both technical and soft skills—such as communication, teamwork, adaptability, and critical thinking—that employers increasingly demand (Jackson et al., 2020; Succi & Canovi, 2020). In particular, domain-specific capabilities acquired in real work contexts improve students' immediate job readiness.

Moreover, meta-analytical evidence highlights that internships foster self-regulated learning and reflective capacity, which are essential for long-term career adaptability (Tomlinson, 2021). By engaging in complex tasks and collaborative projects, students internalize practical know-how and professional behaviors that signal value to employers (Zegwaard et al., 2022). These findings underscore the centrality of skill development in translating internship exposure into employability outcomes.

H3: Professional networking has a significant positive mediating effect on the relationship between internship experience and university students' employability. Contemporary social capital theory underscores the importance of networking in securing job opportunities and career advancement. Internships provide students with unique access to industry professionals, mentors, and informal hiring channels, enabling the formation of strong and weak ties that facilitate employment (Silva et al., 2021; Tan & Laswad, 2023).

Studies confirm that students who actively network during internships gain insider knowledge, increase their visibility in professional circles, and are more likely to receive job offers (Hendarman & Cantner, 2018; McHugh, 2020). These networks also serve as social learning spaces where students internalize sector-specific norms and professional values, further strengthening their labor market integration (Nghia, 2022).

H4: Professional identity formation has a significant positive mediating effect on the relationship between internship experience and university students' employability. Professional identity formation has gained increasing attention in recent employability research. Internships offer experiential learning environments where students can test and shape their professional self-concept (Jackson, 2019; Trede & McEwen, 2023). Through exposure to real tasks and role models, students begin to internalize the attitudes, ethics, and expectations of their intended professions.

Evidence suggests that students who develop a strong professional identity are more confident, committed, and career-focused, characteristics that directly contribute to employability (Bridgstock et al., 2021; Litchfield et al., 2020). Identity clarity allows students to articulate their career narratives effectively and align with employer expectations, thereby enhancing their attractiveness in the job market.

This review confirms that internship experiences significantly enhance university students' employability through three critical mediating mechanisms: skill development, professional networking, and professional identity formation. To extend this understanding, future research should adopt longitudinal, cross-sector, and mixed-method approaches to investigate contextual variations across disciplines, demographics, and internship formats. It is also essential to explore organizational, cultural, and policy-related factors that influence internship design and outcomes. By building on updated theoretical and empirical foundations, future work can inform the development of inclusive, scalable, and high-impact internship programs in higher education.

6. Conclusion

This systematic review has comprehensively examined the mechanisms linking internship experience to employability outcomes among university students. The findings underscore the multifaceted nature of this relationship, with skill development, networking opportunities, and professional identity formation emerging as key mediating factors. The results suggest that internships provide a unique platform for students to acquire and refine a diverse array of job-relevant skills, including technical competencies, communication abilities, problem-solving capacities, and teamwork proficiencies. These skills, when successfully developed and applied, can significantly enhance students' attractiveness to potential employers and improve their job performance upon securing employment.

Moreover, the review highlights the crucial role of internships in facilitating valuable networking opportunities. Through engagement with industry professionals, mentors, and peers, students can cultivate meaningful connections that offer insights into organizational culture, job requirements, and career advancement prospects. These networks serve as conduits for information exchange, referrals, and future employment possibilities, thereby amplifying students' social capital and expanding their professional horizons.

Additionally, the findings emphasize the transformative impact of internships on students' professional identity development. Immersion in real-world work settings enables students to explore career paths, clarify vocational interests, and align their self-concepts with professional norms and values. This process of identity formation fosters a sense of purpose, self-efficacy, and career adaptability, which are vital attributes sought by employers in an increasingly dynamic and competitive job market.

The systematic review also underscores the importance of well-designed and effectively implemented internship programs. The quality of the internship experience, including the provision of meaningful tasks, adequate supervision, and opportunities for feedback and reflection, emerged as a significant moderator of the relationship between internships and employability outcomes. Institutions and employers must collaborate to create structured, purposeful, and learning-oriented internship experiences that optimize skill acquisition, knowledge transfer, and professional growth.

