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From Participation to Modeling: The Contribution of the Delphi Method in Constructing a Competency Framework for Lebanese Career Counselors

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Abstract

The rapid transformations of the labor market have profoundly reshaped educational systems and career paths, creating new challenges for career guidance and counseling. It is essential to train competent career guidance professionals to meet the demands of this context. In this perspective, this article presents a study based on a participatory approach using the Delphi technique to design a prototype of the competencies required for the training of guidance practitioners.

A review of international practice standards helped identify relevant elements and define the basic structure of the competency framework, integrating knowledge, skills, and expected attitudes.

A "Delphi expert panel" composed of researchers, teachers, and practitioners reached consensus after two rounds. The results led to the modeling of a structured framework that identifies the key roles and competencies needed in career guidance.

The active participation of all stakeholders in career guidance reinforced the relevance and validity of the framework, which serves as a prototype highlighting the essential elements for adequate training and high-quality professional practice.

Keywords: career guidance, curriculum development, Delphi method, participatory approach, competency framework, modeling.

Résumé

Les transformations rapides du marché du travail ont profondément transformé les systèmes éducatifs et les trajectoires professionnelles, créant de nouveaux défis pour l'orientation et le conseil en carrière. Il est essentiel de former des professionnels de l'orientation compétents afin de répondre aux exigences du contexte. Dans cette perspective, cet article décrit une étude fondée sur une approche participative utilisant la technique Delphi afin d'élaborer un prototype de compétences nécessaires à la formation des praticiens de l'orientation.

Une revue des normes internationales de pratiques a permis de dégager les éléments utiles et de définir l'architecture de base du référentiel de compétences intégrant connaissances, savoir-faire et attitudes attendus.

Un panel « d'experts Delphi » formé de chercheurs, enseignants et praticiens a permis d'atteindre un consensus en deux tours. Les résultats ont conduit à la modélisation d'un référentiel structuré, identifiant les rôles et compétences clés nécessaires à l'orientation professionnelle.

La participation active de l'ensemble des acteurs de l'orientation professionnelle a renforcé la pertinence et la validité du référentiel, qui constitue un prototype mettant en évidence les éléments essentiels à une formation adaptée et à une pratique professionnelle de qualité

Mots-clés : orientation professionnelle, élaboration de programmes, méthode Delphi, approche participative, référentiel de compétences, Modélisation.

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ملخص

أدّت التحولات السريعة في سوق العمل إلى تغييرات عميقة في الأنظمة التعليمية والمسارات المهنية، مما خلق تحديات جديدة أمام الإرشاد والتوجيه المهني. ومن الضروري إعداد ممارسين أكفاء في مجال الإرشاد لمواكبة متطلبات السياق الحالي. وفي هذا الإطار، يصف هذا المقال دراسة قائمة على منهجية تشاركية باستخدام تقنية "دلفي" من أجل وضع نموذج أولي للكفاءات الضرورية لتدريب ممارسي التوجيه.

سمحت مراجعة المعايير الدولية للممارسات باستخلاص العناصر المفيدة وتحديد البنية الأساسية للإطار المرجعي للكفاءات، الذي يدمج المعارف والمهارات والمواقف المطلوبة.

وقد أتاح "فريق خبراء دلفي" المكوَّن من باحثين وأساتذة وممارسين التوصل إلى إجماع بعد جولتين. وأسفرت النتائج عن بناء مرجع منظّم يحدد الأدوار والكفاءات الرئيسية اللازمة للإرشاد المهني.

لقد عزّزت المشاركة الفاعلة لجميع الأطراف المعنية بالتوجيه المهني من أهمية وموثوقية هذا المرجع، الذي يُشكّل نموذجًا أوليًا يبرز العناصر الأساسية لتكوين ملائم ولممارسة مهنية عالية الجودة.

الكلمات المفتاحية: التوجيه المهني، إعداد البرامج، منهجية دلفي، مقاربة تشاركية، الإطار المرجعي للكفاءات، النمذجة

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Introduction

The 21st century is characterized by rapid and profound transformations driven by technological advances, globalization, and sociocultural changes, which have increased the complexity of career paths and reinforced the need for continuous, context-sensitive career guidance (OECD, 2004; UNESCO, 2021). These changes pose both scientific and practical challenges: how can frameworks be developed that ensure quality, equity, and effectiveness, while remaining adapted to the context in which they are implemented? International organizations, including the OECD, UNESCO, and Cedefop, emphasize the need to develop guidance systems grounded in these principles (Cedefop, 2009).

In Lebanon, a country marked by political and economic instability, significant educational inequalities, and high unemployment, the development of relevant guidance models is a pressing priority. Top-down approaches, often imported, have proven insufficient because they are disconnected from local realities. According to Cedefop (2009), while top-down processes provide a favorable context for framework development, the effectiveness of such measures relies heavily on bottom-up processes that directly engage field actors, including training institutions, educators, researchers, and institutional leaders.

In this regard, participatory and collaborative approaches are essential. Co-construction with practitioners and experts enables the mobilization of collective intelligence, ensures the legitimacy of results, and strengthens their appropriation (Reason & Bradbury, 2008).

