

12-1-2024

## Leadership potential and self-perceived employability of undergraduate students in the United Arab Emirates

Aizhan Shomotova

*United Arab Emirates University; Zayed University, aizhan.shomotova@zu.ac.ae*

Tatiana Karabchuk

*United Arab Emirates University*

Ali Ibrahim

*United Arab Emirates University*

Follow this and additional works at: <https://zuscholars.zu.ac.ae/works>



Part of the [Education Commons](#)

---

### Recommended Citation

Shomotova, Aizhan; Karabchuk, Tatiana; and Ibrahim, Ali, "Leadership potential and self-perceived employability of undergraduate students in the United Arab Emirates" (2024). *All Works*. 6480.  
<https://zuscholars.zu.ac.ae/works/6480>

This Article is brought to you for free and open access by ZU Scholars. It has been accepted for inclusion in All Works by an authorized administrator of ZU Scholars. For more information, please contact [scholars@zu.ac.ae](mailto:scholars@zu.ac.ae).



# Leadership potential and self-perceived employability of undergraduate students in the United Arab Emirates

Aizhan Shomotova<sup>a,b,c,\*</sup>, Tatiana Karabchuk<sup>b,d</sup>, Ali Ibrahim<sup>a</sup>

<sup>a</sup> College of Education, United Arab Emirates University, Al Ain, United Arab Emirates

<sup>b</sup> Human Capital Research Center, United Arab Emirates University, Al Ain, United Arab Emirates

<sup>c</sup> College of Interdisciplinary Studies, Zayed University, Abu Dhabi, United Arab Emirates

<sup>d</sup> College of Humanities and Social Sciences, United Arab Emirates University, Al Ain, United Arab Emirates

## ARTICLE INFO

### Keywords:

Higher education  
Self-perceived employability  
Leadership potential  
Undergraduate student  
Scale validation  
Partial least squares structural equation modelling  
UAE

## ABSTRACT

One of the main challenges facing higher education institutions (HEIs) is developing students' employability skills, such as leadership. The earlier students acquire leadership skills, the higher their self-perceived employability (SPE) is upon graduation. Understanding how leadership is associated with SPE can help HEIs provide better leadership development programmes to increase SPE so that students pursue sustainable employment after graduation and use their leadership skills successfully in the workplace. Currently, there is a scarcity of published research on how youth leadership potential (LP) impacts SPE among undergraduate students at HEIs in the United Arab Emirates (UAE) and the Arab region in general. Therefore, this study begins with validating the psychometric properties of the LP scale in the UAE context and then tests the relationship between the LP and SPE of undergraduate students. The empirical study used data from an online survey of 523 undergraduate students to apply partial least squares structural equation modelling to test hypotheses. The study validated the 10-item LP scale for the UAE context, and a statistically significant positive relationship was found between the LP of undergraduate students and their SPE.

## 1. Introduction

Rapid digitalisation, globalisation and the growth of the knowledge economy have increased employers' demands for new skills and investment in human capital, and this massive demand for soft and information-technology skills has transformed the labour market and workplace requirements. Higher education institutions (HEIs) try to equip students with all new necessary skills for the labour market by providing up-to-date academic programmes, extracurricular activities, career counselling, professional development courses, workshops and internships, but nevertheless most studies report employers saying that university graduates remain unprepared to succeed in the workplace and lack the required skill sets (Abernathy, 2018; Jackson & Tomlinson, 2022; Lowden et al., 2009; McGarry, 2016; Rothwell & Rothwell, 2017). A potential area of focus for HEIs to improve student employability is leadership development. Leadership potential (LP) has already been identified as a crucial attribute for success in the labour market (Matu & Paik, 2021), and studies have shown that individuals with strong leadership skills are more likely to be sought after by employers and achieve

higher levels of career success (Judge & Piccol, 2004; McGunagle & Zizka, 2020).

Furthermore, the results of a survey by the National Association of Colleges & Employers, (2015) showed that around 80 % of all employers were looking for leadership skills, including communication, teamwork, the ability to effectively lead oneself and the ability to influence others (Hansen & Hoag, 2018; Furtner et al., 2013). Given the increasing emphasis on leadership skills in the workplace and their correlation with job performance and success, it is essential for HEIs to assess and cultivate undergraduate students' LP at an early stage.

Leadership potential should be identified in the early stages of human development, thus the early development of leadership capacity marked as the foundation for leadership development in adulthood in the literature (Karagianni & Jude Montgomery, 2018; Kuhn et al., 2003; Riggio & Mumford, 2011). In the context of higher education, early leadership development increases the chances of a university student being better prepared for employment, this being because leadership has been associated with confidence, competence and self-efficacy (Chemers et al., 2000). Therefore, university students should be exposed to more

\* Corresponding author: Human Capital Research Center, United Arab Emirates University, United Arab Emirates.  
E-mail address: [aizhan.shomotova@zu.ac.ae](mailto:aizhan.shomotova@zu.ac.ae) (A. Shomotova).

opportunities to develop their LP by graduation and before entering the labour market.

Previous studies found a link between self-perceived employability (SPE) and positive attitudes towards searching for a job (K rves et al., 2014; Morrison, 2014). Tymon (2013) emphasised the importance of understanding students' perceptions of their own employability, especially among first- and second-year students. Also, Zhou et al. (2022) highlighted the relevance of SPE during challenging times to stay employable despite adverse circumstances. In particular, SPE among young adults entering the job market is even more critical because they do not have much actual experience or work achievements on which to rely (Kasler et al., 2017).

Therefore, the goal of the study is to identify the association between the LP and SPE of undergraduate students. Survey data from 523 undergraduate students collected via an online questionnaire were used to test the validity of the original 12-item scale measuring LP in the context of the United Arab Emirates (UAE) and then to test the relationship between this LP and SPE. Previous studies have examined numerous personal and contextual factors of SPE, such as self-confidence, self-esteem, self-efficacy and university commitment ( lvarez-Gonz lez et al., 2017; Baruch et al., 2020; Chou et al., 2012; Donald et al., 2019; Jackson & Tomlinson, 2020; Shomotova & Ibrahim, 2023), but the literature contains almost nothing on the relationship between the LP and SPE of undergraduate students in Arab countries.

### 1.1. Leadership potential of undergraduate students

Each employer is looking for a different skill set (Benbow & Hora, 2018) because each job requires its own specific skills. However, LP is a crucial skill that employers in various industries consistently value. Leadership is seen as a valuable asset in the workplace because it indicates an individual's ability to effectively guide and motivate others, make sound decisions and drive organisational success (Zafar et al., 2023).

According to Van Linden and Fertman (1998), the theory of leadership development proposes that each adolescent has some leadership skills that they subtly demonstrate in their family life, school activities and when dealing with neighbours in their community. Based on this, the variety of early experiences plays a vital role in leadership development in adulthood (Karagianni & Jude Montgomery, 2018; Riggio & Mumford, 2011), which in turn can lead to an individual applying LP successfully in a future workplace when they grow up. However, although early practices can facilitate the development of traits and skills, they do not guarantee successful development in adulthood but merely set the stage for future development (Murphy & Johnson, 2011). In a sense, early experience in leadership aids the developmental process through the 'self-reinforcing mechanism' (Murphy & Johnson, 2011). In other words, early leadership experiences are likely to trigger the leadership development process: the more that students engage in activities that can develop their leadership skills and competencies, the more likely they are to have better perceptions of themselves as future leaders at work.

The theory of youth leadership has been researched for many years, and based on that, leadership development programmes and activities are provided at universities. However, these programmes cannot develop LP among young people if it does not already exist (Yuan et al., 2019). The word 'potential' means 'existing in possibility; capable of development into actuality; a power or quality that has not yet come forth but may emerge and develop' (Tiffan, 2009, p. 3). In organisations, potential refers to the possibility that individuals can become something more than what they currently are. It implies further growth and development to reach some desired end state' (Silzer & Church, 2010, p. 4). Therefore, individuals with high LP possess some cognitive, emotional and behavioural growth factors that allow them to grow into great leaders (Silzer & Church, 2010).

Various previous studies have developed LP measurements.

According to Van Linden and Fertman (1998), high-potential young people develop various leadership skills during their development process. Based on that theory, Yuan et al., 2019 developed the Youth Leadership Potential Scale using the five dimensions of (i) leadership dimensions, (ii) leadership attitude, (iii) communication skills, (iv) decision making and (v) stress management, and Zaccaro et al. (2004) developed a college student LP scale based on those five dimensions. Later it was reduced to two dimensions: cognitive abilities and personality questions (Hojan-Clark, 2010). Dries and Pepermans (2012) identified LP based on an extensive review of literature from 1986 to 2010, and they developed a model of LP consisting of four quadrants: (i) analytical skills, (ii) learning agility, (iii) drive and (iv) emergent leadership. Another study assessed the LP of aviation students by using the questionnaire developed by Zharikov and Krushelnitsky (2019) and the Quick Leadership Test (Sovgira et al., 2019). Lee et al. (2015) developed the Leadership Potential Scale (LPS) in the context of HEIs in South Korea, and this is the instrument used in the present study; it includes 12 critical soft skills and competencies that college students can develop before exercising their professional leadership in their job.

