Presenting a DACUM Model Based on the Triple-Strength Empowerment Approach to Women in Internal Auditing

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ABSTRACT

As one of the dominant features in developing countries, gender inequality has driven individual development and the promotion of skills, behavioral, and social competences largely based on the male gender. The audit profession is considered one of the jobs where gender inequality exists, especially in developing countries. This has made educational programs more inclined towards enhancing masculine abilities, followed by less well-regarded feminine functions in the field. This study aims to present a Dacum model based on the triple-strength empowerment approach of women working in the field of internal auditing in companies operating across the capital market. This is a goal-oriented, descriptive-applied developmental research, and a combination of data types. In the qualitative section, three-dimensional empowerment indicators of women working in the field of the internal auditing were identified based on the Dacum model approach participated by 15 research experts, using cross-sectional and Delphi analyses. The research period was in the period of one year from 2018-2019. A comprehensive interpretive-structural analysis was performed with the participation of 20 women as internal auditors of companies listed on the Tehran Stock Exchange. The purpose of this analysis was to prioritize the spectrum of the most influential indices of empowerment of female auditors in educational planning to the least effective ones in the form of the research model and to examine the relationships between them based on matrix comparisons. According to the results, 17 indices reached theoretical adequacy during the two rounds of Delphi analysis out of the initial 19 indices in the cross-mix analysis. Furthermore, the results of the interpretive/structural analysis indicated that educational planning was selected to balance the other roles of women as internal auditors, and the most influential Dacum indicator was to enhance the capabilities of women in internal auditing in listed companies in Tehran Stock Exchange.

Keywords:
Female Internal auditors, Analysis of Dacum Approach, Triple-Strength Empowerment Approach.

1. Introduction

Nowadays, organizations operate under totally different and changing conditions. New technologies and new developments in the organizational community have made it possible for corporate executives to accurately identify training needs to gain the benefits and advancement of the organization and to empower more employees without any gender discrimination (Eulerich et al., 2019). Under these conditions, the educational approaches associated with it also vary, depending on the nature and content of each profession and the set of tasks/responsibilities defined for it (Nouri et al., 2019). As an example of these types of jobs, the internal auditing (IA) profession should operate within a structured framework governed by management despite the commitment to behavioral and functional independence (Chiarini et al, 2020). Having been inaccurately established, this defective structure can lead to a deeper expectations gap (Lyer et al., 2018). This issue becomes more widespread when the IA profession is affected by gender discrimination, leading to the development and disruption of educational programs. According to statistics released by the Institute for Research and Planning in Higher Education of Iran[1], 230135 graduates in accounting in Iran in 1996-2014, with 110770 (approx. 49%) of them women. On the other hand, in the auditing profession, according to data provided by the Bureau of Auditing and Financial Reporting at the end of 2014, only 1052 (approx. 25%) of the auditors are female, out of the 4300 auditors employed in trusted audits. Tehran Stock Exchange Organization. Due to the limited number of auditors employed in companies operating across the capital market, as required by promulgation No. 107474 approved on April 28, 2012, by the Securities and Exchange Commission to comply with the requirements of internal control guidelines, the number of internal auditing committee charters and internal auditing activity is lower. Internal auditing Practice (Mehrani et al., 2016). Given the above, it can be said that women's rights (as part of the audit profession's cycle) have been undermined and they have received little attention. On the other hand, the lack of coherent training programs has led to a lack of attention to the development of professional, social, and individual skills in this field despite the presence of empowered female auditors, followed by their modest effective presence as freelancers (Ardakani,

2014). The Dacum model is one of the strategic approaches in educational need assessment, considered in this study as a basis for the theoretical/practical development of female internal auditors employed in companies operating across the capital market. In assessing educational needs, its main advantage lies in defining jobs based on professional, individual, and social characteristics as well as accurately identifying current events in a profession (Mazloumian, 2019). Thus, it leads to the examination of these features in terms of value-based metrics and the formulation of the best planning needed to enhance the training of target operators through status quo analysis and optimal status in the training characteristics of each profession (Jacobs, 2019). Therefore, citing Articles 3, 20, and 21 of the Constitution on the Guaranteed Rights of Women in High-Level Jobs and the IA professionals Bills and Standards Adopted by the Iranian Association of Internal auditors (2017) to Observe the Code of Professional and Practical Conduct for Auditors Internally, this research seeks to present a model based on a three-dimensional approach. Thus, it can expand the training needs of women as internal auditors in companies operating across the capital market under the Dacum model. Under the aforementioned laws of the Iranian Constitution, relevant by-laws in internal auditing, and reported inequalities in research such as Whiting & Wright (2001), Ragins & CornWell (2001), Almer et al. (2012), Hardies et al. (2013), It can be said that no empirical research has been conducted on the Dacum model in the IA profession regarding women's rights compliance. This research could play a part in the development of theoretical foundations in this field, the one that has received little attention despite its importance due to the presence of women.

2. Literature Review
2.1. Dacum Model

Dacum is derived from the term "Development A Curriculum". Indeed, Dacum analysis is the paradigm of task analysis, the process of dissecting a job to its constituent tasks, discovering the relationships between tasks, and the knowledge required of the skills necessary to perform those tasks in the profession (Hey Eun & Choong, 2018). The history of using the Dacum model goes back half a century ago, with its model and idea going back to the 1960s, first

developed in Canada and then by Norton et al. (1985). Since then, the Dacum method has been extensively used in the United States, Canada, and several other countries. Dacum is considered as one of the best tools for analyzing jobs that contain specialized and professional features. This approach requires organizations to contribute to the provision and use of precise and detailed information on employee roles and responsibilities, processes, systems, tasks and assignments, and professional analysis. It is also the best available method for gathering planning information to enhance skills (Deonna, 2002). This template is an approach that identifies the duties and tasks associated with a job, as well as the activities and actions that lie within them. It also focuses on duties and tasks to identify educational needs (Heo, 2010). Therefore, Dacum has now become the most efficient and high-quality process of analysis thanks to the benefits such as 'group interaction', 'brain use', 'group synergy', 'group agreement', 'future orientation', and 'support'. Employee/Learner ',' Comprehensive Outputs', 'Superior Quality', and 'Low Cost' (Rahati & Mansourzadeh, 2018). According to Dixon & Stricklin (2014), the benefits of Dacum analysis in measuring job needs include the following three criteria:
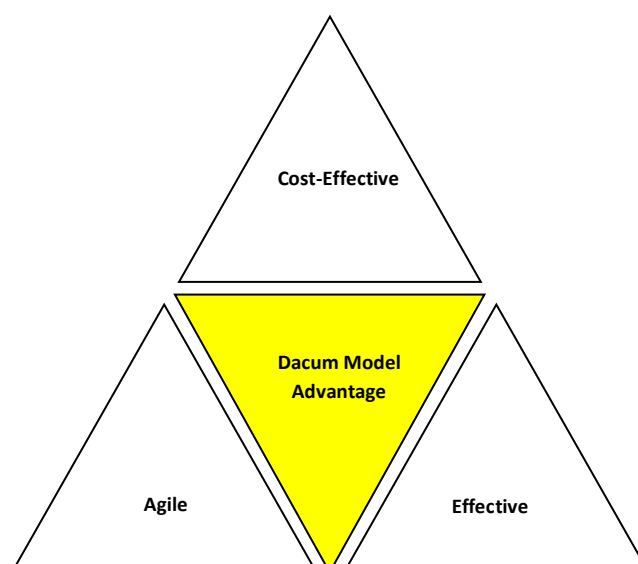

Figure 1: Dacum Model Advantage (Dixon & Stricklin, 2014)