The Delphi method aligns with this logic by providing a structured approach for iterative and anonymous consultations, organizing the confrontation of perspectives, reducing social influence bias, and fostering the emergence of reasoned consensus (Dalkey & Helmer, 1963; Linstone & Turoff, 1975; Hsu & Sandford, 2007). By combining scientific rigor with practical experience, it enables the production of contextualized and legitimate frameworks.

This article focuses on how the Delphi method, grounded in participation and co-construction with experts, facilitated the development of a competency framework for career guidance practitioners in Lebanon, contributing to the professionalization of career counseling while highlighting the scientific and practical value of collaborative approaches in framework development.

1- Problem Statement

The development of practice standards is essential to ensure the competence and professionalization of career counselors. Recent labor market changes, driven by globalization, technological advances, and sociocultural transformations, have increased the complexity of career paths and the frequency of life transitions (OECD, 2004; UNESCO, 2021). These shifts have significantly transformed counselors' roles, requiring them to support increasingly diverse and unstable trajectories. In response, several European countries began developing international practice standards as early as 2003 to strengthen professionalization, ensure counselor legitimacy, and provide high-quality services adapted to individual needs (OECD, 2004; Sultana, 2004; CEDEFOP, 2009). Most standards have been established by state bodies, international organizations such as IAEVG, or professional associations consulting practitioners.

However, top-down approaches alone are insufficient in dynamic contexts, as they often fail to reflect local realities (Cedefop, 2009). Effective frameworks require bottom-up processes involving field actors, including training institutions, teachers, researchers, and institutional leaders. Participatory and collaborative approaches are therefore crucial, as they mobilize collective intelligence and ensure that outcomes are both credible and adopted by end-users (Reason & Bradbury, 2008; Rajhans et al., 2021). Co-construction with practitioners and field experts is particularly necessary to develop effective, contextually relevant tools such as competency frameworks, especially in evolving contexts like Lebanon.

In this regard, the Delphi method offers a structured approach for gathering and organizing dispersed knowledge, fostering consensus, and modeling prototypes through expert panels (Dalkey & Helmer, 1963; Linstone & Turoff, 1975; Hsu & Sandford, 2007). Through iterative and anonymous consultations, it enables systematic confrontation of perspectives, mitigates social influence bias, and promotes reasoned convergence. Its strength lies in integrating diverse viewpoints, combining scientific rigor with practical experience, and producing high-quality, bottom-up data.

This article therefore examines the process of developing a competency framework for career counselors using the Delphi method, highlighting the role of participation and co-construction, and reflecting on the contribution of collaborative approaches to the design of contextually relevant competency frameworks.

2- Theoretical Framework

2.1 Modeling: Concepts and Applications

The concept of a model is highly polysemous: it can be material, symbolic, or conceptual (von Bertalanffy, 1973; Robardet & Guillaud, 1997), and no single definition is universally accepted (Drouin, 1988). Nevertheless, there is consensus around four main characteristics: a model is a simplified and partial representation of reality; it serves to represent, explain, predict, and communicate a phenomenon, process, or system using various forms of language. It constitutes an intermediate object between theory and experience, whose validity is always relative, limited, and subject to revision (Justi & Gilbert, 2000, 2002; Halloun, 2006; Schwarz et al., 2009; Gilbert & Justi, 2016).

In this study, a model is understood as a conceptual and evolving construct (Schwarz et al., 2009; Gilbert & Justi, 2016) that allows the simplification and representation of the complexity of a competency system, making it intelligible and operational. The competency framework model thus functions both as an analytical framework and as a practical tool to guide professional action and decision-making (Justi & Gilbert, 2002; Halloun, 2006; Gilbert & Justi, 2016).

Modeling refers to the process of constructing and using models to represent, explain, or anticipate the functioning of a phenomenon, system, or complex reality (Bunge, 1973; Le Moigne, 1990). It is an iterative process of model construction and validation, continuously alternating between empirical and theoretical domains (Robardet & Guillaud, 1997; Walliser, 1977). Modeling is not merely about simplifying reality; it involves identifying its invariants, organizing them within a coherent and evolving structure, and producing a tool that accounts for this reality while allowing its appropriation.

In the context of developing a competency framework using the Delphi method, modeling thus refers to a collective and progressive approach. At the theoretical level, it mobilizes existing models in career guidance and competency development to confront and adapt them to the Lebanese context. At the empirical level, it draws on the expertise of field actors, including practitioners, researchers, and decision-makers, who formulate, discuss, and validate the framework based on identified key competencies.

Accordingly, modeling a competency framework via the Delphi method does not aim to deliver a pre-made model, but to co-construct a validated model emerging from the confrontation of viewpoints, successive reformulations, and progressive consensus. Modeling therefore becomes a tool for the collective formalization of a Lebanese competency framework that is both contextually relevant and scientifically grounded.

