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Proposed Mathematical Model to Develop Soft Skills to Enhancing Job Admission for University of Jazan graduates

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Abstract: In this paper, we examine the importance of soft skills for graduates of Jazan University in improving their job prospects using a proposed mathematical model. A proposed model for developing soft skills is presented, aimed at enhancing employment opportunities for Jazan University graduates. The study employs a semi-experimental and descriptive approach, utilizing an existing training model for soft skills development. Data collection is conducted through a scientific research tool, with the study sample consisting of 300 participants for the basic study and 75 female graduates for the experimental study. The results reveal several key findings, including the identification of a comprehensive list of soft skills and the existence of significant statistical differences between pre-and post-test scores in the proposed model. Furthermore, the study demonstrates a significant impact of the model application based on the Cohen equation. The study concludes by recommendation the inclusion of soft skills in the students' curriculum to better prepare them for future employment opportunities.

Keywords: Model- Program - Development - Soft skills - Jobs - Graduates

1 Introduction

The labor market is currently witnessing rapid changes in light of the successive developments in the business environment, which has become more complex than ever, and the era of the Fourth Industrial Revolution imposed many challenges, which contributed to changing the concept of success in life and profession, so success is no longer associated with the individual's technical and specialized skills only, but it has become important what he possesses of social and personal skills, which support his positive social interaction with the environment and others. To keep pace with these changes, studies have recently turned towards those skills required by the labor market from university graduates from various disciplines, so these skills were divided into cognitive skills known as hard skills, and non-cognitive skills known as soft skills.

A study (Lidnzon [1], 2019) confirmed that the labor market does not only require hard skills, but there are soft skills that are of great importance in long-term success,

and educational s should employ all available possibilities not only hard skills development but must give great attention to soft skills.

The Kingdom's Vision 2030 referred to soft skills and stressed the need to upgrade them to link education outcomes and labour market needs, Through the pivot of a prosperous economy, our children's skills and abilities are among our current most important resources, and we will strive to maximize these energies by adopting a culture of penalties for work, providing opportunities for all and acquiring the necessary skills to enable them to pursue their goals. To achieve this, we will continue to invest in education and provide students with the knowledge and skills needed for future jobs. We will also support efforts in aligning learning outputs with the needs of the labour market, The National Portal for Action " Taqat", which provides training and employment assistance services by identifying the skills and knowledge needed by researchers, was launched. Work will also be undertaken to encourage vocational training to drive economic development. innovation in cutting-edge technologies and entrepreneurship.

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To underscore the importance of soft skills, the Education and Training Calendar Authority of the Four Seasons Hotel in Riyadh organized the international conference entitled "International Conference for the Evaluation of Education" entitled: Future skills, development and evaluation, 4-6 December 2018 in order to identify the future skills needed by the labour market and how they are developed and mechanisms for their inclusion in the educational and training system, How to measure and evaluate it, and this conference kept pace with the future developments and requirements of the labour market, And the importance of developing educational systems, to prepare the individual, to build his personality, and to acquire the necessary skills to keep up with the future development requirements under the fourth industrial revolution.

The Education and Training Evaluation Authority, 2020, also supported this through the National Qualifications Framework " Saqf ", a framework that harmonizes higher education outcomes with the requirements of the Saudi labour market and is the scientific reference that guides, educational and training institutions in building, developing and restructuring their programmes, stating that the areas of learning in all disciplines must be based on three main dimensions: "Knowledge, Understanding, Skills, Values, Autonomy and Responsibility", some skills featured eight levels that focused on written and oral personal skills, electronic communication, critical thinking and working with a team, taking responsibility, and other soft skills. In this context (Reem Al-Amoush [2], 2021,360) stated in her study that "Arab education policies continue to develop strategies to improve the student's quality and enable him or her to have solid technical or academic skills that are linked to knowledge, experience and ability to carry out his or her careers according to specialization. and the world's leading universities are focusing on developing training programmes based on the development of their students' soft skills, This attracts students to them the most, as well as some States that seek to build students' capacities during the school period according to specific models that engage in psychosocial formation and the development of communication skills. Teaching soft skills alongside solid academic skills indicates that university professors treat a person as a whole entity acquiring soft skills is as important to a student's success in his work as solid skills. In Cotet's [3] [2021] study, it was mentioned that soft skills are important for learners to develop, boost self-confidence, and enhance their chances of future professional and social success.

It is also one of the skills targeted in the Prince Mohammed bin Salman Program for Human Capacity Development (Human Capacity Development Initiative 2021), in addition to the fact that work environments are becoming more demanding for soft skills. (Snape [4], 2017)

A study (Devedzic [5], 2018) also showed that soft skills differ from hard skills by applying them to a wide range of fields, which makes the process of teaching and evaluating them difficult unlike hard skills, and despite these differences between hard and soft skills, they constitute in general integrated and synergistic life skills.

A study (Reem Al-Amoush [2], 2021, 360) showed that soft skills are the complementary part of the academic skills acquired by the student and are one of the basic requirements for work, which is essential in job performance and enhances the interaction of individuals and is applicable both inside and outside work.

Otaiba's study [6] [2021, 84] also stated that soft skills are an entry point for adapting university outputs to recruitment requirements, and the soft skills required for recruitment that ensure ample chances of obtaining successful jobs such as communication, organization and planning, working in a team, flexibility, critical thinking, crisis management and negotiation).

The findings of the survey conducted by the Oxford University SAID School of Business indicate that information and communication technologies have negatively affected the number of jobs in the labor market, but this effect is temporary, as specific technical and technological skills were surprisingly low on the list for respondents, who saw so-called "soft skills" as one of the key things, and problem-solving, communication, and decision-making skills were among the most important. Receiving 88%, 87%, and 85% respectively, the rapid pace of changes in the labor market dictates that employees must acquire a set of new skills continuously and quickly. (HR Voice, 2018, 28).

The study of (Desaimani [7],2018) confirmed the importance and growing demand for the integration of soft skills in education in the Kingdom of Saudi Arabia in line with the Kingdom's Vision 2030 and local and global economic needs, by enriching the student's skills in the field of future skills during their university studies, for a smooth transition from university to the labor market.

The study of (Al-Batsh [8], 2019, 119) also recommended the importance of employing soft skills in different life situations to provide humans with dealing skills in all different fields.

Proceeding from the foregoing, and in the light of global and local trends, by encouraging graduates to become self-employed and rely on themselves to refine and develop their skills for appropriate employment opportunities, Current research is an attempt to emphasize the importance of developing soft skills as a necessary requirement for youth employment in various fields to meet today's challenges. in addition to solid skills with

technical skills that are no longer sufficient to cope with the continuing change in recruitment.

1.1 Statement of the problem:

The labor market is currently witnessing rapid changes in light of the successive developments in the business environment, which has become more complex than ever, and while recruitment or professional promotion processes were previously concerned with the professional and specialized experiences of individuals, the trend in the contemporary work environment began to focus more and more on what has become called soft skills as an added value advantage not only for individuals who possess them but also for institutions, after proving their positive contribution to work, productivity, and efficiency. Performance and stimulating innovation.

Jackson [9] (2021) also found that soft skills are 86% more important than hard skills when it comes to long-term success, so today's educational and training institutions are twice as likely to focus on soft skills training than hard skills training.

Based on the work of the research team, several interviews were conducted with some university graduates from various colleges who did not get job opportunities, and discussed their difficulties in obtaining job opportunities, and it became clear from the dialogue with them that it is difficult to get job opportunities as a result of their lack of effective communication skills while dealing with others, they are not good at time management facing the problems they are exposed to, and this is what soft skills achieve for them, as it is one of the most important The skills and requirements of the Twenty-First Century, and to achieve this goal requires training them on those skills to provide them with a job opportunity and admission to future jobs.

Through the above, a mathematical model aimed at developing soft skills to promote job admissions for Gazan University graduates is proposed. The problem of research is the main question of the impact of a proposed soft skills development mathematical model to promote job admissions for Jazan University graduates.

1.2 The Study Problem branches into the following questions:

1. What are the soft skills that must be available to Jazan University graduates to enhance their ways of accepting jobs?
2. What is the proposed vision of the soft skills development model to enhance the ways of accepting jobs for Jazan University graduates?
3. Are there statistically significant differences between the graduates of the research sample in the soft skills that must be available to the graduates of Jazan University in its ten dimensions according to variables (age, academic specialization, academic average, place of residence)?
4. Are there statistically significant differences between the graduates of the research sample in the ways of accepting jobs according to the variables (age, academic specialization, academic average, place of residence)?
5. Are there statistically significant differences at the level of significance (a is less than or equal to 0.05) between the average scores of the study sample members in the pre - and post-test in soft skills to enhance the means of job acceptance for Jazan University graduates?
6. What is the size of the impact of the application of the proposed soft skills development model to enhance the ways of accepting jobs for Jazan University graduates?