Dixon & Stricklin (2014) argue that Dacum is superior to other "job analysis" models such as PS, scenario writing, routing technique, Delphi, etc. in terms of effectiveness, speed of operation, and low cost. The most important feature leading to a preferred Dacum approach - as an approach - may be its educational need assessment. Most training needs assessment techniques and methods get stuck in the process of identifying and prioritizing training needs of HR and stopping. However, the implementation of Dacum in any profession or job leads to the identification of duties and tasks as well as the essential competencies required to perform the professional responsibilities of the staff on which the training modules are also implemented. Due to this feature, Dacum has been widely accepted by many analysts in the field of HR strategies and professional behavior. Accordingly, business-based strategies and their consequences are constantly being revised and revised. Soon et al. (2008) propose three presumptions for this approach:
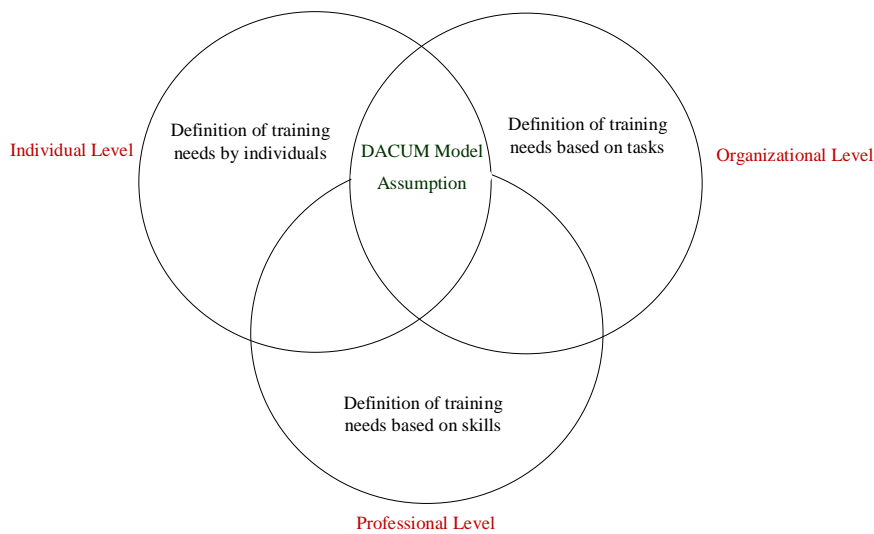
Figure 2: Dacum Model Presumptions (Soon et al., 2008)

Based on this presumption, it is raised at three levels, namely individual, organizational, and professional, as specified. At the individual level, individuals must define educational features relevant to their professional nature by assessing their competencies, expertise, or expertise to identify educational needs. At the organizational level, structures are based on and periodic evaluations are conducted based on an analysis of organizational needs for the educational needs assessment. Finally, at the professional level, educational needs are described based on knowledge, skills, and learning in each profession by HR strategists. At the individual level, educational needs are based on the characteristics of fit between the individual and the components such as the personality of the organization, profession, or business culture associated with it. At the organizational level, however, they depend on the content aspects of the organization such as structure, technology, culture, and environment.

2.2. Approaches to the Effectiveness of Women in internal auditing

Internal auditing is a concept based on the principle of "Transparency and Development of Financial Operations" to enhance the level of decision-makers' interest. As defined by the Association of Internal auditors, internal auditing acts as a tool to advance transparency-creating goals at the capital market level (Moshtaridoost and Dastgir, 2019). Nevertheless, professionally, the "internal auditor" is defined as an individual who is independent of the structural frameworks of the company that acts as a tool for the effective development of internal auditing functions. Accordingly, Li et al. (2018) define "Internal auditor" as one of the corporate financial/accounting practitioners who has access to all financial/non-financial documents associated with senior executives of the organization. Hence, it helps to increase the level of access to strategic strategies as well as the level of transparency of the company. It is worth noting that the mere presence of "internal auditing" in organizations cannot guarantee that all organizational and managerial goals will be met. Instead, an "internal auditing" will be effective and efficient, taking advantage of the more capable individuals in this position, while also providing useful services to individuals within the organization in particular and individuals outside the organization in general (Betti & Sarens, 2020). Thus, it will result in the increased dynamics of financial decision making by investors and shareholders (Jaekson & Pitman, 2006). Accordingly, internal auditing can be considered as an effective factor in controlling finances and preventing deviations. In line with the requirements of supervisory organizations and companies, companies are required to prevent

financial problems and gross errors and losses. Hence, they can safeguard shareholder rights based on a series of internal processes based on internal control mechanisms and a series of external processes based on the oversight of the relevant institutions and organizations. Nonetheless, according to research conducted by Mehrani et al. (2016) and Imani Barandagh et al. (2017), the existence of "gender discrimination" is recognized as one of the limiting factors in internal auditing, with its roots in domestic cultural beliefs and characteristics. The results of research by Abbott et al. (2012) and Schubert (2006) suggest that the specialized skills of women in professional careers such as internal audits are far more effective than those of men. Because women communicate with others more effectively, they are expected to perform better than men in solving group problems, performing tasks, and deciding on controversial issues (Dallas, 2002; Robinson & Dechant, 1997; Hardies et al., 2015). Stewart & Munro (2007) argue that the presence of women on audit committees leads to improved communication skills and, consequently, better preparation for audit committee meetings. Along the way, Chen et al. (2016) found that more vital and sensitive issues were discussed in a gender diversity board (consisting of both sexes) compared to a board of directors composed solely of men. According to Ittonen et al. (2010), the presence of women in internal auditing can help to better understand potential biases in structuring strategy and risk assessment, leading to increased transparency. Moreover, conservatism and risk aversion, as an inherent characteristic of women, can help to ensure the accuracy of the financial reporting process. Given the above, two approaches to women's effectiveness in internal auditing can be considered. The first approach defines women's effectiveness in internal auditing according to individual characteristics and the appropriateness of auditing developed by global standards, taking into account the characteristics of internal auditing. In the second approach, the effectiveness of female auditors has not considered a measurable fact but is determined by the mental assessments assigned to this concept by management. In other words, the success of female internal auditors can be measured only based on conflicting expectations of stakeholders (Masheyekhi & Mehrani, 2016). Implementing the second approach requires designing a questionnaire to extract

managerial feedback for each of the auditors' activities. Women in an organization. The effectiveness of female internal auditors is considered as a criterion for measuring performance in the field of internal auditing activity, defined to meet the goals and objectives of audit activities, under the highest quality characteristics and standards. Efficiency and effectiveness can be measured both quantitatively and qualitatively (Alzeban & Gwilliam, 2014). Alzeban & Gwilliam (2014) identified factors such as the competence and capability of women in the internal auditing unit, the evaluation and improvement of risk management by women, and the size of the internal auditing unit based on the number of women. This section will briefly describe the concepts related to each of these factors.

Figure 3: Effectiveness of women as internal auditors

- ▪ **Women's Competence and Capability in the Internal auditing Unit:** Standard-setters always emphasize the importance of having an internal auditor with the knowledge, skills, and competence to take on audit tasks and responsibilities (Al-Twaijry et al., 2004). As skilled auditors, women can conduct higher quality audits, thanks to their greater ability to identify specific organizational problems (Okhravi Joughan et al., 2018). Following a study on the importance of internal auditing in the Malaysian public sector, Ahmad et al. (2009) found that failure to employ competent employees in the field of internal

auditing and gender conflict had a negative impact on women's effectiveness in internal auditing.

- **The size of the audit unit based on the number of women:** Ahmad et al. (2009) stated that the small number of female internal auditors is a major obstacle to the success of the audit. According to them, strong management support allows internal auditing units to be provided with sufficient staff and resources, and employees to be able to perform their responsibilities successfully.

