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## **Aligning Strategic Intelligence and Graduate Employability: A Conceptual Review**

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### Abstract

The purpose of this paper is to present a framework for scholars carrying out reviews of research that meet international standards for publication. Conceptualizing the factors that determine graduate employability and how it relates to strategic intelligence. A set of propositions are presented using three themes namely: strategic intelligence, career counselling and skill gap. This is primarily a conceptual paper focusing on the approach of performing systematic reviews. Nevertheless, the paper builds on a database of previously done research in graduate employability, career development, and strategic intelligence. The paper uses narrative examples from empirical reviews to further explain the parts of the conceptual framework drawing from theoretical frameworks of human capital theory and adaptive theory. The study also alludes to specific findings from previous research to demonstrate general trends in how the framework's main aspects have been used in exemplary reviews. The contribution of this paper is to emphasize the importance of students developing strategic intelligence in order to be employable. It is intended that this conceptual framework would give helpful methodological input in enhancing long-standing efforts in graduate employability, and career development discipline to progress knowledge in a more methodical and coherent manner. The paper reveals that foresight and environmental intelligence are proxies for strategic intelligence and when applied to career counselling, they will result in new capacity outcomes that are more suitable to the energy requirements and other sustainable green technologies via university career counsel partnerships with government and industry. It also revealed that, when a student can predict the direction of their desired industry, he or she can develop the necessary skill sets to be employable after graduation. Finally, it found out that the alignment of strategic

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intelligence and graduate employability helps in recruitment effectiveness and improves efficiency in the entire career ecosystem processes. Apart from undergraduates, the paper proposes a practical framework for universities, graduates, and industry to help produce employable personnel and entrepreneurs, as well as a set of requirements for maintaining employability in a career ecosystem. The paper contributes to theory by integrating strategic intelligence and graduate employability literature by recognizing shared characteristics of fast and continuous learning, as well as foresight. Thus this paper helps to bridge the gaps in respective research agendas. As a result, this research is unique in that it contributes to the advancement of human capital theory, graduate employability, and strategic intelligence.

**Keywords:** *Graduate Employability, Strategic Intelligence, Career Counselling, Skill Gap, Education for Sustainable Development*

## 1.0 Introduction

Graduate employability is defined as the ability to obtain a job following graduation (Bessant, 2002), or, as Rothwell and Arnold (2007) concurred, the ability to get the job one wants or keep the job one has. It refers to the extent to which students can apply their skills and knowledge to find work (Tomlinson, 2012). According to Chan and Lin (2015), graduate employability has been a recurring issue in both developed and developing countries over the last 20 years, and it remains critical for graduates as they transition from higher education (HE) to the labour market (Donald *et al.*, 2018, 2019).

Conversely, graduates are graduating from universities by the thousands each year, only to be thrown into an evolving labour market that cannot absorb the majority of them (Mgaiwa, 2021) - the number of students does not correspond to the number of job openings. Mgaiwa found that this recurring problem worsened during the COVID-19 pandemic, which had a massive impact on the global economy, raising the scale of the youth unemployment crisis to an all-time high not seen since the 1980s. The uncertainty created by disruptive technologies in our environment has also become a major factor driving unemployment (Walsh, 2018). This has disrupted customer tastes and business processes, which are perceived to disadvantage new graduates due to their expectations before entering the market (Lawrence and Godwin, 2021). For example, the introduction of electronic learning materials in developing-country rural areas is forcing many schools to either evolve or become obsolete. As a result, new graduates are caught in the market disruption and are ill-equipped to take on the hybridized job role, making such opportunities lucrative for only experienced proactive teachers with digital technology competency. Even students with excellent grades have difficulty finding work, which can be attributed to skill gaps (Jackson and Bridgstock, 2021). This supports studies by Oliver, (2015); Nghai, (2019) who claim that disruptions are displacing occupations and altering the market's skill requirements.

According to a recent study (The labour Market for Recent College Graduates, 2022), 44% of recent graduates are working in jobs that do not require a college diploma. Furthermore, even if they have an employability advantage, 50% of university graduates in developed countries such as the United Kingdom are already reporting significant difficulties in finding work (Mok and Jiang, 2018). Similar to the United States, China generates about 7 million university graduates each year (Xiaohao *et al.*, 2016), however, in 2013 there were about 2 million graduates without jobs (Chan, 2015). Just 25% to 30% of graduates in India and 15.5% of graduates in Spain are unemployed, respectively (Tilak, 2020). Experts anticipate that these

figures will continue to increase and result in a long-term economic cicatrix to lifetime incomes, career trajectories, and mental and physical health (Parolin and Wimer, 2020). It will be challenging for already employed individuals to keep their positions, and it will be particularly challenging for recent graduates looking for employment prospects (Jackson and Bridgstock, 2002).

Consequently, graduate employability can be influenced by a variety of factors, including the type of degree obtained, students' perceived self-value, their commitment to personal growth and development, and their career path as it relates to their desired industries and labour market (Donald et al., 2022). To accomplish this, an intelligent system called Strategic Intelligence (SI) is required to guide students in acquiring the necessary skills before graduation. Many jobs were lost during the COVID-19 pandemic, and new job descriptions and remote working styles emerged. This development put additional strain on the labour market (Shahriar *et al.*, 2021). While fewer jobs were available due to the pandemic, graduate employability increased (Mallick and Biswas, 2020), forcing schools and students to develop new skill sets to stand out to employers. Moreover, Thomas *et al.* (2019) claim that climate change has affected several geographies and aspects of life, including work positions (socially economically, and mentally). Graduating students must be creative to land desired professions in these climate-changed places since, even though harsh environmental conditions are progressively displacing people in some areas (Islam and Zhang, 2018; Shahriar, *et al.*, 2021).

The discovery that regions with lesser energy consumption have profited favourably from climate change has also helped disclose new assets (Charfeddine and Kahia, 2019). Furthermore, the Brexit issue has left European students who are now enrolled in school in the UK and have the chance of continuing their education in a challenging position (Thomson, 2019). They now require a work permit to work in the UK, unlike before (Portes and Springford, 2023). Students today, more than ever need to be more strategically astute due to the environment's constant change and uncertainties brought on by by-laws, disruptive technology, and natural phenomena. Strategic Intelligence (SI) can be defined as the acquisition, analysis, and dissemination of data pertinent to strategic decision-making (Bensoussan and Fleisher, 2012; Fleisher and Bensoussan, 2015). It is a strategy that is frequently employed by businesses and organizations to assist them to get a competitive edge (Lawrence and Godwin, 2021). Environmental intelligence must have a role in SI for it to be effective.

Environmental intelligence, according to Majid and Khoo (2009), is the extensive gathering, consolidation, integration, analysis, and use of data, information, and the generation of knowledge related to natural and artificial environments. The evolution of an environmental intelligence discipline has been steady over the last fifty years, but it has accelerated in the last 25 years due to the convergence of computer processing power, a greater acceptance of an ecological approach to natural and human-caused environmental problems, and serious natural events. Nonetheless, a concept like SI can be narrowed into a student's life to help the student gain a competitive advantage. This will cause the student to see himself/herself as an entity, system, or organization willing to build the innovation capability required for the labour market through the use of a strategic intelligent system. These capabilities and resources are beneficial to students seeking employment; however, such students may become distracted or overwhelmed as a result of work overload.