1.3 Objectives of the research:

The current research aims to:

1. Identify the soft skills that must be available to Jazan University graduates to enhance the means of job acceptance.
2. Preparing a proposed model for the development of soft skills to enhance the ways of accepting jobs for Jazan University graduates.
3. Detection of statistically significant differences between the graduates of the research sample in the soft skills that must be available to the graduates of Jazan University in its ten dimensions according to variables (age, academic specialization, academic average, place of residence).
4. Identify the statistically significant differences between the graduates of the research sample in the ways of accepting jobs according to variables (age, academic specialization, academic average, place of residence).
5. Verify that there are statistically significant differences at the level of significance (a is less than or equal to 0.05 between the scores of the study sample members in the pre-and post-test in soft skills to enhance the means of accepting jobs for Jazan University graduates.
6. Revealing the size of the impact of the application of the proposed model for the development of soft skills to enhance the means of accepting jobs for graduates of Jazan University.

1.4 Importance of Research:

1. The importance of the topic of soft skills that must be available to graduates of the University of Jazan in promoting job admissions.
2. Enriching the Arab Library with possible future expectations that benefit all those interested in this field, from which to start conducting other studies and research.
3. Guiding the efforts of the Ministry of Education and Universities towards the need to develop soft skills among graduates of the University of Jazan to promote the admission of future jobs.

1.5 Research hypotheses:

1. It is possible to identify the soft skills that must be available to Jazan University graduates to enhance their ways of accepting jobs.
2. Are there statistically significant differences between the graduates of the research sample in the soft skills that must be available to the graduates of Jazan University in its ten dimensions according to variables (age, academic specialization, academic average, place of residence)?
3. Are there statistically significant differences between the graduates of the research sample in the ways of accepting jobs according to variables (age, academic specialization, academic average, place of residence).
4. There are statistically significant differences at the level of significance (a is less than or equal to 0.05) between the scores of the study sample members in the pre-and post-test in soft skills to enhance the ways of accepting jobs for graduates of Jazan University.
5. The high impact of the application of the proposed soft skills development model to enhance the ways of accepting jobs for Jazan University graduates.

1.6 Research limits:

1. **Methodological limits of the research:** This research follows the semi-experimental approach with one group, i.e., the pre-and post-measurement of the same group through the preparation of a training model based on the development of soft skills among graduates of Jazan University and its application to an experimental sample of (75) graduates from Jazan University, and the descriptive analytical approach.
2. **Objective limit:** The study is limited to the subject of applying the proposed soft skills model to enhance the means of accepting jobs for Jazan University graduates.
3. **Human limit:** The survey sample consisted of (30), the basic sample of (300), and the experimental research sample of (75) graduates of Jazan University.

4. **Spatial limit:** The current study is applied in the Jazan region.
5. **Time limit:** It is the period taken by the field study, which is the stage of collecting and unloading data from the study community, and the research team has applied the field tools for research, data collection and unloading in its final form, starting from January 2023 until the end of May 2023.

1.7 Search terms and procedural concepts:

Proposed model:
Ahmed Bassam Aziz et al. [10] (2022, 353) defined it as "a set of topics and actions aimed at achieving its goal and presented to a certain category of learners to achieve the intended goals in a specific period".
The model is defined as a set of planned and organized training activities that cover a variety of topics and aim to accomplish specific objectives, such as providing trainees with knowledge and expertise that leads to job acceptance within a specific period of time.

Soft skills:
Akfirat [11] (2016) defined it as: "skills that enable an individual to adapt and deal positively with the demands and problems of everyday life, including time management, sociability, good use of resources, interaction with others, respect for work, leading to the learner's success in work and life". Soft skills are defined procedurally as a set of personal skills that university graduates must acquire to help them accept jobs and engage in the labor market. they are represented in communication skills, communication, time management, working in a team, planning, negotiation, critical thinking, crisis management, problem-solving, decision-making, flexibility, and adaptation to variables.

Career:
Rekha [12] (2020. 5) defined it as a set of powers and responsibilities aimed at carrying out a specific activity or a convergent set of activities. A job is defined procedurally as a set of duties and responsibilities that require the appointment of an individual to perform them who are characterized by certain skills that distinguish him from others to accept the job.

1.8 Theoretical background of the research:

1.8.1 Soft skills:

The concept of soft skills:
Soft skills are vital skills to achieving effective performance in the twenty-first century, soft skills are an important and effective element in the success of any institution, and they are represented in the qualities that

the individual possesses in his work and support him psychologically to achieve first and then achieve the goals that the institution seeks.

Abdul Hamid [13] (2019, 8) stated that "A term for soft skills that is frequently repeated in the recent period, which means those basic skills that are linked to a person's ability to cope, He presented his ideas convincingly and tactfully, his ability to communicate and communicate, and the use of behaviour that characterized his relationships with others, the initiative, working in a team, time management and decision-making by qualifying students at all levels of school academically, Professional in line with the 21st century recruitment requirements In today's era, attention to the development of soft skills is a prerequisite for shaping and refining students' personality, Preparing them as generations of the future capable of meeting today.

Hassan, Mustafa, and Ahmed [14] (2022, 1156) stressed the importance of possessing soft skills and the necessity of conducting research studies and training models to stay current and adapt to changing requirements.

Fouad [15] (2023, 80) defined them as "life skills acquired by individuals, skills required by the labor market by developing them from the personal and social aspects in a way that qualifies them to deal with others and communicate with them effectively and enable them to bear the burdens and pressures of work."

We will briefly present the most important soft skills addressed by the research team in the current study and the most used in job interview models, which are illustrated as follows:

Fig. 1: Shows the list of soft skills covered by the current research.

Communication and communication skills:
Zaki and Zaki [16] (2018) referred to the term communication as "the sender sending a message without receiving feedback from the receiver, which is a technical term rather than psychological, while communication is a more active term as it refers to the process that leads to the transmission of thoughts and feelings between individuals, whether verbal or non-verbal messages, while interaction involves friction and contact more than in communication."

Time management skill:
Moussa [17](2019, 13) defined it as 'the process of utilizing the time available to achieve important goals in our lives, while maintaining a balance between work and personal life requirements, as well as the needs of the body, spirit, and mind.' The definition of time management is to use available time and resources to achieve specific objectives, and it involves planning, organization, follow-up, coordination, motivation, and communication.

The skill of working in a team:
Abdul Wahed [18] (2016) pointed out that the skill of working within a team that "consists in managing and representing the group at work and the ability to successfully carry out various roles, while acquiring coping skills, flexibility, and accommodating and adapting to the requirements of the work environment, whether by being able to work under pressure, work in culturally diverse environments, or accept criticism." It defines teamwork as "a group of people who can work or work together, cooperate, and interact to achieve a common goal, within an environment that brings them together."

Planning skill:
Abadi [19] (2018, 1687) defined planning as "a process of predetermining what will be done, as a determination of a future course of action that includes a coherent and coherent set of processes to achieve certain goals." The skill of procedural planning is defined as "the ability to set priorities, manage time and tasks, and make appropriate decisions to achieve the goals to be implemented."

The skill of critical thinking:
Abdul Wahed [18](2016, 312) explained that "critical thinking is a complex concept that has links to an unlimited number of behaviors, in an unlimited number of situations and situations and is intertwined with other concepts such as logic and learning, problem solving, and epistemology, and one of the most prominent critical thinking skills is the skill of distinguishing between truth and opinion, as critical thinking is associated with many actions, most notably: Slowing down, reasoning, open-mindedness, asking questions, clarifying and verifying, referring to sources, evaluating sources, and collecting evidence and evidence of the validity of something."

Negotiation skill:
Sayed [20] (2019, 801) stated that the negotiation skill is "a set of skills that you use during the exchange of opinions, suggestions and presentation of views to solve a problem or resolve an issue in a way that satisfies all parties, through negotiation skills in (speaking - listening persuasion - conflict management, deliberation in

decision-making, disagreement)." It defines negotiation as "a process through which two or more parties interact with a common interest and to achieve their goals and obtain desirable results that require communication with each other as a more appropriate means to narrow the area of disagreement and expand the area of participation between them through discussion, sacrifice, argument, persuasion, and objection to reach an agreement acceptable to the parties on negotiating topics or issues."

Crisis management skills:
Hariri [21](2019, 157) defined crisis management as the art of handling crises through decision-making systems at the collective or individual level, to overcome the inability to handle events and subsequent and sudden variables.

Problem-solving and decision-making skills:
Abdel-Baqi [22] et al. (2021, 247-242) defined problem-solving skill as "an individual's cognitive activity through the growth of a set of mental skills in an overlapping manner while facing situations that require him to find a correct solution by following regular steps that enable him to choose the appropriate alternative to achieve the desired solution," and decision-making defined it as "making a judgment or opinion about what an individual should do in a particular situation through a logical selection or choice between alternative solutions or opinions in light of Research and understanding of the causes of the problem."
Procedurally, it defines decision-making and problem-solving as both having a series of steps that begin with a problem and end with a solution to that problem, but both involve evaluating multiple alternatives or solutions to arrive at a final decision.

The skill of flexibility and adaptation to variables:
Qasim [23] (2018, 89) defined it as "the ability of an individual to adapt to diverse and new life situations, by changing the methods used by the individual to face these situations, in addition to thinking about various alternatives to solve problems and choosing the appropriate alternative for the situation." The skill of flexibility and adaptation to changes is defined procedurally as "adapting the individual's abilities to adapt, deal and adapt to new and changing life situations, by changing the ways and strategies used by the individual to face those situations to adapt to the new situation."