2.2 Practice Standards and Competency Frameworks

2.2.1 Emergence and Role of Standards

In the context of ongoing transformations, international organizations such as the OECD and Cedefop consider career guidance as a strategic lever to support educational and professional transitions, enhance employability, and reduce social inequalities. The development of practice standards aims to operationalize these recommendations by defining specific requirements for professionals, including the acquisition of theoretical knowledge, mastery of assessment tools, development of interpersonal skills, and the ability to integrate theory and practice.

2.2.2 Content and Recurring Themes

From a professionalization perspective, several international and national frameworks have been examined, including those developed by IAEVG, OCCOQ (Quebec), DHET (South Africa), CICA (Australia), NCDA (United States), the NICE network (Europe), MEVOC (Austria), Cedefop (Europe), and SEFRI (Switzerland). Although not exhaustive, these

frameworks represent a diversity of state, associative, and professional contexts, allowing the identification of common trends as well as country-specific particularities.

Several common elements emerge. Most frameworks distinguish between core competencies and specialized competencies, covering the three classical dimensions of knowledge: knowledge (career development theories, understanding of education systems and labor markets), skills (individual and group assessment, program design and management, use of information and ICT, research and integration of scientific data into practice), and attitudes (ethics, professionalism, communication, diversity management, and inclusion). Specialized competencies address more advanced areas, such as psychometric testing, supervision, career placement, and corporate counseling, requiring higher qualifications, as in the case of the NCDA, which reserves certain roles for master's degree holders.

These frameworks also show divergences in structure and terminology. For example, Cedefop (2009) distinguishes three domains (core, interaction, and support competencies), whereas NICE organizes competencies around six professional roles and seven core competencies. MEVOC categorizes competencies into four groups: cognitive, functional, personal, and ethical. Moreover, some frameworks, such as IAEVG and OCCOQ, emphasize advocacy and community engagement, while the South African framework places greater emphasis on recognizing diverse career paths irrespective of formal qualifications.

Analysis of these standards highlights a shared commitment to professionalizing career guidance through the definition of updated competency frameworks, often developed in consultation with practitioners and stakeholders. However, none of these frameworks rely explicitly on a single theoretical foundation, and the concept of specialized competencies is applied variably depending on the context. Overall, despite existing convergences, each country adapts its standards to the realities of its labor market, education system, and professional culture.

2.2.3 Concept of Competency

The concept of competency is central to the professionalization of career guidance. It extends beyond the acquisition of knowledge to encompass the dynamic mobilization of knowledge, skills, and attitudes in real-world contexts.

Definitions and Theoretical Perspectives

Competency is an integrative process, combining personal resources (knowledge, experience, values) and external resources (networks, documentation, professional tools) to act effectively. It is both situational and evolving, and its implementation depends on each professional's interpretation of complex situations.

Competency According to Guy Le Boterf

According to Guy Le Boterf, competency is not merely the possession of knowledge; it lies in the ability to mobilize and combine internal and external resources to solve a problem or complete a task. Competency cannot be understood independently of context, as it is evaluated through relevant and responsible action in real situations. Thus, the focus is not so much on "having" competencies as on "being competent," that is, acting appropriately while demonstrating reflexivity, adaptability, and autonomous decision-making.

Applied to career guidance, this approach underscores the need to train counselors capable of thinking and acting independently by integrating knowledge, methods, and attitudes. It also highlights the importance of continuous learning and professional development to update resources in response to societal and economic changes. Finally, it emphasizes reflexivity, understood as the capacity to evaluate one's practices, draw lessons from experience, and adjust interventions according to contexts and client needs.

3- Methodological Framework

3.1 Nature of the Research and Data Collection Design

This research-development study, of a qualitative and inductive nature and situated within a constructivist paradigm (Harvey & Loiselle, 2009; Fortin & Gagnon, 2016), aims to develop a reference model of career guidance counselors' competencies, grounded in literature and enriched by practitioners' expertise.

The researcher adopted the stance of a researcher-developer, characterized by a continuous interaction between his own conceptions and the contributions of participants. Based on an initial model derived from the analysis of literature on practice standards in career guidance, the researcher collected and integrated expert reflections to progressively refine the competency framework. This approach relies on an inductive method, favored in research-development, which promotes the emergence of ideas from the data collected and accommodates a diversity of perspectives. The consideration of divergent expert opinions constitutes an inter-judge method that ensures scientific rigor.

As Van der Maren (1995, cited in Harvey & Loiselle, 2009) highlights, induction provides the researcher with increased openness and flexibility, allowing for a more intuitive and hands-on approach to tool development. Nevertheless, the sensitivity of the researcher-developer, shaped by prior experience and theoretical knowledge, inevitably influences methodological and analytical choices. To mitigate this subjectivity and strengthen the validity of the results, the use of triangulation strategies proved essential.