### 1.2. Self-perceived employability of undergraduate students

SPE has garnered significant attention in the literature, especially in the context of higher education. Rothwell et al. (2008) defined SPE as a person's belief in their capacity to secure employment that matches their level of qualification. Grounded in social cognitive theory (Bandura, 1986), the perceived ability to execute a task directly influences the performance of that task. In this vein, how a person perceives their employability can significantly impact their confidence in finding new employment or maintaining a job (Berntson & Marklund, 2007; Morrison, 2014). For undergraduate students, these self-perceptions are paramount, and their confidence in their employability dictates their perceived job security and resilience in the face of job-related adversities. This self-assurance can be a beacon of hope during periods of unemployment, guiding them until they secure or transition to a new role (Dacre Pool & Qualter, 2013; Qenani et al., 2014). HEIs play a crucial role in fostering these perceptions and preparing students for a seamless transition to the job market. The SPE conceptual model due to Rothwell et al. (2008) provides a comprehensive framework for understanding this phenomenon. It delineates four pillars of employability: (i) the student's university, (ii) their field of study, (iii) their self-belief and (iv) the state of the external labour market. Notably, the original model identifies two dimensions—internal and external employability—that have been investigated empirically across diverse global settings from the USA to South Africa in attempts to validate this model (Drazi c et al., 2018; Goodman & Tredway, 2016; Huang, 2015).

A previous study explored SPE within the unique socio-cultural context of the UAE by validating a three-factor model of the SPE scale with 10 items, supporting its adaptation and use in the UAE and the broader Arab region (Shomotova & Ibrahim, 2023). The results showed that undergraduates in the UAE have a high level of internal SPE confidence, feel particularly competent in their skill set and are confident in interview situations and in obtaining employment that fits with their areas of knowledge. Compared to their internal SPE, their confidence in the university's contribution to improving employability is marginally lower but still remains quite high. The reputation of their university and their chosen academic field appear to have a significant impact on students' opinions of their employability. However, there is a noticeable drop in confidence when it comes to external SPE, with students appearing to be less positive about the overall job situation. These results are consistent with earlier research that highlighted undergraduates' declining optimism about their work prospects after graduation (Botha, 2021; Shomotova & Ibrahim, 2023).

### 1.3. Undergraduate students' leadership potential and self-perceived employability

Previous research conducted in Costa Rica indicated that leadership abilities among university staff improve their self-assessed competence and effectiveness, consequently increasing their perceived employability prospects (Camps & Rodríguez, 2011). Moreover, a Pakistani study revealed a positive correlation between leadership and aspects such as career planning, skill enhancement and networking activities, which collectively contribute to an employee's perceived employability (Chughtai, 2019). Also, a Chinese investigation highlighted that transformational leadership directly influences an employee's employability. This impact is further mediated through factors such as job demands, skill discretion, decision-making authority, perceived organisational support and team-member exchange, although not significantly by leader-member exchange (Yizhong et al., 2019). Therefore, most studies conclude that there is a significant positive relationship between leadership skills and perceived employability on the professional stage. However, if LP can be identified and developed at an earlier stage, specifically during the undergraduate student's university experience, before actual employment, then the chances of having a higher perceived employability after graduation and during employment can be increased.

Student leadership competency development programmes have been shown to predict life and career satisfaction and career success 5–19 years later (Howard et al., 2017). Similarly, it was found that humility, empathy and curiosity as part of a leadership development programme for engineering students benefited alumni with valuable skills in the first 5–10 years of their career (Paul, 2018). In general, students in leadership development programmes are more likely to see an increase in the development of employability skills (Cleveland, 2018) that consequently can increase their confidence in their abilities, such as internal SPE.

However, it is important to differentiate between a leadership style and LP; for example, a study found a statistically significant, positive and moderate correlation between the transformational leadership style and the employability of college students (Villarreal, 2017). Therefore, students self-reported that those who possess and practice transformational leadership can have greater employability. In the case of LP, all students have different types of LP that need to be identified and developed or 'handcrafted' through academic and non-academic activities at university. It is not about the level or style of leadership but rather about the unique potential of an individual student that lies within their personality traits: competencies and qualities such as a global mind, citizenship, openness, and optimism. A recent study showed that having leadership characteristics such as being emotionally intelligent, handling disturbances, emerging as a role model, and inspiring others would result in improved graduate's performance and their capability of being employed in the competitive job market for graduates (Priyadarshini et al., 2019). Furthermore, the researchers found a positive impact of these dimensions of student leadership on student academic performance and perceived employability (Priyadarshini et al., 2019). Moreover, Fox (2018) highlighted the significance of understanding career readiness and using a leadership development framework to enhance student self-efficacy and prepare them for the workplace; the study suggested that by learning about LP development practices, students can become more confident and prepared for their future careers.

### 1.4. Conceptual framework

The above discussion indicates that LP and SPE are positively related and that students who see themselves as having LP can be more proactive in preparing for the job market. In this study, the researchers hypothesized that the LP of undergraduate students—which consists of 12 different factors according to Lee et al. (2015)—is associated with their self-perception of their future employability, which consists of three factors, i.e. internal, external and university perceptions as validated by Shomotova and Ibrahim (2023) (Fig. 1).

## 2. Methods

### 2.1. Procedure and participants

Approval for the study (RS\_2022\_8458) was obtained from the Social Sciences Research Ethics Committee of United Arab Emirates University (UAEU), the largest public university in the UAE, and survey data were gathered between February and June 2022 using the Qualtrics online survey application at UAEU. The researchers addressed to all the students of the UAEU (the number of which was around 13,000) via university's Institutional Research Unit who emailed every undergraduate student an electronic link to the online survey. Response rate was a bit more than 5 % of the total student population. After cleaning filled-in online questionnaires, the final sample was fixed as 523 undergraduate students. The sample contains full-time undergraduate students from different academic years of study and a wide range of disciplines, with proportionately more women (86 %) who are UAE citizens aged 17–24 years (90 %) from the city of Al Ain in the UAE (57.6 %). The sample is close to the targeted population group, UAEU undergraduate students, who are mostly Emirati women (80 %) (Academic UAEU Year Book 2018–2019).

### 2.2. Measures

#### 2.2.1. Leadership potential scale

In this study, the LPS developed by Lee et al. (2015) was tested for its validity in the UAE context. It includes 12 unique factors presented as critical soft skills and competencies that college students can develop before exercising their professional leadership in their employment, these being (i) problem-solving, (ii) leading others, (iii) self-management, (iv) situational judgment, (v) intellectual inquiry, (vi) optimism, (vii) openness, (viii) network, (ix) dominance, (x) social skill, (xi) global mind and (xii) citizenship. Each item is defined in Table 1. This scale was developed specifically to assess undergraduate students' LP and suited the main purpose of the present research project. The items were rated on a six-point Likert-type scale from 1 (strongly disagree) to 6 (strongly agree), with high scores taken as meaning that students had high LP.

*Reliability and validity.* Cronbach's  $\alpha$  for the subscales ranged from 0.69 to 0.87, and the Spearman-Brow coefficient ranged from 0.73 to 0.87. In the case of citizenship, Cronbach's  $\alpha$  was 0.69, and the Spearman-Brow coefficient was 0.74, showing low reliability (Lee et al., 2015). In terms of concurrent validity, the total score on the LPS was found to have significant positive correlations with those on the Leadership Skill Inventory ( $r = 0.70, p < 0.001$ ) and the Leadership Skill Scale ( $r = 0.87, p < 0.001$ ) (Lee et al., 2015).

#### 2.2.2. Self-perceived employability scale

The original SPE scale was developed by Rothwell et al. (2008) as a 16-item scale on a five-point Likert-type response methodology from 1 (strongly disagree) to 5 (strongly agree), and the measurement instrument was tested on students studying for a bachelor's degree in business at three universities in the United Kingdom. In the present study, the validated shorter version adapted for the UAE context by Shomotova and Ibrahim (2023), a 10-item UAE-SPE scale with the three factors of university SPE, internal SPE and external SPE was used.

*Reliability and validity.* For university SPE on a four-item scale, Shomotova and Ibrahim (2023) reported a Cronbach's  $\alpha$  of 0.88, with 0.83 for internal SPE and external SPE, each on a three-item scale. Those authors supported the convergent and discriminant validity of the scale compared to other components of the scale.

### 2.3. Data analysis

The analytical strategy involved two steps. In the first step, the LPS was validated using a two-stage factor analysis. First, confirmatory