1.9 Previous studies related to the research:

Alamoush Study (2021)[2]:
The study aimed to identify the role of the university practical education model in enhancing the soft skills of trainees in the schools of the directorates of Zarqa governorate (from the point of view of female collaborating teachers). The sample of the study consisted of (58) collaborating teachers from the Directorate of Education of Zarqa Governorate I and II, and used the identification as a tool for collecting data of four soft skills: Crisis management, adaptation and flexibility, effective communication, cooperation and teamwork. The results of the study showed that the role of the university's practical education model in enhancing the soft skills of trainee students in Zarqa governorate schools and the estimates of sample members on the tool as a whole came (at a moderate level).

Otaiba Study (2021)[6]:
The study aimed to clarify the challenges facing Arab higher education and to reveal the reasons for the poor alignment between higher education outcomes and the requirements of the employment market. The researcher used the analytical descriptive curriculum. One of the most important results was that today the student needs a set of skills to ensure better access to employment and a successful career called soft skills. (Communication - organization and planning - working in a team - adaptation and flexibility - critical thinking - crisis management - professionalism - negotiation).

Dirania Study (2022)[24]:
The study aimed to identify the degree to which students possess soft skills from the Arab Open University teachers from their point of view. The prescribing curriculum was used. The sample of the study was chosen in the intentional manner from the student teachers studying for the course of practical education in the higher diploma in education and the bachelor's degree in primary education. (118) Students, to collect study data, a measure of seven soft skills, verified honesty and consistency, was built. The results of the study showed that the degree to which students educated at the Open Arab University possess soft skills, skilled work ethic, collaborative skill, time management skill, critical thinking skill, problem-solving skill, goal-setting skill, communication skill, and high level.

Bajammal Study (2023):
The study aimed to identify a degree of soft skills for the labour market of female students educated in the early childhood education programme in the Department of Childhood Studies of King Abdul Aziz University s Studies Department of Children's Studies 2022, which numbered 57 female teachers data were collected through identification, which consisted of items measuring five soft skills, The results of the study showed that female students educated in the early childhood education programme possess a very high degree of soft skills needed for the labour market despite a discrepancy between skills.

Al-Khairy Study (2023)[25]:
The study was intended to identify the degree of King

Khalid University students' practice of soft skills from the point of view of the faculty, relied on the descriptive curriculum, and consisted of a sample study of 296 members, selected in a random caste manner, have been identified as a tool for gathering information and the results identified a number of soft skills to be developed by King Khalid University students and suited to meet labour market needs, Results found statistically significant differences at the indicative level (0 05) between the responsiveness of the study sample individuals about the soft skills of King Khalid University students that enable them to find suitable jobs in the labour market attributable to the scientific qualification variable for faculty members holding an assistant professor's degree and the lack and atmosphere of statistically significant differences at the indicative level (0.05) between the response of the study sample members attributable to the sex variable.

2 Methodologies

2.1 Research Methodology and Procedures: Research Methodology:

1. The current research relied on the descriptive approach in the analysis of literature and previous studies to characterize measurement variables associated with soft skills.
2. The research also relied on the semi-mono-design approach for one experimental group (pre and post-test) to apply the research experience and know the effectiveness of the proposed model in developing soft skills among graduates of Jazan University to enhance admission to jobs.

2.1.1 Research sample:

A random sample of Jazan University graduates was selected (300), then the experimental sample of (75) graduates was deliberately selected from the lower spring to respond to the identification of soft skills that must be available to Jazan University graduates, i.e. graduates who have less soft skills and have been contacted through their "What's App" and therefore to coordinate with them to implement the proposed soft skills development model to enhance job acceptance for Jazan University graduates, and a test has been applied Before and after me on this sample, to verify the impact of the proposed soft skills development model to enhance the ways of accepting jobs they have.

Current search variables:

– **Independent variable:** the proposed model for female graduates of Jazan University
– **Dependent variable:** developing soft skills to enhance job acceptance

2.1.2 Preparation of experimental processing material:

1. **Prepare a soft skills list:**
   (a) **Purpose of preparing the list:** : Identify the soft skills necessary for university graduates in light of the requirements for admission to jobs in the labor market, to prepare a model to train them on these skills.
   (b) **Sources relied upon in deriving the soft skills list:** The research team referred to the research and studies that were concerned with the development of soft skills, namely: Qwaider [26](2017), Woodard [27] (2019), Batsh [8](2019), Musa [17](2019), Horbacauskien [28](2020), Otaiba [6](2021), Madkhali [29](2022), Nefaie [30](2023).

After completing the skills derivation from previous sources, a list of soft skills needed for graduates was built to help them get jobs and work opportunities. The list included ten main skills: Communication, communication, time management, work within the team, planning, negotiation, critical thinking, crisis management, problem solving, decision-making, flexibility and adaptation to variables. They were presented to the arbitrators to determine the suitability of those skills for the graduates of the university. Most of the arbitrators demonstrated the appropriateness of these skills included in that list, and after the research reached the soft skills suitable for the graduates in their final form.

2.2 Building Research Tools:

The current research relied on the questionnaire tool and a model for the development of soft skills among graduates of Jazan University and the test to measure soft skills, where these skills are dominated by the mental side, not the performance side, and the study tools were built according to a set of steps as follows:

Preparation of the questionnaire: The questionnaire included two parts:

Section I General data: including (age, marital status, academic average, academic specialization, place of residence) **Section II axis of the resolution:**

The first axis: soft skills to be available in graduates of Jazan University include 10 dimensions. The number of phrases of this axis (60) is a phrase. Each dimension includes (6) phrases. The aim was to determine the skills to be available in graduates of Jazan University. The questionnaire was prepared through readings, research and related studies, including a study of Al-Amoush (2021)[2], Otaiba (2021)[6], Madkhali (2022)[29], Diraniyeh (2022)[24], Fouad (2023)[15], Al-Nefaie (2023)[30].

The soft skills were classified to include ten skills (communication, communication and time management, teamwork, negotiation planning, critical thinking, crisis

management, problem-solving, decision-making, flexibility and adaptation to variables), and the final questionnaire consisted of (60) phrases, and the correction key was placed for the questionnaire, and the response is determined according to the five-point Likert scale (5) options (very high, high, medium, weak, very weak), with a continuous gradient scale (1,2,3,4,5).

The second axis: ways to accept jobs for graduates of Jazan University The number of phrases of the axis reached (10) phrases, and the response is determined according to the five-point Likert scale (5) options (strongly agree, agree, somewhat agree, disagree, strongly disagree), with a continuous graduated scale (1,2,3,4,5)

Content Honesty Calculation:
The soft skills test was applied to an exploratory sample of (30) graduates from Jazan University other than the basic research sample, to verify the control and legalization of the test and verify its validity for application, then the questionnaire phrases were arbitrated by presenting them to some arbitrator professors specialized in curricula and teaching to express an opinion on the appropriateness and clarity of the questionnaire phrases, and some amendments were made to the referred to and then the questionnaire was applied in its final form.

Calculation of the truthfulness of the composition:
The validity of the formation was calculated by the method of internal consistency, by finding the correlation coefficient (Pearson correlation coefficient) and the values of the correlation coefficients ranged between the total degree of each dimension and the total degree of the first axis (soft skills that must be available to graduates of Jazan University) as shown in Table (1) The values are statistically significant at the level of significance ((0.01), which indicates the homogeneity of the phrases and dimensions of the first axis and the total degree of it.
It is clear from the previous table that the correlation coefficients are all a function at the level of significance (0.000) for approaching the correct one, which indicates the homogeneity of the dimensions of the first axis and its validity for application.
The validity of the formation was also calculated by the method of internal consistency of the second axis (ways of accepting jobs for Jazan University graduates), by finding the correlation coefficient (Pearson correlation coefficient) and the values of the correlation coefficients ranged between the degree of each phrase and the total degree of the second axis (ways of accepting jobs for Jazan University graduates) as shown in Table (2) The values are statistically significant at the level of significance ((0.01), which indicates the homogeneity of the axis phrases and the total degree of the second axis.
It is clear from the previous table that the correlation coefficients are all a function at the level of significance (0.000) to approach the correct one, which indicates the homogeneity of the dimensions of the second axis and its

validity for application.
Stability coefficient:
The stability of the first axis was calculated using the alpha coefficient Cronbach, and the value of the Cronbach alpha coefficient for the axis as a whole was 0.962, which is a high value indicating the stability of the axis and the stability values for the dimensions of the axis range between 0.762, 0.772, which indicates the stability of the first axis.

The stability of the second axis was also calculated using the alpha coefficient Cronbach and the value of the Cronbach alpha factor for the axis as a whole was 0.826, which is a high value indicating the stability of the axis and the stability values of the axis statements range between 0.723, 0.756, which indicates the stability of the second axis.
The stability of the resolution as a whole was calculated using the alpha coefficient Alpha Cronbach and the value of the Cronbach alpha factor for the resolution as a whole was 0.803, which is a high value indicating the stability of the resolution and the stability values of the axis range between 0.826, 0.962, which indicates the stability of the resolution.