As a result, universities and students should learn how to apply the conservation of resources theory (COR theory), as well as how these resources interact within eco-career. The COR theory, developed by Hobfoll (1988), postulated that human behaviour under stress is driven by a need to defend, conserve, and acquire important resources (Hobfoll, 1988). According to the COR framework, situations where valuable resources are at risk of being lost or have



already been lost cause stress (Hobfoll, 1989). This theory contributes to a better understanding of the links between stress and physical health, providing fundamental insights that have guided research on coping with long-term occupational burnout, chronic illness, and the medical consequences of natural disasters (Hobfoll and Lilly, 1993 (cited in Gilbert *et al.*, 2021). Similarly, university students who want to develop graduate employability skills must learn stress management techniques because these skills are investments and when a student stops developing them, they become stressed. This supports the contention made by Hobfoll (1998) and Hobfoll, *et al.* (2018) that people must invest resources to protect against resource loss, recover from losses, and gain resources. Although graduate employability has become one of the fastest-growing research areas in the last decade (Tarique, 2021; Donald *et al.*, 2022), there is still little research on the variables used for graduate employability and their alignment with SI. This conceptual paper examines graduate employability relating to the skill gap, employee turnover, and career counselling.

To bridge this gap and connect SI and graduate employability, we propose three inquiry questions:

1. What effect does strategic intelligence have on career counselling?
2. What effect does strategic intelligence have on the skill gap in graduates
3. What effect does strategic intelligence have on graduate employability?

## 2.0 Literature Review

### 2.1 Theoretical Framework

Human Capital Theory (HTC) (Becker 1962; Sicherman and Galor, 1990) and Adaptive Theory (AT) are the theoretical frameworks used in this conceptual paper (Fidan and Balci, 2017). HTC was chosen as a suitable theoretical lens for this paper, with a focus on investing in human capital to improve graduate employability. According to the theory, employability represents how an individual improves his or her desirability in the labour market. Individual attributes such as knowledge, skills, experience, training, abilities, talent, intelligence, and judgement are examples of human capital. In the 18th century, Adam Smith proposed this theory, which was later popularized by Becker (1962). The central argument of HCT is that education and training are investments that increase productivity (Mgaiwa, 2021). According to researches (e.g. Becker, 1962; Sicherman and Galor, 1990; and Varga 2020) quality education can make it easier for a person to find work and build a career; thus, a productive person will earn more and be more employable. As a result, graduates regard career counselling and networking as critical components of the graduate employability development process (Okay-Somerville and Scholarios, 2017). Furthermore, Donald *et al.* (2018) investigated students' perceptions of education and employability, revealing that as they progressed, undergraduates felt more employable from a personal standpoint, but less employable from a market perspective due to the competitive labour market and the cost/benefit conflict of resources. These authors asserted that repayment expectations of university debts, the cost and benefits of higher education (HE), the year of study influence, gender influence, and career advice were opportunities for improving employability.

The adaptive/adaptation theory, also known as the survival theory, is the capacity of an organisation to bend to changes in its current state of affairs and change as necessary (Ram, 2021). The central concepts of adaptive theory paint a vivid picture of the cycle by which individuals or organizations incorporate trend-setting innovation into their work rehearsals (Oki, 2019). Charles Darwin, the most renowned scientist associated with adaptive theory, established a stable fit between living beings and their environment (Byrant and Tunner, 2019). Before Darwin, diverse scientists such as Aristotle, William Parley, and Buffon recognized the

way species changed but were unable to explain the changes (Flannelly and Flannelly, 2017; McLaughlin, 2022).

According to researchers (e.g. Fidan and Balci 2017); Turner *et al.*, 2019), in adaptive structuration theory and allocation, associations are constantly changing so as to adjust to changing conditions in order to accomplish their various intents and fulfil distinctive applicable partners. As a result, Human Resources (HR) is currently undergoing rapid and intense change as a result of varying demands, shifting workforces, and technology (Jagannathan *et al.*, 2019; Vahdat, 2022). These transformations have altered the ways and manner in which businesses are conducted, shifting from traditional paper-based methods to new methods driven by information and communication technology in both developed and developing countries (Nazir, 2022). This will help to simplify the recruiting process, as well as rejections. Undergraduates must be willing to apply to a variety of organizations, brand and re-brand their resumes, and update their skill sets until they are employed in their desired jobs.

## 2.2 Conceptual Theme

### *Theme 1: Strategic intelligence*

Helfat and Peteraf (2015) explained strategic intelligence (SI) as the ability to look outwardly, focusing on understanding and anticipating others, particularly competitors - which includes collecting, analysing, and disseminating environmental data on the organization's strategy. These environmental data could be organization's rules, financial affairs, taxes, political and economic scope, and human resource categories (Chukuigwe, 2022). In other words, SI considers and analyses an organization's emotional, social, political, and economic behaviour. This is supported by Chand, Kumar, and Mittal (2019), who explain that emotional intelligence partially mediates the relationship between employability skills and employer satisfaction in recruiting new graduates; meaning any source of intelligence can be used to improve the issues surrounding graduate employability, but SI is the ability to know what plan of action and information to use.

According to Ezenwa *et al.* (2018), SI can be assessed using the following criteria: strategic vision, human and social resources, and the organization's economic and political issues. Organizations must have a cognitive environment and a decision-making system in place to filter out irrelevant information to have such intelligence (Sinnaiah *et al.*, 2023). As a result, before such intelligence, an intended goal must be established to aid comprehension and goal achievement planning. This will include determining and carrying out plans and activities (Boamah *et al.*, 2022) predicting expected situations and current and future organizational performance will necessitate foresight and environmental information.

The determination and execution of plans and activities is the second component of strategic planning (George, Walker and Monster, 2019). This component specifies how the organization's plans and activities are to be carried out (Limani *et al.*, 2019). The third step in strategic planning is to forecast the organization's future situations and performance (Idrees *et al.*, 2019). According to George *et al.*, (2019), when a situation in an organization is predicted, the organization's future performance can be predicted. They stated that strategic planning could be especially beneficial in making organizations more effective and that poorly funded strategic processes frequently resulted in undesirable and unpredictable outcomes.

Lastly, the final component of the strategic planning process is the use of approaches to achieve goals, which is regarded as the final step in the strategic planning process and produces the necessary information/intelligence for an organization to become innovative (Bryson and George, 2020). As a result, SI is a blend of foresight (Lawrence *et al.*, 2020) and environmental intelligence (Lawrence and Poi, 2021). So, we present below propositions (P1), that graduates

who predict possible industrial outcomes and trends are more likely to prepare for job opportunities than those who do not.

*P1. (Foresight):* Graduates who project possible outcomes of where industries and trends are heading are more likely to be prepared for job opportunities than those who do not predict the future.

Foresight is defined as a set of practices, methods, tools, and techniques that assist organizations in actively exploring, shaping, and managing the future, which makes strategic intelligence easy (Järvenpää *et al.*, 2020). Crews (2020) defined foresight as the ability to see or predict what will happen in the future and then take appropriate action. Understanding key drivers of change, possible future projections, and the implications of change on specific businesses, projects, or contexts are all part of this (Colli *et al.*, 2019). As a result, Lawrence *et al.* (2020) saw corporate foresight as a means of gaining a competitive advantage. Foresight activities are not intended to accurately predict the future (He *et al.*, 2022). Rather, they enable practitioners to explore plausible futures informed by current trends and trajectories as well as emergent signals of change - assisting career counsellors and students in making informed career decisions.

Foresight is a set of practices that enables organizations and individuals to achieve superior market positions in the future (Rohrbeck and Kum, 2018). Foresight can also be viewed as a means of achieving competitive advantages, or, in this case, proper labour market positioning. Foresight employs a wide range of methods, from creative to evidence-based, and from expert-based to highly interactive or participatory (Lawrence *et al.*, 2020). Individuals and organizations, for example, can predict events and outcomes using wildcards, modeling, bibliometrics, road mapping, and prototyping (Kohler, 2021). Due to the dynamic nature of organizations, Haarhaus and Liening (2020) discussed the importance of environmental scanning in predicting outcomes, they concluded that environmental scanning was necessary as it produced detailed information need to help environmental sustainability and growth. Hence, we present the proposition (P2) that individuals that analyse their environments are more productive than those who do not.