- **Assessing and Improving Risk Management by Women:** Assessing and improving risk management are considered to be among the factors that facilitate women's effectiveness as internal auditors, leading to a riskier and more controlled performance risk management company in the capital market. In this regard, Al-Shetwi et al. (2011) noted that women's internal auditing consulting services are considered a competitive advantage, thanks to their risk-averse characteristics. This can lead to an appropriate assessment and management of the improved corporate risk if there are independent pillars and internal auditors are effectively monitored by the audit committee.

2.3. The Triple-Strength Empowerment Approach of Internal auditors

Training is the process by which a person acquires the skills needed to perform an action, task, or job, leading to the skills developed in him or her. It is a learning-based experience designed to make several relatively lasting changes in an individual and enhance individual abilities (Monzavi Bozorgi & Habibian, 2019). In other words, Training can enhance changes in skills, knowledge, attitudes in the personal sphere, and interactions, negotiation, and so on in the social sphere. Nonetheless, the degree of training can vary greatly depending on the nature and professional status of the job. For example, the IA profession has different educational characteristics thanks to its characteristics (Safarzadeh et al., 2018). Inspired by Lovegrove & Thomas (2013), the Parker & Johnson (2017) leadership inspiration section, they developed the levels of all three internal auditor capabilities. According to Parker & Johnson (2017), the IA profession is based on oversight functions. In developing their three-pronged approach, they noted

that the purpose of internal auditing, as one of the mechanisms of corporate governance, is to gain and maintain investors' confidence in the fairness of the information symmetry and market/information available to them, as well as their professional, social, and personal capabilities. Needed to develop your responsibilities. Based on this approach, three levels of competence of internal auditors are:
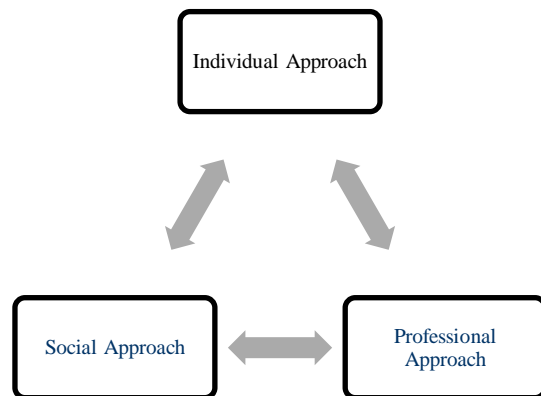

Figure 4: Triple-Strength Empowerment approach of internal auditors

Baatwah & Al-Qadasi (2019) define the triple-strength empowerment approach of internal auditors as a distinction beyond functional competencies, as an approach to motivating individual identity, which encourages the individual to pursue issues beyond job responsibilities. Whether in terms of mental maturity or skill maturity. On the other hand, they define empowerment in internal auditing as a social and standard concept to strengthen social trust-like functions. Auditors who use the triple-strength empowerment approach find ways to pursue overlapping and potentially conflicting career goals. In other words, they seek to motivate themselves individually and materially to achieve material progress, in the first place; they strive to achieve a higher position of their professional responsibilities, such as audit partner, in the second; and to raise the level of public accountability. Stakeholders and society are, after all, (Parker & Johnson, 2017).

Given the theoretical underpinnings provided, this study seeks to answer the following questions:

- **Qualitative Section Question:** What are the characteristics of the triple-strength empowerment approach of women working in the field of internal

auditing to create the Dacum model?

- **Quantitative Section Question:** What are the most influential indicators of the triple-strength empowerment approach of women working in the field of internal auditing in the form of the Dacum model?

3. Methodology

This research is categorized according to the result, purpose, and type of data in the methodology. It is a developmental study in terms of results because the concepts associated with Dacum analysis do not have a coherent framework for improving women's empowerment in the IA profession in the theoretical accounting field. Since this research seeks to expand the theoretical basis of this concept in auditing, it is considered as a developmental study from this perspective. It is also a descriptive study to describe the purpose of the internal auditing in terms of purpose. Finally, it is an inductive-deductive study of the logic of data collection. This is because the qualitative part of this research first explores the theoretical foundations of triple-strength empowerment approaches in Dacum analysis using an inductive approach, followed by explaining the components and indicators identified in the target population, ie female internal auditors of listed companies. Securities, using an inductive approach. The qualitative part of this research, as combined research, uses Meta-synthesis, including a series of steps to determine the components and indicators, with the process steps Sandelowski and Barroso (2008) as the most important of these steps. It ranges from "recognizing the root cause of the problem in the form of research questions" to "presenting a specific model based on identifying indicators from the results of past research" through the participation of panel members. This research uses a three-dimensional approach to the audit profession. The qualitative part of this research seeks to explore the components of each of the three dimensions using meta-synthesis and to determine the theoretical adequacy of the identified components using Delphi analysis. On the other hand, a small part of this research seeks to determine the most influential components of each dimension using a comprehensive interpretive and structural analysis. In other words, the goal is to analyze the regression of indicators between professionals using Delphi analysis to determine the theoretical adequacy according to two criteria, namely

the mean and contingency coefficient. Finally, the section explains a little bit about the identified layers in the form of a pattern of influence and effectiveness prioritization using comprehensive interpretive-structural analysis.

3.1. Statistical Population and Sampling Method

The statistical population is comprised of two parts, i.e., qualitative and quantitative. In the qualitative section, the target population is comprised of research on the subject matter and 15 accounting and financial management specialists across the university. They are involved in the analysis and recognition of content propositions based on a Meta-synthesis, critical assessment, and Delphi analysis. The "homogeneous qualitative sampling" method has been used by panel members to select these individuals. In this sampling technique, the researcher selects his/her samples to gain in-depth, centralized, and detailed knowledge from among those who have experienced this phenomenon and can provide him/her with a wealth of information (Sadeghi Fassaei and Naseri Rad, 2012). However, in the quantitative section, the target population is comprised of 25 audit partners. This statistical population is acceptable due to the requirements of comprehensive structural-interpretive analysis because they participate in the study to explain the results of the qualitative section in the companies listed on the Tehran Stock Exchange (TSE). The comprehensive interpretive-structuralist approach is an analysis based on the analysis of complex systems at specific levels. It should be done by participants founded on specific criteria such as experience or specialized knowledge. Here, the cross-matrix questionnaires participated by 15-30 individuals are used to avoid a multitude of ambiguous responses. Researchers such as Singh & Kant (2011), Malone (2014), Ramesh et al. (2008), and Attri et al. (2013) have predicted the optimal sample size selected within the range of 15-25 individuals. They have used a convenience sampling method by considering filters that suit the nature of the study.

