

Is banking and finance education producing sector-relevant personnel? Stakeholders' psychological perceptions toward employment

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Abstract: While many studies have examined factors affecting graduate employability, few have examined the effects of stakeholders' psychological perceptions. Uncovering the moderating effects of employability skills and experience becomes critical. This study examines the psychological perceptions of graduate programs, graduate employability modelling, interpersonal competencies, and the employability skills and experience required to produce sector-relevant personnel for the banking sector. Using structural equation modelling, we examine the relationships between the subject variables. 453 students and 33 lecturers were surveyed, and data sheets from a skills inventory were given to a random sample of 23 bank human resource managers in North Lebanon. The findings support the theory of beneficial interaction effects between interpersonal competencies and graduate employability.

Keywords: Graduate employability, skills, banking graduates, Lebanon, stakeholders' psychological perceptions, structural equation modelling.

JEL Classification: E24, J23, J24.

APA Style Citation: El Sayed, R., & Özgüt, H. (2023). Is banking and finance education producing sector-relevant personnel? Stakeholders' psychological perceptions toward employment. *E&M Economics and Management*, 26(3), 109–127. <https://doi.org/10.15240/tul/001/2023-3-007>

Introduction

There have been significant good and negative developments in the world economy. Due to these developments, existing and potential employees must acquire new skills, but university graduates are disproportionately burdened with this responsibility. Consequently, stakeholders are compelled to form psychological judgments about graduates' employability. Stakeholders' psychological perceptions significantly impact graduate employability, as recent research indicates that perceptions influence final employee

selection decisions (Clasen, 2021; Ding et al., 2021). Meanwhile, higher education institutions (HEIs) play a crucial role in developing employability skills, as their graduates must possess the necessary credentials to work professionally in what has been dubbed the "learning age" or "learning society" (Mgaiwa, 2021). Employers frequently view developing necessary skills as their responsibility; thus, universities are accountable for developing and improving the employability skills desired by employers (Anderson & Tomlinson, 2021).

However, when employers face a shortage of employability skills, the employer's role is critical; firms can direct universities to teach the soft skills they require while graduates develop the necessary interpersonal competencies and work experience.

Nonetheless, combining a conceptual understanding of psychology with graduate employability enables the development of remarkable and novel academic precepts. By defining employability as a collection of personal characteristics, skills, and experiences that assist graduates in securing employment (Small et al., 2021), we can operationalize stakeholder psychology as the study of employers' mindsets, how they operate, and how their behavior is influenced by the personal characteristics, skills, and accomplishments graduates must possess in order to secure employment. Despite significant progress in graduate employability research over the years, three critical gaps remain in this body of knowledge.

While it is true that stakeholders' strategies influence graduates' employability, studies often overlook the psychological factors that influence their perceptions and employability decisions (Anderson & Tomlinson, 2021; Mgaiwa, 2021; Small et al., 2021). Evidently, stakeholders' psychological perceptions significantly impact graduate employability strategies, which has enormous implications for graduate employability strategies' influence on graduate employability. Additionally, while empirical evidence is lacking, employers place a premium on graduates' skills and interpersonal competencies and their ability to empathize with job demands (Aviso et al., 2021; Budiarto et al., 2021). As a result, it is necessary to establish and test the precise nature of the relationships between stakeholders' psychological perceptions, employability skills and experience, graduate programs, interpersonal competencies, and graduate employability, all needing more empirical clarity and support. This necessitates the development of an integrative and empirically supported framework for examining the effects of stakeholders' psychological perspectives and strategies on graduates of HEIs' interpersonal competencies, employability skills, work experience, and graduate programs' employability opportunities.

Furthermore, research indicates that the effectiveness of psychological perceptions in eliciting desired changes in graduate employability

is moderated by a variety of variable factors (Clasen, 2021; Ding et al., 2021). While prior empirical research has shed some light on graduate employability, little is known about the moderating factors that influence graduate employability. Examining the effects of graduate programs, interpersonal skills, and job skills and experience on graduate employability during and after the COVID-19 pandemic, comes up with a new research idea.

This study examines how stakeholders' psychological perceptions, employability skills and experience, graduate programs, and interpersonal competencies affect graduates' employability after completing an HEI program. In doing so, the study also aims to examine, if stakeholder perception influences employability skills and experience, graduate programs, and interpersonal competencies. Additionally, this includes developing a skills inventory based on employer needs, incorporating it into an analysis of the employability skills profile of graduates from private universities, and utilizing the results to inform curriculum and module delivery. The study is based on the experiences of banking and finance graduates from North Lebanon's higher education institutions, where numerous graduate employers' psychological perceptions, attitudes, and behaviors significantly influence university graduates' employability. The researchers note, however, that there are few if any, studies that examine the interaction between stakeholders' psychological perceptions of graduates and the employability strategies used to recruit graduates from HEIs, emphasizing the study's uniqueness and novelty.

1. Theoretical background

1.1 Attribution theory and hypothesis development

Attribution theory, developed by Heider (1958) deals with the social perceiver's utilization of information to derive causal explanations for occurrences. It looks at the acquired data and how it is assembled to make a logical judgment. The theory focuses on how individuals describe the causes of behaviours. On the other hand, Fiske and Taylor (1991) see individuals as naive psychologists who always try to establish a sense of the social world. These individuals always try to see a cause for any event or behaviour. Heider (1958) explained two major themes about situational (external

cause) and dispositional (internal cause) attributions. Where dispositional attribution shows the internal characteristics of an individual as the reason for any behaviour, these internal attributions can be personality traits, beliefs, or motives. In comparison, it shows an individual's external characteristics as the reason for any behaviour. These external attributions can be situational or environmental.