*P2. (Environmental Intelligence):* Individuals that analyse their environments are more productive than those who do not.

Environmental intelligence can also be defined as the massive collection, accumulation, integration, analysis, dissemination, and use of data, information, and knowledge related to the natural and man-made environment (Majid and Khoo, 2009; Lawrence and Poi, 2021). The advancement towards an environmental intelligence discipline has gained grounds as a result of natural and human-caused environmental problems (ranging from massive hurricanes, tsunamis, and the COVID-19 pandemic) - which results in disruption from the norm, opportunities, and threats (Akkermans, Richardson and Kraimer, 2020). This supports Salomone and Stanley's (1981) early claims that chance alone was insufficient due to the complex interplay between an external event and an internal psychological process. Career shocks were defined by Akkermans *et al.* (2018) as '*a disruptive and extraordinary event that is, to some extent, caused by factors outside the focal individual's control and that triggers a deliberate thought process concerning one's career*' (P.4). For example, during the 2011 New Zealand earthquake, some people maintained their status quo, while others were motivated to change careers as a result of dissatisfaction (Wordsworth and Nilakant, 2021), which was seen as a positive move. Career shocks can be deduced to cause changes in solid cultures and social

identities, which can pose threats to foundational practices and beliefs (Donald et al., 2018). Competencies, in any case, will lead to career success and employability (Blokker *et al.*, 2019). These authors discovered that career shocks, along with career success and abilities, play an important role in young professionals' early career development. According to Seibert *et al.* (2013), young professionals who developed high levels of competencies reported higher levels of perceived employability. Furthermore, according to Akkermans *et al.* (2021), career shocks have become an increasingly important part of contemporary career learning. According to their explanation, career shocks are influenced by employees' opinions of their organization's human resource policies, which may have a favourable or bad impact on them and may also affect their propensity to work for that organization again in the future.

The environmental intelligence discipline has developed since it embraced a systems-based understanding of the world by emphasizing the interdependencies between and among human and natural activities to manage crises, career shocks, and potential disruptions. Environmental intelligence, according to Barati *et al.* (2020), is the capacity for calculation, analysis, and presumption that enables individuals to establish an organic and immediate relationship between their small-scale actions. As well, the significant and subtle environmental effects that will unquestionably and immediately have an impact on the entire society, the entire environment, and ultimately every individual member of the society.

Environmental intelligence includes physical and social intelligence, which is the knowledge required to increase people's well-being and organizational productivity (Garg and Gera, 2020), which is a useful tool (environmental intelligence) for forecasting (Brandtner, and Mates, 2021). This type of intelligence allows individuals to approach the workplace thoughtfully, ensuring team support and performance that revolves around the physiology of the team (Lawrence and Poi, 2021). According to Majid and Khoo (2009), organizations that implemented physical intelligence saw double-digit revenue growth, a 12.5% increase in the commercial success of their deals, increased operating efficiency, customer satisfaction, and employee satisfaction scores, and enhanced innovation. Social intelligence, conversely, is the ability to think, understand, manage, and act appropriately in social human relationships. According to Goleman (2006), social intelligence is concerned with the best interests of others; thus, it extends beyond purely selfish motives.

Social intelligence is the ability to understand others and act rationally and emotionally in interpersonal relationships (Herzig, Lorini and Pearce, 2019). This was also affirmed in Albrecht (2009), expatiating, social intelligence as the power to read and get along with people; Sharma (2020) and Garg *et al.*, (2021) explained that this ability goes beyond just basic interactions but, also being able to become empathetic to others. . Because collaboration is a necessary skill for employment and career success (Sheppard, 2019), social intelligence is a necessary ability for undergraduates to function effectively in any social setting (Bonesso *et al.*, 2019). The ability to recognize, comprehend, and act on emotional information about others is what leads to effective performance (Papoutsi *et al.*, 2019; Supramaniam and Singaravello, 2021).

### ***Graduate Employability***

The definition of employability has changed over time, moving from the 20th-century relationship between education and labour markets (Boden and Nedeva, 2010) to the 21st-century relationship between personal skills and knowledge and the likelihood of finding employment (Lees, 2002; Boden and Nedeva, 2010). The idea of graduate employability has changed over time, and researchers are currently working to clearly describe the disparities between graduates' and graduate employers' needs (Donald et al., 2018). This seems to be due to the employability construct ignoring how social institutions like gender, racism, social class,

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and disability interact with employment chances (McGinn and Oh, 2017). Similarly, graduate employability has become a central issue driving the mission of Higher Education (HE), as a result of ongoing criticism that graduates are not adequately prepared for professional roles (Small et al., 2018). As a result, HE has made numerous efforts and continues to thrive to address this challenge (Abelha et al., 2020).

### ***Theme 2: Career Counselling***

*P3. (Career eco-system):* A successful collaboration between higher education, the government, and industry will produce graduates who perform well and have the qualifications that employers are looking for.

*P4. (Education for Sustainable Development):* Career counselling centred on Education for Sustainable Development produces better employees who have a sustainable environment mindset.

Graduate employability in the context of higher education (HE) encompasses more than just finding employment (Herbert *et al.*, 2020). According to Buheji and Buheji (2020), graduates are more likely to find jobs and succeed in their preferred career roles if they possess a particular set of accomplishments, abilities, and understandings. They added that the graduates, workforce, community, and economy will all benefit from this. This is consistent with Römgens *et al.* (2020) assertion that students develop effective performance in the labour market by developing their knowledge, competence, and qualities. According to Abelha *et al.* (2020), a strong sense of innovation and collaboration practices in higher education is critical for graduate employability and competence development around the world. Graduates will fully comprehend their job choices through career counselling (Hoang and Huy, 2021). Career counselling is substantially backed up by Bolton-King (2022), who claims that Counselling is an efficient method for fostering undergraduate employability skills and greatly raising students' self-efficacy in interpersonal and communication abilities. This is comparable to the argument made by Okolie *et al.* (2020), who support Career Training Mentorship (CTM) as a way to improve students' clarity regarding their professional objectives, career interests, personal development plans, and employability. They proposed that all higher education institutions in Nigeria set up CTM centres to give students the chance to obtain high-quality career guidance, coaching, and mentorship services while attending classes.

As Aliu and Aigbavboa (2021) found, university and industry collaborations will increase graduate employability, these mentorship programs should be coupled with industry experience and collaborative activities. Also, the inclusion of Education for Sustainable Development (ESD) in all counselling programs for students and professionals would strengthen students' perceptions of the world, their community, and the kinds of professions that are needed (Lawrence *et al.*, 2023). Besides, many jobs that are evolving at this time are centered on the need to reduce carbon footprints. Knowledge in green jobs that require less use of fossil fuel will enhance the chance of gaining employment in the future since most machines drive by coal and crude oil are being phased out. Sustainable Development Goals (SDGs) were established to maintain the advancements made in sustainable development and to stop the further deterioration of the natural systems that sustain life (Lawrence, 2018). Education for Sustainable Development is the incorporation of the SDGs into higher education through which universities teach SDGS, conduct research, and ensure SDG action compliance in their university environments (Zamora-Polo and Sánchez-Martín, 2019; Fernández, and Castillo-Eguskita, 2021). As a result of the clarity surrounding future job roles as they relate to sustainable development, universities, and career mentors will easily collaborate with the government, policy-makers, and industry heads in preparing students for employable roles.