3.2. Research Validity

This study consists of two phases, namely the qualitative phase and the quantitative phase, separated from each other to better understand the content of

narrative analysis. The qualitative validity section, reviewed by three research experts, examined the degree of coherence of the criteria for the triple-strength empowerment approach of women in the audit profession, approved by the panel members. On the other hand, in a small section, he used Lawshe's (1990) ratio or content validity ratio (CVR) to determine validity. To calculate these ratios, the opinions of experts in the content of the test are used. Thus, by explaining the objectives of the test to them and providing them with operational definitions of the content of the questions, they are asked to classify each question based on the Likert's three-part spectrum, "the item is necessary", "the item is useful but necessary." "And" items are not required ". All topics are approved according to the following ratio and tables 1 and 2 that provide a summary of it.

$$CVR = \frac{n_e - \frac{N}{2}}{\frac{N}{2}} \quad (1)$$

In this equation, n_e is the number of experts who have responded to the "necessary" option, and N is the total number of professionals participating in the narrative. It is worth noting that the content validity of an item is accepted if the calculated value of that item is greater than the value entered in the table. The following table shows the minimum CVR:

Table (1) Minimum CVR values for content validity

No. of Evaluators (raters)	5	6	7	8	9	10	15	....	40
Minimum Content Validity Ratio	0.99	0.99	0.99	0.75	0.78	0.62	0.49	...	0.29

Now, according to the above, the CVR indicator (ie, the content validity of the model component components with the indicator) was determined with the part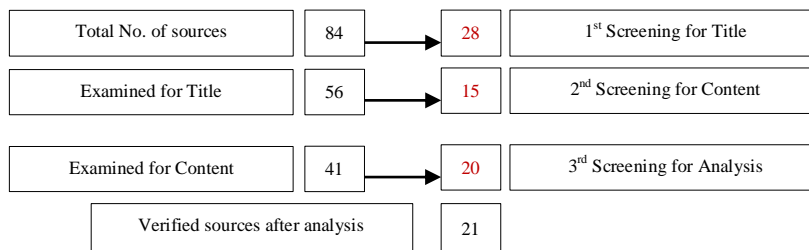icipation of 15 experts in the research. The results indicate that all statements are valid. In terms of narrative measurement, for example, conflict education training program among the required features, out of 15 participants in the component evaluation, 14 people chose the "necessary" option and 1 person the "somewhat" option. According to the following equation, the number obtained in the 15-person row is 0.49:

$$CVR = \frac{14 - \frac{15}{2}}{\frac{15}{2}} = 0/86 > 0/49$$

4. Results

4.1. Meta-synthesis and Delphi Result

The Meta-synthesis was initially conducted by referring to databases and research authorities. Thus, drawing on the process of meta-synthesis and Delphi analysis, this section of the research seeks to analyze Training programs to improve the capabilities of three-dimensional components and propositional themes. Accordingly, in the first step, similar research on the subject matter was extracted by referring to the following databases and research authorities.

Table (2) Databases and Official Research Authorities

English Databases	Persian Databases
Sciencedirect	MAGIRXN
Emeraldinsight	NOORSOFR
OnlineLierary	SID
Aaajournals	All of Iranian Research Systems

Several authentic and reliable studies have been identified in the 1990-2019 and 2014-2019 ranges based on the protocol and the meta-synthesis assessment process. Put differently, research related to the research purpose was identified to obtain similar papers and studies by referring to the above databases and research authorities.

Figure 1: Screening analysis process of research tailored to the research purpose to identify the components and propositions

According to the screening of research in terms of title, content, and analysis, 21 studies can be used as a basis for evaluation to determine the components and indicators of training programs to improve the degree of the three abilities introduced in this study. In the next step, the themes (topics) are classified and divided into the components and indicators of training programs to improve the degree of the three abilities introduced in this study in companies listed on the TSE, using the Stirling approach (2001). In this method, first, 21 verified research projects are fitted assisted by 15 research experts to reach a more coherent understanding of the nature of the research by 10 criteria in the critical evaluation method. These criteria include research objectives, research methodology rationale, research design, sampling, data collection, reflectivity, analytical accuracy, theoretical and transparent expression of findings, and research significance.

Table (3) Evaluation process of verified studies to determine the components and propositional themes of the research

Components		N	Y	Research Objective	Methodology Rationale	Research Design	Sampling Method	Data Collection Method	Generalization of Findings	Ethical	Statistical Analysis Method	Theoretical Capability	Value of the Study	Total
Individual approaches to women's empowerment	Li et al (2018)	□	☒	3	4	3	4	3	3	5	3	3	4	35
	Yang et al (2018)	☒	□	2	2	3	3	2	3	4	2	3	3	**27**
	Oussii et al (2018)	□	☒	3	3	4	3	3	3	4	3	4	3	33
	Parker & Johnson (2017)	□	☒	4	3	5	5	3	5	3	4	5	5	43
	Chen et al (2017)	□	☒	4	3	3	4	4	4	4	4	4	4	38
	Lenz & Hahn (2015)	☒	□	3	2	2	2	3	1	2	2	1	2	**20**
	Moshtaridoost & Dastgir (2019)	□	☒	4	3	4	4	3	3	4	4	3	4	36
Professional Approaches to Women's Empowerment	Gramling et al (2018)	□	☒	3	3	3	3	2	3	3	4	3	3	30
	Eulerich et al (2017)	□	☒	3	3	3	3	3	3	4	3	3	3	31
	Parker & Johnson (2017)	□	☒	4	3	5	5	3	5	3	4	5	5	43
	Alzeban & Gwilliam (2014)	□	☒	3	4	3	3	3	3	3	3	3	3	31
	Gonzalez et al (2012)	☒	□	2	2	3	2	2	1	1	2	1	2	**18**
	Mihret et al (2010)	□	☒	3	3	2	3	3	3	4	3	3	3	30
	Dadashi et al (2018)	☒	□	3	3	2	3	2	3	3	4	3	3	**29**
Social Approaches to Women's Empowerment	Chang et al (2019)	□	☒	4	4	3	4	4	3	3	4	3	4	36
	Baatwah & Al-Qadasi (2019)	□	☒	3	4	3	4	3	3	4	3	3	3	33
	Drogalas et al (2017)	□	☒	3	3	4	3	3	3	3	4	3	3	32
	Parker & Johnson (2017)	□	☒	4	3	5	5	3	5	3	4	5	5	43
	Larkin (2000)	□	☒	3	4	3	3	3	4	3	3	3	3	32
	Karcher (1996)	☒	□	2	2	3	2	2	2	3	2	2	2	**22**
	Sepasi & Rezayat (2015)	□	☒	3	3	3	4	3	3	3	4	3	3	32

The results showed that five of the subjects did not score the required scores and were therefore excluded from the study. These included Yang et al. (2018), Lenz and Hahn (2015), Gonzalez et al. (2012), Dadashi et al. (2018), and Karcher (1996). Then, research topics are extracted using the Sterling method (2001). Accordingly, to determine the empowerment indicators, three aspects are used: individual, professional, and social, internal auditors continue their analysis of the following checklist, extracted from verified research based on content analysis.

Table (4): Dacum components and indicators for the capacity building based on three approaches

Principal Components	Indicators	7	6	5	4	3	2	1
Individual approaches to women's empowerment	Educational planning is more successful in maintaining Career Orientations							
	Educational planning for career advancement							
	Educational programming to control the conflict between the characteristics required in the IA profession and the female characteristics							
	Educational planning to balance other women's roles and the role of the internal auditor							
	Educational planning to control emotions in decision-making processes							
	Educational programming to gain more material benefits in the workplace							
Professional Approaches to Women's Empowerment	Educational programming to establish a perceptual fit with the IA profession							
	Educational planning to identify sensitive points in the IA profession							
	Educational planning to improve risk control in internal auditing processes							
	Educational programming to improve the level of technical and specialized knowledge in the internal auditing process tasks							
	Educational programming to identify regulations and standards related to internal auditing							
	Educational planning to improve the level of intuition in professional decision-making and judgment							
Social Approaches to Women's Empowerment	Educational planning to raise the level of commitment to social values							
	Educational planning for professional excellence in developing transparency for stakeholders							
	Educational programming to maintain adherence to stakeholder risk assessment							
	Educational planning for cohesion to improve the level of public trust							
	Educational programming to adhere to social norms as an internal auditor							
	Educational programming to develop the company's level of environmental and environmental reporting							
	Educational planning to develop financial reporting capabilities and focus on disclosure of optional information							

Then, Delphi's analysis was used to achieve theoretical adequacy to ensure the identified components and indicators. To this end, these indicators were made available to experts for survey in the form of a seven-option checklist, with the results presented in Table 5.