This theory can be used to shed light on the psychological effects of stakeholders' perceptions of HEI graduates. When applied to this context, attribution theory assumes that situational (external) and dispositional (internal) factors influence stakeholders' psychological attitudes toward graduate employees. This indicates that stakeholders' psychological perceptions and hiring decisions are influenced not only by more than just graduate students' educational credentials and interpersonal competencies (dispositional factors) but also by their skills and experience (situational factors). Thus, stakeholders and/or recruiters use these two critical factors as part of the information cues they use to evaluate graduate applicants' abilities and skills. Additionally, such data can be used to gain further insight into graduate applicants' job compatibility, personality, motivation, personal abilities, and skills. Recruiters' psychological perceptions are strongly influenced by graduate applicants' resumes or curriculum vitals, which provide recruiters with such detailed information on which to base their decisions. However, academic research has yet to recognize the critical role of psychology in determining whether or not specific graduate students with the desired situational and dispositional characteristics will be hired (Okunuga & Ajeyalemi, 2018; Mrstik et al., 2019). By addressing this research gap, we believe that psychology significantly influences how people recruit new students and how well they perform in the job market.

1.2 Graduate employability skills, perceptions, and strategies

Graduate employability concepts have been expanded in research to encompass broader areas such as sustainability (Svabova et al., 2019), entrepreneurship (Maxwell & Armellini, 2019), consumer behavior (Ertz et al., 2016), and economic growth and development (González, 2018), leaving enormous gaps in terms of its underlying forces. One of the most significant

voids concerns perceptions that are not even implicit in previous empirical definitions.

Saunders and Zuzel (2010) define graduate employability as graduates' chances of finding work. On the contrary, Heo and Li Xiaohu (2019) assert that employability is a collection of personal characteristics, skills, and accomplishments used to obtain employment. Employability has also been defined as knowledge, experience, and the technical and non-technical skills necessary to meet specific job requirements in other studies (Fulgence, 2015; Mgaiwa, 2021). Chan et al. (2018) referred to employability skills as a collection of personal attributes, understandings, and achievements of individuals which help them to increase the likeliness of getting a job and significant growth in that career. Common employability and global skills are two important types of employability skills. According to Krishnan et al. (2021), common employability skills include leadership, communication skills, critical thinking, problem-solving, interpersonal skills, personal qualities, teamwork, and adaptability. While global skills of employability, according to Tang et al. (2022), include the use of technology, mental level, organizational resource management, multi-racial awareness, physical space, valuing differences and diversity and analytical skills. Regardless of these definitions provided, it is noticed that the entire topic of graduate employability is based on perceptions.

With the help of typical interview questions on subjects, including how graduates will handle stress-related issues, shortcomings, and strengths, these skills are frequently assessed. In addition, candidates are questioned on themes, including how they manage challenging circumstances, respond to errors and mishaps, and cope with supervisors who make poor judgments regarding their global employability skills. Stakeholders always try to seek these skills in the potential candidate for any job. It remains an intriguing question to consider the extent to which perceptions are a component of and/or a determining factor in graduate employability. Our suggestion is consistent with those made by Ding et al. (2021), who assert that recruiters' actions, attitudes, and behavior result from their perceptions. This indicates that recruiters' perceptions influence the decision to hire graduates. As a result, it becomes clear that employers' employability strategies revolve around their perceptions of graduates.

It remains an intriguing question to consider the extent to which perceptions are a component of and/or a determining factor in graduate employability. However, our suggestion is consistent with those made by Ding et al. (2021), who assert that recruiters' actions, attitudes, and behaviour result from their perceptions. This indicates that recruiters' perceptions influence the decision to hire graduates. As a result, it becomes clear that employers' employability strategies revolve around their perceptions of graduates.

Prior research has shed light on the critical factors or aspects that can influence graduate employability perceptions and strategies. A positive correlation between graduate programs and employability, which is consistent with the existence of such institutions, is found (Clarke, 2018; Jackson & Wilton, 2017). In other instances, graduates' employability is viewed as a function of their skills and experience (Rowe & Zegwaard, 2017). The significance of possessing the appropriate skills and experience sheds light on a graduate applicant's ability to execute job requirements successfully (Clarke, 2018; Jackson & Wilton, 2017; Rowe & Zegwaard, 2017). In addition, interpersonal competencies are also evidenced by numerous empirical studies (Anho, 2011; Blom & Saeki, 2011; Budiarto et al., 2021; Padmini, 2012). Ignoring the roles and empirical significance of these variables when analyzing academic issues pertaining to graduate employability is empirically irrational and leaves much to be desired.

Following the review of these insights, it becomes empirically unavoidable that stakeholders' employability decisions are influenced by their yet-to-be-modelled psychological perceptions, graduate students' graduate programs, skills, experiences, and interpersonal competencies. Thus, this study examines stakeholders' psychological perceptions of employability skills and experience. The study contains a number of theoretical and practical contributions. As such, our study proposes to develop a graduate employability model that considers graduate programs, skills and experiences, and interpersonal competencies as critical determinants of graduate employability. Nonetheless, connections between several of these variables are contemporary and thus attract the attention of academic researchers. To a greater extent, some connections are surrounded by opposing

arguments, and both have yet to be analyzed in the context of North Lebanon. To address these concerns, we propose to examine the interactional relationships between these variables by formulating study hypotheses.

2. Research methodology

2.1 Hypotheses development and proposed graduate employability model

Psychological perceptions are bound to be observed in any situation, and studies have focused on consumer behavior (Ertz et al., 2016), nursing (Vandette & Gosselin, 2019), and education (Reynolds, 2017). The question of how stakeholders' psychological perceptions affect graduate students' employability skills and experience remains exciting. However, the candidates with the desired skills and experience are likely to secure employment (Aviso et al., 2021). This notion is consistent with Bögel and Upham's (2018) assertions that any favourable circumstance can induce individuals to develop favourable psychological perceptions. Employers perceive that graduates must have disciplinary and technical skills learnt from their degrees but need graduates to determine a variety of other attributes and skills, including leadership, communication skills, critical thinking, problem-solving, interpersonal skills, personal qualities, teamwork, adaptability, and often managerial potential and abilities (Krishnan et al., 2021). Thus, according to Lowde (2011), stakeholders' psychological perceptions indirectly compel graduate students to acquire these employability skills and experience in order to maximize their employability potential. These psychological perceptions are the behaviors of the employers according to Attribution theory. This indicates the possibility of a significant interaction between stakeholders' psychological perceptions of employability skills and experience, as expressed by the following hypothesis:

H1: Stakeholders' psychological perceptions have significant effects on graduate students' employability skills and experience.