### ***Theme 3: Skill Gap***

*P5. (Volunteering):* Graduates who volunteer will quickly acquire the skills they need and find work.

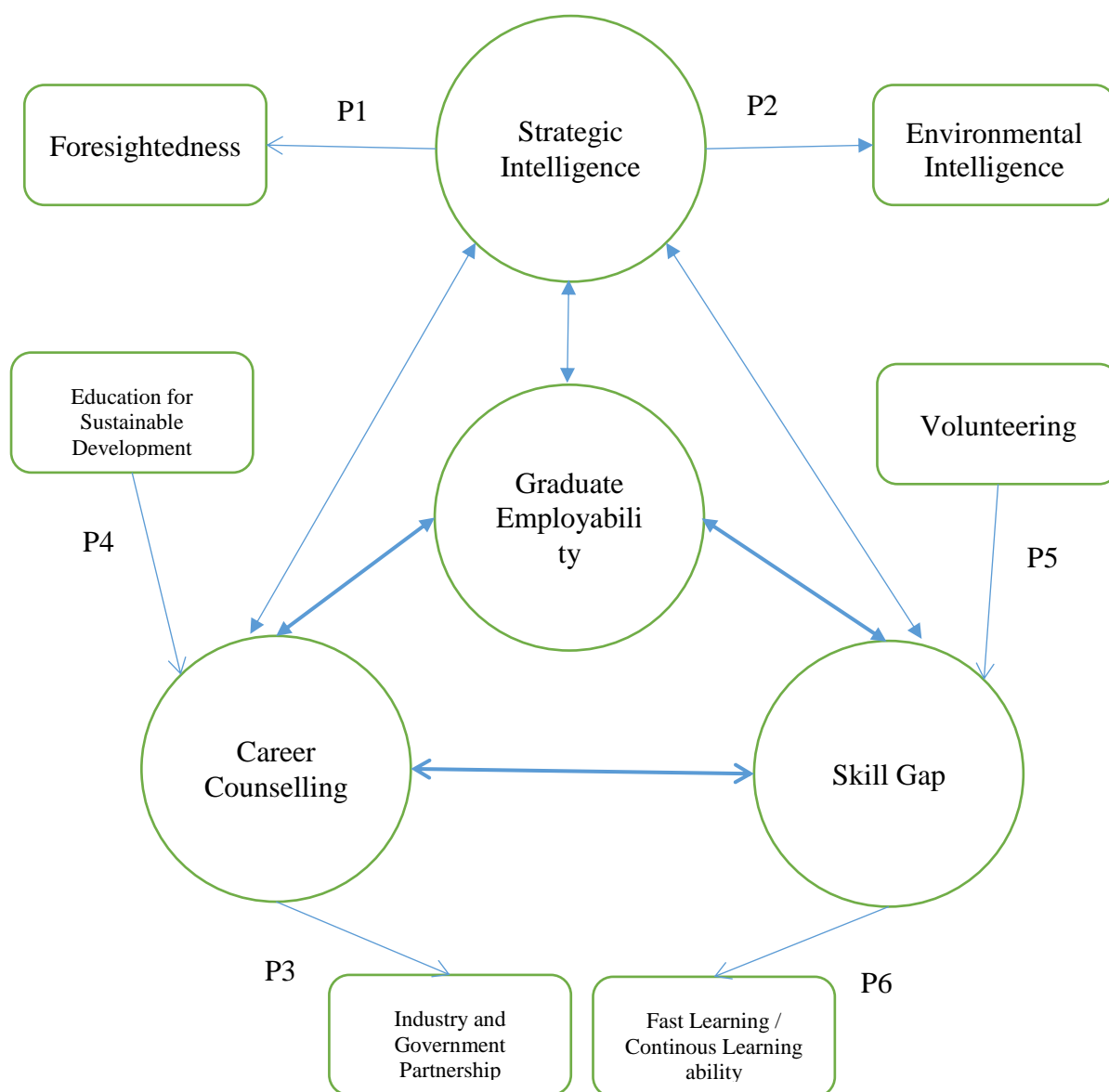
*P6. (Fast Learning Ability):* Graduates who learn quickly, are more productive, and have a high retention value.

Similarly, a collaboration between the government, universities, and industry will provide insights into employee turnover and the current and future skills gap (for undergraduate development and industry skills). This will improve career sustainability for graduates and graduate employers within the career ecosystems (Baruch and Rousseau, 2019) - graduates will seek employability and work-life balance, while employers will seek competitive advantage and human capital utilization (Donald, *et al.*, 2020). Graduates are exposed to the organizational culture, and staff turnover, which are relevant to their career decision (Holston-Okae and Mushi, 2018; Dwesini, 2019). This will help the student gain commercial acumen, understand how the industry works, and what skills they need to be productive in such an industry (Al Hinai *et al.*, 2020). According to Bhatnagar (2021), in addition to technical abilities and skills, students should strive to develop soft skills such as emotional intelligence, communication, critical thinking, problem-solving skills, and interpersonal skills, all of which are highly valued for employability, particularly communication skills (Nabulsi *et al.*, 2021). In terms of the career ecosystem, an understanding of the skill gaps will provide useful feedback on deficient skill areas, particularly for curriculum review, development, and training (Ayodele *et al.*, 2020).

Furthermore, continuing education is critical for graduate employability and labour market relevance (Van der Heijden *et al.*, 2016; Donald *et al.*, 2019). Students need to have the ability to learn things quickly to be easily employable (on campus and off campus). Towers *et al.* (2020) emphasized the importance of fostering entrepreneurial capacity in undergraduates, stating that the job market is becoming increasingly competitive, and universities will need to foster career-ready graduates with entrepreneurial acumen in social science (e.g. retail, business management, and accounting) and science (e.g. pharmacy, architecture, and engineering). To decrease the impact of unemployment, graduates should be ready to launch their firms, which will necessitate ongoing learning - continuous learning (structured and unstructured). Giancaspro and Manuti (2021) indicated that student volunteering provides an opportunity to understand one's propensity, allowing for more effective study or work choices in the future. Volunteering is strongly linked to increased employability (Fee and Gray, 2022).

### **2.3 Conceptual Model**

The three themes and the six propositions that have been covered thus far in connection to graduate employability are summarized in Figure.1 to provide a systematic overview of this conceptual paper. By illustrating the interwoven and interdependent elements and functions that the career eco-system (students, universities, governments, and industry) play to attain graduate employability, the picture also aids in capturing the framework of strategic intelligence and graduate employability. Students, employers, university administrators, government officials, and business leaders are therefore most likely to be interested in Figure.1. The figure provides a platform for real-world application and empirical testing, maximizing this paper's potential impact on a larger audience.



### A Conceptual Framework on Strategic intelligence and Graduate Employability

Figure 1. Source: Conceptualized by the Researchers (2023)

#### Conclusions: Inquiry Questions 1-3

The inquiry questions below are provided to explain and confirm the propositions above.

Inquiry Question 1: What effect does strategic intelligence have on career counselling?

Foresight and environmental intelligence are proxies for strategic intelligence (Lawrence and Poi, 2021), and when applied to career counselling, they will result in education for sustainable development via university career counsel partnerships with government and industry (Looy *et al.*, 2003; Okolie, 2020). Foresight will expose students to the future needs and direction of the industry, providing ample time for networking and capacity building (Shanmugam *et al.*, 2019; Ead *et al.*, 2021). Environmental intelligence will also aid in the collection of data required for ESD Cebrian *et al.*, 2020).

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Inquiry Question 2: What effect does strategic intelligence have on the skill gap in graduates?