3.2 Operational Approach

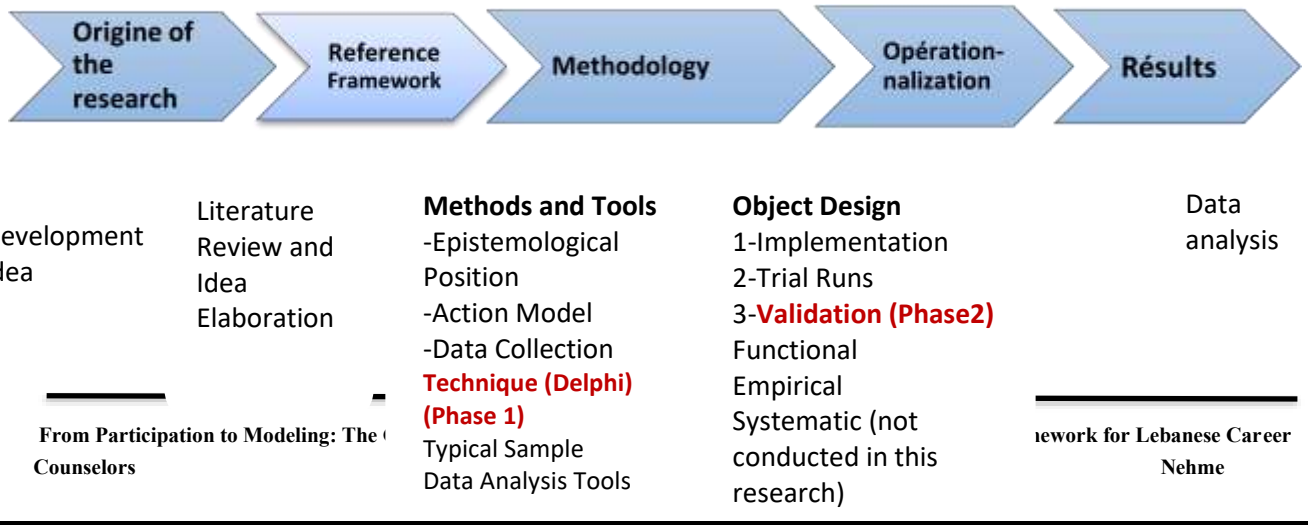
3.2.1 The Delphi Technique Process

The Delphi technique, developed in the 1950s by Dalkey and Helmer, is a method of expert consultation designed to assess the acceptability of emerging concepts and to generate consensual knowledge. It is widely employed in modeling, foresight, and scenario building, and presents several advantages: the involvement of geographically dispersed experts, anonymity that fosters freedom of expression and reconsideration of positions, and successive iterations that enable the refinement of judgments (Fallerly et al., 2013; Tremblay, 2020; Pherson, Reese, & Wendler, 2018).

According to Rowe and Wright (1999) and Pickard (2013), its effectiveness relies on six principles: the selection of qualified experts, the written collection of opinions, anonymity, the simultaneous administration of questionnaires with controlled feedback, the pursuit of consensus through iterative rounds, and the acknowledgment of divergences as legitimate results.

Thus, the Delphi technique constitutes an iterative validation process that allows for both convergence toward agreement and recognition of disagreements within the scientific community. The synthesis model of Harvey and Loiselle, applied in this research, proposes five macroscopic phases encompassing more microscopic stages of the process, illustrated in the figure below (Harvey & Loiselle, 2009). The data collection phase through the Delphi technique, as well as the validation phase, are highlighted in red.

Figure 1. Phases of the Research-Development Process



3.2.2. Prototype Development Process

Delphi Research Design and Data Collection

This research involves the modeling of a competency framework for career counselors. Hence, the importance of adopting a qualitative research design, which enables the collection of data derived from the experiences and representations of Delphi experts, while respecting the iterative nature of the research process. A research design with these characteristics makes it possible to better anchor and enrich the research-development experience (Deslauriers & Kérisit, 1997). The Delphi technique appeared particularly suitable, as it meets these requirements.

Sampling and Expert Selection

In this study, an "expert" is defined as an individual capable of providing an informed opinion on issues related to career guidance (Ekionea, Bernard, & Plaisent, 2011; Hsu & Sanford, 2007; Tremblay-Boudreault & Dionne, 2014). A non-probability sampling technique, appropriate for an inductive approach within qualitative research, was employed. The selected typical sampling relied on precise criteria. Of the twenty-five experts initially invited, twelve participated in the entire process (Ekionea et al., 2011; Hsu & Sanford, 2007). These experts, with diverse backgrounds, often combined multiple responsibilities, including service management, oversight of university admissions, supervision in technical institutes, training, teaching, consulting with international organizations, and even establishing private structures specialized in training, recruitment, and professional integration. They worked with a wide range of populations (adults, in- and out-of-school youth, retirees). To preserve anonymity, each participant was identified by the letter “E” (Expert), followed by a number.

Development of the Data Collection Tool

A) First Round of the Delphi Method

During the first round, a bilingual questionnaire (Arabic/French) was administered to the 12 participants. The questionnaire addressed three main areas. The first gathered sociodemographic information (educational background, professional framework, and the nature of work related to career guidance). The second focused on the roles and competencies of counselors, drawing particularly on the international NICE framework, which identifies six roles and seven core competencies, to assess their relevance within the Lebanese context and to identify potential local specificities. Finally, a third question invited experts to express their views on the ethical considerations that should be integrated into counseling practice.