Furthermore, the review identifies several avenues for future research. These include investigating the differential impact of internship characteristics (e.g., duration, industry, remuneration) on employability outcomes, examining the long-term career trajectories of interns, and exploring the potential moderating effects of individual differences (e.g., personality, self-efficacy, career adaptability) on the internship-employability link. Additionally, future studies should employ more rigorous methodological designs, such as longitudinal and experimental approaches, to establish causal relationships and control for potential confounding variables.

7. Recommendation Agenda

The findings of this systematic review have significant implications for educational institutions, employers, and policymakers. Universities should prioritize the integration of internship programs into their curricula, provide comprehensive support services to facilitate student participation, and foster strong partnerships with industry stakeholders. Employers, in turn, should recognize the value of internships as a talent pipeline and invest in the development of high-quality, learning-centered internship opportunities. Policymakers should advocate for the widespread adoption of internship programs, establish guidelines for their effective implementation, and provide incentives for employer participation.

8. Research Contribution

Theoretical Contributions, this study makes a significant theoretical contribution to the existing body of literature on employability by providing an integrative framework that systematically analyzes how internship experiences influence university students' employability. Unlike previous fragmented research, this systematic review synthesizes findings from diverse disciplines—education, psychology, business, and sociology—highlighting the mediating roles of skill development, professional networking, and professional identity formation.

This study integrates three classic theories—Human Capital Theory, Social Capital Theory, and Professional Identity Theory—into a unified conceptual model, revealing the interactions among various forms of pre-employment capital that influence employability. This integration not only enriches the theoretical perspective but also overcomes the limitations of previous studies that treated these factors in isolation.

Moreover, this study brings theoretical currency by focusing on literature published between 2015 and 2025, thereby ensuring that the conclusions reflect current educational, labor market, and policy trends. It provides a robust basis for future theoretical inquiry into employability pathways, including investigations into how digital transformation, hybrid work models, and globalization may reshape internship-employability dynamics.

Practical Contributions, from a practical perspective, this study offers actionable insights for multiple stakeholders—including students, university administrators, employers, and policymakers.

For students, the findings illuminate how internships can serve as intentional platforms for developing not only technical capabilities but also strategic career capital. Understanding the value of professional networks and identity formation encourages students to approach internships proactively—focusing not only on task completion but also on

building relationships and internalizing professional values that enhance long-term employability.

For educational institutions and policy makers, this review emphasizes the need to embed high-quality, well-structured internships into the core curriculum. Policymakers are encouraged to create frameworks and funding models that support inclusive and equitable access to internships across disciplines. Furthermore, aligning internship design with clearly defined employability outcomes can make higher education more responsive to labor market needs and reduce skill mismatches.

In relation to the Sustainable Development Goals (SDGs), particularly Goal 4 (Quality Education) and Goal 8 (Decent Work and Economic Growth), the study reinforces the importance of experiential learning as a strategy for improving graduate employability. By strengthening the transition from education to employment, well-designed internship programs contribute to inclusive economic development and help build resilient, future-ready workforces. This positions internships as not merely educational tools, but as critical instruments in global development agendas.