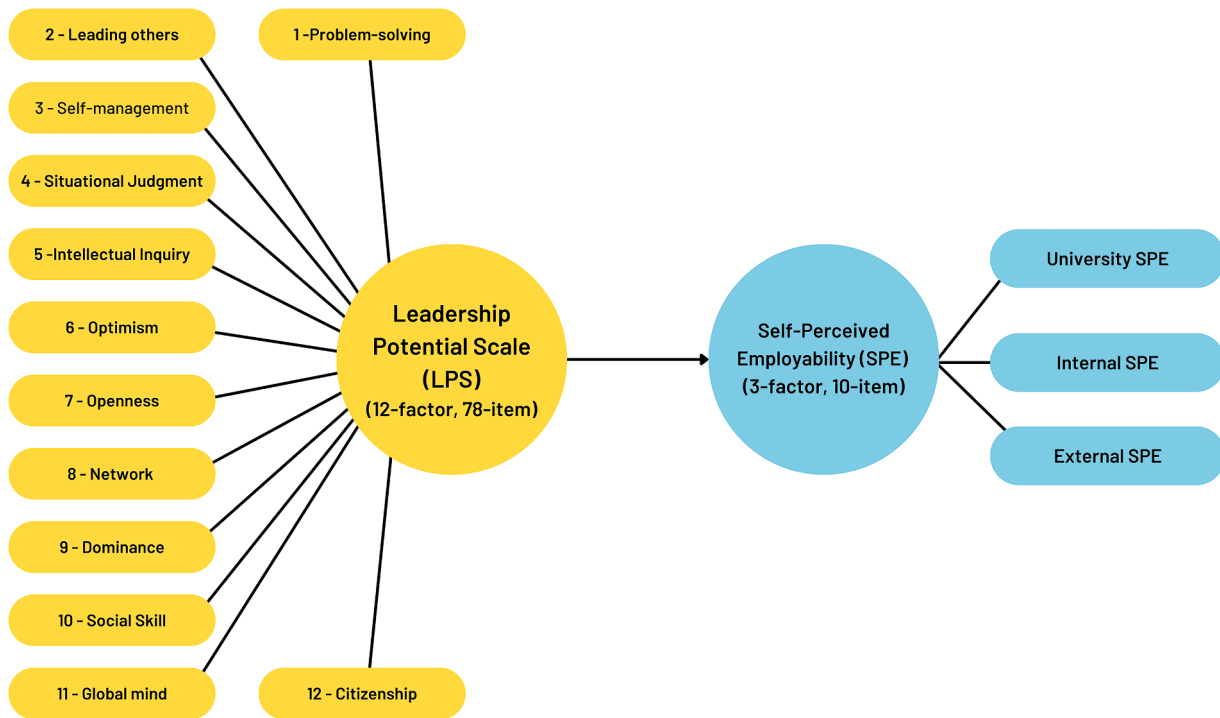


Fig. 1. Conceptual framework of relationship between leadership potential (LP) and self-perceived employability (SPE).

**Table 1**  
Concepts from literature review on LP measurement provided by Lee et al. (2015).

Factor	Concept
Problem-Solving	To remove obstacles and actively propose effective solutions in order to solve a problem.
Leading Others	To guide others to a specific goal through advice and praise or lead an organization with efficient mediation and negotiation.
Intellectual Inquiry	To collect and understand domestic and international information about politics, economy, and society as well as new trends of fields of interest.
Self-management	To control and develop oneself through time-management and goal setting in order to achieve goals.
Situational Judgment	To assess the character of a person and judge a situation quickly for promotion or behavior correction.
Global Mind	To collect information on global circumstances and understand and accept multiculturalism.
Network	To actively interact with other members, based on understanding of one's organization.
Optimism	To behave optimistically and positively with belief in one's ability.
Openness	To adopt a new way rather than follow an existing way.
Dominance	To play an important role and influence others in one's organization.
Social Skill	To use verbal and non-verbal skills for good relationship.
Citizenship	To behave morally and follow the law as a member of a society.

factor analysis (CFA) was performed with maximum likelihood estimation to validate the original scale developed by Lee et al. (2015). The LPS is a multidimensional construct at the two-order level with 12 first-order level indicators. All items were specified to be loaded onto their designated factors only. Second, to validate the psychometric properties of the LPS in the UAE context, exploratory factor analysis (EFA) was performed using Jamovi (ver. 28) with a series of model fit indices (e.g.  $\chi^2/df$ , CFI, SRMR, and RMSEA) to evaluate whether the hypothesised model matches the actual data.

In the second stage of the empirical study, partial least squares structural equation modeling (PLS-SEM) was used to test the hypothesis about the relationship between LPS and SPE with the help of the

SmartPLS software. As highlighted by Hair et al. (2019), PLS-SEM is appropriate for testing theories focusing on prediction. The complex model has two-order constructs and relationships, making PLS-SEM a suitable choice. Moreover, our study explores existing theories and aims to expand on them. This aligns with the idea of using PLS-SEM for research that seeks to develop theories further (Hair et al., 2019). For these reasons, PLS-SEM was the logical method for our research.

The following parameters were used in the factor analysis and construct validity. All factors in the analysis were considered statistically significant at the 95 % confidence level, and the p-value was set at 0.05 (see Table 2).

### 3. Results

#### 3.1. Descriptive statistics and correlations

Table 3 presents a summary of the mean score, the variability as indicated by the standard deviation and the internal consistency as calculated by Cronbach's  $\alpha$  for the 12 dimensions of the LPS and the

**Table 2**  
Cut-off criteria for model fit.

Measure	Terrible	Acceptable	Excellent
CMIN/DF	>5	>3	>1
CFI	<0.90	<0.95	>0.95
TLI	<0.90	<0.95	>0.95
SRMR	>0.10	>0.08	<0.08
RMSEA	>0.08	>0.06	<0.05

Note: Using chi-square ( $\chi^2$ ; significant p-value expected), the fit of the model was checked to ensure that it was generally appropriate for the data. The normed chi-square statistic divided by degrees of freedom (Chi-square/df; 3.0 implies a good fit and five acceptable values) was used because a significant  $\chi^2$  value rejects the null hypothesis that the model fits the population, while a good solution fits the data when  $\chi^2$  is non-significant ( $p > 0.05$ ) (Bentler, 1990). To assess the quality of the fit, we checked the infringing estimates (Hair et al., 2019) and the adjustment fit measures such as the comparative fit index (CFI), the Tucker-Lewis index (TLI), standardised root mean square residual (SRMR) and root mean square error of approximation (RMSEA) (Hu & Bentler, 1999).

three dimensions of SPE (UAE-SPE). It also details the interrelations among these variables. The internal consistency values for these subscales were generally high, falling between 0.83 and 0.94. However, the openness dimension of the LPS exhibited a Cronbach's  $\alpha$  of 0.67, signifying a lower-than-desired level of reliability when judged against the accepted standard of 0.70. Regarding the significant correlations between the variables, all dimensions of the LPS are statistically significant and positively correlated with the three SPE factors.

### 3.2. Confirmatory factor analysis of leadership potential scale

**Leadership potential scale.** The CFA displayed a normed chi-square ( $\chi^2/df$ ) value of 2.96, which is considered indicative of a good model fit, given that the  $p$ -value is less than 0.001. Despite this, the comparative fit index (CFI) stood at 0.856, below the threshold value of 0.92, which could suggest a suboptimal fit. The alternative fit indices used include the SRMR and RMSEA. The SRMR showed a promising result with a value of 0.058, while the RMSEA registered at 0.06, with the confidence interval ranging from 0.0583 to 0.0612, which aligns with an acceptable model fit. Most of the fit indices for the LPS model were satisfactory except for the CFI and TLI. EFA was used after the CFA to further refine the model's estimates and validate the scale's psychometric properties in the UAE context.

### 3.3. Exploratory factor analysis of leadership potential scale

The EFA was conducted using an extraction method (*Maximum likelihood*) and a rotation method (*Oblimin*). Bartlett's sphericity test—which calculates the statistical likelihood that the correlation matrix contains significant correlations between some of its components—is a crucial step in determining the overall importance of the correlation matrix. The results of Bartlett's sphericity test were significant ( $\chi^2(1275) = 22\ 913, p < 0.001$ ), which indicates its suitability for factor analysis. The Kaiser–Meyer–Olkin test was used to measure the sampling adequacy ( $MSA = 0.967$ ), indicating the suitability of the data for factor analysis. In this sense, data with  $MSA$  values greater than 0.800 are considered appropriate for factor analysis.

Using the methodology of the original research, the structure of 12-factor loadings on the LPS was examined to evaluate whether the UAE-LPS could enhance the explanation of the underlying theoretical construct, which includes 12 distinct dimensions. Many items met the inclusion criteria because the threshold for minimum factor loading was established at 0.300, even though a more stringent benchmark for item loading is typically placed at 0.500 (Hair et al., 2010).

The EFA with UAE case data did not confirm the discussed above 12-factor structure as none of the items loaded the 11th and 12th factors. Consequently, ten factors showed complete loadings above 0.300 of items on associated factors such as Problem-solving (PS), Leading Others (LO), Self-management (SM), Situational Judgment (SJ), Intellectual inquiry (II), Global mind (GM), Network (Net), Dominance (Dom), Citizenship (Cit) and Optimism (Opt). However, Openness (Open) and Social Skills (SS) had to load less than 0.400 and cross-loaded with other factors. Because the differences between the primary loading and the cross-loading are less than the threshold of 0.200, discriminance could be an issue, so the Openness factor was removed completely, while only the SS\_1 and SS\_2 items had to be removed. SS\_3 and SS\_4 loaded above 0.500 into the Citizenship factor. The three items SS\_3, SS\_4 and Cit\_3 have loadings between 0.500 and 0.600, which are not very strong but acceptable. Conceptually, the Citizenship factor states for moral behaviour and being a law-abiding member of society, so items SS\_3 states for "Other people know me as a kind person", and SS\_4 item states for "I give compliments and recognition (تَشْرِيد) to other people's achievements" and Cit\_3 states for "I am honest" contribute less to the factor in comparison to Cit\_6 and Cit\_8 (see Table A3 in the Appendix). Table 4

After removing the Openness factor and SS items, the EFA showed that there were items with low loadings of less than 0.400, such as Cit\_2;

**Table 3**  
Descriptive statistics, internal consistency reliability and correlations of SPE and LP scales.

Scales	Items	Mean	SD	CA	1	2	3	4	5	6	7	8	9	10	11	12	13	14	
University SPE	4	3.7	0.9	0.88	—														
Internal SPE	3	3.8	0.9	0.83	.64**														
External SPE	3	3.3	1	0.83	.67**	.75**													
Problem-solving	10	4.7	1	0.94	.43**	.37**	.49**												
Leading Others	7	4.8	1.1	0.93	.41**	.33**	.45**	.81**											
Self-management	6	4.5	1.2	0.92	.42**	.35**	.39**	.63**	.64**										
Situational judgement	8	4.7	1	0.93	.45**	.35**	.47**	.79**	.80**	.63**									
Intellectual inquiry	6	4.3	1.2	0.90	.33**	.29**	.34**	.67**	.58**	.48**	.65**								
Optimism	5	4.8	1.1	0.90	.42**	.38**	.47**	.72**	.71**	.65**	.74**	.56**							
Global Mind	7	4.8	1.1	0.91	.37**	.30**	.40**	.70**	.68**	.58**	.73**	.58**	.75**						
Network	6	3.9	1.3	0.92	.30**	.35**	.36**	.55**	.47**	.58**	.50**	.54**	.52**	.49**					
Dominance	6	4.3	1.2	0.92	.32**	.32**	.40**	.66**	.63**	.59**	.66**	.60**	.66**	.63**	.68**				
Citizenship	8	5	1.1	0.94	.42**	.30**	.43**	.72**	.77**	.61**	.77**	.55**	.75**	.74**	.43**	.59**			
Social skills	4	4.9	1.1	0.90	.44**	.38**	.47**	.72**	.74**	.60**	.75**	.54**	.76**	.72**	.50**	.61**	.83**		
Openness	5	4.3	1.3	0.67	.34**	.29**	.33**	.59**	.55**	.54**	.62**	.57**	.58**	.64**	.58**	.56**	.58**	.63**	

\*\* . The correlation is significant at the 0.01 level (2-tailed).