In this paper, strategic intelligence can be viewed through foresight and environmental intelligence. When a student can predict the direction of their desired industry, he or she can develop the necessary skill sets to be employable after graduation (Hernandez-de-Menendez *et al.*, 2020). Due to a lack of experience, such students may not be able to obtain high-paying jobs, but they may be able to obtain volunteer or intern positions. Volunteering jobs will give undergraduates opportunities to gain experience in their desired industry (Jackson and Bridgstock, 2021). Furthermore, the ability for undergraduates to understand the university environment, as it relates to job recruitments will assist in building their innovation capabilities, which in turn will make them fast learners (Iranmanesh *et al.*, 2021), because they can grasp the entire career eco-system's algorithm and how it works. This demonstrates to recruiters that the graduate is self-motivated, determined, and decisive in their career development (Zaheer *et al.*, 2021).

Inquiry Question 3: What effect does strategic intelligence have on the graduate employability?

The ability to have strategic information required to push one's ambition after university is critical (Teubner and Stockhinger, 2020; Iivari *et al.*, 2020), and foresight will help students take ownership of their careers as they strive for work-life balance (Baruch, 2001; Donald *et al.*, 2019). This is because a sustainable career is built through time, and only a focused student can go through the dynamic process (De Vos and Van der Heijden, 2017b). As a result, the process will provide employees with the opportunity to learn and relearn what works in order to achieve employment sustainability. Prior to this, it is advantageous for such an individual to develop this skill set during their college years, in order to build capacity and thick skin towards change, information gathering, and decision-making. Similarly, teamwork and awareness of the academic environment will boost graduates' capacity to recognize and use resources, making them more appealing to recruiters and business executives and employable. (Lawrence and Poi, 2015; Baruch, 2015)

### **3.0 Theoretical and practical contribution**

#### ***Theoretical contribution***

Despite the existence of papers on strategic intelligence, graduate employability is discussed separately. There is, however, little research on how undergraduates might position themselves to acquire a competitive edge using these notions together. The conceptual model (Figure 1) and the three inquiry questions explain the relationship between strategic intelligence and employability as well as the steps students must take to achieve, so emphasizing the requirements of graduates, employers, and universities. This fills the aforementioned gap in the research by improving how we conceptualize strategic intelligence and graduate employability.

The framework also emphasizes the interdependence and connections between the responsibilities played by undergraduates, universities, business, and other stakeholders. By recognising shared ideas of life-long learning and sustainable employability (Ghosal *et al.*, 1999), career management literature (Arthure *et al.*, 1989; Gunz and Peiperl, 2007) are connected. According to Inkson and King (2011), these two streams are frequently developed concurrently; as a result, this work aids in bridging the two research objectives. Finally, we set the groundwork for establishing strategic intelligence as a crucial component of graduate and general employability.



### ***Practical contribution***

This conceptual paper provides managerial advice on how undergraduates might become employable from an early class through strategic information, as requested by Keikha and Hadadi (2016), Goodman and Tredway (2016), and Steurer (2022). Additionally, Dardiri (2016) referred to counselling implications as well as advice on developing innovative habits for a long-lasting profession.

In order to address problems with an entrepreneurial attitude even when they work in organizations, undergraduates need to know how to deal with job concerns (Van van Heijden *et al.*, 2016). Students should take responsibility for their own careers in order to get a job and maintain sustainability in a cut-throat economy. In addition, lifelong learning must continue via graduates' participation in the labour market as it starts in school and continues through higher education (Donald *et al.*, 2019).

### **4.0 Future Research**

Future works might expand on the ideas we put forth, keep looking at how strategic intelligence and graduate employability interact with one another, and study the career ecosystem. It will also identify further cooperative tactics to improve employability and examine the impact of Artificial Intelligence (A.I.) on finding and selecting the best candidate for a position, as it relates to the employability of graduates from the viewpoints of organizations and recruiters. Finally, future study should investigate how far universities can allow A.I to influence talent management and student performance in terms of strategic intelligence for graduate employability.

## **REFERENCES**

- Abelha, M., Fernandes, S., Mesquita, D., Seabra, F. and Ferreira-Oliveira, A.T., 2020. Graduate employability and competence development in higher education—A systematic literature review using PRISMA. *Sustainability*, 12(15), p.5900.
- Akkermans, J., Seibert, S.E. and Mol, S.T., 2018. Tales of the unexpected: Integrating career shocks in the contemporary careers literature. *SA Journal of Industrial Psychology*, 44(1), pp.1-10.
- Akkermans, J., Richardson, J. and Kraimer, M.L., 2020. The Covid-19 crisis as a career shock: Implications for careers and vocational behavior. *Journal of vocational behavior*, 119, p.103434.
- Akkermans, J., Collings, D.G., da Motta Veiga, S.P., Post, C. and Seibert, S., 2021. Toward a broader understanding of career shocks: Exploring interdisciplinary connections with research on job search, human resource management, entrepreneurship, and diversity. *Journal of vocational behavior*, 126, p.103563. <https://doi.org/10.1016/j.jvb.2021.103563>
- Albrecht, K., 2006. *Social intelligence: The new science of success*. New York, NY; Pfeiffer
- Aliu, J. and Aigbavboa, C.O., 2021. Structural determinants of graduate employability: impact of university and industry collaborations. *Journal of Engineering, Design and Technology*, 19(5), pp.1080-1100.
- Al Hinai, M.R., Bhuiyan, A.B. and Husin, N.A., 2020. Theoretical review on the graduate attributes and the readiness for employability among engineering graduates in the

- higher education institutes (HEIs) in Oman. *Indian Journal of Finance and Banking*, 4(2), pp.130-139.
- Ayodele, T.O., Oladokun, T.T. and Kajimo-Shakantu, K., 2020. Employability skills of real estate graduates in Nigeria: a skill gap analysis. *Journal of Facilities Management*, 18(3), pp.297-323.
- Barati, N., Dariush, B., Dastyar, F. and Barati, M., 2020. Environmental Intelligence A Holistic Approach to the Human-Environment Relationship. *Armanshahr Architecture & Urban Development*, 13(30), pp.213-225.
- Baruch, Y., 2015. Organizational and labor markets as career ecosystem. In *Handbook of research on sustainable careers* (pp. 364-380). Edward Elgar Publishing.
- Baruch, Y. and Rousseau, D.M., 2019. Integrating psychological contracts and ecosystems in career studies and management. *Academy of Management Annals*, 13(1), pp.84-111.
- Becker, G.S., 1962. Investment in human capital: A theoretical analysis. *Journal of political economy*, 70(5, Part 2), pp.9-49.
- Behle, H., 2020. Students' and graduates' employability. A framework to classify and measure employability gain. *Policy reviews in higher education*, 4(1), pp.105-130.
- Bensoussan, B.E. and Fleisher, C.S., 2012. *Analysis without paralysis: 12 tools to make better strategic decisions*. FT Press. Australia--a case study. *Journal of Education and Work*, 15(1), pp.31-51.
- Bessant, J., 2002. Risk and Nostalgia: The problem of education and youth unemployment in
- Bhatnagar, N., 2021. Employability and skill gap among MBA graduates in India: a literature review. *Industrial and commercial training*, 53(1), pp.92-104.
- Buheji, M. and Buheji, A., 2020. Planning competency in the new Normal—employability competency in post-COVID-19 pandemic. *International Journal of Human Resource Studies*, 10(2), pp.237-251
- Blokker, R., Akkermans, J., Tims, M., Jansen, P. and Khapova, S., 2019. Building a sustainable start: The role of career competencies, career success, and career shocks in young professionals' employability. *Journal of Vocational Behavior*, 112, pp.172-184. <https://doi.org/10.1016/j.jvb.2019.02.013>
- Boamah, F.A., Zhang, J., Wen, D., Sherani, M., Hayat, A. and Horbanenko, O., 2022. Enablers of knowledge management: practical research-based in the construction industry. *International Journal of Innovation Science*, 14(1), pp.121-137.
- Boden, R. and Nedeva, M., 2010. Employing discourse: universities and graduate 'employability'. *Journal of Education Policy*, 25(1), pp.37-54.
- Bolton-King, R.S., 2022. Student Counselling to enhance graduates' employability potential. *Science & Justice*, 62(6), pp.785-794.
- Bonesso, S., Gerli, F. and Cortellazzo, L., 2019. Emotional and Social Intelligence Competencies Awareness and Development for Students' Employability. *New Directions for Teaching and Learning*, 160, pp.77-89.
- Brandtner, P. and Mates, M., 2021, July. Artificial Intelligence in Strategic Foresight—Current Practices and Future Application Potentials: Current Practices and Future Application Potentials. In *The 2021 12th International Conference on E-business, Management and Economics* (pp. 75-81).