The implications for graduate programs of stakeholders' psychological perceptions of employability skills are enormous and lack empirical support. While graduate programs are viewed as influencing recruiters' decisions (Anderson & Tomlinson, 2021). Contrary, Casagrande (2017) revealed that graduate programs

have no impact on the employers' perception of the graduate. Hence, there are various programs and degrees which lack skills development among graduates during their studies. At the same time, the programs which focus on soft skills and theoretical knowledge of the subject are highly recommended by stakeholders. The primary difficulty is that this has yet to be empirically validated, and the study addresses these concerns by proposing the following hypothesis, which will be tested for relevance and validity:

H2: Stakeholders' psychological perceptions have significant effects on higher education institutions students' graduate programs.

Interpersonal competencies' effects on graduate employability are frequently overstated in studies (Anho, 2011; Blom & Saeki, 2011; Padmini, 2012). Nonetheless, graduates can be highly motivated to develop and enhance their interpersonal competencies to meet stakeholders' psychological expectations. Additionally, the stakeholders' theory's propositions emphasize the critical nature of meeting stakeholders' expectations and safeguarding their interests (Jackson & Wilton, 2017). This implies that graduate students must meet recruiters' expectations and protect their own interests in order to find work. Due to the lack of evidence of this interactive relationship in previous academic studies, we proposed the following hypothesis to determine its empirical validity and relevance to banking and finance students in North Lebanon:

H3: Stakeholders' psychological perceptions have significant effects on higher education institutions students' interpersonal competencies.

Employability skills and experience are viewed as a one-way street leading from graduate programs to employability skills and experience in studies (Clarke, 2018; Jackson & Wilton, 2017; Rowe & Zegwaard, 2017). Dynamic changes in the business environment, combined with structural imbalances such as COVID-19 and other economic issues, led the researchers to conclude that employability skills and experience also influence the type of graduate programs in which graduate students enroll. Students are eager to enroll in graduate programs that will help them develop their skills and experience. Chartered accountants, financial analysts, and auditing programs are all examples of such

programs. As a result of these considerations, we have arrived at and established the following hypothesis:

H4: Employability skills and experience have a significant positive effect on graduate programs.

According to studies, academic credentials are contingent upon graduates' personal characteristics (Anho, 2011; Padmini, 2012). As a result, certain academic credentials require students to possess significantly more specific personal characteristics. For example, contrary interpersonal skills of graduate students are found to have no impact on academic achievement or academic credentials (Syed et al., 2014). While Blom and Saeki (2011) established that engineering and medical students are more likely to have strong problem-solving and numerical aptitudes than business administration students. Alternatively, these studies indicate that an individual's personal characteristics significantly influence the type of academic qualifications he or she will pursue and obtain. As a result, it becomes clear that this concept should be empirically established and developed by demonstrating that personal characteristics significantly impact graduate students' academic qualifications. Thus, the following hypothesis is formulated in accordance with this proposition:

H5: Interpersonal competencies have a significant effect on graduate programs.

Employability skills are a critical determinant of employability on both a theoretical and practical level (Fulgence, 2015; Mgaiwa, 2021). The critical nature of employability skills cannot be overstated, and Bui and Porter (2010) agree, arguing that employability skills are a necessary component of organizational growth, competitiveness, and success. In addition, Lauder (2013) suggests that there are various interpersonal and soft skills which employees prefer to fill a position. Clasen (2021), on the other hand, argued that the importance and role of employability skills are combined with experience to form an essential determinant dubbed employability skills and experience. Likewise, work experience is equated with an increased capacity to perform assigned organizational tasks (Ding et al., 2021). This indicates that employability skills and experience have a beneficial

effect on graduate employment, which can be expressed as follows:

H6: Employability skills and experience have a significant effect on graduate employability.

HEI's graduate programs are believed to contribute to developing and promoting students' skills and abilities, which help them acquire jobs and perform well during their careers (Lowden et al. 2011). The graduate programs are seen as beneficial since they expose students to possibilities for work-based learning and other comparable opportunities while also enabling the documentation of these experiences. Then, graduates may use this as a source to demonstrate abilities and qualities to potential employers (Nixon et al., 2008). For these reasons, academic qualifications are regarded as having a significant effect on graduate employability. Thus, we propose the following hypothesis to test whether this concept holds true for Lebanon's HEIs:

H7: Graduate programs have a significant effect on graduate employability.

Interpersonal competencies have a wide range of implications for an organization; thus, their inclusion in studies examining how they affect graduate programs is critical. For example, Blom and Saeki (2011) emphasize that interpersonal competencies frequently contribute to certain employees performing more effectively than others. This also aligns with Padmini's (2012) recommendations highlighting the critical nature of recruiting employees with high interpersonal competencies, citing their contribution to organizational efficiency and effectiveness (performance). This indicates a positive relationship between graduate employability and personal characteristics. This interaction, however, has yet to be empirically modelled through an examination of stakeholders' psychological perceptions of graduate employability at higher education institutions. As a result, the current study argues that personal characteristics significantly influence graduate employability. As a result, the following hypothesis is proposed to explain this phenomenon:

H8: Interpersonal characteristics have a significant effect on graduate employability.