Preparing the proposed model for university graduates:
The elements of building the model were deduced according to the models of educational designs presented in the literature and previous studies, and after reaching the list of soft skills, the model was prepared so that graduates develop soft skills to enhance the ways of accepting jobs in the labor market, and the model included topics related to soft skills and distributed the topics of the model to (10) sessions divided into two sessions per week and allocated each session a training hour, and took care during the design of the model in its initial form to include (introduction to the definition of the model and its objectives - procedural objectives - category The model also included the timetable for the application of the model includes (day - session number - main topic - sub-topics - time - procedural objectives for each session - training methods and teaching aids used - evaluation procedure).

Model Honesty Calculation:
The sincerity of the model was verified after presenting it to a group of arbitrators specialized in curricula and teaching to express an opinion on the appropriateness of the model and its objectives and scientific content, and the model was modified according to the opinions of the arbitrators and then became ready in its final form.

Experimental application of the model (exploratory experiment): After ensuring the sincerity of the content of the model by the arbitrators, the research team applied the model to an exploratory sample consisting of (30) graduates from Jazan University to identify the ease of use of the model, the clarity and accuracy of its content, and to discover any problems during the model.

Table 1: Shows the values of correlation coefficients between the total score for each dimension and the total degree of the dimensions of the first axis (soft skills that must be available to Jazan University graduates) (n = 300)

Dimensions Questionnaire	Whole Axis	The first dimension is the skill of communication and communication	The second dimension is the skill of time management	The third dimension is the skill of working within a team	The fourth dimension is the skill of planning	The fifth dimension is the skill of critical thinking	The sixth dimension is the skill of negotiation	The seventh dimension is the skill of crisis management	The eighth dimension is the skill of problem-solving	The ninth dimension is the skill of decision-making	The tenth Dimension Resilience Scale And adapting to variables
Correlation	1	.751**	.792**	.844**	.880**	.884**	.890**	.895**	.931**	.918**	.848**
Significance	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000

Table 2: Shows the values of correlation coefficients between the degree of each statement and the total score of the second axis (ways to accept jobs for female graduates of Jazan University) (n = 300)

Second Axis Phrases	Whole Axis	Statement 1	Statement 2	Statement 3	Statement 4	Statement 5	Statement 6	Statement 7	Statement 8	Statement 9	Statement 10
Correlation	1	.624**	.614**	.794**	.746**	.784**	.681**	.517**	.628**	.674**	.635**
Significance	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000

Application of the model on the experimental research sample:

The experimental sample, which consisted of (75) graduates from Jazan University, was selected from the lower spring for the responses of the graduates of the research sample to the research questionnaire, i.e. those who do not have soft skills by sending an electronic link to the pre-test of the experimental sample and answering it through the previous information they had and after the application of the model, another electronic link was sent to the post-test of the experimental sample to answer the test questions after the end of the application of the proposed model to them.

Time Period:

The duration of the model took 5 weeks via the application (Zoom), where the sessions were provided by two sessions per week from May to June 2023, and each session was allocated a training hour, and coordination was made with the graduates of the experimental research sample through the WhatsApp group.

Evaluation of the model through soft skills test:

A pre-evaluation of the experimental sample, that is, before the application of the model in order to determine the level of their information and experience about these skills and a post-evaluation of the experimental sample after the completion of the application of the model Sessions.

Objective of the test:

The aim of the test is to measure the soft skills in general, and each skill separately among Jazan University graduates in order to verify the effectiveness of the

Table 3: Shows the values of the stability coefficient for the dimensions of the first axis (soft skills that must be available to graduates of Jazan University) (n = 300)

Dimensions Questionnaire	Whole Axis	The first dimension is the skill of communication and communication	The second dimension is the skill of time management	The third dimension is the skill of working within a team	The fourth dimension is the skill of planning	The fifth dimension is the skill of critical thinking	The sixth dimension is the skill of negotiation	The seventh dimension is the skill of crisis management	The eighth dimension is the skill of problem solving	The ninth dimension is the skill of decision-making	The tenth dimension is the skill of flexibility and adaptation to variables
Alpha Cronbach	.962	.772	.773	.769	.763	.763	.765	.764	.762	.763	.770

Table 4: Shows the values of the stability coefficient for the second axis (ways to accept jobs for Jazan University graduates) (n = 300)

Second Axis Phrases	Whole Axis	Statement 1	Statement 2	Statement 3	Statement 4	Statement 5	Statement 6	Statement 7	Statement 8	Statement 9	Statement 10
Alpha Cronbach	.826	.756	.737	.723	.728	.724	.728	.744	.724	.734	.736

Table 5: Shows the values of the stability coefficient for the resolution as a whole and its axis (n = 300)

Questionnaire axis	Alpha Cronbach
The resolution as a whole	.803
The first axis (soft skills that must be available to graduates of Jazan University)	.962
The second axis (ways to accept jobs for Jazan University graduates)	.826

proposed soft skills development model.

Test content:
The test content matrix was built related to soft skills (communication skills, time management, teamwork, planning, negotiation, critical thinking, crisis management, problem solving, decision-making, flexibility and adaptation to variables), the test vocabulary was formulated using the pattern of multiple choice questions, where the question header was formulated in the form of life situations related to the field of soft skills The test questions were formulated in their initial form, and then they were presented to (10) specialists in the field of model and curriculum design with the aim of Arbitration of the soft skills test in terms of studying the extent to which each individual is related to the main skill set to measure it and the link of vocabulary to soft skills as a whole, And its suitability for the target group, and the observations of the arbitrators were made, and then the test was designed in its final form after making the amendments proposed by the arbitrators, then it was applied to the exploratory sample to measure the sincerity and stability of the test vocabulary, then it was applied to the experimental sample, then statistical analyzes were conducted to determine the effectiveness of the proposed model for the development of soft skills to enhance the ways of accepting jobs for Jazan University graduates.

Table 6: Shows the content of the proposed soft skills development model to enhance job acceptance methods for Jazan University graduates.

Arranging sessions	Session Topics	Number of sessions	Time
First Session	Acquaintance - Preparation for the model - Definition of the model (its components, objectives, importance) pre-test	1	60 minutes
Second Session	Introducing the skill of communication and communication	1	60 minutes
Third Session	Introducing the skill of time management	1	60 minutes
Fourth Session	Introducing the skill of working within a team	1	60 minutes
Fifth Session	Introducing the skill of planning	1	60 minutes
Sixth Session	Introducing the negotiation skill	1	60 minutes
Seventh Session	Introducing the skill of critical thinking	1	60 minutes
Eighth Session	Introducing the skill of problem solving and decision-making	1	60 minutes
Ninth Session	Introducing the skill of crisis management	1	60 minutes
Tenth Session	Introducing the skill of flexibility and adaptation to variables, concluding and thanking the training group for their commitment to the training model, post-test	1	60 minutes

2.3 Statistical processing:

After collecting and unpacking the data, statistical treatments were performed using the SPSS model to determine the arithmetic averages, standard deviation, frequencies, percentages and Pearson's correlation coefficient to measure the differences between the averages using the T Test, Paired-Samples and Wilcoxon test to detect whether there are statistically significant differences between the averages of the scores of the graduates of the research sample in both the pre- and post-test to apply the proposed model, and analysis of variance in one direction using the Anova test, calculation of relative weight and use of Cohen's equation To calculate the size of the impact of the proposed soft skills development model based on the pre- and post-application of the same group, in order to extract, discuss and interpret the results.

3 Results

3.1 Results analyzed and interpreted: First: Descriptive results:

Description of the basic research sample: The following is a comprehensive description of the basic research sample shown in the table.
Table (7) shows the following: Age: It is clear that the highest percentage of respondents was from (25 to less than 30) by 50% while the lowest percentage was from (20 to less than 25) by 16%, marital status: it is clear that

the highest percentage of respondents was married by 56% while the lowest percentage was widowed by 4%, academic average: It is clear that the highest percentage of respondents was excellent rate by 50%, while the lowest percentage was weak rate by 1%, academic specialization: It is clear that the highest percentage of respondents was scientific specialization by 48%, while the lowest percentage was administrative specialization by 20%, place of residence: It is clear that the highest percentage of respondents was the place of residence city by 61%, while the lowest percentage was the place of residence village by 39%.
Table 8 shows the following: Age: The highest proportion of sample members was (25 to less than 30) 47% while the lowest (20 to less than 25) was 19%; Social status: The highest proportion of sample members were married at 49% while the lowest was a widow at 3%; Academic rate: The highest proportion of sample members was found to be excellent at 62% while the lowest was good at 7%. Academic specialty: The highest proportion of sample members was an administrative specialty at 37% while the lowest proportion was a literary specialty at 27%. Place of residence: It is clear that the highest proportion of sample members was found to be more than a city-dwelling at 34%.