Table (5) Delphi analysis process in the first round

Principal Components	Indicators	Average	Concordance coefficient	☑	☒	Accept/ Remove
Individual approaches to women's empowerment	Educational planning is more successful in maintaining Career Orientations	5.20	0.80	☑	-	Accepted
	Educational planning for career advancement	5.10	0.75	☑	-	Accepted
	Educational programming to control the conflict between the characteristics required in the IA profession and the female characteristics	5.10	0.75	☑	-	Accepted
	Educational planning to balance other women's roles and the role of the internal auditor	5.20	0.80	☑	-	Accepted
	Educational planning to control emotions in decision-making processes	5	0.55	☑	-	Accepted
	Educational programming to gain more material benefits in the workplace	4	0.40	-	☒	Removed
Professional Approaches to Women's Empowerment	Educational programming to establish a perceptual fit with the IA profession	5.10	0.75	☑	-	Accepted
	Educational planning to identify sensitive points in the IA profession	5	0.55	☑	-	Accepted
	Educational planning to improve risk control in internal auditing processes	5.10	0.75	☑	-	Accepted

Principal Components	Indicators	Average	Concordance coefficient	☑	☒	Accept/ Remove
	Educational programming to improve the level of technical and specialized knowledge in the internal auditing process tasks	5.20	0.82	☑	-	Accepted
	Educational programming to identify regulations and standards related to internal auditing	5	0.55	☑	-	Accepted
	Educational planning to improve the level of intuition in professional decision-making and judgment	3.50	0.33	-	☒	Removed
Social Approaches to Women's Empowerment	Educational planning to raise the level of commitment to social values	5.20	0.82	☑	-	Accepted
	Educational planning for professional excellence in developing transparency for stakeholders	5.10	0.75	☑	-	Accepted
	Educational programming to maintain adherence to stakeholder risk assessment	5.20	0.82	☑	-	Accepted
	Educational planning for cohesion to improve the level of public trust	5.20	0.82	☑	-	Accepted
	Educational programming to adhere to social norms as an internal auditor	5.10	0.75	☑	-	Accepted
	Educational programming to develop the company's level of environmental and environmental reporting	5	0.55	☑	-	Accepted
	Educational planning to develop financial reporting capabilities and focus on disclosure of optional information	5.30	0.85	☑	-	Accepted

Based on Delphi's analysis, two indicators were eliminated because they obtained a mean below 5 and a contingency coefficient below 0.5 based on the Likert scale of 7 options. Other indicators were approved. To achieve theoretical adequacy, is Delphi analysis.

Table (6) Delphi analysis process in the second round

Principal Components	Indicators	Average	Concordance coefficient	☑	☒	Accept/ Remove
Individual approaches to women's empowerment	Educational planning is more successful in maintaining Career Orientations	5.20	0.80	☑	-	Accepted
	Educational planning for career advancement	5.30	0.85	☑	-	Accepted
	Educational programming to control the conflict between the characteristics required in the IA profession and the female characteristics	6	0.90	☑	-	Accepted
	Educational planning to balance other women's roles and the role of the internal auditor	5.30	0.85	☑	-	Accepted
	Educational planning to control emotions in decision-making processes	6	0.90	☑	-	Accepted
Professional Approaches to Women's Empowerment	Educational programming to establish a perceptual fit with the IA profession	5.20	0.80	☑	-	Accepted
	Educational planning to identify sensitive points in the IA profession	5.30	0.85	☑	-	Accepted
	Educational planning to improve risk control in internal auditing processes	5.20	0.80	☑	-	Accepted
	Educational programming to improve the level of technical and specialized knowledge in the internal auditing process tasks	5.30	0.85	☑	-	Accepted
	Educational programming to identify regulations and standards related to internal auditing	6	0.90	☑	-	Accepted
Social Approaches to Women's Empowerment	Educational planning to raise the level of commitment to social values	6	0.90	☑	-	Accepted
	Educational planning for professional excellence in developing transparency for stakeholders	5.25	0.85	☑	-	Accepted
	Educational programming to maintain adherence to stakeholder risk assessment	5.20	0.80	☑	-	Accepted
	Educational planning for cohesion to improve the level of	5.30	0.85	☑	-	Accepted

Principal Components	Indicators	Average	Concordance coefficient	☑	☒	Accept/ Remove
	public trust					
	Educational programming to adhere to social norms as an internal auditor	5.25	0.85	☑	-	Accepted
	Educational programming to develop the company's level of environmental and environmental reporting	6	0.90	☑	-	Accepted
	Educational planning to develop financial reporting capabilities and focus on disclosure of optional information	5.10	0.75	☑	-	Accepted

As can be seen, all the indicators were confirmed in the Delphi analysis of the second round, indicating the theoretical adequacy of the indicators of the strategic consequences of green accounting. According to the components and indicators, the Dacum concept model is presented to improve empowerment based on the following three approaches:
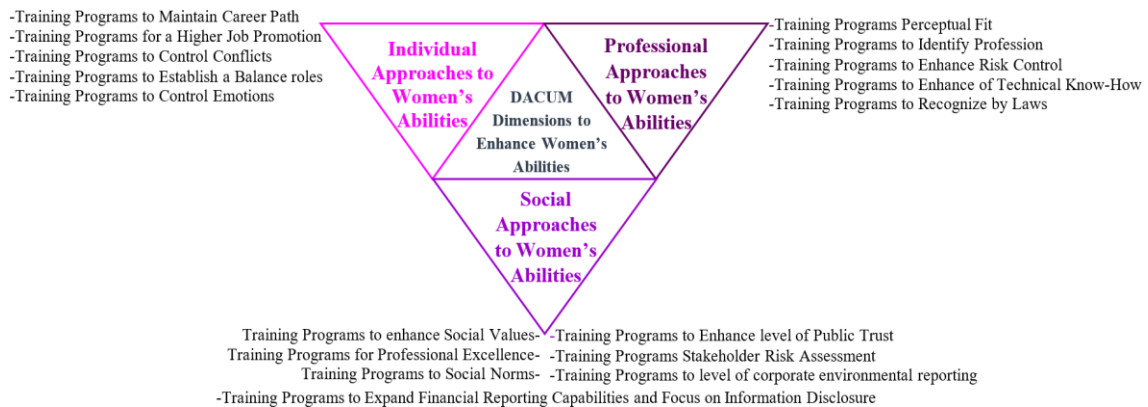

Figure 4: Meta-synthesis framework and Delphi analysis

4-2. Findings of Total Interpretive Structural Modeling Analysis

Following Delphi's approval, the research enters the third section to perform total interpretive structural modeling (TISM) analysis. Panel members participated in this section and assigned the points defined in the description section to the matrix questionnaires. Since TISM is an extension of ISM, the enhanced TISM method, as a more comprehensive method, can determine the layers of interactive communication between research indicators. To begin this analysis, the verified indicators must first be coded from the Delphi analysis round.