Role framework used in the questionnaire

To ensure clarity of the questions and their reformulation, an initial validation was conducted by a counselor who wasn't part of the selection expert panel. The questionnaire was translated into Arabic and French and subsequently reviewed by the supervisors of this dissertation.

Informed Consent and Administration of the Questionnaire

Following an initial oral contact, the questionnaire was sent by email, accompanied by a consent letter that participants were required to sign and return, or alternatively confirm by a reply email, within a three-week period set by the researcher. Each expert responded in writing, independently, providing their perspective or suggestions related to the questionnaire. Experts were also free to submit scientific reference documents related to the subject, should they wish to do so.

Data Analysis

As the experts' responses were already typed, no transcription was necessary; the analysis was carried out manually using Word, Excel, and occasionally paper-based support. In the first step, each document was saved in its original version, anonymized (E1, E2, …), and line numbered. A careful, repeated, and progressive reading process allowed for familiarization with the content and the identification of preliminary themes, highlighted through color coding. Since the responses were received at different times, each new document was integrated progressively, which enriched the thematic construction (Paillé & Mucchielli, 2021).

The identified themes were first noted on paper and then recorded in Excel. Some corresponded to the axes of the interview guide (competencies, ethics, counselor roles), while others emerged, such as: service beneficiaries (youth, adults,

retirees, individuals with disabilities), fields of practice (academic, private, NGOs, public institutions), external conditions (family, culture, social media, administrative context), higher education training, guidance programs (content and resources), as well as the relevance of guidance for educational and professional success.

These themes gradually broken down into sub-themes, referred to as categories (Bardin, 2013), and then refined, merged, or supplemented with new categories according to their relevance (Blais & Martineau, 2006). Illustrative verbatim excerpts were selected to highlight the essence of the subcategories retained.

As expected, the responses collected during the first round were compiled, summarized, and processed without disclosing the individual identities of the experts. Consensus was reached on most of the elements, with broad agreement among the experts on the points discussed.

However, adjustments were made to the role framework based on the experts' proposals (see diagram below). Some emphasized the need to distinguish roles that were initially grouped together, while others considered that certain roles could encompass others. Modifications were therefore made accordingly.

We also identified several divergences that require further exploration in the second round. These divergences concerned the administrative tasks assigned to the counselor, the competency of persuasion and its use in supporting individuals in their decision-making, as well as the extent to which the labor market should be considered in career-related decision-making.

B) Second Round of the Delphi Method

The second round included a brief synthesis of the most significant results, the revised role framework incorporating the experts' suggestions, and a set of questions focusing on the three points of divergence to clarify them.

In this second round, eight responses were received out of the twelve experts initially invited. Despite repeated follow-ups, some ultimately withdrew. The clarifications provided on the points of disagreement facilitated the achievement of consensus.

Emergence of the Prototype Through Consensus

The design of the competency framework was based on several sources: first, the roles and competencies identified through the analysis of international practice standards; second, those highlighted by the Delphi experts; and finally, existing competency frameworks in career guidance, particularly the work of Guy Le Boterf. His approach, guided by the question "How can we recognize that a career counselor is competent?", inspired the development of the first version of the framework.

The proposed competency framework is structured around six roles (R), from which six competencies (C) are derived. These roles and competencies are defined in relation to key professional activities to be implemented in various contexts, while also integrating orientations on desirable ways of acting. In this perspective, Le Boterf (2018) refers to the "criteria of desirable achievement of the activity," which specify the conditions of success and the expected outcomes. The synthesis of the experts' contributions was mobilized to ensure that the framework meets the specific needs of the Lebanese context.

An attempt was also made to create an inventory for the knowledge and skills that could be mobilized in professional situations. However, the expected outcomes for each category of situations could not be fully developed within the timeframe of this research. Further refinement of the model will therefore be required, particularly within the scope of postdoctoral work.

In line with international practice standards, an ethical framework was also proposed to guide practitioners in adopting professional attitudes and behaviors consistent with ethical principles. Developed from the analysis of existing

codes of ethics and the considerations raised by the experts, this framework is structured around four main axes: ethical conduct, professional responsibility, interpersonal skills, and reflective practice.

The detailed prototype of the competency framework was translated into a schematic model, articulated around six roles (R) and the six competencies (C) derived from them.

Validation of the Model

The model was then validated using a grid of ten statements, constructed according to four criteria—comprehensiveness, clarity, relevance, and specificity, and evaluated by eight experts (Picard, 2013). The adjustments suggested were minor and mainly aimed at improving clarity. The final version of the model was synthesized into a schematic representation summarizing its components, thereby constituting a first validated version, which is expected to be further refined and improved through future research.

Research-Development and Scientific Rigor

Research-development is sometimes questioned in terms of its scientific rigor. Its inductive nature, which places a strong emphasis on field data and considers the theoretical framework as one element among others influencing decision-making, is occasionally perceived as lacking in rigor (Nonnon, 2002). However, this inductive approach fosters openness, creativity, and the emergence of innovative ideas that a predefined framework might not allow. Due to the uniqueness of development experiences, the formulation of generalizable principles remains limited. Nevertheless, this type of research enables the identification of avenues for action that may extend beyond the specific context studied and open up new perspectives (Anadon & L'Hostie, 2001).