The following five-sided Likert statistical model was adopted in Table (9):
It is noted from Table (10) that the planning skill came in first place with an arithmetic average (23.81) with a standard deviation (4.11), which is an indication that the response trends were (large) and we note that the skill of time management came in last place with an arithmetic

Table 7: Shows the distribution of the members of the basic research sample according to the demographic characteristics (n = 300)

Statement	Categories Of the variable	Repetition	Percent	Statement	Categories Of the variable	Repetition	Percent
Age	From 20 to less than 25	48	16	Marital Status	I am single	92	31
	From 25 to less than 30	149	50		Married	168	56
	30 and more	103	34		Divorced	27	9
	Total	300	100%		Widow	13	4
Academic average	Excellent	150	50		Total	300	100%
	Very good	93	31	Academic Specialization	Administrative	59	20
	Good	38	12		literary	95	32
	Acceptable	17	6		scientific	146	48
	Weak	2	1		Total	300	100%
	Total	300	100%				
Place of residence	Village	116	39				
	City	184	61				
	Total	300	100%				

Table 8: Shows the distribution of the members of the experimental research sample according to the demographic characteristics (n = 75)

Statement	Categories Of the variable	Repetition	Percent	Statement	Categories Of the variable	Repetition	Percent
Age	From 20 to less than 25	14	19	Marital Status	I am single	33	44
	From 25 to less than 30	35	47		Married	37	49
	30 and more	26	34		Divorced	3	4
	Total	75	100%		Widow	2	3
Academic average	Excellent	47	62		Total	75	100%
	Very good	23	31	Academic Specialization	Administrative	28	37
	Good	5	7		literary	20	27
	Acceptable	0	0		scientific	27	36
	Weak	0	0		Total	75	100%
	Total	300	100%				
Place of residence	Village	32	43				
	city	43	57				
	Total	75	100%				

Table 9: five-sided Likert statistical model

Very few	Few	Medium	Large	Very large
6-10	11-15	16-20	21-25	26-30

Table 10: Shows the arithmetic averages and standard deviations of the dimensions of the axis (soft skills that must be available to female graduates of Jazan University), which are in descending order.

Number	Dimensions of the first axis	Mean	Standard deviation	Ranking	Level
4	Planning	23.8133	4.11277	1	Large
8	Problem solving	23.6733	3.96557	2	Large
1	Communication and communication skill	23.6400	3.58234	3	Large
7	Crisis Management	23.5367	3.87022	4	Large
6	Negotiating	23.4233	3.77336	5	Large
9	Decision	23.3500	3.91218	6	Large
3	Working in a team	23.2167	3.49912	7	Large
5	Critical thinking	22.9700	4.15451	8	Large
10	Flexibility and adaptation to variables	22.9267	3.33342	9	Large
2	Time management	22.4567	3.30118	10	Large
Overall tool		3.24826	23.3007	Large	

average (22.46) with a degree (large), so we note from the arithmetic averages and standard deviations that there is a limited difference between them.

The following five-sided Likert statistical model was adopted in Table (11):
It is noted from Table (12) that the first phrase enables the university degree to join the jobs came with a degree (very large) in first place with an arithmetic average (4.65) with a standard deviation (.601), which is an indication that the response trends were in a degree (very large) and we note that the eighth phrase I have certificates of experience in volunteer work in community service came in last place with an arithmetic average (3.61) with a degree (large), so we note from the arithmetic averages and standard deviations that there is a limited difference between them.

3.2 Second: Results in light of research hypotheses:

1. Results in light of the first hypothesis: which states **"soft skills that must be available to Jazan University graduates can be identified to enhance the means of job acceptance."**
   This hypothesis was answered by reviewing previous studies that were concerned with the development of soft skills, namely: Qwaider (2017)[26], Agha (2019)[31], Woodard (2018)[27], Batsh (2019)[8], Musa (2019)[17], Horbacauskien (2019)[28], Al-Zayan (2020)[32], Otaiba (2021)[6], Madkhali (2022)[29], Al-Nefaie (2023)[30], and accordingly a list of soft skills was built for graduates to help them get jobs and a job opportunity that suits their potential and abilities, and the list included ten main skills: Communication, time management, teamwork, planning, negotiation, critical thinking, crisis management, problem-solving, decision-making, flexibility and adaptation to variables, thus achieving the first hypothesis completely.

2. Results in light of the second hypothesis: which states that "there are no statistically significant differences between the graduates of the research sample in the soft skills that must be available to the graduates of Jazan University in its ten dimensions according to the variables (age, academic specialization, academic average, place of residence)".

To verify the validity of this hypothesis, a test (T.Test) was conducted to determine the significance of the differences between the responses of the research sample in the soft skills that must be available to the graduates of Jazan University in its ten dimensions according to the variable (place of residence), and analysis of variance (ANOVA) to determine the significance of the differences between the responses of the research sample in the soft

skills that must be available to graduates of Jazan University in its ten dimensions according to variables (age, academic specialization, academic average)
It is clear from the results of Table (13) that there are no statistically significant differences between the graduates of the research sample in the soft skills that must be available to the graduates of Jazan University in nine dimensions according to the variable (place of residence), while there are differences in the first dimension of communication skill in favor of the place of residence in the city.

Analysis of Anova variance to find the value of (F) to find out the significance of the differences between the responses of the research sample in the soft skills that must be available to graduates of Jazan University in its ten dimensions according to the variable (age).

It is clear from Table (14) that there are statistically significant differences at the level of significance (0.01) between the responses of the research sample in the soft skills that must be available to graduates of Jazan University in its ten dimensions according to the variable (age), and to identify the trend of significance of differences, the LSD test was applied for multiple comparisons and Table (15) illustrates this.

It is clear from the results of Table (15) that there are differences between the responses of the research sample in the soft skills that must be available to the graduates of Jazan University in its ten dimensions according to the variable (age) and the axis and as a whole between the graduates of the basic research sample whose ages ranged from 20 to less than 25 years and both graduates members of the sample whose ages ranged from 25 to less than 30, 30 or more in favor of graduates whose ages were from 25 to less than 30 at the level of significance (0.01).

Analysis of Anova variance to find the value of (F) to determine the significance of the differences between the responses of the research sample in the soft skills that must be available to graduates of Jazan University in its ten dimensions according to the variable (academic specialization).

It is clear from Table (16) that there are no statistically significant differences at the level of significance (0.05) between the responses of the research sample in the soft skills that must be available to graduates of Jazan University in its ten dimensions according to the variable (academic specialization).

Analysis of Anova variance to find the value of (F) to find out the significance of the differences between the responses of the research sample in the soft skills that must be available to graduates of Jazan University in its ten dimensions according to the variable (academic average).

It is clear from Table (17) that there are statistically significant differences at the level of significance (0.01) between the responses of the research sample in the soft skills that must be available to Jazan University graduates according to the variable (academic average) in the axis as a whole and in the first dimension Communication and

Table 11: five-sided Likert statistical model

Very few	Few	Medium	Large	Very large
1.00 – 1.80	1.81 – 2.6	2.61 – 3.40	3.41 – 4.20	4.20 – 5.00

Table 12: Shows the arithmetic averages and standard deviations of the phrases of the second axis (ways to accept jobs for female graduates of Jazan University), which are arranged in descending order

Number	Phrases of the second axis	Mean	Standard deviation	Ranking	Level
1	Phrase 1	4.65	.601	1	Very large
10	Phrase 10	4.54	.680	2	Very large
7	Phrase 7	4.53	.619	3	Very large
2	Phrase 2	4.49	.692	4	Very large
3	Phrase 3	4.49	.784	5	Very large
9	Phrase 9	4.42	.687	6	Very large
4	Phrase 4	4.35	.746	7	Very large
5	Phrase 5	4.27	.764	8	Very large
6	Phrase 6	4.01	.848	9	Very large
8	Phrase 8	3.61	1.320	10	large
Overall tool		4.3170	.49830		Very large

Table 13: Shows the direction of the significance of statistical differences between the responses of the research sample in the second axis Ways of accepting jobs according to the variable (academic average) n = (300)

Dimensions of the first axis	Place of residence	Mean	Standard deviation	Mean Difference	Sample	T test	Significance
The axis as a whole	City	234.1902	32.09126	3.06	184	.794	.428
	Village	231.1293	33.14672		116		
The first dimension: the skill of communication and communication	City	24.2446	3.37460	1.56	184	3.762	Significant at 0.000
	Village	22.6810	3.70569		116		
The second dimension: the skill of time management	City	22.6196	4.37636	0.42	184	1.077	.282
	Village	22.1983	3.73519		116		
The third dimension: the skill of working within a team	City	23.3641	3.47717	0.38	184	.919	.359
	Village	22.9828	3.53611		116		
The fourth dimension: planning skill	City	23.9348	4.13780	0.31	184	.644	.520
	Village	23.6207	4.08317		116		
The fifth Dimension: Negotiation	City	22.9130	4.31582	-.14730	184	-.299	.765
	Village	23.0603	3.90159		116		
The sixth dimension: the skill of critical thinking	City	23.4620	3.90161	0.099	184	.323	.760
	Village	23.3621	3.57624		116		
The seventh dimension: crisis management skill	City	23.6848	3.91837	0.38	184	.834	.405
	Village	23.3017	3.79753		116		
The eighth dimension: the skill of solving problems	City	23.6196	3.95423	-.13906	184	-.295	.768
	Village	23.7586	3.99918		116		
The ninth dimension: Decision-making skill	City	23.3043	3.89827	-.11807	184	-.254	.800
	Village	23.4224	3.95002		116		
The tenth dimension: The skill of flexibility and adaptation to changes	City	23.0435	3.25732	0.30	184	.764	.446
	Village	22.7414	3.45687		116		

Table 14: Shows the significance of the statistical differences between the responses of the research sample in the soft skills that must be available to the graduates of Jazan University in its ten dimensions according to the variable (age) $n = 300$