- Bryant, M.M. and Turner, J.S., 2019. From thermodynamics to creativity: McHarg's ecological planning theory and its implications for resilience planning and adaptive design. *Socio-Ecological Practice Research*, 1, pp.325-337.
- Bryson, J. and George, B., 2020. Strategic management in public administration. In *Oxford Research Encyclopedia of Politics*.
- Buheji, M. and Buheji, A., 2020. Planning competency in the new Normal—employability competency in post-COVID-19 pandemic. *International Journal of Human Resource Studies*, 10(2), pp.237-251
- Bhatnagar, N., 2021. Employability and skill gap among MBA graduates in India: a literature review. *Industrial and commercial training*, 53(1), pp.92-104.
- Cebrian, G., Palau, R. and Mogas, J., 2020. The smart classroom as a means to the development of ESD methodologies. *Sustainability*, 12(7), p.3010.
- Chan, S.J. and Lin, L.W., 2015. Massification of higher education in Taiwan: Shifting pressure from admission to employment. *Higher education policy*, 28, pp.17-33.
- Chand, P.K., Kumar, A.S. and Mittal, A., 2019. Emotional intelligence and its relationship to employability skills and employer satisfaction with fresh engineering graduates. *International Journal for Quality Research*, 13(3), p.735.
- Chukuigwe, N., 2022. Strategic Intelligence and Organizational Performance in Telecommunication Firms in Rivers State. *BW Academic Journal*, pp.8-8.
- Clark-Ambrosini, J.L., Ashleigh, M.J., Higgs, M. and Baruch, Y., 2022. Quid pro quo? The future for graduate development programmes through the lens of talent management. *The International Journal of Human Resource Management*, pp.1-24.
- Charfeddine, L. and Kahia, M., 2019. Impact of renewable energy consumption and financial development on CO2 emissions and economic growth in the MENA region: a panel vector autoregressive (PVAR) analysis. *Renewable energy*, 139, pp.198-213.
- Colli, M., Berger, U., Bockholt, M., Madsen, O., Møller, C. and Wæhrens, B.V., 2019. A maturity assessment approach for conceiving context-specific roadmaps in the Industry 4.0 era. *Annual Reviews in Control*, 48, pp.165-177.
- Crews, C., 2020. Foresight and the COVID-19 Pandemic. *Research-Technology Management*, 63(4), pp.55-57.
- Dardiri, A., 2016. Soft Skill and Entrepreneurial Career Guidance Model for Enhancing Technical Vocational Education and Training's Graduates Competitiveness. *Innovation of Vocational Technology Education*, 12(1), pp.1-7.
- De Vos, A. and Van der Heijden, B.I. eds., 2015. *Handbook of research on sustainable careers*. Edward Elgar Publishing.
- Donald, W.E., Ashleigh, M.J. and Baruch, Y., 2018. Students' perceptions of education and employability: Facilitating career transition from higher education into the labor market. *Career development international*, 23(5), pp.513-540.
- Donald, W.E., Baruch, Y. and Ashleigh, M., 2019. The undergraduate self-perception of employability: Human capital, careers advice, and career ownership. *Studies in Higher Education*, 44(4), pp.599-614.
- Donald, W.E., Baruch, Y. and Ashleigh, M.J., 2020. Striving for sustainable graduate careers: Conceptualization via career ecosystems and the new psychological contract. *Career Development International*, 25(2), pp.90-110.

<https://doi.org/10.53819/81018102t4178>

- Donald, W., Ashleigh, M. & Baruch, Y. (2022). The university-to-work transition: Responses of universities and organizations to the COVID-19 pandemic. *Personnel Review*, 51(9), 2201-2221. doi: 10.1108/PR-03-2021-0170
- Dwesini, N.F., 2019. Causes and prevention of high employee turnover within the hospitality industry: A literature review. *African Journal of Hospitality, Tourism and Leisure*, 8(3), pp.1-15.
- Ead, H., Fadallah, S., Fahmy, H., Rezk, M., Piccinetti, L. and Sakr, M., 2021. Awareness of foresight through education in Egypt: a case study from Egyptian university. *Insights into Regional Development*, 3(4), pp.10-20.
- Ezenwa, O., Stella, A. and Agu, A.O., 2018. Effect of competitive intelligence on competitive advantage in Innoson technical and industry limited, Enugu state, Nigeria. *International Journal of Business, Economics & Management (IJBEM)*, 1(1), pp.28-39.
- Fee, A. and Gray, S.J., 2022. Perceived organisational support and performance: The case of expatriate development volunteers in complex multi-stakeholder employment relationships. *The International Journal of Human Resource Management*, 33(5), pp.965-1004.
- Fernández, I. and Castillo-Eguskiza, N., 2021. A holistic approach to integrate and evaluate sustainable development in higher education. The case study of the University of the Basque Country. *Sustainability*, 13(1), p.392.
- Fidan, T. and Balcı, A., 2017. Managing schools as complex adaptive systems: A strategic perspective. *International electronic journal of elementary education*, 10(1), pp.11-26.
- Flannelly, K.J. and Flannelly, K.J., 2017. 19th Century Evolutionary Thought Before Charles Darwin. *Religious Beliefs, Evolutionary Psychiatry, and Mental Health in America: Evolutionary Threat Assessment Systems Theory*, pp.29-37.
- Fleisher, C.S. and Bensoussan, B.E., 2015. *Business and competitive analysis: effective application of new and classic methods*. FT press.
- Garg, N. and Gera, S., 2020. Gratitude and leadership in higher education institutions: exploring the mediating role of social intelligence among teachers. *Journal of Applied Research in Higher Education*, 12(5), pp.915-926.
- Garg, N., Jain, A. and Punia, B.K., 2021. Gratitude, social intelligence, and leadership among university teachers: mediation and moderation analysis. *International Journal of Organizational Analysis*, 29(2), pp.368-388.
- George, B., Walker, R.M. and Monster, J., 2019. Does strategic planning improve organizational performance? A meta-analysis. *Public Administration Review*, 79(6), pp.810-819.
- Giancaspro, M.L. and Manuti, A., 2021. Learning to be employable through volunteering: A qualitative study on the development of employability capital of young people. *Frontiers in Psychology*, 12, p.574232.
- Gilbert, S., Mullen, J., Kelloway, E.K., Dimoff, J., Teed, M. and McPhee, T., 2021. The CARE model of employee bereavement support. *Journal of Occupational Health Psychology*, 26(5), p.405
- Goleman, D., 2006. The socially intelligent. *Educational leadership*, 64(1), pp.76-81.