**Table 4**  
Goodness-of-fit indices of LPS.

Scale	Test for exact fit			Alternative indices of model fit				RMSEA 90 % CI		
	$\chi^2$	df	P	$\chi^2/df (<5)$	CFI (> 0.92)	TLI (> 0.92)	SRMR ( $\leq 0.08$ )	RMSEA (< 0.08)	Lower	Upper
12-factor LPS	8464	2859	< .001	2.96	0.856	0.849	0.058	0.06	0.058	0.061

PS 2; II 5; SJ 1; SJ 6; SJ 7 and Opt 5 that were removed too. Consequently, Table 5 shows the factor loadings of the final 10-factor taken into the further model estimations. This 10-factor LP scale contains only those factors with loadings greater than 0.400. Exception was done for SJ 5 (with a loading of 0.396), since four selected items provided more factor stability (Table 5). The communality of the scale indicates the amount of variance in each dimension, and all items showed good communality value above the 0.50 threshold. The first valuable outcome of this study is that, as a result of EFA, ten factors were identified for the final model with 69 % of the total variance on the UAE-LP scale.

The EFA yielded a normed chi-square ( $\chi^2$ ) value of 1737 with 810 degrees of freedom, denoting a chi-square to degrees of freedom ratio ( $\chi^2/df$ ) of 2.14, which indicates a highly satisfactory fit to the model, supported by a  $p$ -value of less than 0.001. The Tucker–Lewis index (TLI) stood at 0.932, reflecting an acceptable fit. Additionally, the root mean square error of approximation (RMSEA) was recorded at 0.046, representing an excellent fit (Table 6). Subsequently, this study confirmed the convergent and discriminant validity of the 10-factor LP construct in the UAE context (see Appendix Table A4).

### 3.4. Measurement model of UAE-LPS: construct validity and reliability

This research establishes the reliability and validity of the measurement models by meeting several criteria. First, Table 7 shows that Cronbach's alpha and composite reliability exceeded the threshold of 0.70, indicating internal consistency reliability (Nunnally & Bernstein, 1994). Second, the average variance extracted (AVE) surpassed 0.50, demonstrating convergent validity (Hair et al., 2010). Third, Table A1 in the Appendix shows that the square root of the AVE was greater than the correlations between each variable and the other variables, confirming discriminant validity (Fornell & Larcker, 1981), apart from the higher-order constructs SPE and LPS that were estimated separately as latent variables and showed significant discriminant validity (Table A2). Further analysis, including cross-loadings, revealed that all scale items exhibited their highest coefficients with their associated constructs, providing additional support for discriminant validity (Hair et al., 2010). Thus, we can underline the second outcome of the study, which is that the UAE-LP scale was successfully tested for validity and reliability.

### 3.5. Partial least squares structural equation modelling

Finally, the study tested the relationship between the LP of undergraduate students in the UAE and their SPE, and the findings are summarised in Fig. 2. We used PLS-SEM to derive standardized path coefficients, and the statistical significance of these coefficients was determined by comparing the empirical  $t$ -values to critical values. Empirical  $t$ -values were calculated by dividing the original path coefficient estimates by the bootstrap standard error (Hair et al., 2014). In this study, we used bias-corrected bootstrapping with 5000 bootstrap samples, employing the no-sign-changes approach.

In the analysis of the relationships within the constructs derived from the PLS-SEM methodology, the path coefficient showed a significant direct effect of LP on SPE, with a value of 0.537 (T-statistic = 10.488,  $p < 0.001$ ) (Fig. 2). Furthermore, a deeper examination of the indirect effects revealed that LP has a noteworthy influence on the three dimensions of SPE: external SPE ( $\beta = 0.415$ ,  $p < 0.001$ ), internal SPE ( $\beta = 0.46$ ,  $p < 0.001$ ) and university SPE ( $\beta = 0.483$ ,  $p < 0.001$ ).

Regarding the explanatory power of the model, the  $R^2$  values were observed as follows: external SPE (0.596), internal SPE (0.732),

university SPE (0.808) and SPE (0.289). According to Cohen (1988),  $R^2$  values of 0.25, 0.50 and 0.75 are deemed weak, moderate and substantial, respectively, in their explanatory capacity. Thus, the models for university SPE (80 %) and internal SPE (73 %) show a strong degree of explained variance, external SPE (60 %) registers a moderate explanatory capacity, while the model for the broader SPE construct (29 %) leans towards being weak. Collectively, these findings emphasise the importance of LP attributes in shaping perceptions of employability across its three dimensions.

Composed of 10 distinct factors spanning from Q42\_PS to Q52\_Cit, the LPS demonstrated significant factor loadings, underlining the robustness of the relationship between each factor and the LPS construct. The factors presented outer loadings between 0.700 and 0.858, denoting a strong positive association with the LPS, except that Q50\_Net (Network factor) has a loading of 0.659. Similarly, the outer loadings of the latent SPE variable are greater than 0.700 (Fig. 3). Most of these loadings surpassed the conventional threshold of 0.700, thereby reinforcing the convergent validity of the LP and SPE scales (Hair et al., 2014).

Addressing the main structural relationship, LP exhibited a pronounced impact on SPE with a path coefficient of 0.555 that exceeds the suggested significance threshold of 0.200 (Cohen, 1988). The  $R^2$  value for SPE was recorded at 0.308, and when adjusted for the number of predictors, it changed marginally to 0.307. An  $R^2$  value exceeding 0.250 is considered substantial in behavioural research, implying that the model has substantial explanatory power (Falk & Miller, 1992). Thus, the  $R^2$  value reflects the variance in SPE that can be accounted for by LP. This result allows for the third important outcome of the research, that leadership potential scale has a significant association with self-perceived employability.

## 4. Discussion

### 4.1. Theoretical contribution

This research endorses the LPS developed by Lee et al. (2015), contextualising it within the UAE framework and examining its association with SPE (UAE-SPE). The study rigorously evaluated the reliability of this scale, using the methodological guidelines proposed by Hair et al., 2017 to ensure the consistency of the measurements. The findings demonstrated that the UAE-LPS exhibits robust reliability and validity, adhering to the prescribed methodological standards.

The findings shed light on the pivotal role of LP in determining students' SPE. The results demonstrated that students who showed higher LP competencies tended to be more confident in their prospects for employment. As mentioned, each adolescent has some leadership skills that they demonstrate subtly in their daily lives (Van Linden & Fertman, 1998), but that requires additional awareness and guidance. Consequently, early experiences play a vital role in developing leadership skills (Riggio & Mumford, 2011) by serving as the foundation for leadership development in adulthood (Karagianni and Montgomery, 2018) and increasing the possibility that an individual will apply leadership skills in a future workplace successfully when they grow up.

Previous research has indicated that students firmly believe that the reputation of their institution and areas of academic specialisation are valuable advantages in the job market (Shomotova & Ibrahim, 2023). This study supported the idea that LP is highly correlated with students' confidence in their university and specialisation of study. Consequently, the better the LP skills that students can develop, the higher their perceptions of their ability to find a job and achieve career success (Maurer

**Table 5**  
Factor loadings of LPS.

Items	Factor										Communality	
	1	2	3	4	5	6	7	8	9	10		
Q52_6_Cit	0.875											0.872
Q52_7_Cit	0.846											0.814
Q52_5_Cit	0.704											0.777
Q52_8_Cit	0.626											0.612
Q53_3_SS	0.577											0.672
Q53_4_SS	0.567											0.732
Q52_3_Cit	0.522											0.663
Q44_4_SM		0.83										0.774
Q44_5_SM		0.784										0.692
Q44_3_SM		0.719										0.693
Q44_1_SM		0.687										0.726
Q44_6_SM		0.652										0.666
Q44_2_SM		0.579										0.593
Q42_3_PS			0.813									0.761
Q42_2_PS			0.793									0.745
Q42_4_PS			0.74									0.741
Q42_1_PS			0.68									0.638
Q42_5_PS			0.653									0.656
Q42_8_PS			0.48									0.613
Q50_2_Net				0.775								0.707
Q50_4_Net				0.765								0.652
Q50_5_Net				0.724								0.685
Q50_3_Net				0.699								0.655
Q50_1_Net				0.672								0.711
Q50_6_Net				0.511								0.578
Q51_2_Dom					0.757							0.763
Q51_5_Dom					0.687							0.707
Q51_4_Dom					0.684							0.761
Q51_1_Dom					0.643							0.689
Q51_3_Dom					0.591							0.595
Q48_2_GM						0.849						0.788
Q48_1_GM						0.768						0.688
Q48_3_GM						0.666						0.714
Q48_4_GM						0.555						0.581
Q46_2_II							0.773					0.75
Q46_3_II							0.712					0.669
Q46_1_II							0.71					0.74
Q46_4_II							0.613					0.536
Q43_2_LO								0.751				0.769
Q43_1_LO								0.624				0.648
Q43_3_LO								0.581				0.739
Q43_4_LO								0.55				0.623
Q43_7_LO								0.448				0.631
Q45_3_SJ									0.655			0.61
Q45_4_SJ									0.641			0.756
Q45_2_SJ									0.529			0.663
Q45_5_SJ									0.396			0.653
Q47_2_Opt										0.613		0.712
Q47_1_Opt										0.574		0.679
Q47_3_Opt										0.461		0.663
Q47_4_Opt										0.407		0.625

Note. ‘Maximum likelihood’ extraction was used in combination with an ‘oblimin’ rotation.