Dimensions of the first axis	Age	Sum of squares	Mean Square	Degrees of freedom	F Test	Significance
The axis as a whole	Between groups	26189.875	13094.938	2	13.444	Significant at 0.000
	Within Groups	289290.111	974.041	297		
	Total	315479.986667		299		
The first dimension: the skill of communication and communication	Between groups	102.485	51.243	2	4.075	Significant at 0.018
	Within Groups	3734.635	12.575	297		
	Total	3837.120		299		
The second dimension: the skill of time management	Between groups	189.453	94.726	2	9.167	Significant at 0.000
	Within Groups	3068.984	10.333	297		
	Total	3258.437		299		
The third dimension: the skill of working within a team	Between groups	346.144	173.072	2	15.507	Significant at 0.000
	Within Groups	3314.772	11.161	297		
	Total	3660.917		299		
The fourth dimension: planning skill	Between groups	171.524	85.762	2	5.213	Significant at 0.006
	Within Groups	4886.022	16.451	297		
	Total	5057.547		299		

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Dimension		Between groups	Within Groups	Total
The fifth Dimension: Negotiation	Sum	620.293	4540.437	5160.730
	Mean	310.147	15.288	
	df	2	297	299
	F	20.287		
	Sig.	Significant at 0.000		
The sixth dimension: the skill of critical thinking	Sum	271.105	3986.131	4257.237
	Mean	135.553	13.421	
	df	2	297	299
	F	10.100		
	Sig.	Significant at 0.000		
The seventh dimension: crisis management skill	Sum	177.074	4301.523	4478.597
	Mean	88.537	14.483	
	df	2	297	299
	F	6.113		
	Sig.	Significant at 0.003		
The eighth dimension: the skill of solving problems	Sum	342.030	4359.957	4701.987
	Mean	171.015	14.680	
	df	2	297	299
	F	11.650		
	Sig.	Significant at 0.000		

The ninth dimension: Decision-making skill	Between groups	383.555	191.777	2	13.585	Significant at 0.000
	Within Groups	4192.695	14.117	297		
	Total	4576.250		299		
The tenth dimension: The skill of flexibility and adaptation to changes	Between groups	264.335	132.168	2	12.836	Significant at 0.000
	Within Groups	3058.052	10.296	297		
	Total	3322.387		299		

Table 15: Shows the trend of significance of the statistical differences between the responses of the research sample in the soft skills that must be available to graduates of Jazan University in its ten dimensions according to the variable (age) n = (300)

The axis as a whole	Age	From 20 to less than 25		From 25 to less than 30		30 and more	
		Mean Difference (I-J)	Significance	Mean Difference (I-J)	Significance	Mean Difference (I-J)	Significance
	From 20 to less than 25			26.77615	0.000	18.70975	0.001
	From 25 to less than 30	26.77615	0.000			-8.06640	0.045

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The first dimension: the skill of communication and communication

Age		From 20 to less than 25	From 25 to less than 30	30 and more	30 and more
From 20 to less than 25	Mean Difference (I-J)		-1.58990	-1.60053	18.70975
	Significance		0.007	0.010	0.001
From 25 to less than 30	Mean Difference (I-J)	1.58990		-.01062	8.06640
	Significance	0.007		0.981	0.045
30 and more	Mean Difference (I-J)	1.60053	.01062		
	Significance	0.010	0.981		

The second dimension: the skill of time management

Age		From 20 to less than 25	From 25 to less than 30	30 and more
From 20 to less than 25	Mean Difference (I-J)		-2.28006	-1.62156
	Significance		0.000	0.004
From 25 to less than 30	Mean Difference (I-J)	2.28006		.65850
	Significance	0.000		0.111
30 and more	Mean Difference (I-J)	1.62156	-.65850	
	Significance	0.004	0.111	

The third dimension: the skill of working within a team

Age	From 20 to less than 25		From 25 to less than 30		30 and more	
	Mean Difference (I-J)	Significance	Mean Difference (I-J)	Significance	Mean Difference (I-J)	Significance
From 20 to less than 25			3.06795	0.000	2.57646	0.000
From 25 to less than 30	-3.06795	0.000			-.49150	0.252
30 and more	-2.57646	0.000	.49150	0.252		

The fourth dimension: planning skill

Age	From 20 to less than 25		From 25 to less than 30		30 and more	
	Mean Difference (I-J)	Significance	Mean Difference (I-J)	Significance	Mean Difference (I-J)	Significance
From 20 to less than 25			2.13870	0.002	1.33333	0.061
From 25 to less than 30	-2.13870	0.002			-.80537	0.122
30 and more	-1.33333	0.061	.80537	0.122		

communication skill, the fourth dimension planning skill, the sixth dimension critical thinking skill, the seventh dimension crisis management skill, the ninth dimension decision-making skill, the tenth dimension the skill of flexibility and adaptation to variables, there are no differences in the dimension while the second dimension is a skill Time management, the third dimension is the skill of working in a team, the fifth dimension is negotiation, the eighth dimension is problem-solving skill.

The fifth Dimension: Negotiation	Age	From 20 to less than 25		From 25 to less than 30		30 and more	
		Mean Difference (I-J)	Significance	Mean Difference (I-J)	Significance	Mean Difference (I-J)	Significance
	From 20 to less than 25			3.90548	0.000	1.96197	0.004
	From 25 to less than 30	-3.90548	0.000			-1.94351	0.000
	30 and more	-1.96197	0.004	1.94351	0.000		

The sixth dimension: Critical thinking skill	Age	From 20 to less than 25		From 25 to less than 30		30 and more	
		Mean Difference (I-J)	Significance	Mean Difference (I-J)	Significance	Mean Difference (I-J)	Significance
	From 20 to less than 25			2.72609*	0.000	1.92294*	0.003
	From 25 to less than 30	-2.72609*	0.000			-.80315	0.088
	30 and more	-1.92294*	0.003	.80315	0.088		

Through the above results, we conclude that the second hypothesis was partially achieved, as there are no statistically significant differences between the graduates of the research sample in the soft skills that must be available to graduates of Jazan University in nine dimensions depending on the variable (place of residence), while there are differences in the first dimension Communication skill in favor of the place of residence in the city, and there are statistically significant differences at the level of significance (0.01) between the responses of the research sample in the soft skills that must be available to Graduates of Jazan University in its

The seventh dimension: Crisis management skill	Age	From 20 to less than 25		From 25 to less than 30		30 and more	
		Mean Difference (I-J))	Significance	Mean Difference (I-J))	Significance	Mean Difference (I-J))	Significance
	From 20 to less than 25			2.14164*	0.001	1.22472	0.067
	From 25 to less than 30	-2.14164*	0.001			-.91692	0.061
	30 and more	-1.22472	0.067	.91692	0.061		
The eighth dimension: Problem solving skill	Age	From 20 to less than 25		From 25 to less than 30		30 and more	
		Mean Difference (I-J))	Significance	Mean Difference (I-J))	Significance	Mean Difference (I-J))	Significance
	From 20 to less than 25			3.00643*	0.000	1.82079*	0.007
	From 25 to less than 30	-3.00643*	0.000			-1.18564*	0.016
	30 and more	-1.82079*	0.007	1.18564*	0.016		

ten dimensions according to the variable (age) and in favor of graduates aged from 25 to less than 30 years, and there are no statistically significant differences at the level of significance (0.05) between the responses of the research sample according to the variable (academic specialization).

There are statistically significant differences at the level of significance (0.01) between the responses of the research sample according to the variable (academic average) in the axis as a whole and in the first dimension

The ninth dimension: Decision-making skill

Age	From 20 to less than 25		From 25 to less than 30		30 and more	
	Mean Difference (I-J)	Significance	Mean Difference (I-J)	Significance	Mean Difference (I-J)	Significance
From 20 to less than 25			3.24734*	0.000	2.35336*	0.000
From 25 to less than 30	-3.24734*	0.000			-.89399	0.064
30 and more	-2.35336*	0.000	.89399	0.064		

The tenth dimension: The skill of flexibility and adaptation to changes

Age	From 20 to less than 25		From 25 to less than 30		30 and more	
	Mean Difference (I-J)	Significance	Mean Difference (I-J)	Significance	Mean Difference (I-J)	Significance
From 20 to less than 25			2.67254*	0.000	2.29409*	0.000
From 25 to less than 30	-2.67254*	0.000			-.37845	0.358
30 and more	-2.29409*	0.000	.37845	0.358		

the skill of communication and communication, the fourth dimension the planning skill, the sixth dimension the critical thinking skill, the seventh dimension crisis management skill, the ninth dimension the decision-making skill, the tenth dimension the skill of flexibility and adaptation to variables, there are no differences in the dimension while the second dimension is the skill of time management, the third dimension is the skill of working within a team, the fifth dimension is negotiation, the eighth dimension is the skill of solving Problems.