- Goodman, S. and Tredway, G., 2016. Antecedents of perceived graduate employability: A study of student volunteers in a community-based organisation. *SA Journal of Industrial Psychology*, 42(1), pp.1-10.
- Haarhaus, T. and Liening, A., 2020. Building dynamic capabilities to cope with environmental uncertainty: The role of strategic foresight. *Technological Forecasting and Social Change*, 155, p.120033.
- He, L.Y., Li, H., Bi, J.W., Yang, J.J. and Zhou, Q., 2022. The impact of public health emergencies on hotel demand-Estimation from a new foresight perspective on the COVID-19. *Annals of Tourism Research*, 94, p.103402.
- Helfat, C.E. and Peteraf, M.A., 2015. Managerial cognitive capabilities and the microfoundations of dynamic capabilities. *Strategic management journal*, 36(6), pp.831-850.
- Herbert, I.P., Rothwell, A.T., Glover, J.L. and Lambert, S.A., 2020. Graduate employability, employment prospects and work-readiness in the changing field of professional work. *The International Journal of Management Education*, 18(2), p.100378.
- Hernandez-de-Menendez, M., Morales-Menendez, R., Escobar, C.A. and McGovern, M., 2020. Competencies for industry 4.0. *International Journal on Interactive Design and Manufacturing (IJIDeM)*, 14, pp.1511-1524.
- Herzig, A., Lorini, E. and Pearce, D., 2019. Social intelligence. *AI & SOCIETY*, 34, pp.689-689.
- Hoang, N.T. and Huy, D.T.N., 2021. Determining factors for educating students for choosing to work for foreign units: Absence of self-efficacy. *JETT*, 12(2), pp.11-19.
- Hobfoll, S.E., 1988. *The ecology of stress*. Taylor & Francis.
- Hobfoll, S.E., 1989. Conservation of resources: A new attempt at conceptualizing stress. *American psychologist*, 44(3), p.513.
- Hobfoll, S.E., Halbesleben, J., Neveu, J.P. and Westman, M., 2018. Conservation of resources in the organizational context: The reality of resources and their consequences. *Annual review of organizational psychology and organizational behavior*, 5, pp.103-128.
- Holston-Okae, B.L. and Mushi, R.J., 2018. Employee turnover in the hospitality industry using Herzberg's two-factor motivation-hygiene theory. *International Journal of Academic Research in Business and Social Sciences*, 8(1), pp.218-248.
- Idrees, S.M., Alam, M.A. and Agarwal, P., 2019. A prediction approach for stock market volatility based on time series data. *IEEE Access*, 7, pp.17287-17298.
- Iranmanesh, M., Kumar, K.M., Foroughi, B., Mavi, R.K. and Min, N.H., 2021. The impacts of organizational structure on operational performance through innovation capability: innovative culture as moderator. *Review of Managerial Science*, 15, pp.1885-1911.
- Islam, M.S. and Zhang, Y., 2018. The potential of strategic environmental assessment to reduce disaster risks through climate change adaptation in the coastal zone of Bangladesh. *International Journal of Climate Change Strategies and Management*, 11(1), pp.137-153.
- Jackson, D. and Bridgstock, R., 2021. What actually works to enhance graduate employability? The relative value of curricular, co-curricular, and extra-curricular learning and paid work. *Higher Education*, 81(4), pp.723-739.

- Jagannathan, S., Ra, S. and Maclean, R., 2019. Dominant recent trends impacting on jobs and labor markets-An Overview. *International Journal of Training Research*, 17(sup1), pp.1-11.
- Järvenpää, A.M., Kunttu, I. and Mäntyneva, M., 2020. Using foresight to shape future expectations in circular economy SMEs. *Technology Innovation Management Review*, 10(7).
- Keikha, A. and Hadadi, E., 2016. Investigating effects of Strategic Intelligence of Managers on the performance of employees: Case Study Private Banks in city of Zahedan. *International Journal of Scientific & Engineering Research*, 7(3), pp.263-279.
- Kohler, K., 2021. Strategic Foresight: Knowledge, Tools, and Methods for the Future. *CSS Risk and Resilience Reports*.
- Lawrence, D.O, Aaron A, Pope O, Subai A., 2020. Corporate foresight and organisational sustainability of oil servicing companies in the Niger delta region, south-south, Nigeria. *Journal of Strategic Management*, 5(2):12-27.
- Lawrence, D.O. and Poi, G., 2021. Environmental Intelligence and Innovation Capabilities of Communication Companies in Nigeria. *European Journal of Business and Innovation Research*, 9(5), pp.34-46.
- Lawrence, A.W, Ogbanga, M., Lawrence, D. O., and Lawrence, B. A., 2023. Awareness Assessment Study and Ways to Deepen the Knowledge and Practise of Sustainable Development Goals. *International Journal of Innovative Research and Development*,
- Limani, Y., Hajrizi, E., Stapleton, L. and Retkoceri, M., 2019. Digital transformation readiness in higher education institutions (HEI): The case of Kosovo. *IFAC-PapersOnLine*, 52(25), pp.52-57.
- Iivari, N., Sharma, S. and Ventä-Olkkonen, L., 2020. Digital transformation of everyday life—How COVID-19 pandemic transformed the basic education of the young generation and why information management research should care?. *International journal of information management*, 55, p.102183.
- Looy, B.V., Debackere, K. and Andries, P., 2003. Policies to stimulate regional innovation capabilities via university–industry collaboration: An analysis and an assessment. *R&D Management*, 33(2), pp.209-229.
- Majid, S. and Khoo, C., 2009. Environment Intelligence: An Innovative Information Service. *Singapore Journal of Library & Information Management*, 38.
- Mallick, U.K. and Biswas, M.H.A., 2020. Mathematical approach with optimal control: reduction of unemployment problem in Bangladesh. *Journal of Applied Nonlinear Dynamics*, 9(2), pp.231-246.
- McLaughlin, P.J., 2022. Durkheim’s Failed Darwinian Encounter: Missed Opportunities on the Path to a Post-exemptionalist Environmental Sociology. *Sociological Perspectives*, p.07311214221121164.
- McGinn, K.L. and Oh, E., 2017. Gender, social class, and women's employment. *Current opinion in Psychology*, 18, pp.84-88.
- Mgaiwa, S.J., 2021. Fostering graduate employability: Rethinking Tanzania’s university practices. *SAGE Open*, 11(2), p.21582440211006709.