One of the primary goals of this study was to close research gaps caused by a dearth of empirical evidence for exploring, denoting,

and testing the moderating factors affecting graduate employability. According to House et al. (2020), by highlighting the effects of psychological beliefs, attitudes, and behavior, significant psychological effects can be observed in any moderating context. While such concepts are widely applicable in other fields but little is known about the existence of moderating factors associated with graduate employability.

This study is unique in demonstrating the indirect effect of three critical variables on a graduate's employment prospects. However, studies indicate that other factors significantly influence graduate students' desire to pursue specific programs (Mrstik et al., 2019). On the other hand, Okunuga and Ajeyalemi (2018) assert that graduate programs have a profound effect on a variety of graduate activities, careers, and personal development. The ideas implicit in these two suggestions imply that graduate programs may have moderating effects on graduate employability, though their nature and significance have yet to be determined. When studies indicate that a lack of related qualifications has a detrimental effect on graduates' employability, the validity of such an observation can be unquestionable (Mrstik et al., 2019; Okolie et al., 2019). In this context, we can argue that stakeholders are psychologically averse to hiring graduate students who lack the necessary credentials because they perceive such graduates as incapable of carrying out the job's requirements. This has a detrimental effect on graduates' employability prospects. As a result, we can restate our argument with the following hypothesis:

H9: Irrelevant graduate programs moderate the relationship between stakeholders' psychological perceptions and graduate employability.

Padmini (2012) argues that interpersonal skills are critical in determining graduate employability. Additionally, supporting research indicates that graduate students with the necessary interpersonal skills have a strong chance of securing employment with any potential employer (Anho, 2011; Padmini, 2012). Blom and Saeki (2011) believe that interpersonal skills improve a candidate's employability prospects. This is consistent with Fulgence's (2015) assertion that employers are much more likely to perceive and hire graduates who are better employed and possess the necessary interpersonal competencies. As a result, it becomes

critical to establish and argue that interpersonal skills have a moderating effect on graduate employability. Subsequently, this can be expressed as the following hypothesis:

H10: Interpersonal competencies moderate the relationship between stakeholders' psychological perceptions and graduate employability.

In practice, it is widely accepted that lacking employability skills and experience leads to minor negative perceptions of potential graduate employees among stakeholders. This demonstrates an indirect link between stakeholders' psychological perceptions of graduates and graduate employability via employability skills and experiences. The study's novelty will be enhanced by its efforts to establish and test the existence of moderating effects between stakeholders' psychological perceptions of graduate employability and graduate employability using the following hypothesis:

H11: Lack of employability skills and experiences moderates the connection between stakeholders' psychological perceptions and graduate employability.

Thus, the current study analyzes the effect of graduate employability and internal characteristics on the stakeholders' perception of graduates, ultimately impacting graduate

employability. This relationship among variables can be seen in the proposed research framework in Fig. 1.

The current study contributes to the body of knowledge by incorporating stakeholders' psychological perceptions, interpersonal competencies, graduate programs, and employability skills and experience in contexts where the job market operates differently. The conceptual framework depicted in Fig. 1 was used to model and test the interactions between these model variables. Significant connections have been established, as the significant factor analysis probabilities indicate. As such, we detail the methodology used to arrive at this decision in the following section.

2.2 Data collection and analysis

This study used a quantitative approach to evaluate a measurable relationship between the study variables. Judgmental sampling was used to select the respondents to complete the current study's objectives. Black (2010) has provided that it is a non-probability sampling technique for selecting study participants based on the researcher's judgment or current knowledge. The prime aim of selecting this type of sampling technique was to approach the target population directly; thus, the relevance of the selected sample was enhanced for study.

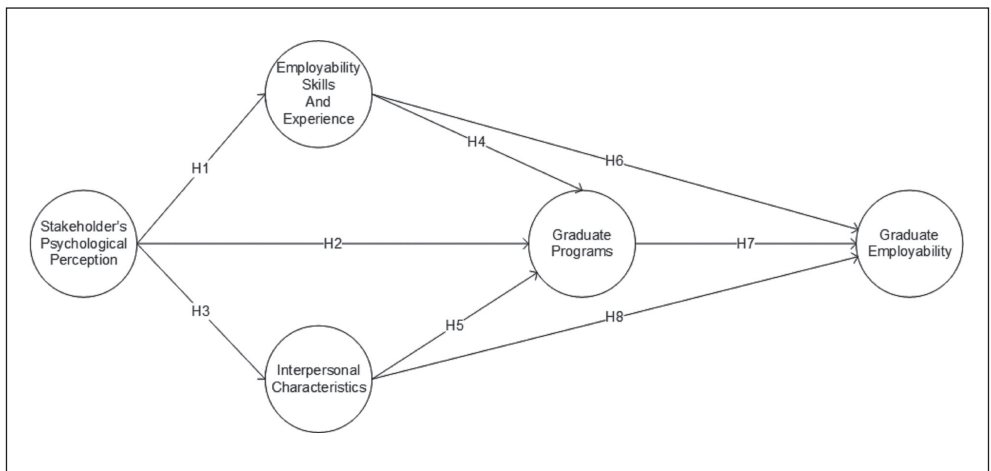


Fig. 1: Conceptual framework

Source: own

The data collection has been made from three types of stakeholder groups for data collection consisting of 453 students, 33 academic teachers, and a randomly selected sample of 23 bank human resource managers in North Lebanon. The selection of three groups of stakeholders was important to provide readers with additional information about the employability perspectives of all three relevant stakeholders.

Based on the reviewed theoretical and empirical evidence, a questionnaire was developed

to collect data, shown in Tab. 1. In order to measure interpersonal competencies, employability skills and experience, and graduate program variable elements, 3-point Likert scale ranging from (low importance, medium importance, and high importance) was used. On the other hand, a 5-point Likert scale was used to assess stakeholders' psychological perceptions and graduate employability variable elements (strongly disagree, disagree, neutral, agree, and strongly agree).