Table 16: Shows the significance of the statistical differences between the responses of the research sample in the soft skills that must be available to the graduates of Jazan University in its ten dimensions according to the variable (academic specialization) n = (300)

Dimensions of the first axis	Academic Specialization	Sum of squares	Mean Square	Degrees of freedom	F Test	Significance
The axis as a whole	Between groups	937.738	468.869	2	0.443	0.643
	Within Groups	314542.249	1059.065	297		
	Total	315479.987		299		
The first dimension: the skill of communication and communication	Between groups	70.143	35.071	2	2.765	0.065
	Within Groups	3766.977	12.683	297		
	Total	3837.120		299		
The second dimension: the skill of time management	Between groups	63.098	31.549	2	2.932	
	Within Groups	3195.339	10.759	297		
	Total	3258.437		299		
The third dimension: the skill of working within a team	Between groups	39.312	19.656	2	1.612	0.201
	Within Groups	3621.604	12.194	297		
	Total	3660.917		299		
The fourth dimension: planning skill	Between groups	7.210	3.605	2	0.212	0.809
	Within Groups	5050.336	17.004	297		
	Total	5057.547		299		
The fifth Dimension: negotiation	Between groups	77.043	38.521	2	2.251	0.107
	Within Groups	5083.687	17.117	297		
	Total	5160.730		299		
The sixth dimension: the skill of critical thinking	Between groups	7.981	3.990	2	0.279	0.757
	Within Groups	4249.256	14.307	297		
	Total	4257.237		299		
The seventh dimension: crisis management skill	Between groups	.728	.364	2	0.024	0.976
	Within Groups	4477.869	15.077	297		
	Total	4478.597		299		
The eighth dimension: the skill of solving problems	Between groups	23.275	11.637	2	0.739	0.479
	Within Groups	4678.712	15.753	297		
	Total	4701.987		299		
The ninth dimension: decision-making skill	Between groups	37.888	18.944	2	1.240	0.291
	Within Groups	4538.362	15.281	297		
	Total	4576.250		299		
The tenth dimension: the skill of flexibility and adaptation to changes	Between groups	13.755	6.878	2	0.617	0.540
	Within Groups	3308.631	11.140	297		
	Total	3322.387		299		

3.3 Results in light of the third hypothesis: Which states that "there are no statistically significant differences between the graduates of the research sample in the ways of accepting jobs according to the variables (age, academic specialization, academic average, place of residence)"

To verify the validity of this hypothesis, a test was conducted: (T.Test) to determine the significance of the differences between the responses of the research sample in the axis of ways to accept jobs according to the variable (place of residence), the analysis of variance test (Anova) to find out the significance of the differences between the responses of the research sample in the axis of ways to accept jobs according to variables (age, academic specialization, academic average).

It is clear from the results of Table (18) that there are no statistically significant differences between the graduates of the research sample in the axis of ways of accepting jobs according to the variable (place of residence).
Analysis of Anova variance to find the value of (F) to determine the significance of the differences between the responses of the research sample in the axis of ways to accept jobs according to variables (age, academic specialization, academic average).

It is clear from Table (19) that there are no statistically significant differences at the level of significance (0.01) between the responses of the research sample in the second axis Ways to accept jobs according to the variable (age). Analysis of Anova variance to find the value of (F) to find out the significance of the differences between the responses of the research sample in the axis of ways of accepting jobs according to the variable (academic specialization).
It is clear from Table (20) that there are statistically significant differences at the level of significance (0.01) between the responses of the research sample in the second axis, ways of accepting jobs according to the variable (academic specialization) and identifying the trend of the significance of differences, the LSD test was applied for multiple comparisons and Table (21) shows that.

Table 17: Shows the significance of the statistical differences between the responses of the research sample in the soft skills that must be available to the graduates of Jazan University in its ten dimensions according to the variable (academic average) n = (300)

Dimensions of the first axis	Academic GPA		Sum of squares	Mean Square	Degrees of freedom	F Test	Significance
The axis as a whole	Between groups		11755.209	2938.802	4	2.854	Significant at 0.024
	Within Groups		303724.777	1029.576	295		
		Total	315479.987		299		
The first dimension: the skill of communication and communication	Between groups		573.197	143.299	4	12.952	Significant at 0.000
	Within Groups		3263.923	11.064	295		
		Total	3837.120		299		
The second dimension: the skill of time management	Between groups		68.191	17.048	4	1.576	0.181
	Within Groups		3190.245	10.814	295		
		Total	3258.437		299		
The third dimension: the skill of working within a team	Between groups		108.153	27.038	4	2.245	0.064
	Within Groups		3552.764	12.043	295		
		Total	3660.917		299		

Dimension		Total	Within Groups	Between groups
The fourth dimension: planning skill	Sum of squares	5057.547	4861.378	196.169
	Mean square		16.479	49.042
	df	299	295	4
	F	2.976		
	Sig.	Significant at 0.020		
The fifth Dimension: Negotiation	Sum of squares	5160.730	5029.110	131.620
	Mean square		17.048	32.905
	df	299	295	4
	F	1.930		
	Sig.	0.105		
The sixth dimension: the skill of critical thinking	Sum of squares	4257.237	4114.636	142.601
	Mean square		13.948	35.650
	df	299	295	4
	F	2.556		
	Sig.	Significant at 0.039		
The seventh dimension: Crisis management skill	Sum of squares	4478.597	4329.041	149.556
	Mean square		14.675	37.389
	df	299	295	4
	F	2.548		
	Sig.	Significant at 0.040		
The eighth dimension: the skill of solving problems	Sum of squares	4701.987	4594.482	107.505
	Mean square		15.575	26.876
	df	299	295	4
	F	1.726		
	Sig.	0.144		
The ninth dimension: Decision-making skill	Sum of squares	4576.250	4421.374	154.876
	Mean square		14.988	38.719
	df	299	295	4
	F	2.583		
	Sig.	Significant at 0.037		
The tenth dimension: The skill of flexibility and adaptation to changes	Sum of squares	3322.387	3205.165	117.222
	Mean square		10.865	29.305
	df	299	295	4
	F	2.697		
	Sig.	Significant at 0.031		

Table 18: Shows the significance of the statistical differences between the responses of the research sample in the second axis Ways to accept jobs according to the variable (place of residence) n = (300)

The second axis	Place of residence	Mean	Standard deviation	Mean Difference	Sample	T test	Significance
The axis as a whole	City	43.5326	4.77803	.93778	184	1.591	.113
	Village	42.5948	5.26180		116		

Table 19: Shows the significance of the statistical differences between the responses of the research sample in the second axis Ways to accept jobs according to the variable (age) n = (300)

The second axis	Age	Sum of squares	Mean Square	Degrees of freedom	F Test	Significance
The axis as a whole	Between groups	35.475	17.737	2	.713	0.491
	Within Groups	7388.855	24.878	297		
	Total	7424.330		299		

Table 20: Shows the significance of the statistical differences between the responses of the research sample in the second axis Ways to accept jobs according to the variable (academic specialization) n = (300)

The second axis	Academic Specialization	Sum of squares	Mean Square	Degrees of freedom	F Test	Significance
The axis as a whole	Between groups	244.299	122.150	2	5.053	Significant at 0.007
	Within Groups	7180.031	24.175	297		
	Total	7424.330		299		

Table 21: Shows the direction of the significance of the statistical differences between the responses of the research sample in the second axis Ways to accept jobs according to the variable (academic specialization) n = (300)

	Academic Specialization	Administrative		Literary		Scientific	
		Mean Square	Significance	Mean Square	Significance	Mean Square	Significance
The axis as a whole	Administrative			-1.02908	0.208	-2.29173[*]	0.003
	Literary	1.02908	0.208			-1.26265	0.052
	Scientific	2.29173	0.003	1.26265	0.052		

It is clear from the results of Table (21) that there are differences between the responses of the research sample in the second axis, ways of accepting jobs according to the variable (academic specialization) among the graduates of the basic research sample whose academic specialization is scientific, literary, administrative, in favor of graduates whose academic specialization was scientific at the level of significance (0.01).

Analysis of Anova variance to find the value of (F) to find out the significance of the differences between the responses of the research sample in the axis of ways to accept jobs according to the variable (academic average).

It is clear from Table (22) that there are statistically significant differences at the level of significance (0.01) between the responses of the research sample in the second axis, ways of accepting jobs according to the variable (academic average) and identifying the trend of significance of differences, the LSD test was applied for multiple comparisons and Table (23) shows that.

It is clear from the results of Table (23) that there are differences between the responses of the research sample in the second axis Ways of accepting jobs according to the variable (academic average) among the graduates of the basic research sample who obtained an excellent academic average, very good, good, acceptable, weak in favor of the graduates who obtained an excellent and very good academic average at the level of significance (0.01).

Through the above results, we conclude that the third hypothesis was partially achieved, as there are no statistically significant differences between the graduates of the research sample in the axis of ways to accept jobs according to the variable (place of residence), and there are no statistically significant differences at the level of

significance (0.01) between the responses of the research sample in the second axis Ways to accept jobs according to the variable (age), and there are statistically significant differences at the level of significance (0.01) between the responses of the research sample in the second axis Ways to accept jobs According to the variable (academic specialization) in favor of graduates whose academic specialization was scientific, and there are statistically significant differences at the level of significance (0.01) between the responses of the research sample in the second axis Ways of accepting jobs according to the variable (academic average) in favor of graduates who had obtained an excellent and very good academic average.