**Table 6**  
Model fit measurements.

RMSEA	RMSEA 90 % CI		Model Test				
	Lower	Upper	TLI	BIC	$\chi^2$	df	p
0.0467	0.0437	0.0498	0.932	-3335	1737	810	< .001

et al., 2017).

The present study confirms a positive association between LP and university SPE, showing that leadership-orientated students believe that their personal leadership qualities, combined with the status and prominence of their university and their discipline, can further increase their employability and create a synergistic advantage in the job market. The findings are in line with previous research that suggested that participation in extracurricular activities, such as student councils and clubs, can positively impact students’ LP and in turn their SPE (Griffiths

et al., 2021; Pitan & Muller, 2020).

Students with higher LP are more confident in the relevance and desirability of their skills by potential employers. They believe that their leadership skills make them more valuable candidates in the job market and increase their chances of obtaining sustainable employment (Poplavskaya et al., 2023; Bui et al., 2019; Hassock & Hill, 2022; Hora et al., 2018). Moreover, enhanced scores on the LPS are likely to amplify students’ self-assurance during job interviews and their overarching conviction in securing roles aligned with their qualifications, especially because employers value such leadership traits highly (Riggio & Mumford, 2011).

The results of the study become more important in the national context of the overall lower levels of students’ confidence regarding their employability after graduation (Botha, 2021; Shomotova & Ibrahim, 2023), and doubts about securing employment within their field of study (Shomotova & Ibrahim, 2023). This study allows to address this issue via improving the LP since students with higher scores of inherent LP qualities



**Table 7**  
Construct validity and reliability.

Factors	Cronbach's alpha	Composite reliability (rho_a)	Composite reliability (rho_c)	Average variance extracted (AVE)
External_SPE	0.816	0.817	0.815	0.596
Internal_SPE	0.81	0.811	0.811	0.588
Uni_SPE	0.866	0.867	0.866	0.618
Q42_PS	0.926	0.926	0.926	0.675
Q43_LO	0.906	0.907	0.906	0.659
Q44_SM	0.918	0.920	0.918	0.652
Q45_SJ	0.871	0.874	0.871	0.628
Q46_II	0.875	0.886	0.877	0.643
Q47_Opti	0.879	0.880	0.879	0.646
Q48_GM	0.892	0.893	0.892	0.675
Q50_Net	0.912	0.918	0.91	0.63
Q51_Dom	0.911	0.917	0.912	0.675
Q52_Cit	0.945	0.946	0.945	0.712
LV_LPS*	0.927	0.932	0.939	0.606
LV_SPE*	0.799	0.873	0.878	0.707

Note: \*SPE and LPS are higher-order constructs estimated based on latent variable scores (Hair et al., 2010).

perceive the job market as favourable for graduates like them. Moreover, they might be more optimistic or aware of job vacancies in their preferred locations, reinforcing their confidence in the external job market; they might enhance their proactive behaviour, networking and ability to take advantage of resources, amplifying their belief in easily identifying relevant job opportunities in their chosen field and geographical area (Bouland-van Dam et al., 2020; Kjellström et al., 2020).

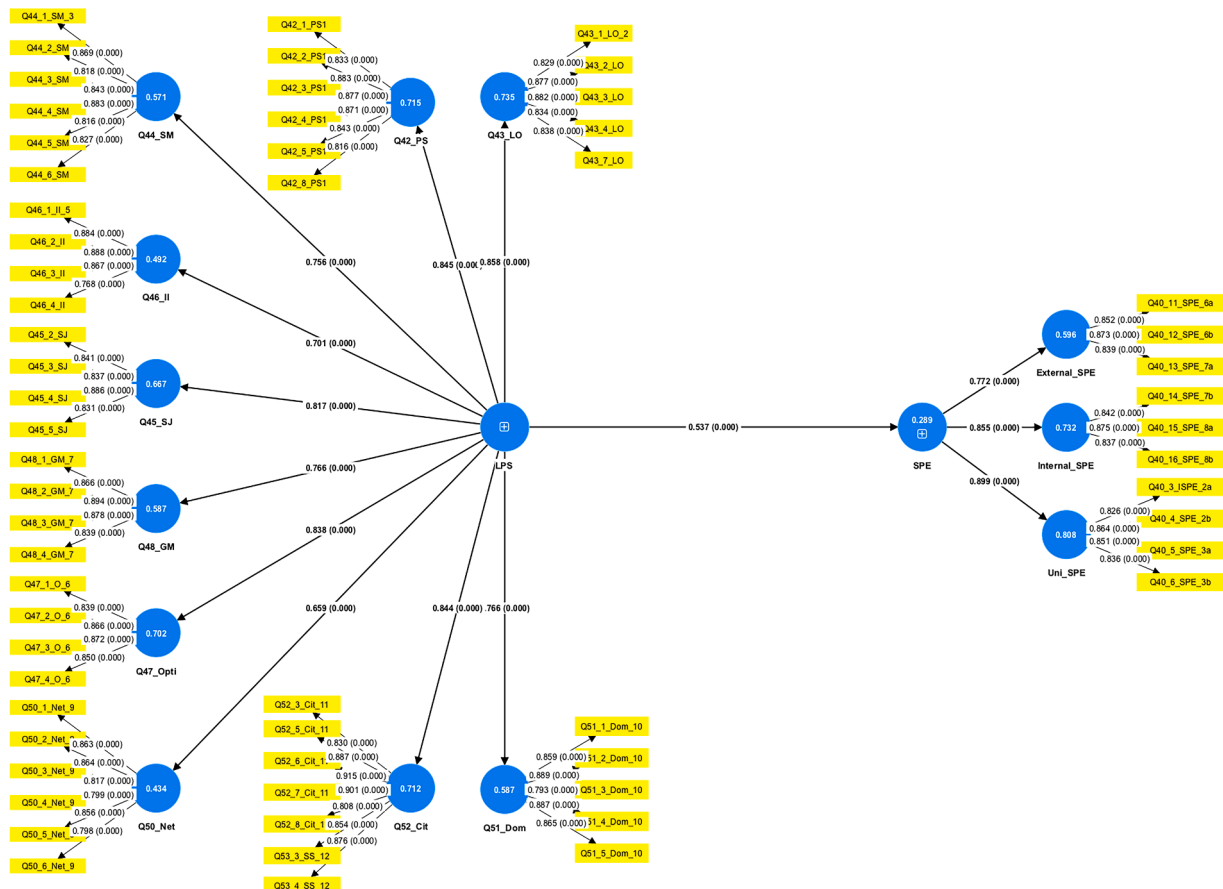
The UAE has been undergoing rapid socio-economic transformations and aims to diversify its economy beyond oil (Ashour, 2020; Gallant &

Pounder, 2008; Poplavskaya et al., 2023). As part of this vision, there is an increasing emphasis on cultivating a knowledge-based economy, prioritising education, and empowering youth (Ashour, 2020). Therefore, the nexus between LP attributes and employability perceptions becomes crucial, as it mirrors the broader national aspirations of nurturing a generation of leaders who are not only academically proficient but also professionally adept associated with leading others (Furtner et al., 2013).

#### 4.2. Practical implications

As with many other countries, the UAE national strategies (UAE Strategy 2030 and UAE 2071 Centennial Plan) put a considerable emphasis on preparing a skilled workforce for the knowledge-based economy of the future (UAE Government, 2023). This study highlights the role of HEIs in sustaining students' confidence in their employability, which reflects these national strategies.