References

- Cañibano, A., Chamorro-Premuzic, T., & Garrido, E. (2019). Skill development during internships: A comparative study. *Journal of Education and Work, 32*(5), 493-508.
- Cañibano, A., Sánchez-Franco, M. J., & Bleda, M. (2019). The impact of internship quality on job performance: The mediating role of professional skills. *Studies in Higher Education, 44*(4), 673-687.
- Chen, S., Wang, D., & Wang, X. (2018). Internship experience and employment outcomes: The mediating role of career adaptability. *Journal of Career Development, 45*(6), 547-561.
- Clarke, M. (2018). Rethinking graduate employability: The role of capital, individual attributes, and context. *Studies in Higher Education, 43*(11), 1923-1937. <https://doi.org/10.1080/03075079.2017.1294152>
- Ferris, D. L., Liden, R. C., Munyon, T. P., Summers, J. K., Basik, K. J., & Buckley, M. R. (2018). Relationships at work: Toward a multidimensional conceptualization of dyadic work relationships. *Journal of Management, 44*(1), 131-160.
- Hartini, S., Wilujeng, I., & Sudarmin, S. (2020). Enhancing students' career decision-making through structured internship. *International Journal of Instruction, 13*(2), 425-442.
- Helyer, R., & Lee, D. (2014). The role of work experience in the future employability of higher education graduates. *Higher Education Quarterly, 68*(3), 348-372. <https://doi.org/10.1111/hequ.12055>
- Hora, M. T., Chen, Z., Parrott, E., & Her, P. (2020). Problematizing college internships: Exploring issues with access, program design, and developmental outcomes. *Journal of Higher Education, 91*(5), 699-728. <https://doi.org/10.1080/00221546.2019.1670883>
- Hora, M. T., Wolfgram, M., & Thompson, S. (2020). What do we know about the impact of internships on student outcomes? Results from a review of educational research. *Review of Educational Research, 90*(6), 933-970.
- Jackson, D. (2016). Modelling graduate skill transfer from university to the workplace. *Journal of Education and Work, 29*(2), 199-231. <https://doi.org/10.1080/13639080.2014.907486>
- Jackson, D. (2022). Student perceptions of the development of employability skills through work-integrated learning. *Studies in Higher Education, 47*(8), 1629-1643. <https://doi.org/10.1080/03075079.2021.1896808>
- Jackson, D., & Collings, D. G. (2018). The influence of work-integrated learning and paid work during studies on graduate employment and underemployment. *Higher Education, 76*(3), 403-425. <https://doi.org/10.1007/s10734-017-0216-z>
- Jackson, D., & Wilton, N. (2016). Developing career management competencies among undergraduates and the role of work-integrated learning. *Teaching in Higher Education, 21*(3), 266-286. <https://doi.org/10.1080/13562517.2015.1136281>
- Karns, G. L., Maher, J. K., & Ricks, J. M. (2019). Skill development through internships in marketing: A multi-site assessment. *Marketing Education Review, 29*(1), 30-46.
- Lo Presti, A., & Pluviano, S. (2016). Looking for a route in turbulent waters: Employability as a compass for career success. *Organizational Psychology Review, 6*(2), 192-211. <https://doi.org/10.1177/2041386615589398>

- Patel, M., & Srivastava, A. (2021). Enhancing employability of graduates through structured internship programs. *International Journal of Management Studies*, 8(1), 112-128.
- Rothwell, A., Herbert, I., & Rothwell, F. (2008). Self-perceived employability: Construction and initial validation of a scale for university students. *Journal of Vocational Behavior*, 73(1), 1-12. <https://doi.org/10.1016/j.jvb.2007.12.001>
- Singh, P., Thakur, R., & Srivastava, S. (2019). Internships and employability: An empirical study of undergraduate students. *International Journal of Educational Management*, 33(4), 728-745.
- Tomlinson, M. (2017). Forms of graduate capital and their relationship to graduate employability. *Education + Training*, 59(4), 338-352. <https://doi.org/10.1108/ET-05-2016-0090>
- Tomlinson, M., & Holmes, L. (2021). Graduate employability and the relational dimensions of career development. *Higher Education*, 81(4), 859-874.
- Wilton, N. (2022). Does the quality of work-integrated learning matter? A study of student perceptions and graduate outcomes. *Studies in Higher Education*, 47(2), 394-409. <https://doi.org/10.1080/03075079.2020.1739011>
- Yorke, M. (2017). Employability in higher education: Revisiting the debate. *Higher Education Research & Development*, 36(2), 215-229.
- Yorke, M. (2017). *Employability in higher education: What it is—what it is not*. Higher Education Academy.

Acknowledgments

The authors would like to express their sincere appreciation to colleagues and academic experts who provided valuable comments and suggestions during the development of this study.

Authors contributions

W.L.: Conceptualization, Data Curation, Resources, and Writing - Original Draft Preparation; T.D.: Review & Editing and Supervision; S.R.: Methodology, Investigation, Formal Analysis, Visualization, Writing - Review & Editing, Co-author, Supervision, and Project Administration.

Funding

No outside funding supported this research.

Funding

No outside funding supported this research.

Competing interests

The authors disclose no conflict of interest.

Informed consent

Obtained.

Ethics approval

The Publication Ethics Committee of the Sciedu Press.

The journal's policies adhere to the Core Practices established by the Committee on Publication Ethics (COPE).

Provenance and peer review

Not commissioned; externally double-blind peer reviewed.

Data availability statement

The data that support the findings of this study are available on request from the corresponding author. The data are not publicly available due to privacy or ethical restrictions.

Data sharing statement

No additional data are available.

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