Tab. 1: Constructs, items and their resources – Part 1

Construct	Item code	Items	Source
Stakeholders' psychological perceptions (SPP)	SPP1	Students with a high level of work experience are well capable of handling assigned tasks and duties	Irwin et al. (2019)
	SPP2	Work experience provides good ideas about the students' work effectiveness and ability to complete assigned tasks	
	SPP3	Students with a high level of work experience tend to perform better than students with no work experience	
	SPP4	Students with a high level of work experience are easy to manage than students with no work experience	
	SPP5	Students with a high level of work experience have a good understanding of work-related practices than students with no work experience	
	SPP6	Work experience is important for developing students' key skills	
	SPP7	Work experience enhances students' confidence and motivation levels	
	SPP8	Work placements provide students with a good idea of what work is like	
Employability skills and experience (RSE)	RSE1	Communication	Fulgence (2015); Saunders and Zuzel (2010)
	RSE2	Information technology (IT)	
	RSE3	Interpersonal	
	RSE4	Leadership	
	RSE5	Negotiation	
	RSE6	Networking	
	RSE7	Planning/organization	
	RSE8	Problem-solving	
	RSE9	Team-working	
	RSE10	Technical	

Tab. 1: Constructs, items and their resources – Part 2

Construct	Item code	Items	Source
Interpersonal competencies (IPC)	IPC1	Adaptability	Fulgence (2015); Saunders and Zuzel (2010)
	IPC2	Attention to detail	
	IPC3	Commitment	
	IPC4	Cooperation	
	IPC5	Creativity	
	IPC6	Decisiveness	
	IPC7	Dependability	
	IPC8	Integrity	
Graduate programs (GP)	GP1	Understanding concepts	Saunders and Zuzel (2010)
	GP2	Breadth of knowledge	
	GP3	Up to date	
	GP4	Application of knowledge	
Graduate employability (GE)	GE1	Employing graduate students provide organizations with better and knowledgeable employees	Fulgence (2015)
	GE2	Graduate students are an important source of cheaper labour	
	GE3	Graduate students help to provide new and better ideas to their work organizations	
	GE4	Employing graduate students is expensive because the students have to be trained	
	GE5	Graduate students take time to learn and master the required on-the-job activities and responsibilities	
	GE6	Graduate students do not always have the required work experience, and hence, they might not contribute much to their employers	
	GE7	Organizations need to change their graduate employability strategies in accordance to changes in business, social and economic conditions	
	GE8	Organizations must use different graduate employability strategies so as to hire the right graduate students for a particular position	

Source: Irwin et al. (2019); Fulgence (2015); Saunders and Zuzel (2015)

For data analysis, the Smart PLS package was used. The structural equation modelling (SEM) technique provided a fit of the model and measured the validity and reliability of the graduate employability model (Al-Mutairi et al., 2014; Heo & Li Xiaohu, 2019). The mean scores for the human resources managers' skills

inventory, which includes soft skills ($n = 9$), personal attributes ($n = 9$), and knowledge factors ($n = 9$), in order to analyze the employability skills profile of private university graduates and to inform the curriculum and module delivery, were calculated. The results of path analysis measured the relationship between study

variables and the proposed moderating effects. Path analysis was used since it is the best technique to evaluate direct and indirect effects using a single model (Crossman, 2019).

3. Research results

3.1 Factor analysis

The first step involved performing a factor analysis on the model variables (stakeholders' psychological perceptions, interpersonal competencies, graduate programs, employability skills and experience, and graduate employability). Numerous researchers discovered that factor loadings should be greater than 0.5 for optimal results (Hulland, 1999; Truong & McColl, 2011). Additionally, 0.5 was determined to be a cutoff for desirable loadings in a hospitality scenario (Chen & Tsai, 2007).

Meanwhile, when Ertz et al. (2016) examined environmental consumer behavior, they used variables with factor loadings of at least 0.4 and greater in their CFA. Thus, on the above ground, we did not choose this criterion arbitrarily but chose 0.7 because it is greater than the minimum acceptable factor loading cutoff values used in these studies.

The factor loadings obtained in Tab. 2 were greater than 0.7, indicating that the variable indicators almost perfectly reflect and correlate with the latent variables (stakeholders' psychological perceptions, employability skills and experience, interpersonal competencies, graduate program, and graduate employability). That is, the indicators are conceptually meaningful and are closer to the ostensibly latent variables.

Tab. 2: Factor analysis results

	Stakeholders' psychological perceptions (SPP)	Employability skills and experience (RSE)	Interpersonal competencies (IC)	Graduate program (GP)	Graduate employability (GE)
SPP1	0.821				
SPP2	0.765				
SPP3	0.736				
RSE5		0.781			
RSE6		0.723			
RSE7		0.783			
RSE8		0.840			
RSE9		0.800			
IPC3			0.767		
IPC4			0.790		
IPC5			0.742		
IPC6			0.821		
IPC7			0.765		
IPC8			0.736		
GP1				0.746	
GP2				0.777	
GP3				0.786	
GP6				0.762	
GP7				0.743	
GE5					0.841
GE6					0.831

Source: own

3.2 Discriminant validity, internal consistency, and convergent validity tests

Following that, tests for discriminant validity, internal consistency, and convergent validity were conducted. According to the Fornell and Larcker criterion, the diagonal correlation coefficients in Tab. 3 exceed their corresponding underneath correlation coefficients (Ab Hamid et al., 2017).

Additionally, this is demonstrated by the fact that the squared AVE values in Tab. 4 exceed both the related row and column values (Hair et al., 2021). Results reveal that graduate employability, graduate programs, interpersonal competencies, employability skills and experience, and stakeholders' psychological perceptions of seemingly unrelated measures are, in fact, unrelated. As a result of this, discriminant validity is established.