Table (7) Abbreviation of approved indicators

Indicators	L
Educational planning is more successful in maintaining Career Orientations	L1
Educational planning for career advancement	L2
Educational programming to control the conflict between the characteristics required in the IA profession and the female characteristics	L3
Educational planning to balance other women's roles and the role of the internal auditor	L4
Educational planning to control emotions in decision-making processes	L5
Educational programming to establish a perceptual fit with the IA profession	L6
Educational planning to identify sensitive points in the IA profession	L7
Educational planning to improve risk control in internal auditing processes	L8

Indicators	L
Educational programming to improve the level of technical and specialized knowledge in the internal auditing process tasks	L9
Educational programming to identify regulations and standards related to internal auditing	L10
Educational planning to raise the level of commitment to social values	L11
Educational planning for professional excellence in developing transparency for stakeholders	L12
Educational programming to maintain adherence to stakeholder risk assessment	L13
Educational planning for cohesion to improve the level of public trust	L14
Educational programming to adhere to social norms as an internal auditor	L15
Educational programming to develop the company's level of environmental and environmental reporting	L16
Educational planning to develop financial reporting capabilities and focus on disclosure of optional information	L17

According to Table 6, the indicators verified by the experts are determined in the form of a series of acronyms for the formation of a structural self-interaction matrix (SSIM). At this stage, a comparison is initially made between the views of 20 women working in companies operating in the capital market as internal auditors on the relationship between indicators. For this purpose, the "mode" indicator is used so that the relationship with the highest frequency in terms of experts, among the four possible types of relationship between the indicators, will be included in the final table. To determine the type of relationship, it is suggested to use the opinion of experts based on various management techniques, including brainstorming, nominal group technique (NGT), etc. (Singh et al., 2013). The symbols in Table 8 can be used to determine the type of relationship:

Table (8) Conceptual relations used in the formation of structural self-interaction matrix

Symbol	Meaning
V	i leads to j. (Row leads to column)
A	j leads to i. (Column leads to row)
X	There is a two-way or mutual relationship between i and j.
O	There is no valid relationship.

In this regard, the SSIM is calculated as follows:

Table (9) Final Structural Self-Interaction Matrix (SSIM)

	L17	L16	L15	L14	L13	L12	L11	L10	L9	L8	L7	L6	L5	L4	L3	L2	L1
L1	V	O	O	O	O	O	O	V	O	A	O	O	O	O	V	V	--
L2	V	O	O	O	O	O	O	V	O	O	O	O	O	O	V	--	
L3	V	O	O	O	O	O	O	A	O	O	O	O	O	O	--		
L4	O	O	O	O	V	O	O	A	V	V	O	O	V	--			
L5	O	O	O	O	O	O	O	V	O	V	O	O	--				
L6	O	O	V	V	A	O	V	O	O	O	A	--					
L7	O	O	V	V	A	V	V	A	O	V	--						
L8	O	V	O	O	O	A	A	O	A	--							
L9	O	O	O	O	O	O	V	O	--								
L10	O	O	O	O	O	O	O	--									
L11	O	O	A	A	O	A	--										
L12	O	O	A	A	O	--											
L13	O	O	V	V	--												
L14	O	O	X	--													
L15	O	O	--														
L16	O	--															
L17	--																

In this section, conceptual relationships are determined based on the mode indicator according to the following table:

Table (10) Transformation of conceptual relations to numbers

Conceptual Notation	Transformation of conceptual notations to quantities
V	1 is assigned to the cell corresponding to this pair in the reachability matrix and 0 for its symmetric cell.
A	0 is assigned to the cell corresponding to this pair in the reachability matrix and 1 for its symmetric cell.
X	1 is assigned to the cell corresponding to this pair in the reachability matrix and 1 to its symmetric cell.
O	0 is assigned to the cell corresponding to this pair in the reachability matrix and 0 for its symmetric cell.

Then, the reachability matrix is formed. That is to say, it is formed at this stage by transforming the notations corresponding to the structural matrix to 0 and 1 according to the following table.

Table (11) Formation of the Reachability Matrix

	L1	L2	L3	L4	L5	L6	L7	L8	L9	L10	L11	L12	L13	L14	L15	L16	L17
L1	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1
L2	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1
L3	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1
L4	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
L5	1	1	1	0	1	0	0	1	0	0	0	0	0	0	0	1	1
L6	1	1	1	0	0	1	0	1	0	0	1	1	0	1	1	1	1
L7	1	1	1	0	0	1	1	1	1	0	1	1	0	1	1	1	1
L8	1	1	1	0	0	0	0	1	0	0	0	0	0	0	0	1	1
L9	1	1	1	0	0	0	0	1	1	0	1	0	0	0	0	1	1
L10	1	1	1	0	0	0	0	1	0	1	0	0	0	0	0	1	1
L11	1	1	1	0	0	0	0	1	0	0	1	0	0	0	0	1	1
L12	1	1	1	0	0	0	0	1	0	0	1	1	0	0	0	1	1
L13	1	1	1	0	0	1	1	1	1	0	1	1	1	1	1	1	1
L14	1	1	1	0	0	0	0	1	0	0	1	1	0	1	1	1	1
L15	1	1	1	0	0	0	0	1	0	0	1	1	0	1	1	1	1
L16	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1
L17	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1

Following the formation of the reachability matrix, the indirect relations between propositions, i.e., the advantages of Total Interpretive Structural Modeling (TISM) over Interpretive Structural Modeling (ISM), are used to investigate other dimensions. Otherwise stated, any pairwise comparison should be thoroughly interpreted by answering the interpretive question expressed in the previous step to evolve ISM into TISM. For pairwise comparisons, the ith proposition is compared pairwise with all elements, from $(i + 1)$th element to nth element. For each relation, the answer is either "Y" or "N." If the answer is yes, i.e., "Y," the reason is stated. Otherwise, if the answer is no, i.e., "N," the pair of variables considered by the participants should be commented on.

Now, the SSIM must be formed based on polewise and pairwise comparisons. For pairwise comparisons, the ith proposition is compared pairwise with all elements, from $(i + 1)$th element to nth element. For each relation, the answer is either "Y" or "N." If the answer is yes, i.e., "Y," the reason is stated. In this case, the interpretive logic of paired relations is indicated in the basic scientific-logical interpretive form. In this step, the relationships are entered as a reachability matrix as "1" or "0" demonstrated in Table 12. According to this table, "1" is assigned to cells with "Y" and 0 to cells with "N." This matrix is obtained by transforming an SSIM into a binary matrix of 0 and 1.

Table (12) Pairwise comparisons between propositions based on matrix form

Yes/No	Z1 To Z..	No
☐ ☐ L1 **Educational planning is more successful in maintaining Career Orientations**		
Yes ☐ NO ☒	L1 − L2	1
Yes ☒ NO ☐	L2 − L1	2
Yes ☐ NO ☒	L1 − L3	3
Yes ☒ NO ☐	L3 − L1	4
Yes ☐ NO ☒	L1 − L4	5
Yes ☐ NO ☒	L4 − L1	6
Yes ☐ NO ☒	L1 − L5	7
Yes ☐ NO ☒	L5 − L1	8
Yes ☐ NO ☒	L1 − L6	9
Yes ☒ NO ☒	L6 − L1	10
Yes ☐ NO ☒	L1 − L7	11
Yes ☒ NO ☐	L7 − L1	12
Yes ☐ NO ☒	L1 − L8	13
Yes ☒ NO ☐	L8 − L1	14
Yes ☐ NO ☒	L1 − L9	15
Yes ☐ NO ☒	L9 − L1	16
Yes ☐ NO ☒	L1 − L10	17
Yes ☐ NO ☒	L10 − L1	18
Yes ☐ NO ☒	L1 − L11	19
Yes ☐ NO ☒	L11 − L1	20
Yes ☐ NO ☒	L1 − L12	21
Yes ☐ NO ☒	L12 − L1	22
Yes ☐ NO ☒	L1 − L13	23
Yes ☐ NO ☒	L13 − L1	24
Yes ☐ NO ☒	L1 − L14	25
Yes ☐ NO ☒	L14 − L1	26
Yes ☐ NO ☒	L1 − L15	27
Yes ☐ NO ☒	L15 − L1	28
Yes ☐ NO ☒	L1 − L16	29
Yes ☐ NO ☒	L16 − L1	30
Yes ☐ NO ☒	L1 − L17	31
Yes ☐ NO ☒	L17 − L1	32

