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# From Options to Choices: Helping Clients Make Better Career Decisions

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## Abstract

We are taught reading, mathematics, and driving, yet we are rarely taught how to make decisions. Consequently, many individuals struggle with career choices and seek guidance from career counsellors.

When faced with multiple options—such as colleges, occupations, majors, or jobs—the decision-making process typically involves: (a) identifying promising alternatives, (b) exploring them in depth, and (c) comparing the final options to select the most suitable option. This paper focuses on individuals who have already compiled a shortlist of 3-4 viable alternatives and need guidance in choosing the best one. To address this need, we present *Comparing and Choosing*, an evidence-based framework that career counsellors and practitioners can use to guide clients in systematically comparing and evaluating their final alternatives. We then demonstrate how this framework can be integrated into counselling practice to enrich counselor–client dialogue. Next, we introduce *Compare and Choose*, a free online decision-support system that operationalizes the framework and facilitates the comparison and evaluation of alternatives. Finally, we examine how these tools may enhance counsellors' capacity to assist clients in making better career decisions and identify the conditions of their optimal use.

*Keywords:* career counselling, career decision making, career decision-support system, PIC, Comparing and Choosing.

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The career one pursues has significant implications for one's lifestyle, well-being, and economic and social status (Pham et al., 2024; Robertson, 2013). Hence, career decisions rank among the most important decisions we make. However, while we are taught how to read, do math, and drive, we are rarely taught how to make decisions. As a result, when faced with career decisions, many individuals turn to career and guidance counsellors or career development practitioners to navigate the process (Di Fabio & Bernaud, 2008; Fouad et al., 2006). Others turn to self-help resources, including career information and planning websites (Galliot, 2017), which can be used independently or as part of the career counselling process (Whiston et al., 1998).

Making career decisions is a challenging task because it often requires collecting vast amounts of information about many alternatives (e.g., occupations, majors, colleges, and jobs). Furthermore, the contemporary world of work – characterized by rapid technological advances and digitalization (Nordin & Mathew, 2024) – requires individuals to make career decisions more frequently, and often with incomplete information. Additionally, unclear personal characteristics and uncertain future preferences further complicate the decision-making process (Gati & Kulcsár, 2021).

Career counselling typically begins by forming a working alliance with the client (Whiston et al., 2016). Then, the counsellor often assists the client in getting to know themselves. Savickas (2012) and Hartung (2013) highlight narrative and developmental perspectives that help individuals construct coherent career stories and integrate their career with multiple life roles, while Blustein (2013) underscores the social and economic contexts that shape opportunities through the psychology of working. These views, further synthesized by Savickas and Guichard (2016), frame career as a dynamic, evolving process integrated with personal identity, social context, and multiple life roles rather than a one-time decision.

Despite variations among different approaches, the career counselling process ultimately involves making a decision. Decision-making typically focuses on the choice among several alternatives. When the number of career options is large, narrowing them down to a manageable list of promising career alternatives becomes inevitable. Then, during a joint in-depth exploration of these options – often using online career information systems like the JOBBANK or O\*NET – some promising alternatives that do not match the client's preferred attributes are likely to be eliminated. The final stage is to evaluate and compare the remaining alternatives to identify the most suitable option. Other clients come with a shortlist already prepared and need guidance only in the final comparison. In both cases, the counsellor's role is to guide clients through the challenging process of evaluating and comparing the final alternatives to find the most suitable one.

In this paper, we aim to enrich career counsellors' repertoire of approaches and tools for supporting clients who have already compiled a shortlist of final alternatives. We begin with a brief review of career decision-making models and introduce the decision-theory-based *PIC* model (Prescreening, In-depth exploration, and Choice; Gati & Asher, 2001). We focus on the model's final stage, *Choice*, which seeks to identify the most suitable alternative from the shortlist, and present the *Comparing and Choosing* framework, designed to operationalize this objective. This framework guides a systematic attribute-by-attribute evaluation of the finalists to determine the best fit, using a multidimensional compensatory model that assumes an alternative's advantages can offset its shortcomings (Bell et al., 1988).

Next, we introduce *Compare & Choose*, a free online decision-support system that implements the proposed framework. We suggest ways to incorporate both the *Comparing and Choosing* framework and the *Compare & Choose* decision-support system into career counselling. The Discussion addresses practical considerations for incorporating them into career counselling and examines the benefits and challenges of applying the proposed framework and system with clients from diverse sociocultural backgrounds.

### Career Decision Making

Our approach is rooted in the notion that career choices are the outcome of a decision-making process, traceable to Parsons's (1909) principles: *Know yourself, know the world of work*, and combine them through *true reasoning*. Zytowski (2008) pointed out that Parsons never delineated the meaning of true reasoning, and suggests that *career decision-making* should be considered its modern equivalent. Fifty years ago, Jepsen and Dilley (1974) reviewed eight vocational decision-making models and compared them from a decision-theory perspective. Later, Harren (1979, p. 119) proposed that "a decision-making model is a description of a psychological process in which one organizes information, deliberates among alternatives, and makes a commitment to a course of action."