3.4 Results in light of the fourth hypothesis: Which states that, "There are statistically significant differences at the level of significance (a is less than or equal to 0.05) between the scores of the study sample members in the pre-and post-test in awareness of soft skills to enhance the ways of accepting jobs for graduates of Jazan University."

To prove the validity of the fourth hypothesis, there are statistically significant differences at the level of significance (a is less than or equal to 0.05) between the scores of the study sample members in the pre-and post-test in the development of soft skills to enhance the means of accepting jobs for graduates of Jazan University, the following steps have been followed: The moderation of the distribution of data for both the total score of the pre-and post-soft skills test was verified and

Table 22: Shows the significance of the statistical differences between the responses of the research sample in the second axis Ways to accept jobs according to the variable (academic average) n = (300)

The second axis	Academic Specialization	Sum of squares	Mean Square	Degrees of freedom	F Test	Significance
The axis as a whole	Between groups	565.430	141.357	4	6.080	Significant at 0.000
	Within Groups	6858.900	23.251	295		
	Total	7424.330		299		

Table 23: Shows the direction of the significance of statistical differences between the responses of the research sample in the second axis Ways of accepting jobs according to the variable (academic average) n = (300)

	Academic Specialization	Weak		Acceptable		Good		Very good		Excellent	
		Mean Difference (I-J)	Significance	Mean Difference (I-J)	Significance	Mean Difference (I-J)	Significance	Mean Difference (I-J)	Significance	Mean Difference (I-J)	Significance
The axis as a whole	Weak			7.0588	0.051	2.0526	0.558	2.0537	0.552	1.0667	0.756
	Acceptable	-7.058	0.051			-5.0061*	0.000	-5.0050*	0.000	-5.992*	0.000
	Good	-2.0526	0.558	5.006*	0.000			.00113	0.999	-.98593	0.261
	Very good	-2.0537	0.525	5.005*	0.000	-.00113	0.999			-.9871	0.122
	Excellent	-1.0666	0.765	5.992*	0.000	.98596	.261	.98710	.122		

in Table (24) the results of this are illustrated.

It is clear from the previous table No. (24) that the values of moderation for the soft skills development test before and after are smaller than the level of significance (0.05), and this means that it is statistically significant, which confirms the lack of moderation of the normal distribution, which allowed the use of the Wilcoxon Test, which is an alternative non-parametric test to the (T-Test) for two related samples to identify the statistical significance of the differences between the average scores of the study sample in both the pre-and post-application of the soft skills development model.

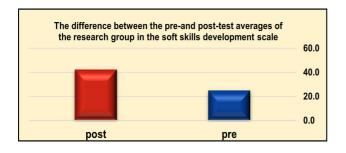To verify the validity of the research hypothesis, the significance of the differences between the average scores of the study sample was calculated in both the pre-and post-application of the soft skills development model using the Wilcoxon Test.

From the previous table No. (25), we find a value = 0.000 sig. (P. Value), which is smaller than the significance level (0.05), and this means that there are significant

Table 24: Results of the Moderation Test for Pre- and Post-Soft Skills Test

Test	Kolmogorov-Smirnov			Shapiro-Wilk		
	Statistic	df	Sig.	Statistic	df	Sig.
Pre	0.159	75	0.000	0.883	75	0.000
Post	0.254	75	0.000	0.772	75	0.000

Table 25: Shows the results of the Wilcoxon Test for the significance test of the differences between the average scores of the study sample in both the pre- and post-application of the soft skills development model

Mean Rank		Test statistic (Z)	Sig. (P.Value)
Signals (+)	Signals (-)		
40.47	9.58	-7.227-b	Significant at 0.000

differences between the averages of the scores of the study sample in both the pre-and post-application of the soft skills development model.

Fig. 2: Differences between the averages of the pre-and post-measurement scores of the research group in the soft skills development scale

Research group in the soft skills development scale
Through the above results, we conclude that the fourth hypothesis was fully achieved, as there are statistically significant differences at the level of significance (a is less or equal to 0.05) between the scores of the study sample members in the pre-and post-test in the proposed model for the development of soft skills to enhance the means of job acceptance for female graduates of Jazan University.

3.5 Results in light of the fifth hypothesis: Which states that,"There is an impact of the implementation of the proposed soft skills development model to enhance the means of job acceptance for female graduates of Jazan University."

To prove the validity of the fifth hypothesis, Cohen's D test was used, and the following equation was applied:

$$d = \frac{\mu 1 - \mu 2}{\alpha} \qquad (1)$$

Where $\mu 1$= the value of the mean of the pre-test, $\mu 2$= the value of the mean of the post-test, α= the standard deviation common to the two tests.

$$d = \frac{42.27 - 24.88}{10.75} \qquad (2)$$

$$d = \frac{17.39}{10.75} = 1.6 \qquad (3)$$

Table 26: Shows the results of Cohen's equation.

Pre-test Mean	Post-Test Mean	Standard deviation	Cohen's equation "D"	The amount of impact size
24.88	42.27	10.75	1.6	Very Large

It is clear from the results of the previous table that the value of the Cohen coefficient is equal to (1.6), which is a value greater than 0.80, which indicates that there is a large impact of the proposed soft skills development model to enhance job acceptance for female graduates of Jazan University."

The size of the impact is determined by the following scale: (Ahmed Abdel Badie , 22, 2022)
d = 0.2, Small Effect
d = 0.5, Medium Effect
d = 0.8, Large Effect

In light of the above results, the validity of the fifth hypothesis has been achieved in full, as there is a significant impact of the application of the proposed soft skills development model to enhance the ways of accepting jobs for Jazan University graduates, and this result agreed with the study of (Bassam Abu Hashish, 2022)[33], (Maram Al-Nefaie, 2023)[30], which indicates that there is a very large impact of the training model based on enhancing soft skills appropriate to the labor market among university graduates.

4 Discussions:

1. According to what has been seen from previous studies, a list of soft skills was built for graduates to

help them get job opportunities, and the list included ten main skills: communication, time management, teamwork, negotiation and planning, critical thinking, crisis management, problem-solving, decision-making, flexibility and adaptation to variables, thus achieving the first hypothesis completely.

2. Through the above results, it is clear that the second hypothesis was partially achieved, as there are no statistically significant differences between the graduates of the research sample in the soft skills that must be available to graduates of Jazan University in nine dimensions according to the variable (place of residence), while there are differences in the first dimension of communication skill in favor of the place of residence in the city, and there are statistically significant differences at the level of significance (0.01) between the responses of the research sample according to the variable (age) and in favor of graduates that Aged from 25 to less than 30 years, there are no statistically significant differences at the level of significance (0.05) between the responses of the research sample according to the variable (academic specialization), there are statistically significant differences at the level of significance (0.01) between the responses of the research sample according to the variable (academic average) in the axis as a whole and in the first dimension Communication and communication skill, the fourth dimension planning skill, the sixth dimension critical thinking skill, the seventh dimension crisis management skill, the ninth dimension decision-making skill, the tenth dimension the skill of flexibility and adaptation to variables, there are no differences in the dimension while the second dimension is a time management skill, the third dimension is a skill Working in a team, the fifth dimension is negotiation, the eighth dimension is problem-solving skill.

3. Through the above results, it is clear that the third hypothesis was partially achieved, as there are no statistically significant differences between the graduates of the research sample in the axis of ways to accept jobs according to the variable (place of residence), and there are no statistically significant differences at the level of significance (0.01) between the responses of the research sample in the second axis according to the variable (age), and there are statistically significant differences at the level of significance (0.01) between the responses of the research sample in the second axis according to the variable (academic specialization) In favor of graduates whose academic specialization was scientific, and there are statistically significant differences at the level of significance (0.01) between the responses of the research sample in the second

axis according to the variable (academic average) in favor of graduates who had an excellent and very good academic average.

4. Through the above results, it was found that the fourth hypothesis was fully achieved, as there are statistically significant differences at the level of significance (a is less than or equal to 0.05) between the scores of the study sample members in the pre-and post-test in the proposed model for the development of soft skills to enhance the ways of accepting jobs for graduates of Jazan University.

5. In light of the above results, it is clear that the validity of the fifth hypothesis has been achieved in full, as there is a significant impact of the application of the proposed soft skills development model to enhance the means of accepting jobs for female graduates of Jazan University.

5 Conclusions

In the present study, a proposed model for the development of soft skills among students was presented at the University to emphasize the importance of soft skills among students, as soft skills are one of the basic skills that students need to succeed in university studies, professional and personal life, and also are the basic skills that employers are looking for in graduates, where students can acquire many abilities and personal qualities that help the individual to communicate effectively with others, work with them cooperatively, crisis management and problem-solving, critical thinking, decision-making, planning, and time management, and achieve their goals, and the university must play an active role in the development of soft skills at, by providing training models, workshops, and study plans that focus on these skills, students are motivated to participate in student activities and volunteer in the community.

6 Recommendations

1. Using various educational strategies to develop soft skills for students at the University.
2. Providing the Arab library with research, studies, and books that are concerned with soft skills.
3. Include soft skills training in the study plan of students at the university.

Propositions:

1. Conduct further studies on soft skills and challenges in the labor market.
2. Conduct further studies on soft skills and AI challenges.

3.Conducting further studies on the design of training models to develop the rest of the soft skills among students and graduates to meet the requirements of the labor market.

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