Harvey (2007) identifies eight characteristics of research-development (Harvey & Loiselle, 2009). Within this study, several elements were mobilized to ensure scientific rigor:

a) the creation of a competency framework as an innovative product.

b) the detailed description of the experience in the Lebanese context.

c) the continuous collection of documented data and their rigorous analysis.

d) grounding the process in international practice standards and scientific literature.

e) the presentation of the development process, emphasizing its contextual nature.

f) the justification of all modifications, validated by anonymous experts, which, through the iterative nature of the Delphi method, ensured effective triangulation and strengthened the reliability of the model.

g) the opening, through the development of the model, to new research perspectives.

h) the preparation of the writing and dissemination of the results.

Thus, although the effectiveness of the developed product must be confirmed through subsequent studies (Anadon & L'Hostie, 2001), the approach presented combines rigor, contextualization, and innovation, and meets the minimum requirements of scientific validity generally recognized for research-development.

5 – Results

The findings of the research were obtained through the successive phases of the Delphi technique. An initial synthesis followed the first round, and a second synthesis addressed the divergences identified in the second round, before reaching consensus, which ultimately led to the development and validation of the final model.

Results of the First Round of the Delphi Method

The responses from the first round confirmed the relevance of the six proposed roles within the Lebanese context, although their presence remains selective, limited, and not yet widespread. The experts validated the six roles, emphasizing their complementarity and relevance for the development of the profession.

Career counseling was identified as the central role, aimed at supporting individuals in constructing appropriate educational and career pathways. The management of information and technological resources was considered essential in a context shaped by rapid transformations in the labor market and the growing need for broad access to information. The management of guidance programs and services was recognized as a lever for social equity, ensuring greater accessibility and higher quality of interventions.

The role of advocacy with decision-makers and communities, still insufficiently formalized, was identified as strategic for promoting social justice and inclusion. The roles of research and development, as well as training, were also deemed crucial for professionalizing the field, strengthening the scientific legitimacy of career guidance, and developing the competencies of counselors and their educational and social partners.

Regarding competencies, these encompassed the acquisition and mobilization of knowledge, skills, and attitudes. Knowledge included mastery of career guidance theories, methodologies of support, educational and professional regulations, as well as socio-economic and psychosocial trends. Skills included the assessment of individual potential, interpersonal communication, the ability to support realistic career planning, interprofessional collaboration, program design and evaluation, mastery of digital technologies, and innovation capacity.

Attitudes encompassed emotional and relational intelligence, active listening, empathy, patience, flexibility, open-mindedness, and ethical commitment, considered as fundamental pillars of professional practice.

In addressing the ethical considerations of guidance, experts highlighted the need for an explicit ethical framework ensuring confidentiality, respect for dignity, and equity in access to services. The ethical stance also involves combating discrimination, acknowledging vulnerabilities, and affirming the social responsibility of the career counselor as an agent of social justice. Integrity, transparency, and reflexivity in practice were emphasized as safeguards of credibility and trust in the profession.

At the end of the exchanges, three points of divergence remained, requiring clarification and more precise positioning from the experts. A second round was therefore necessary to achieve consensus.

Results of the Second Round of the Delphi Method

Following the first round, a second questionnaire was designed to clarify the divergences among experts and to refine the role framework. Three points of disagreement formed the basis of this second round: respect for the individual's freedom of decision, the place of administrative tasks within the counselor's role, and the definition of the foundations of an informed choice, including the role of the labor market. At the same time, the initial role framework was revised in light of the experts' suggestions.