The importance of universities, as underscored in our study, is reminiscent of Sustainable Development Goal (SDG) 4, which advocates for quality education. By emphasising relevant curricula that respond to the dynamic job market, HEIs can play a pivotal role in ensuring employability. Moreover, the link between leadership qualities and increased employability is congruent with SDG 8's focus on promoting economic growth and decent work (United Nations, 2023). By developing these leadership attributes, young individuals are better positioned to navigate the job landscape. Therefore, early assessments and support can help recognise and address the determinants of student perceptions and will enable universities to tailor support, ensuring that students are adequately prepared for the workforce. Leadership and career development programmes can cultivate student self-assurance before graduation and prepare them for their professional aspirations by fostering robust industry



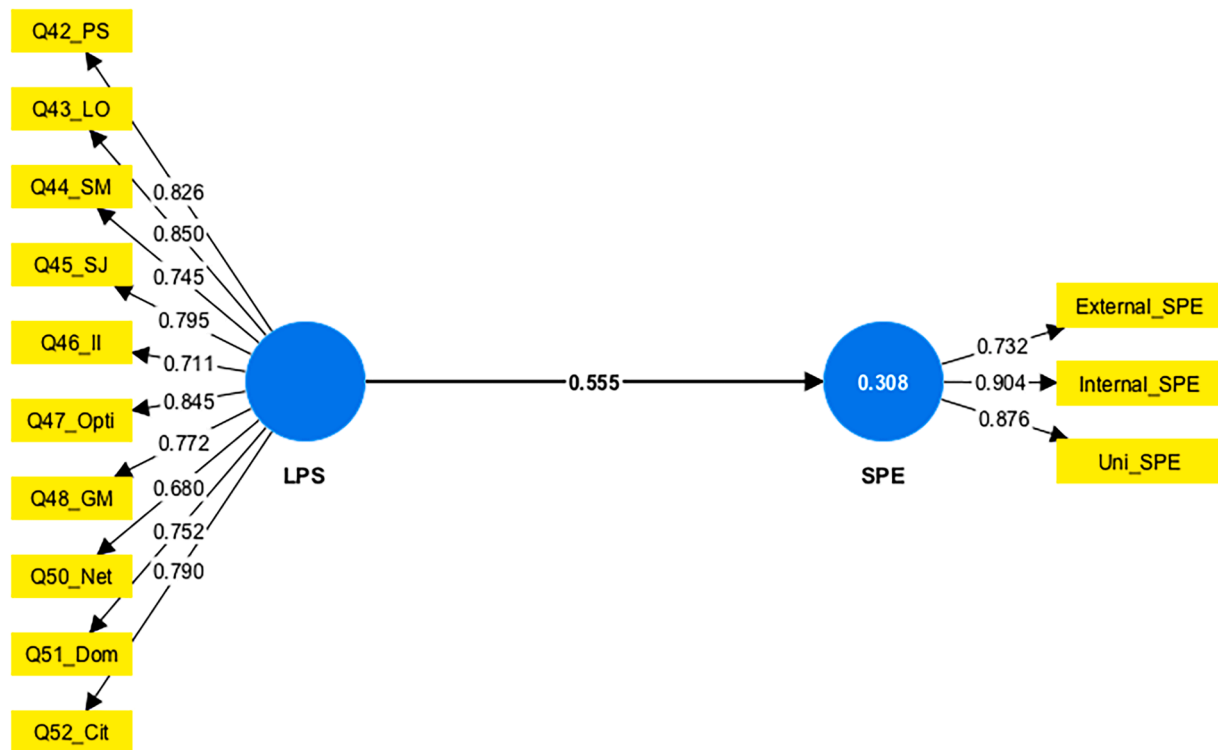


Fig. 3. PLS-SEM: graphical output of path coefficients ( $p < 0.001$ ) of latent variables on UAE-LP and UAE-SPE scales.

partnerships and ensuring that their curricula and resources resonate with the demands of the chosen study fields.

#### 4.3. Limitations and future research

The findings of this study are based on the student population of one public university, and the sampling method does not allow the results to be generalised to all students in the UAE or the Gulf. However, the present data are sufficient for testing the validity of the LPS and the correlation between LP and SPE. Future research could consider using nationally representative random student sampling to improve the external reliability of the findings.

#### 5. Conclusions

The first result of this research is the validation of a 10-factor model within the UAE-LPS comprising 45 items, confirming its suitability and applicability within the UAE context. The UAE version of the LPS demonstrated robust psychometric characteristics in terms of construct structure as well as convergent and discriminant validity. This scale serves as an effective and reliable instrument for assessing the LP abilities of undergraduate students, with the CFA outcomes endorsing the legitimacy of this scale's measurement model in the UAE setting. The second result of this study is the analysis of the association between students' LP and SPE.

Considering the vibrant dynamics of the national economy and labour market, this research suggests that universities should be not merely centres of academic excellence but also a practical field that will produce future leaders, especially in the context of national initiatives.

#### Appendix

Tables A1, A2, A3, A4

Furthermore, the results of the study identified a critical need for HEIs to integrate leadership training and development into their curricula. The continuous strong link between LP and SPE across studies serves as a demonstration of the potential benefits of fostering leadership qualities in students, which appears to translate into greater self-efficacy with respect to employability.

The results of this study suggest that HEIs should focus on the LP development of undergraduate students by emphasising skills such as problem-solving, citizenship, leading others, and global mindset. These leadership skills should be developed sustainably through academic and extra-curricular activities during students' undergraduate programs at the university. Higher education leaders, faculty, career counsellors and student affairs experts should be aware of the importance of these skills and develop LP programs for their students from their early university days.

#### CRedit authorship contribution statement

**Aizhan Shomotova:** Writing – original draft, Visualization, Validation, Software, Methodology, Investigation, Data curation, Conceptualization. **Tatiana Karabchuk:** Writing – review & editing. **Ali Ibrahim:** Writing – review & editing, Supervision.

#### Declaration of competing interest

The authors declare that they have no known competing financial interests or personal relationships that could have appeared to influence the work reported in this paper.

**Table A1**  
Discriminant validity of two constructs and factors.

	External_SPE	Internal_SPE	LPS	Q42_PS	Q43_LO	Q44_SM	Q45_SJ	Q46_II	Q47_Opti	Q48_GM	Q50_Net	Q51_Dom	Q52_Cit	SPE	Uni_SPE
External_SPE	0.772														
Internal_SPE	0.635	0.767													
LPS	0.327	0.65	<b>0.665</b>												
Q42_PS	0.283	0.604	0.889	0.822											
Q43_LO	0.249	0.599	0.911	0.787	0.812										
Q44_SM	0.33	0.454	0.797	0.6	0.676	0.807									
Q45_SJ	0.282	0.596	0.884	0.758	0.809	0.605	0.793								
Q46_II	0.239	0.425	0.754	0.701	0.623	0.459	0.633	0.802							
Q47_Opti	0.321	0.631	0.904	0.734	0.753	0.68	0.75	0.6	0.804						
Q48_GM	0.189	0.485	0.821	0.648	0.678	0.573	0.681	0.501	0.762	0.821					
Q50_Net	0.348	0.4	0.696	0.532	0.491	0.598	0.471	0.529	0.538	0.419	0.794				
Q51_Dom	0.231	0.5	0.809	0.613	0.643	0.586	0.621	0.62	0.676	0.601	0.712	0.822			
Q52_Cit	0.219	0.576	0.878	0.721	0.799	0.593	0.778	0.544	0.782	0.759	0.401	0.546	0.844		
SPE	0.901	1.002	0.574	0.516	0.497	0.478	0.519	0.396	0.543	0.417	0.404	0.403	0.488	<b>0.683</b>	
Uni_SPE	0.636	0.783	0.514	0.456	0.441	0.457	0.469	0.365	0.467	0.396	0.328	0.329	0.458	1.018	0.786

**Table A2**  
Discriminant validity of latent variables.

Latent variables	LPS	SPE
LPS	0.779	
SPE	0.555	0.841

**Table A3**  
Collinearity statistics (VIF).

	VIF
External_SPE	1.503
Internal_SPE	1.886
Uni_SPE	1.936
Q42_PS	2.664
Q43_LO	3.117
Q44_SM	2.035
Q45_SJ	2.296
Q46_II	1.934
Q47_Opti	2.833
Q48_GM	2.303
Q50_Net	2.124
Q51_Dom	2.514
Q52_Cit	2.67

**Table A4**  
Leadership potential scale validated in the UAE.

Code of items	Sub-scale and items
1	Leading others
LO_1	<i>I try to provide constructive feedback for my colleagues' (زملاء) opinion.</i>
LO_2	<i>I tend to suggest specific methods to colleagues for the smoothness (سلاسة) of the work process.</i>
LO_3	<i>I enjoy sharing new knowledge or offering information to my colleagues.</i>
LO_4	<i>I willingly (طوع) provide private time for my colleagues when they are in trouble.</i>
LO_7	<i>I motivate my colleagues to suggest ideas and opinions when I work with them.</i>
2	Self-management
SM_1	<i>I make plans for study or tasks.</i>
SM_2	<i>I have a habit of making work a priority (أولوية).</i>
SM_3	<i>I feel comfortable when I follow a plan.</i>
SM_4	<i>I usually follow a plan that I made.</i>
SM_5	<i>I establish specific plans for work both annually and monthly.</i>
SM_6	<i>I effectively manage time.</i>
3	Network
Net_1	<i>I take an active part in school events.</i>
Net_2	<i>I participate in my school department's major activities.</i>
Net_3	<i>I do know the annual plan (الخطة السنوية) of my department or club.</i>
Net_4	<i>I receive news about my department or club faster than other members.</i>
Net_5	<i>I mostly follow the purpose of my department, school society, or club.</i>
Net_6	<i>I have a network of friends among my school colleagues.</i>
4	Intellectual Inquiry
II_1	<i>I understand the major issues of politics, social problems, and economics of my country.</i>
II_2	<i>I understand worldwide trends in issues of energy, politics, environment, and so on.</i>
II_3	<i>I know the political issues of some countries.</i>
II_4	<i>I read an article on world trends or economy with interest.</i>
5	Global Mind
GM_1	<i>I have experienced happiness when I traveled somewhere unfamiliar.</i>
GM_2	<i>I enjoy learning through taking a trip abroad.</i>
GM_3	<i>I would like to explore other countries and unfamiliar places.</i>
GM_4	<i>I have experiences trying foreign foods and cultures in the UAE.</i>
6	Dominance (منيطرة)
Dom_1	<i>I lead discussions when I participate in a conference or forum.</i>
Dom_2	<i>I have the power to lead others.</i>
Dom_3	<i>I would like to give a speech in front of many people.</i>
Dom_4	<i>I am an influential person in my group.</i>
Dom_5	<i>I take a major role when I participate in a group activity.</i>
7	Problem-solving skills
PS_2	<i>I can quickly and effectively solve a problem.</i>
PS_3	<i>I can quickly compare, analyze, and evaluate tasks.</i>
PS_4	<i>I can identify a problem clearly.</i>
PS_5	<i>I can quickly suggest an alternative (حل بديل) solution for solving a problem.</i>
PS_8	<i>I find what the effective way is to solve a problem.</i>