According to the table above, the assigned conceptual notations are transformed into 0 and 1 based on the mode proposition to the numbers according to the previous table given the definition of conceptual relations. The following table specifies driving power (score 1 obtained from row) and dependence power (score 1 obtained from column):

Table (13) Reachability matrix for the degree to which the relationships are transferred between the propositions

	L1	L2	L3	L4	L5	L6	L7	L8	L9	L10	L11	L12	L13	L14	L15	L16	L17
L1	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1
L2	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1
L3	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1
L4	1*	1*	1*	1	1*	1*	1	1*	1	1*	1*	1	1*	1*	1*	1*	1*
L5	1*	1*	1*	0	1	0	0	1	0	0	0	0	0	0	0	1*	1
L6	1*	1*	1*	0	0	1	0	1*	0	0	1	1*	0	1	1	1	1
L7	1*	1*	1*	0	0	1	1	1	1	0	1	1	0	1	1	1	1*
L8	1	1*	1*	0	0	0	0	1	0	0	0	0	0	0	0	1*	1*
L9	1*	1*	1*	0	0	0	0	1	1	0	1	0	0	0	0	1*	1*
L10	1*	1*	1*	0	0	0	0	1	0	1	0	0	0	0	0	1*	1*
L11	1*	1*	1*	0	0	0	0	1	0	0	1	0	0	0	0	1*	1*
L12	1*	1*	1*	0	0	0	0	1	0	0	1	1	0	0	0	1*	1*
L13	1*	1*	1*	0	0	1	1	1*	1*	0	1*	1*	1	1	1	1*	1*
L14	1*	1*	1*	0	0	0	0	1*	0	0	1	1	0	1	1	1*	1*
L15	1*	1*	1*	0	0	0	0	1*	0	0	1	1	0	1	1	1*	1*
L16	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1
L17	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1

Table (14) Separation of driving power and dependence power

L	L1	L2	L3	L4	L5	L6	L7	L8	L9	L10	L11	L12	L13	L14	L15	L16	L17
Influence Power	4	3	2	17	7	11	13	6	8	7	7	8	14	10	10	2	1
Dependency Power	13	14	15	1	2	4	3	12	4	2	9	7	2	6	6	13	17

Thereafter, the output set, input set, and common elements must be identified first to determine the relations between the propositions. The scores of level determination and variable priority, the reachability set, and the antecedent set are determined for each variable. The reachability set of each variable includes some of the variables reachable through this variable. The antecedent set contains a set of variables that can be reached. Then, the intersection (common elements) between reachability and the antecedent set of all factors is determined. The reachability set and the intersection set of that factor(s) are considered as priority levels if they are identical. "Level" indicates the layers designed for the final model. To obtain other levels, previous levels must be separated from the matrix and the process should be repeated. After the levels are determined, the received matrix is rearranged in the order of the levels. The new matrix is called the cone matrix. In this step, the output and input sets are obtained for each variable using the final reachability matrix. The output and input sets are defined for a variable as follows. The output set for a

particular dimension/component is that variable itself, along with the other variables affected by it, i.e., the variables reachable through this variable. In addition, the input set for each variable includes that variable itself, along with other variables affecting it. Finally, the common elements indicate the intersection between the output and input sets of the variables in the TISM as a top-level variable. Put another way, these variables are not effective in creating any other variables. Following the determination of output elements, input elements, and common elements, propositions with identical common output and common elements are determined as the first level and least effective DACUM proposition. Upon the determination of this level, i.e., the least effective DACUM proposition, that proposition is deleted and the identical propositions of the input and common elements are explored, and it is selected as the next level. The operation is repeated until the components of all system levels are identified.

Table (15) set of output and input propositions, and common elements of propositions

| L	Reachability set	Antecedent set	Intersection set	Level
L1	1, 2, 3, 17	1, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15	1	IV
L2	2, 3, 17	1, 2, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15	2	III
L3	3, 17	1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15	3	II
L4	1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17	4	4	XII
L5	1, 2, 3, 5, 8, 16, 17	4, 5	5	VI
L6	1, 2, 3, 6, 8, 11, 12, 14, 15, 16, 17	4, 6, 7, 13	6	IX
L7	1, 2, 3, 6, 7, 8, 9, 11, 12, 14, 15, 16, 17	4, 7, 13	7	X
L8	1, 2, 3, 8, 16, 17	4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15	8	V
L9	1, 2, 3, 8, 9, 11, 16, 17	4, 7, 9, 13	9	VII
L10	1, 2, 3, 8, 10, 16, 17	4, 10	10	VI
L11	1, 2, 3, 8, 10, 16, 17	4, 6, 7, 9, 11, 12, 13, 14, 15	11	VI
L12	1, 2, 3, 8, 11, 12, 16, 17	4, 6, 7, 12, 13, 14, 15	12	VII
L13	1, 2, 3, 6, 7, 8, 9, 11, 12, 13, 14, 15, 16, 17	4, 13	13	XI
L14	1, 2, 3, 8, 11, 12, 14, 15, 16, 17	4, 6, 7, 13, 14, 15	14, 15	VIII
L15	1, 2, 3, 8, 11, 12, 14, 15, 16, 17	4, 6, 7, 13, 14, 15	14, 15	VIII
L16	16, 17	4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16	16	II
L17	17	1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17	17	I
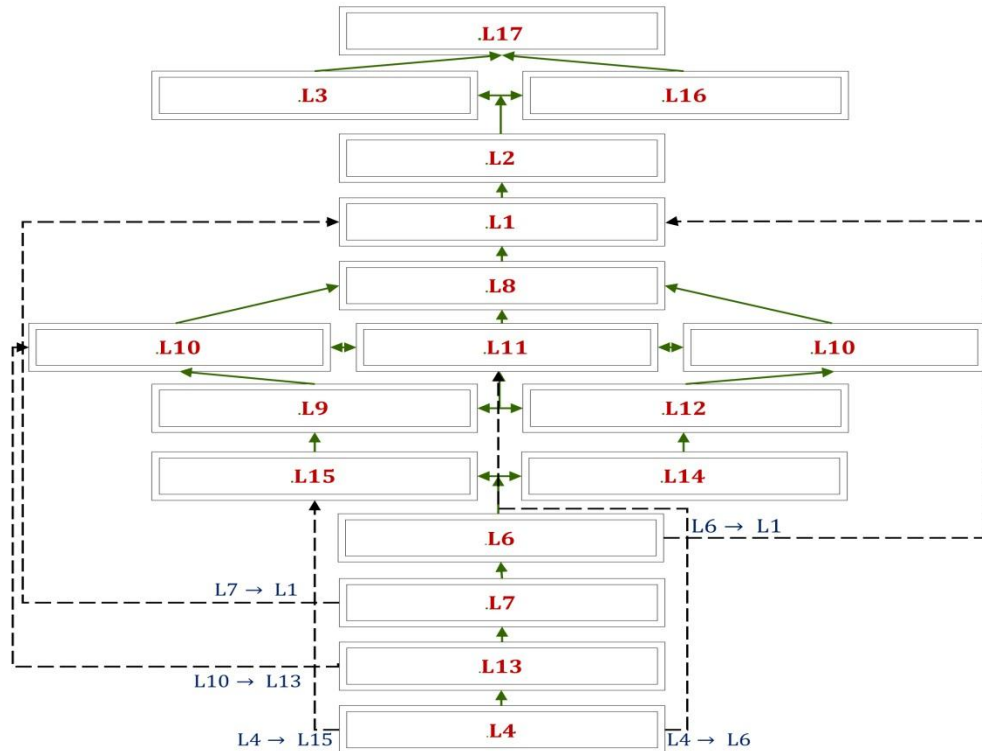
Figure 5: A Model of Dacum causes to improve three dimensions of women's empowerment in the IA profession

According to Table 15, the indicators of "failure to allocate resources to improve the effectiveness of internal auditing" (L17), "educational planning to develop financial reporting capabilities", and "focus on disclosure of discretionary information" were identified as the first and least effective indicator in the Dacum model in the promotion. Women's capabilities in the IA profession, based on common output indicators and the same elements. Likewise, the "Educational Planning Indicator for Balancing between Other Women's Roles and the Role of the Internal auditor (L4)" was selected as the twelfth level and the most effective Dacum indicator in promoting women's empowerment in the IA profession in TSE-accepted companies.