Tab. 3: Fornell-Larcker criterion

	Graduate employability	Graduate program	Interpersonal competencies	Employability work experience	Stakeholders' psychological perceptions
Graduate employability	0.836				
Graduate program	0.752	0.763			
Interpersonal competencies	0.600	0.619	0.771		
Employability work experience	0.652	0.719	0.655	0.786	
Stakeholders' psychological perceptions	0.465	0.523	0.490	0.689	0.831

Source: own

The validity of all variables established in previous research was compared to the validity results obtained in this study (Chhinzer & Russo, 2018; Fulgence, 2015; Saunders & Zuzel, 2010). As a result, the study's validity results (GE: $\alpha = 0.769$, GP: $\alpha = 0.820$, IC: $\alpha = 0.863$; WRE: $\alpha = 0.845$, and SPP: $\alpha = 0.776$) were relatively higher and exceeded the minimum

Cronbach's alpha threshold of 0.70 (Tavakol & Dennick, 2011). Additionally, the Rho_A (GE: $\rho = 0.770$, GP: $\rho = 0.820$, IPC: $\rho = 0.865$, RWE: $\rho = 0.851$, and SPP: $\rho = 0.790$) values were above 0.70 (Hair et al., 2021). This denotes that the estimated model variables have high internal consistency levels (Tab. 4).

Tab. 4: Internal consistency and convergent validity tests

	Cronbach's alpha	Rho A	Composite reliability	Average variance extracted (AVE)
Graduate employability	0.769	0.770	0.823	0.699
Graduate program	0.820	0.820	0.874	0.582
Interpersonal competencies	0.863	0.865	0.898	0.594
Employability work experience	0.845	0.851	0.890	0.618
Stakeholders' psychological perceptions	0.776	0.790	0.870	0.691

Source: own

Tab. 4 composite reliability values (GE: CR = 0.823, GP: CR = 0.874, GP: IPC = 0.898, RWE: CR = 0.890, and SPP: CR = 0.870) values were higher than the prescribed limit of 0.70 (Hair et al., 2021), indicating the presence of high levels of correlations among multiple indicators of the same construct that are in agreement. Besides, the computed AVE values were above 0.50 (Henseler et al., 2009). So, our model variables had a lot of discriminant and convergent validity regarding stakeholders' psychological perceptions and strategies for getting jobs after college in North Lebanon.

3.3 Model fitness

The study reported a standardized root mean square residual (SRMR) of 0.012, which is less than 0.08 and thus reflects a good fit (O'Boyle & Williams, 2011). Furthermore, the difference between the estimated and saturated models' correlation matrix is non-significant ($p > 0.05$), as denoted by d_ULS and d_G (Enders & Tofighi, 2008). Additionally, Tab. 5 exhibits a normed fit index (NFI) of 0.70 and significant chi-squared values, representing an acceptable model fit. Thus, our model showed how stakeholders' psychological perceptions, employability skills and experience, graduate programs, and interpersonal competencies all work together to make HEI graduates more likely to be hired.

3.4 Path analysis

Tab. 6 results confirm positive interactive effects between the stakeholders' psychological perceptions and the graduate students' employability skills and experience. The SEM revealed that improvements in stakeholders' psychological perceptions by one unit result

in an improvement of 0.840 units in graduate students' employability skills and experience. Thus, $H1$ was accepted, and this is congruent with employability suggestions made by Bögel and Upham (2018), revealing that graduate students will acquire certain skills and experiences to influence stakeholders' perceptions and enhance their employability potential positively.

The study's findings indicate a weak and insignificant relationship between stakeholders' psychological perceptions and graduate programs. These findings contradict propositions asserting that stakeholders' psychological perceptions positively influence graduate students' decision to pursue graduate programs that are contemporary with what employers and recruitment agents are pursuing (Anderson & Tomlinson, 2021). Additionally, graduate students may find such programs rewarding, even if they are pursued at the expense of other graduate programs. As a result, this may account for a negative influence and the rejection of $H2$. The findings can be supported by the previous studies by Casagrande (2017), showing that most graduate programs do not necessarily impact the employers' perception due to the lack of skills development among graduates during their studies. Employers arrange costly training and development schemes for new hires to promote soft skills.

The outcome of $H3$ is consistent with empirical evidence indicating a significant relationship between stakeholders' psychological perceptions and graduate students' interpersonal competencies (Anho, 2011; Blom & Saeki, 2011; Padmini, 2012). Graduate students who understand stakeholders' perspectives motivate themselves to improve their

Tab. 5: Fit Summary

	Saturated model	Estimated model
SRMR	0.080	0.012
d_ULS	1.466	2.912
d_G	0.666	0.733
Chi-squared	1866.599*	1885.881*
NFI	0.700	0.700

Note: *Significant at 0.001.

Source: own

interpersonal skills by 59.3% to increase their chances of finding work.

Other significant and intriguing SEM findings include the 0.924 and 0.161 positive effects of employability skills and experience and interpersonal competencies on graduate programs, respectively. These findings corroborate previous research conducted in Slovakia (Svabova et al., 2019) and the United States (Clasen, 2021). This coherence suggests that graduate programs should not solely focus on imparting knowledge to students, developing their employability skills and experience, and enhancing their interpersonal competencies. As a result of the acceptance of *H4*, it was established that employability skills and experience significantly positively affect graduate programs. However, *H5* was rejected, and it was concluded that interpersonal skills have no significance in the graduate programs of HEI students. These findings are consistent with the research findings of Syed et al. (2014). In addition, the study found no impact of the graduate students' interpersonal skills on academic achievement or academic credentials. This suggests that graduate program success is not necessarily affected by the interpersonal skills of HEI students.

Alternatively, the results indicate that graduate students' employability skills and experience have a detrimental negative effect on their employability, with a one-unit increase in graduate students' employability skills and experience resulting in a -0.104 decrease in graduate employability. These findings counter the graduate

employability theory, which asserts that obtaining a graduate degree increases an individual's employability potential (Tomlinson & Holmes, 2016). As a result, this may imply that graduate students acquired skills and experience not required for related jobs, diminishing their employability prospects in banking and finance-related jobs. However, *H6* was rejected, concluding that graduate students are dissuaded from pursuing related qualifications when significant skills and experience are required, reducing their employability potential. In addition, a previous study by Lauder (2013) also suggests that some employers prefer interpersonal and soft skills to employability skills to fill a position.