(continued on next page)

Table A4 (continued)

Code of items	Sub-scale and items
8	Optimism (المتفائل)
Opt_1	I take a positive and optimistic view of everything.
Opt_2	I try to think in a positive way, like "Everything will be fine."
Opt_3	I think that I can finish my work despite some problems.
Opt_4	I have the confidence to finish any project.
9	Situational judgement
SJ_2	I can sense people's feelings.
SJ_3	I hand other people necessary things (tissues, table-ware, pencils, and so on), sensing people's feelings.
SJ_4	I can quickly identify what other people need.
SJ_5	I generally consider others' feelings.
10	Citizenship
Cit_3	I am honest.
Cit_5	I try to keep my promises as far as I can.
Cit_6	I behave politely (بإدب) to others.
Cit_7	I usually follow the rules of conduct (قواعد السلوك) in my life.
Cit_8	I do not hurt other people with my intentional remarks (ملاحظات مقصودة).
SS_3	Other people know me as a kind person.
SS_4	I give compliments and recognition (تقدير) to other people's achievements.

## References

- Abernathy, D. F. (2018). Addressing skills, knowledge and Self-Efficacy in the online development of school leaders. *Journal for the Advancement of Educational Research International*, 12(1), 47–57.
- Álvarez-González, P., López-Miguens, M. J., & Caballero, G. (2017). Perceived employability in university students: Developing an integrated model. *Career Development International*, 22(3), 280–299. <https://doi.org/10.1108/CDI-08-2016-0135>
- Ashour, S. (2020). Quality higher education is the foundation of a knowledge society: Where does the UAE stand? *Quality in Higher Education*, 26(2), 209–223. <https://doi.org/10.1080/13538322.2020.1769263>
- Bandura, A. (1986). The explanatory and predictive scope of self-efficacy theory. *Journal of Social and Clinical Psychology*, 4(3), 359–373.
- Baruch, Y., Bhaskar, A. U., & Mishra, B. (2020). Career dynamics in India: A two-wave study of career orientations and employability of graduates. *Personnel Review*, 49(3), 825–845. <https://doi.org/10.1108/10-2018-0429>
- Benbow, R. J., & Hora, M. T. (2018). Reconsidering college student employability: A cultural analysis of educator and employer conceptions of workplace skills. *In Harvard Educational Review*, 88(4).
- Bentler, P.M. (1990). Quantitative methods in psychology comparative fit indexes in structural models.
- Berntson, E., & Marklund, S. (2007). The relationship between perceived employability and subsequent health. *Work and Stress*, 21(3), 279–292. <https://doi.org/10.1080/02678370701659215>
- Botha, D. (2021). Self-perceived employability among undergraduate students at a south african university. *SA Journal of Human Resource Management*, 19. <https://doi.org/10.4102/sajhrm.v19i0.1685>
- Boulard-van Dam, S. I. M., Oostrom, J. K., De Kock, F. S., Schlechter, A. F., & Jansen, P. G. W. (2020). Unravelling leadership potential: Conceptual and measurement issues. *European Journal of Work and Organizational Psychology*, 1–19. <https://doi.org/10.1080/1359432X.2020.1787503>
- Bui, H. T., Nguyen, H. T., & Cole, D. (Eds.). (2019). *Innovate higher education to enhance graduate employability: Rethinking the possibilities*. Routledge.
- Camps, J., & Rodríguez, H. (2011). Transformational leadership, learning, and employability: Effects on performance among faculty members. *Personnel Review*, 40(4), 423–442. <https://doi.org/10.1108/00483481111133327>
- Chemers, M.M., Watson, C.B., Bank, C.M., & May, S.T. (2000). Dispositional affect and leadership effectiveness: A comparison of self-esteem, optimism, and efficacy.
- Chou, C. M., Shen, C. H., Hsiao, H. C., Chang, H. T., Chen, Y. J., Lee, W. H., et al. (2012). Analysis of students' employability self-efficacy and entrepreneurial career intention: Using labor market information as a mediator variable. *In 2012 Fifth International Joint Conference on Computational Sciences and Optimization* (pp. 32–35).
- Chughtai, A. (2019). Servant leadership and perceived employability: Proactive career behaviours as mediators. *Leadership and Organization Development Journal*, 40(2), 213–229. <https://doi.org/10.1108/LODJ-07-2018-0281>
- Cleveland, R. N. (2018). *Understanding employability development skills through co-curricular activities*. UNIVERSITY OF NORTH TEXAS.
- Cohen, J. (1988). *Statistical power analysis for the behavioral sciences* (2nd ed.). Hillsdale, NJ: Erlbaum.
- Dacre Pool, L., & Qualter, P. (2013). Emotional self-efficacy, graduate employability, and career satisfaction: Testing the associations. *Australian Journal of Psychology*, 65(4), 214–223. <https://doi.org/10.1111/ajpy.12023>
- Donald, W. E., Baruch, Y., & Ashleigh, M. (2019). The undergraduate self-perception of employability: Human capital, careers advice, and career ownership. *Studies in Higher Education*, 44(4), 599–614. <https://doi.org/10.1080/03075079.2017.1387107>
- Dražić, M.Č., Petrović, I. B., & Vukelić, M. (2018). Career ambition as a way of understanding the relation between locus of control and self-perceived employability among psychology students. *Frontiers in Psychology*, 9(SEP). <https://doi.org/10.3389/fpsyg.2018.01729>
- Dries, N., & Pepermans, R. (2012). How to identify leadership potential: Development and testing of a consensus model. *Human Resource Management*, 51(3), 361–385. <https://doi.org/10.1002/hrm.21473>
- Falk, R. F., & Miller, N. B. (1992). *A primer for soft modeling*. University of Akron Press.
- Fox, K. F. (2018). Leveraging a leadership development framework for career readiness. *New Directions for Student Leadership*, 2018(157), 13–26. <https://doi.org/10.1002/yl.20276>
- Fornell, C., & Larcker, D. F. (1981). Evaluating structural equation models with unobservable variables and measurement error. *Journal of marketing research*, 39–50.
- Furtner, M. R., Baldegger, U., & Rauthmann, J. F. (2013). Leading yourself and leading others: Linking self-leadership to transformational, transactional, and laissez-faire leadership. *European Journal of Work and Organizational Psychology*, 22(4), 436–449. <https://doi.org/10.1080/1359432X.2012.665605>
- Gallant, M., & Pounder, J. S. (2008). The employment of female nationals in the United Arab Emirates (UAE): An analysis of opportunities and barriers. *Education, Business and Society: Contemporary Middle Eastern Issues*, 1(1), 26–33. <https://doi.org/10.1108/17537980810861493>
- Goodman, S., & 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). <https://doi.org/10.4102/sajip.v42i1.1315>
- Griffiths, T. L., Dickinson, J., & Day, C. J. (2021). Exploring the relationship between extracurricular activities and student self-efficacy within university. *Journal of Further and Higher Education*, 45(9), 1294–1309.
- Hair, J. F., Black, W. C., Babin, B. J., & Anderson, R. E. (2010). *Multivariate data analysis: A global perspective*. Upper Saddle River, NJ: Pearson.
- Hair, J. F., Risher, J. J., Sarstedt, M., & Ringle, C. M. (2019). When to use and how to report the results of PLS-SEM. *In In European business review*, 31 pp. 2–24. Emerald Group Publishing Ltd. <https://doi.org/10.1108/EBR-11-2018-0203>
- Hair, J. F., Sarstedt, M., Hopkins, L., & Kuppelwieser, V. G. (2014). Partial least squares structural equation modeling (PLS-SEM): An emerging tool in business research. *In European business review*, 26 pp. 106–121. Emerald Group Publishing Ltd. <https://doi.org/10.1108/EBR-10-2013-0128>
- Hair, J., Hollingsworth, C. L., Randolph, A. B., & Chong, A. Y. L. (2017). An updated and expanded assessment of PLS-SEM in information systems research. *Industrial Management and Data Systems*, 117(3), 442–458. <https://doi.org/10.1108/IMDS-04-2016-0130>
- Hansen, S. L., & Hoag, B. A. (2018). Promoting learning, career readiness, and leadership in student employment. *New Directions for Student Leadership*, 2018(157), 85–99. <https://doi.org/10.1002/yl.20281>
- Hojan-Clark, J.M. (2010). First generation college student leadership potential a mixed methods analysis.
- Hassock, L., & Hill, C. (2022). Employability and Employment: The Role of Higher Education in a Rapidly Changing World. *In Higher Education and Job Employability* (pp. 155–178). Springer.
- Howard, A. R., Healy, S. L., & Boyatzis, R. E. (2017). Using leadership competencies as a framework for career readiness. *New Directions for Student Leadership*, 2017(156), 59–71. <https://doi.org/10.1002/yl.20271>
- Hu, L. T., & Bentler, P. M. (1999). Cutoff criteria for fit indexes in covariance structure analysis: Conventional criteria versus new alternatives. *Structural Equation Modeling*, 6(1), 1–55. <https://doi.org/10.1080/10705519909540118>
- Huang, J. T. (2015). Hardiness, perceived employability, and career decision self-efficacy among Taiwanese college students. *Journal of Career Development*, 42(4), 311–324. <https://doi.org/10.1177/0894845314562960>
- Jackson, D., & Tomlinson, M. (2020). Investigating the relationship between career planning, proactivity and employability perceptions among higher education