5. Conclusion

The study sought to provide a model based on Dacum / Educational Planning Analysis for the balanced promotion of women's empowerment in the IA profession from three perspectives: individual, professional, and social. As described earlier, this research was designed in two phases, namely the qualitative phase and the quantitative phase. The qualitative phase of this research used meta-synthesis and Delphi analysis to develop the components and indicators related to the nature of the research. 84 studies were screened from three perspectives: content, analytical nature, and title using meta-synthesis, of which 21 were similarly verified. Then, the indicators for each approach were extracted and distributed in the form of a checklist of 7 options among panel members, ie participants in the qualitative part of the research using the "critical evaluation" method, focusing on the three aspects according to the triple- approach. Strength empowerment Women working in internal auditing. Using the Delphi analysis, the level of theoretical desirability of the identified indicators was examined. After two rounds of Delphi analysis, out of a total of 19 indicators, only 2 indicators were removed and 17 indicators entered the ISM analysis phase. In this section, co-sponsored by 20 women working in capital market companies, a Dacum model was presented to prioritize training programs to enhance women's empowerment in the IA profession. Based on the results, the proposed model was layered at 12 levels, from the most effective to the least effective, with the most influential indicators

determined in this model located at the level of 9-12. Additionally, the "Educational Planning Indicator for Balancing between Other Women's Roles and the Role of the Internal auditor (L4)" is an indicator of the individual approaches to women's empowerment approaches at the twelfth level of the proposed model. To justify this, it should be noted that the most important priorities of women as internal auditors in the training programs of companies operating in the capital market are to establish a balance between the professional role of women and other roles played by them in the social environment as a spouse, mother, child, etc. This can enhance women's professional performance in developing their professional practices, leading to greater productivity and efficiency. Failure to comply with the characteristics of job conflict with family causes the individual to impose additional pressure on others close to them due to the transfer of professional issues to the family environment. Consequently, emotional, occupational, and physical burnout is imposed on the individual as a consequence of failure to pay attention to women's educational needs assessment in the IA profession. At the eleventh level, on the other hand, it was found that female internal auditors needed "training programming to maintain adherence to stakeholder risk assessment (L13)" based on the professional characteristics mentioned in the regulations. They are constantly under the pressure of this presumption that internal auditors, especially female auditors, generally cannot maintain their independence against the influence/demands of company executives on the independent disclosure of the company's financial performance, on the one hand, and cannot accurately assess and disclose potential risks. Stakeholders, on the other hand. This is due to their job nature in the structure of client companies, especially because of their more permeable and fragile characteristics compared to men. This educational need of women stems from the social characteristics of their role in the IA profession. They need these pieces of training to create their desired professional values by adopting social approaches, to improve the level of trust-building capabilities in stakeholders to demonstrate their regulatory/professional capabilities to stakeholders. On the other hand, according to professional approaches to women's empowerment in internal auditing, "educational planning to identify sensitive points in the IA profession (L7)" is

considered as another important indicator in the development of the Dacum model. Women have meticulous characteristics to gain experience, on the one hand, and argumentative characteristics to act under critical conditions, on the other. Accordingly, they can develop their capabilities to better identify aspects of the IA profession to more effectively demonstrate their functional functions through participation in workshop training programs, greater control over the situation under pressure, and adaptability when faced with similar conditions, by her mental readiness. The Indicator of Educational Planning Indicator (L6) is the fourth indicator of the professional approach to women's empowerment, as another relatively influential factor in women's educational planning. It is one of the most important aspects of professional empowerment in internal auditing in particular and in auditing in general. It may not be prioritized by the individual because of his or her personality traits and can also be considered a very important indicator of the nature of the profession, providing the basis for many traits such as professional skepticism, social commitment, social identity, and so on. On the other hand, perceptual appropriateness, as one of the characteristics of women in this profession, causes their professional identity to be confirmed as a part of the society that owns this job. Accordingly, women feel more internally satisfied with their acceptance among other auditors, which is undoubtedly one of the most important factors influencing their professional judgments in line with the existential philosophy of the IA profession. Notwithstanding, the Educational Planning Indicator was developed as one of the indicators of social approaches to women's empowerment to develop financial reporting capabilities and optional information disclosure focus (L17) as one of the indicators of social approaches to women's empowerment in the IA profession. Although the need for this empowerment can facilitate the degree of transparency and decision-making power of increased stakeholders, it is not very effective in terms of the characteristics that affect women's empowerment as internal auditors. They prefer to prioritize potential stakeholder risks, adhere to social values, and develop public trust as social aspects to pursue optional information that may sometimes distract the company from its strategic direction and goals. The results of this study can be compared with those of Lee et al.

(2018), Wes et al. (2018), Gramling et al. (2018), Baatwah & Al-Qadasi (2019), and Sepasi & Rezayat (2015), confirming the results of this research.

Based on the results, it is suggested that companies pursue three foundations for improving improvement and training to play a more effective role in the IA profession through the development of human resource strategies. On this basis, they can pursue coherent policies of individual, professional, and social development for internal auditors, especially female auditors. In the individual role, the promotion of educational programs to balance the role of women and other roles played by them in society is considered as the most important factor in creating more effectiveness, according to the results. For women active in this field, it is necessary to create a reciprocal space by identifying the nature of the profession, culture, and two-way approaches through further interaction between the company, close people, and the families of internal auditors. Inviting families of female auditors on a variety of occasions can generally lead to increased integration and reduced job and conflicting pressures. On the other hand, as mentioned earlier, the most important indicator of professional approaches to women's empowerment is further education to establish administrative fitness in women and identify sensitive points in this profession. Thus, it is necessary to hold a course of specialized workshops to help create their professional identity in the field of internal auditing and to perform several more effective functions of professional characteristics during judging through scenarios and other methods of cognitive improvement. In addition, the most important educational needs assessment based on the Dacum model in social approaches to the empowerment of women in internal auditing, as mentioned earlier, is educational planning to maintain adherence to stakeholder risk assessment. Accordingly, it is proposed to emphasize and focus on the development of auditing professions in line with international standards and the rules of professional conduct, by giving increasing importance to social values by regulatory bodies. Here, the most important behavioral/functional output of internal auditors is manifested. Hence, individual needs are met and at the same time, female auditors use their functions to develop the most beneficial social values to stakeholders and adhere to the values considered in this area.

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Note

[1] This information is published every year in a publication by the Institute for Research and Planning in Higher Education entitled "Statistics of Higher Education" including universities under the supervision of the Ministry of Science, Research and Technology (MSRT) (187870 people), Islamic Azad University (96599 people), Payam Noor University (72267 people), higher and non-profit educational institutions (34509 people), and other universities and executive bodies (8644 people).