- Mok, K.H. and Jiang, J., 2018. Massification of higher education and challenges for graduate employment and social mobility: East Asian experiences and sociological reflections. *International Journal of Educational Development*, 63, pp.44-51.
- Nabulsi, N., McNally, B. and Khoury, G., 2021. Improving graduateness: Addressing the gap between employer needs and graduate employability in Palestine. *Education+ Training*, 63(6), pp.947-963.
- Nazir, M.A., 2022. The Impact and Factors Affecting Information and Communication Technology Adoption in Small and Medium-Sized Enterprises: A Perspective from Pakistan Muhammad Arsalan Nazir\*, Raza Saleem Khan. *J Organ Stud Innovat*, 9(1), pp.20-46.
- Nghia, T.L.H., 2019. Building soft skills for employability: Challenges and practices in Vietnam.
- Okay-Somerville, Belgin, and Dora Scholarios. "Position, possession or process? Understanding objective and subjective employability during university-to-work transitions." *Studies in higher education* 42, no. 7 (2017): 1275-1291.
- Oki, S., 2019. 'Innovation' as an adaptation of 'progress': revisiting the epistemological and historical contexts of these terms. *Innovation Beyond Technology: Science for Society and Interdisciplinary Approaches*, pp.47-62.
- Okolie, U.C., Nwajiuba, C.A., Binuomote, M.O., Ehiobuche, C., Igu, N.C.N. and Ajoke, O.S., 2020. Career training with Counselling programs in higher education: facilitating career development and employability of graduates. *Education+ Training*.
- Oliver, B., 2015. Redefining graduate employability and work-integrated learning: Proposals for effective higher education in disrupted economies. *Journal of Teaching and Learning for Graduate Employability*, 6(1), pp.56-65.
- Papoutsis, C., Drigas, A. and Skianis, C., 2019. Emotional intelligence as an important asset for HR in organizations: Attitudes and working variables. *International Journal of Advanced Corporate Learning*, 12(2), p.21.
- Parolin, Z. and Wimer, C., 2020. Forecasting estimates of poverty during the COVID-19 crisis. *Poverty and Social Policy Brief*, 4(8), pp.1-18.
- Rothwell, A. and Arnold, J., 2007. Self-perceived employability: development and validation of a scale. *Personnel review*.
- Portes, J. and Springford, J., 2023. *The Impact of the Post-Brexit Migration System on the UK Labour Market* (No. 15883). Institute of Labor Economics (IZA).
- Rajan, S. and Pandita, A., 2019, March. Employability and Hiring Trends of Engineering Job Aspirants in UAE. In *2019 Advances in Science and Engineering Technology International Conferences (ASET)* (pp. 1-6). IEEE.
- Ram, K., 2021. A Unified Adaptive Theory of Global Business Culture. *Culture in Global Businesses: Addressing National and Organizational Challenges*, pp.63-75.
- Rohrbeck, R. and Kum, M.E., 2018. Corporate foresight and its impact on firm performance: A longitudinal analysis. *Technological Forecasting and Social Change*, 129, pp.105-116.
- Römgens, I., Scoupe, R. and Beusaert, S., 2020. Unraveling the concept of employability, bringing together research on employability in higher education and the workplace. *Studies in Higher Education*, 45(12), pp.2588-2603.

<https://doi.org/10.53819/81018102t4178>

- Salomone, P.R. and Slaney, R.B., 1981. The influence of chance and contingency factors on the vocational choice process of nonprofessional workers. *Journal of Vocational Behavior*, 19(1), pp.25-35.
- Sancoko, R., Setiawan, M. and Troena, E.A., 2019. The influence of organizational culture and spiritual intelligence on employee performance through emotional intelligence. *MEC-J (Management and Economics Journal)*, 3(1), pp.67-80
- Seibert, S.E., Kraimer, M.L., Holtom, B.C. and Pierotti, A.J., 2013. Even the best laid plans sometimes go askew: career self-management processes, career shocks, and the decision to pursue graduate education. *Journal of Applied Psychology*, 98(1), p.169.
- Shahriar, M.S., Islam, K.M., Zayed, N.M., HASAN, K. and Raisa, T.S., 2021. The impact of COVID-19 on Bangladesh's economy: A focus on graduate employability. *The Journal of Asian Finance, Economics and Business*, 8(3), pp.1395-1403.
- Shanmugam, K., Zainal, N.K. and Gnanasekaren, C., 2019, May. Technology foresight in the virtual learning environment in malaysia. In *Journal of Physics: Conference Series* (Vol. 1228, No. 1, p. 012068). IOP Publishing.
- Sharma, H., 2020. The nexus between future of work and future of higher education: redefining employability and equity. *Medienimpulse*, 58(1), pp.21-Seiten.
- Sheppard, J., 2019. Collaboration as a means to support inclusion. *BU Journal of Graduate Studies in Education*, 11(2), pp.16-20.
- Sicherman, N. and Galor, O., 1990. A theory of career mobility. *Journal of political economy*, 98(1), pp.169-192.
- Sinnaiah, T., Adam, S. and Mahadi, B., 2023. A strategic management process: the role of decision-making style and organisational performance. *Journal of Work-Applied Management*.
- Small, L., Shacklock, K. and Marchant, T., 2018. Employability: a contemporary review for higher education stakeholders. *Journal of Vocational Education & Training*, 70(1), pp.148-166.
- Steurer, M., van der Vaart, L. and Rothmann, S., 2022. Mapping managerial expectations of graduate employability attributes: A scoping review. *SA Journal of Industrial Psychology*, 48, p.1990.
- Supramaniam, S. and Singaravelloo, K., 2021. Impact of emotional intelligence on organisational performance: An analysis in the Malaysian Public Administration. *Administrative Sciences*, 11(3), p.76.
- Tarique, I., 2021. Talent management: An introduction. In *The Routledge companion to talent management* (pp. 1-6). Routledge.
- Teubner, R.A. and Stockhinger, J., 2020. Literature review: Understanding information systems strategy in the digital age. *The Journal of Strategic Information Systems*, 29(4), p.101642.
- Thomson, T., 2019. What happens when politics and career dreams collide? Considering the impact of Brexit on graduate career aspirations. *Employability via Higher Education: Sustainability as Scholarship*, pp.227-235.
- Thomas, K., Hardy, R.D., Lazrus, H., Mendez, M., Orlove, B., Rivera-Collazo, I., Roberts, J.T., Rockman, M., Warner, B.P. and Winthrop, R., 2019. Explaining differential



- vulnerability to climate change: A social science review. *Wiley Interdisciplinary Reviews: Climate Change*, 10(2), p.e565.
- Towers, N., Santoso, A.S., Sulkowski, N. and Jameson, J., 2020. Entrepreneurial capacity-building in HEIs for embedding entrepreneurship and enterprise creation—a tripartite approach. *International Journal of Retail & Distribution Management*, 48(8), pp.881-899.
- Turner, J.R., Morris, M. and Atamenwan, I., 2019. A theoretical literature review on adaptive structuration theory as its relevance to human resource development. *Advances in Developing Human Resources*, 21(3), pp.289-302.
- Tilak, J.B., 2020. Dilemmas in reforming higher education in India. *Higher Education for the Future*, 7(1), pp.54-66. <https://doi.org/10.1177/2347631119886417>
- Tomlinson, M., 2012. Graduate employability: A review of conceptual and empirical themes. *Higher education policy*, 25, pp.407-431.
- Vahdat, S., 2022. The role of IT-based technologies on the management of human resources in the COVID-19 era. *Kybernetes*, 51(6), pp.2065-2088.
- Varga, J., 2020. Occupational Mobility Among Youth with Different Educational Attainment Levels.
- Walsh, T., 2018. Expert and non-expert opinion about technological unemployment. *International Journal of Automation and Computing*, 15(5), pp.637-642.
- Wang, Y., Kung, L. and Byrd, T.A., 2018. Big data analytics: Understanding its capabilities and potential benefits for healthcare organizations. *Technological forecasting and social change*, 126, pp.3-13.
- Wordsworth, R. and Nilakant, V., 2021. Unexpected change: Career transitions following a significant extra-organizational shock. *Journal of Vocational Behavior*, 127, p.103555.
- Xiaohao, D., Hongxia, Y. and Qiumei, Y., 2016. Research on returns on education at all levels and changes for urban residents in China: 2002–2009. *Trends in Chinese Education*, pp.35-49.
- Zaheer, M.I., Ajayi, S.O., Zulu, S.L., Oyegoke, A. and Kazemi, H., 2021. Understanding the key competencies of market-ready building surveying graduates from employers' perspectives. *Journal of Engineering, Design and Technology*, 19(1), pp.291-314.
- Zamora-Polo, F. and Sánchez-Martín, J., 2019. Teaching for a better world. Sustainability and sustainable development goals in the construction of a change-maker university. *Sustainability*, 11(15), p.4224.