- students in uncertain labour market conditions. *Higher Education*, 80(3), 435–455. <https://doi.org/10.1007/s10734-019-00490-5>
- Jackson, D., & Tomlinson, M. (2022). The relative importance of work experience, extra-curricular and university-based activities on student employability. *Higher Education Research and Development*, 41(4), 1119–1135. <https://doi.org/10.1080/07294360.2021.1901663>
- Judge, T. A., & Piccol, R. F. (2004). Transformational and transactional leadership: A meta-analytic test of their relative validity. *Journal of Applied Psychology*, 89(5), 755–768. <https://doi.org/10.1037/0021-9010.89.5.755>
- Karagianni, D., & Jude Montgomery, A. (2018). Developing leadership skills among adolescents and young adults: A review of leadership programmes. *Dental healthInternational journal of adolescence and youth*, 23(1), 86–98. <https://doi.org/10.1080/02673843.2017.1292928>
- Kasler, J., Zysberg, L., & Harel, N. (2017). Hopes for the future: Demographic and personal resources associated with self-perceived employability and actual employment among senior year students. *Journal of Education and Work*, 30(8), 881–892. <https://doi.org/10.1080/13639080.2017.1352083>
- Kirves, K., Kinnunen, U., de Cuyper, N., & Mäkikangas, A. (2014). Trajectories of perceived employability and their associations with well-being at work: A three-wave study. *Journal of Personnel Psychology*, 13(1A), 46–57.
- Kjellström, S., Ståle, K., & Törnblom, O. (2020). Six ways of understanding leadership development: An exploration of increasing complexity. *Leadership*, 16(4), 434–460. <https://doi.org/10.1177/1742715020926731>
- Kuhn, P., Weinberger, C., & Org, E. (2003). UC santa barbara departmental working papers title leadership skills and wages permalink publication date leadership skills and wages\*. <https://escholarship.org/uc/item/50q3c9n1>.
- Lee, S., Kim, H., Park, S., Lee, S., & Yu, J. (2015). Preliminary development of a scale to measure leadership potential. *Psychological Reports*, 117(1), 51–71. <https://doi.org/10.2466/01.07.PR0.117c13z4>
- Lowden, K., Hall, S., Elliot, D., & Lewin, J. (2009). Intelligenc in the flesh Employers' perceptions of the employability skills of new graduates.
- Matu, J. B., & J Paik, E. (2021). Generic skills development in the gulf cooperation council countries and graduate outcomes: A systematic review of the literature. *Gulf Education and Social Policy Review (GESPR)*. <https://doi.org/10.18502/gespr.v2i1.9309>
- Maurer, T. J., Hartnell, C. A., & Lippstreu, M. (2017). A model of leadership motivations, error management culture, leadership capacity, and career success. *Journal of Occupational and Organizational Psychology*, 90(4), 481–507. <https://doi.org/10.1111/joop.12181>
- McGarry, K. B. (2016). *An examination of perceived employability skills between employers and college graduates*. Northeastern University.
- McGunagle, D., & Zizka, L. (2020). Employability skills for 21st-century STEM students: The employers' perspective. *Higher Education, Skills and Work-Based Learning*, 10(3), 591–606. <https://doi.org/10.1108/HESWBL-10-2019-0148>
- Morrison, A. R. (2014). You have to be well spoken": Students' views on employability within the graduate labour market. *Journal of Education and Work*, 27(2), 179–198. <https://doi.org/10.1080/13639080.2012.742178>
- Murphy, S. E., & Johnson, S. K. (2011). The benefits of a long-lens approach to leader development: Understanding the seeds of leadership. *The Leadership Quarterly*, 22(3), 459–470. <https://doi.org/10.1016/J.LEAQUA.2011.04.004>
- Job outlooks skills qualities employers want*. (2015). National Association of Colleges and Employers. Retrieved from <https://www.naceweb.org/s11122014/job-outlook-s-kills-qualities-employers-want.aspx?land-surv-lp-2-spot-joskz-11282014>National.
- Nunnally, J. C., & Bernstein, I. H. (1994). *Psychometric theory*. New York: McGraw-Hill.
- Paul, R.M. (2018). Towards an understanding of the Influence of Student Leadership Development on Early-Career Engineers. 150. <https://doi.org/10.11575/PRISM/31820>.
- Pitan, O. S., & Muller, C. (2020). Student perspectives on employability development in higher education in South Africa. *Education + Training*, 63(3), 453–471. <https://doi.org/10.1108/ET-02-2018-0039>
- Poplavskaya, A., Karabchuk, T., & Shomotova, A. (2023). Unemployment challenge and labor market participation of Arab Gulf youth: A case study of the UAE. *Social change in the gulf region: Multidisciplinary perspectives* (pp. 511–529). Singapore: Springer Nature Singapore.
- Priyadarshini, C., Singh, S., David, R., & Sayeed, O. Bin (2019). Effect of student leadership on academic performance and perceived employability: A longitudinal study on scale development and validation in the Indian context. *South Asian Journal of Management*, 26(2), 106–134. <https://www.proquest.com/scholarly-journals/effect-student-leadership-on-academic-performance/docview/2283947920/se-2?accountid=62373>.
- Qenani, E., MacDougall, N., & Sexton, C. (2014). An empirical study of self-perceived employability: Improving the prospects for student employment success in an uncertain environment. *Active Learning in Higher Education*, 15(3), 199–213. <https://doi.org/10.1177/1469787414544875>
- Riggio, R. E., & Mumford, M. D. (2011). Introduction to the special issue: Longitudinal studies of leadership development. In , 22. *Leadership Quarterly* (pp. 453–456). <https://doi.org/10.1016/j.leaqua.2011.04.002>
- Rothwell, A., Herbert, I., & Rothwell, F. (2008). Self-perceived employability: Construction and initial validation of a scale for university students. *Journal of Vocational Behavior*, 73(1), 1–12. <https://doi.org/10.1016/j.jvb.2007.12.001>
- Rothwell, A., & Rothwell, F. (2017). Graduate employability in context. *Graduate Employability in Context*, 41–65. <https://doi.org/10.1057/978-1-137-57168-7>.
- Shomotova, A., & Ibrahim, A. (2023). Validation of measurement scales for undergraduate students' self-perceived employability and university commitment in the United Arab Emirates. *Education + Training*, 65(8/9), 972–992.
- Silzer, R., & Church, A. H. (2010). Identifying and assessing high-potential talent. *Strategy-driven talent management: A leadership imperative*, 28, 213–280.
- Sovgira, S., Bida, O. A., Leshchenko, H. A. C., Zakharova, O. V. D., & Chernyshenko, I. A. (2019). Development of leadership potential in the system of higher education: Civil aviation students. In , 8. *In International Journal of Innovation, Creativity and Change*. [www.ijicc.net](http://www.ijicc.net).
- Tiffan, B. (2009). Are you considered a “high potential?” Careers.
- Tymon, A. (2013). The student perspective on employability. *Studies in Higher Education*, 38(6), 841–856. <https://doi.org/10.1080/03075079.2011.604408>
- UAE Government (2023). Future skills for youth <https://u.ae/en/information-and-services/jobs/future-skills-for-youth>.
- United Nations (2023). THE 17 GOALS <https://sdgs.un.org/goals>.
- Van Linden, J. A., & Fertman, C. I. (1998). *Youth leadership: A guide to understanding leadership development in adolescents*. Jossey-Bass.
- Villarreal, M. M. (2017). *An examination of the relationship of technical college students' self-perceived communication competence, leadership style, and employability*. Our Lady of the Lake University.
- Yizhong, X., Baranchenko, Y., Lin, Z., Lau, C. K., & Ma, J. (2019). The influences of transformational leadership on employee employability: Evidence from China. *Employee Relations*, 41(1), 101–118. <https://doi.org/10.1108/ER-02-2018-0052>
- Yuan, Y., Chen, Q., Sun, X., Liu, Z., Xue, G., & Yang, D. (2019). Development and preliminary validation of the youth leadership potential scale. *Frontiers in Psychology*, 10(OCT). <https://doi.org/10.3389/fpsyg.2019.02310>
- Zaccaro, S.J., Kemp, C., & Bader, P. (2004). Leader Traits and Attributes.
- Zafar, S., Raziq, M. M., Igoe, J., Moazzam, M., & Ozturk, I. (2023). Inclusive leadership and innovative work behavior: Roles of autonomous motivation and horizontal and vertical trust. *Current Psychology*. <https://doi.org/10.1007/s12144-023-05386-3>
- Zharikov, E., and Krushelnitsky, E. (2019). Evaluation of Leadership Skills. Retrieved from: <http://www.gurustestov.ru/test/230/>.
- Zhou, W., Pan, Z., Jin, Q., & Feng, Y. (2022). Impact of Self-Perceived employability on sustainable career development in times of COVID-19: Two mediating paths. *Sustainability*, 14(7). <https://doi.org/10.3390/su14073753>