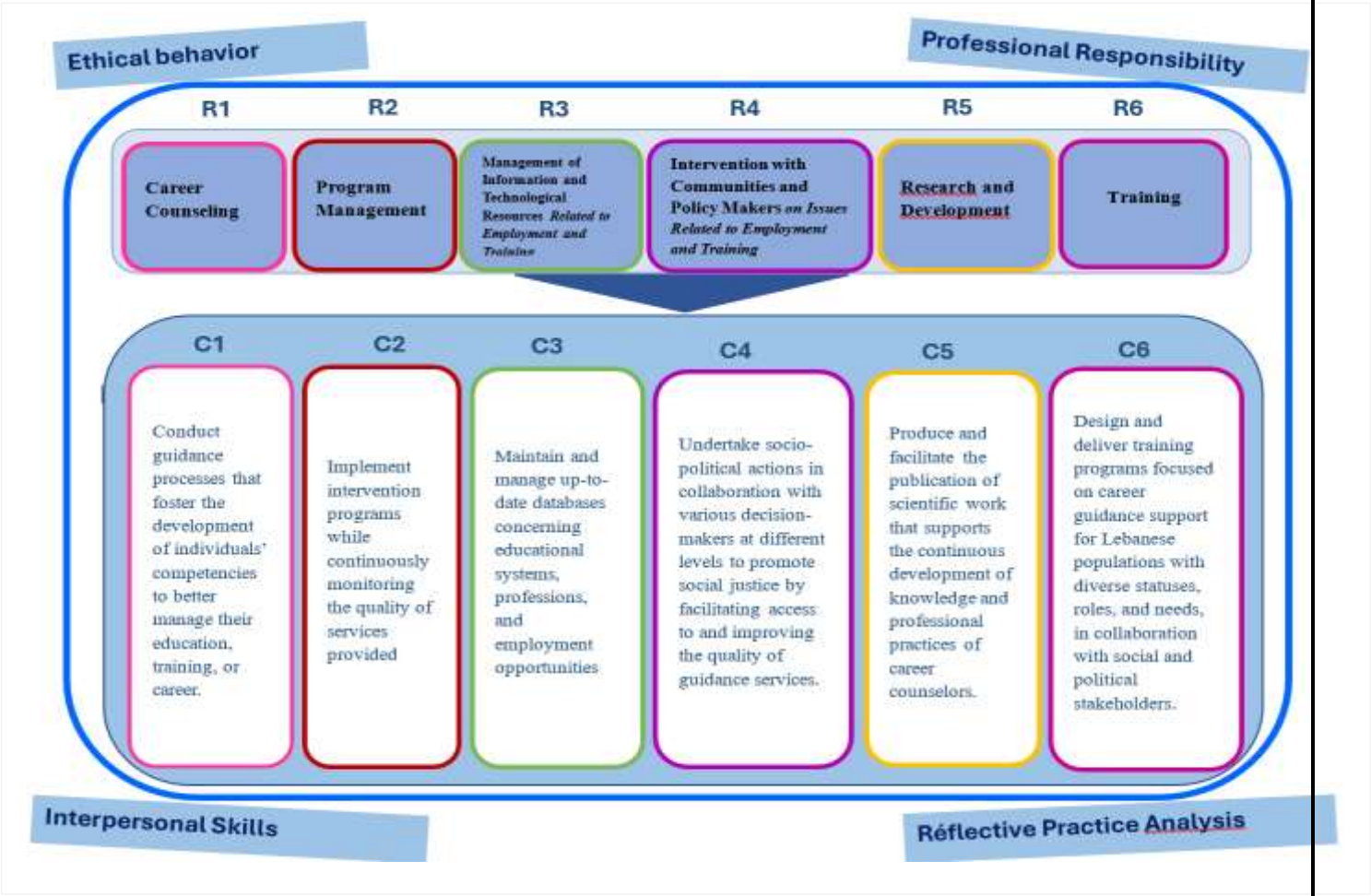
Ten out of twelve experts responded within the given timeframe, enabling consensus to be achieved at this second stage.

The results highlighted three central dimensions of the career counselor's role: respect for the individual's decision-making autonomy, the distinction between administrative tasks and relational support, and the foundations of informed choice.

The counselor's mission is not to persuade, but rather to support individuals in an autonomous decision-making process by facilitating self-exploration and access to objective information on education and labor market opportunities. While

administrative procedures may fall under their responsibilities, these do not constitute the core of the role, which must remain centered on human support. Finally, informed choice requires a combination of in-depth self-knowledge and a realistic understanding of professional opportunities, considering sectoral developments and the importance of transferable skills. Career guidance activities and encounters with professionals were identified as essential levers in this process.

Emergence of the Validated Prototype Framework



6. Discussion

Analysis of the Delphi Process Leading to the Competency Framework Prototype

1. Methodological Rigor and Structuring

The use of the Delphi method proved particularly relevant for the co-construction of a professional guidance competency framework. Its iterative structure allowed for a balance between methodological rigor and openness to the diversity of expert contributions. The development of the framework followed a collective and collaborative approach, in which the research object, already socially pre-constructed through existing practices and literature, was enriched by participants' inputs. The researcher's role was to orchestrate these contributions, preserving their fidelity while innovating in the model's architecture. This process fostered collective intelligence and shared learning, highlighting both the richness of the data collected and the limits of researcher neutrality, necessitating an explicit epistemological stance.

Expert selection, based on criteria of competence, experience, and representativeness, ensured diversity and complementarity of perspectives from both academic and professional backgrounds. Each round was structured to gather detailed contributions within a predefined timeframe while maintaining anonymity to encourage freedom of expression. At the end of each cycle, synthesized feedback was provided to maintain participant engagement and motivation, despite the sometimes-demanding duration of the process.

The procedure relied on constant iterations between data collection, synthesis, and feedback, with each proposal reintegrated into successive rounds to gradually refine the prototype. The Delphi method also facilitated the management of divergences by valuing each contribution equally and seeking consensus without diminishing the richness of disagreements, enabled by anonymity and expert freedom of expression. Finally, the iterative nature of the process contributed to the validation of

results through progressive confrontation of ideas, thereby enhancing the credibility and scientific robustness of the produced framework.