Fascinatingly, completing related graduate programs and developing interpersonal skills increased graduate students' employability prospects by 1.092 and 0.131, respectively. Nevertheless, only *H7* was accepted, and *H8* was rejected. Nonetheless, the first situation implies that completion of related graduate programs effectively positions graduate students to perform assigned job tasks. As a result, stakeholders are more likely to hire such graduates.

As a result, previous research (Anho, 2011; Blom & Saeki, 2011; Padmini, 2012) and graduate employability theory (Tomlinson & Holmes, 2016) place a premium on such feasible and valid outcomes. In the second situation, it can be implied that developing interpersonal skills is not important to get hired. In this case, employers may prefer graduates with employability skills and experience to interpersonal skills. Fig. 2

Tab. 6: Path analysis

	Estimate	<i>p</i> -values	Impact	Hypothesis
SPP → RSE	0.840	0.000	Significant	<i>H1</i> : Accepted
SPP → GP	-0.222	0.151	Insignificant	<i>H2</i> : Rejected
SPP → IPC	0.593	0.000	Significant	<i>H3</i> : Accepted
RSE → GP	0.924	0.000	Significant	<i>H4</i> : Accepted
IPC → GP	0.161	0.131	Insignificant	<i>H5</i> : Rejected
RSE → GE	-0.104	0.580	Insignificant	<i>H6</i> : Rejected
GP → GE	1.092	0.000	Significant	<i>H7</i> : Accepted
IPC → GE	0.131	0.165	Insignificant	<i>H8</i> : Rejected

Note: GP – graduate programs; GE – graduate employability, IPC – interpersonal competences, RSE – related employability skills and experience, SPP – stakeholders' psychological perceptions.

Source: own

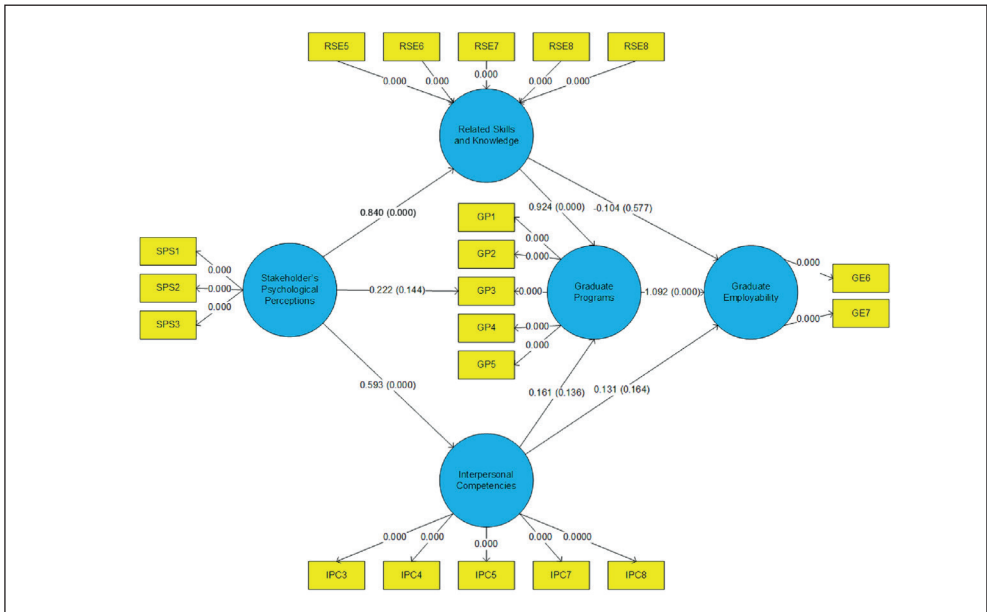


Fig. 2: SEM model of employability

Source: own

shows the resultant model from Smart PLS results of SEM analysis of the proposed model.

Moderating effects

One of the primary reasons for using SEM in this study was to test the previously established moderating effects between stakeholders' psychological perceptions of graduate programs, interpersonal competencies, employability skills, and graduate employability. According to Tab. 7, no significant and minor indirect effects of -0.243 extend from stakeholders' psychological perceptions to graduate

employability via graduate programs. This reaffirms the psychological, practical, and empirical notion that employers hesitate to hire graduates who have not completed a work-related degree program (Mrstik et al., 2019; Okolie et al., 2019). As a result, H9 was rejected, indicating that graduate programs have a negative moderating but insignificant effect on the relationship between stakeholders' psychological perceptions of graduates and graduate employability. This aligns with Hosain et al. (2021), who provided that graduates' technical and leadership skills insignificantly impact graduate employability.

Tab. 7: Indirect effects

	Estimate	p-values	Hypothesis
SPP → GP → GE	-0.243	0.129	H9: Rejected
SPP → IPC → GE	0.078	0.163	H10: Rejected
SPP → RSE → GE	-0.087	0.597	H11: Rejected

Note: GP – graduate programs; GE – graduate employability, IPC – interpersonal competencies, RSE – related employability skills and experience, SPP – stakeholders' psychological perceptions.

Source: own

It has been further explained by Thirunavukarasu et al. (2020) that it is the understanding of graduates about the graduate course which helps in increasing employability, and the course alone cannot serve the purpose.

Acceptance of *H10* results that interpersonal competencies have no beneficial moderating effect on the relationship between stakeholders' psychological perceptions of graduates and their employability. As illustrated in Tab. 7, 0.078 has a positive *p*-value = 0.163, indicating insignificant indirect effects on stakeholders' psychological perceptions, interpersonal competencies, and graduate employability. This means the interpersonal competencies do not significantly moderate the relationship between stakeholders' psychological perceptions and graduate employability. They are suggesting that employers do not decide to hire an HEI graduate based on interpersonal competencies. It is inconsistent with the findings of Hosian et al. (2021) and Tamara et al. (2018), who argued that personality, communication skills, and interpersonal skills significantly influence the employability of graduates and employers' perceptions.