2. Scientificity, Neutrality, and Distancing

The question of scientific rigor arises particularly in research and development employing the Delphi technique, often criticized for its inductive and context-specific nature. The approach adopted in this study prioritized field data while ensuring continuous triangulation with international practice standards. This methodological choice anchored the prototype within a solid conceptual framework, without restricting creativity or limiting the emergence of novel ideas. Sustained efforts were made to maintain neutrality and distance from the research object. Acceptance of opinions, even those contrary to initial expectations or representations, was an essential step.

The process required constant vigilance against researcher subjectivity, particularly during data rephrasing and categorization, to remain faithful to respondents' perspectives. Analysis involved balancing a profusion of words into a coherent, intelligible, and harmonized text while preserving the diversity and complexity of viewpoints.

It should be emphasized that the merit of this process cannot be attributed solely to the researcher. The collective dynamics of the experts, fueled by the diversity of their practices and professional domains, shaped the final form of the constructed object. This collaborative and constructive dimension represents one of the major contributions of the approach, reinforcing both the legitimacy and relevance of the prototype. Furthermore, ethical considerations guiding the entire process strengthened its scientific credibility while highlighting the inherent tensions between researcher freedom, fidelity to data, and respect for involved actors. Managing this subjectivity required transparency, methodological rigor, and continuous validation through feedback, ensuring the reliability and robustness of the results.

3. Practical Contributions and Perspectives

The Delphi process not only produced a competency framework prototype adapted to the Lebanese context but also generated new avenues for scientific and professional reflection. The evolution of the initial schema highlighted the direct contributions of experts, whether in distinguishing initially merged roles, proposing novel competencies, or suggesting groupings. These successive adjustments contributed to a more precise, representative, and contextualized model.

A key learning from this process is the capacity to transform multiple and heterogeneous contributions into structured communication, supported by conceptual schematization. This modeling, particularly the schematized prototype, made complex concepts visible and comprehensible, facilitating their appropriation by both practitioners and researchers. Moreover, the collaborative and iterative nature of the approach opens promising avenues for future research and validation. The developed prototype serves as an evolving foundation, potentially consolidated by subsequent empirical and conceptual work. Its dissemination and adoption by the academic and professional community should enhance the relevance of career guidance in a constantly changing context.

7. Research Limitations

This study presents several limitations, both methodological and contextual.

First, Researcher subjectivity remains a concern. Despite deliberate efforts to maintain neutrality and distance, there is an inherent risk of implicit influence in the way contributions were synthesized or reformulated.

Second, the quality of the results depended heavily on the engagement, clarity, and depth of expert responses. Variability in the quality of contributions may have influenced the relevance of certain formulations.

Third, the R&D nature of the study demanded substantial time and energy, primarily devoted to developing and refining the framework prototype. While this approach enabled the creation of a detailed and contextually adapted model, it limited opportunities for broader empirical validation or systematic experimentation. As a result, the generalizability of the findings remains to be established in future research.

Fourth, external constraints and expert availability posed challenges. Factors such as the economic crisis, the COVID-19 pandemic, and social instability restricted experts' participation, prolonging data collection and complicating logistics. These limitations may have affected the diversity of contributions, although anonymity and the iterative nature of the Delphi process helped maintain an acceptable level of scientific rigor.

Finally, a notable limitation is the absence of explicit integration of artificial intelligence (AI) within the prototype. At the time of consultation, experts were not fully aware of AI's potential role in career guidance, and its use in Lebanon remains limited. Nevertheless, the rapid evolution of AI demonstrates its increasing importance in supporting data analysis, task automation, and personalized guidance. Integrating AI into both the competency framework and daily guidance practices will be essential for enhancing relevance, efficiency, and innovation in the future.

8. Conclusion and Perspectives

In a context marked by rapid labor market changes and educational inequalities, professional guidance requires trained practitioners capable of addressing increasingly complex pathways. This research, employing the Delphi method and a participatory approach, produced a contextualized competency framework grounded in Lebanese realities and inspired by international standards.

The Delphi process played a central role in this construction, enabling structured, iterative, and anonymous expert exchanges that managed divergences while seeking informed consensus. The collaborative and co-constructive approach, involving researchers, practitioners, and educators, enriched the reflection and ensured the relevance of the identified roles and competencies. This process highlighted the importance of collective intelligence, neutrality in data analysis, and methodological rigor in transforming individual contributions into a coherent and operational prototype.

The resulting framework integrates knowledge, skills, and attitudes, providing a solid foundation for the training and professionalization of career counselors in Lebanon. Beyond the final product, the experience demonstrates the value of co-constructed and participatory approaches in developing contextualized, legitimate, and sustainable tools.

Beyond creating the framework, this approach underscores the richness of exchanges and the co-construction dynamics that shaped the final object. It also offers perspectives for extending and deepening the work, including testing and validating the model in diverse educational and professional contexts, expanding expert participation, and developing educational tools integrating AI and self-assessment tools to strengthen counselor practice. Continuous observation of the framework's impact on professional practices and service quality could further enhance understanding of its effectiveness and contribute to the ongoing improvement of guidance systems.

Thus, this research illustrates how rigorous methodology combined with a collaborative and participatory approach enables the design of contextualized, legitimate, and sustainable tools while opening new avenues for professionalization and innovation in career guidance.

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