The study's *H11* establishes that a lack of employability skills and experience results in a -0.087 decrease in stakeholders' negative perceptions of potential graduate employees.

Thus, *H11* was also rejected since the *p*-value is 0.597, reiterating that employability skills and experiences have an insignificant moderating effect on the relationship between stakeholders' psychological perceptions and graduate employability. It is suggested that employers do not decide to hire an HEI graduate based on employability skills and experiences. Interestingly these results are largely inconsistent with previous studies. Smith et al. (2018) and Shaheen et al. (2022) have argued that graduates have more chances of employability with more placements in the past. It requires a deeper understanding of this research area in future.

The results of the computed skills inventory indicate that the bank's human resources managers preferred to recruit graduate students with a high level of soft skills. As evidenced by Tab. 8, all of the top eight-ranked skills were soft skills. Personal characteristics were ranked second, occupying positions 9–14, while knowledge factors were ranked third, occupying positions 20–27. These findings corroborate Clarke's (2018) assertions about the critical nature of specific skills for specific professions. Thus, this study has successfully identified the critical role of soft skills in securing employment with banks for banking and finance graduate students from private universities.

Tab. 8: Human resources managers' skills inventory

Priority (rank)	Skills	Priority (rank)	Skills	Priority (rank)	Skills
1	Numerical skills	10	Decision making	19	Understanding the workplace
2	Computing skills	11	Oral communication skills	20	Adaptability
3	Evaluation skills	12	Writing communication skills	21	Passionate
4	Application of knowledge	13	Presentation skills	22	Initiative
5	Research skills	14	Learning skills	23	Self-confidence
6	Analytical skills	15	Value improving	24	Flexibility
7	Risk management	16	Resourcefulness	25	Energetic
8	Risk assessment	17	Self-understanding	26	Career planning
9	Attention to detail	18	Global awareness	27	Passionate

Source: own

Conclusions

The current study aimed to investigate, establish, and test the precise nature of links that previously lacked empirical clarity and support between stakeholders' psychological perceptions, employability skills and experiences, graduate programs, interpersonal competencies, and graduate employability. The ultimate goal was to determine whether banking and finance education produced employees who were relevant to the industry.

The preliminary results showed that the psychological views of the stakeholders had a favorable influence on graduate students' skill and experience development. As a result, our findings support the idea that graduate programs are created to satisfy sector-relevant human resources requirements. Developing graduate students who lack industry-relevant knowledge and experience would not only appear rational but also worsen the unemployment problem. Such is crucial, particularly in Lebanon, where the brain drain and rising unemployment issues necessitate graduate students with expertise and abilities specific to their industry. HEIs can provide workshops and training programs to enhance graduate students' knowledge, abilities, and experience to solve challenges brought on by a shortage of those factors. These suggested solutions demonstrate the study's useful contributions and are paramount in current circumstances.

According to the study's findings, stakeholders' psychological perceptions of students' choice of graduate programs are negatively correlated. However, such findings fall outside the purview of the graduate employability model, and academic research implies that graduate students' efforts to acquire program credentials with excellent career prospects undercut efforts to generate employees with sector relevance (Chan et al., 2018; Fulgence, 2015; Mgaiwa, 2021). Consequently, graduate employability becomes crucial when choosing the HEI degrees students earn. Therefore, it is the responsibility of the government to implement employment generation programs. Given the current business and economic climate, this is crucial, where it may be difficult for one industry to hire and keep recent graduates.

According to the findings, interpersonal competencies, employability skills, and experience favourably impact graduate programs at HEIs, helping to raise the standard

of instruction there. These incidents suggest that HEI programs must be able to shape graduates into demonstrating appropriate professional abilities and competencies in order to produce sector-relevant individuals (Clasen, 2021; Ding et al., 2021). The relevance of interpersonal skills is a significant problem severely underemphasized in academic studies and hinders the creation of long-lasting graduate programs. In this sense, our work expands on ideas of interpersonal competencies to design sustainable graduate programs emphasizing the development of graduate students' employability skills, experience, and interpersonal abilities.

The results showed that graduates are less likely to pursue related careers due to decreasing employability skills and experience requirements. As a result, students should work to gain experience and employability skills compatible with their intended career path. Moreover, results showed that graduate students' chances of employment are improved by finishing relevant graduate programs and honing their interpersonal abilities (Shaheen et al., 2022). Therefore, to increase the ability of graduates from HEIs to fulfill the needs and requirements of the labor market, graduate programs must be developed and put into place. Because of this, the results of our study indicate that graduate programs, employability abilities, and experience have low or small moderating impacts on the relationship between stakeholders' psychological impressions and graduate employability. However, it was discovered that interpersonal skills had a very little, insignificant positive moderating impact on the association between stakeholders' psychological views of graduates and graduate employability. These results suggest that to maximize their employability potential, graduate students should seek positions they are qualified and have the essential interpersonal skills and experience to perform. Furthermore, developing industry-relevant employees necessitates the construction of modern education curricula in higher education institutions capable of fostering and increasing these essential employability attributes.

On the other hand, this observation necessitates that graduate students participate in career advising courses and programs accordingly. Moreover, such tactics are essential for resolving work and social issues in today's circumstances. As a result, this study can

contribute significantly to creating effective social and educational policies.

In conclusion, the computed skills inventory results indicate that the bank's human resource managers preferred to recruit graduate students with high soft skills, personal characteristics, and knowledge factors. However, this necessitates academic faculty members to develop the HEI curriculum and deliver modules geared toward enhancing graduate students' soft skills and enhancing their personal characteristics and knowledge factors.

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