The concept of career decision-making has gained increasing prominence in vocational psychology, with Walsh and Osipow's (1988) book *Career Decision Making* representing a key milestone. More recently, Lent and Brown (2020) suggest that career choice counselling addresses both the content – the options under consideration, and the process of choosing – how individuals decide among those options.

While these accounts stem from an analytic, information-focused cognitive view, a parallel literature highlights embodied, affective, and narrative ways of knowing – for example, somatic markers and the *felt sense* (Damasio, 1994; Gendlin, 1981). Likewise, life-design approaches invite clients to craft narratives that weave affect, identity, and meaning into coherent plots (Savickas, 2013). Such embodied and narrative forms of knowing can be supplemented by a systematic analysis, and their integration may yield more satisfying decisions (Maree, 2020). Hence, while we focus on systematic comparison and evaluation, we refer to the potential benefits of integrating these approaches in the Discussion.

Several models have been developed to guide career decision-making. While all of them divide the complex process into sequential stages, they differ in their purpose, essence, and number of stages (ranging from three to nine). Studies indicate that interventions based on such models can improve decision readiness and career decision-making self-efficacy (Björnsdóttir et al., 2011; Brown, 2015), as well as increase career decisiveness, exploration, and vocational identity (Hirschi & Läge, 2008). Gati and Kulcsár (2021) reviewed six prominent models (*DECIDES*, Krumboltz & Hamel, 1977; *CASVE*, Peterson et al., 1996; *PIC*, Gati & Asher, 2001; Van Esbroeck et al., 2005; Germeijs & Verschueren, 2006; Hirschi & Läge, 2007) and found that while

some models omit essential stages of the decision-making process, others are overly complex or include ambiguously defined stages, limiting their applicability in both counselling contexts and independent use. In comparing the stages outlined by the various models, Gati and Kulcsár (2021) note that the *PIC* model (Prescreening, In-depth Exploration, and Choice; Gati & Asher, 2001) offers a concise and structured sequence of three stages that incorporates the core elements common to most career decision-making models.

The following section explains the *PIC* stages and reviews empirical evidence supporting their validity. Next, we introduce *Comparing and Choosing*, a decision-theory-based framework that supports the *Choice* stage by guiding the systematic evaluation of the shortlisted alternatives to identify the most suitable one.

### Prescreening, In-Depth Exploration, and Choice (PIC)

Gati and Asher (2001) introduced the *PIC* framework, which offers a structured method for integrating personal and career information to identify the most suitable career option. *PIC* divides the decision-making process into three distinct stages – *Prescreening*, *In-depth exploration*, and *Choice*, each with specific goals, steps, and outcomes. Without a structured process, individuals may struggle to begin career decision-making, lose momentum, or make choices misaligned with their goals and preferences (Gati et al., 1996). Before detailing the steps of the *Choice* stage, we briefly outline the *Prescreening* and *In-depth exploration* stages that precede it. A more comprehensive description and discussion of the three stages of *PIC* can be found in Gati and Asher (2001).

#### Prescreening

The objective is to identify a manageable set of promising career alternatives that warrant further exploration. Individuals first need to identify the career-related criteria most important to them (e.g., prospects for professional advancement, variety of tasks, use of analytical skills, and teamwork; Gati & Asher, 2001; Lent & Brown, 2020). At this point, the counsellor may help clarify any key, non-negotiable criteria. Then, by applying the sequential elimination method (Gati et al., 1995), alternatives are evaluated one criterion at a time, starting with the most critical. At each step, alternatives that do not meet the selected criterion are eliminated. This process proceeds in descending order of criterion importance until a small and manageable set of alternatives remains (typically  $7 \pm 2$ ; Gati et al., 2003; Gutentag et al., 2024; Miller, 1956). This set of promising alternatives becomes the starting point for the next stage – *In-depth exploration*.

#### In-depth Exploration

This stage focuses on confirming which of the promising alternatives are not only suitable for the individual but also feasible. A detailed evaluation of each remaining alternative is conducted, considering: (a) its alignment with the characteristics of the individual's ideal career, including attributes initially regarded as less critical, (b) the individual's willingness and ability to meet the core demands of the career (e.g., shift work for paramedics), (c) the feasibility of being admitted to the required education or training, and (d) the likelihood of securing employment in the chosen field. Typically, additional alternatives are ruled out during this stage, narrowing the list to approximately three ( $\pm 1$ ) final options that are not only promising but also realistic and viable (Gati & Asher, 2001).

#### Choice

The *In-depth exploration* stage rarely yields a single suitable option. Instead, it typically produces a shortlist of two to four alternatives appropriate for the individual, making it necessary to determine the most suitable one. The *Choice* stage entails a systematic comparison of the final options to determine the best one, as described in more detail in the following section (Gati & Asher, 2001), or to rank the remaining alternatives when implementation of the top choice is uncertain.

## Support for the *PIC* model

Empirical support for the *PIC* model has been documented in several studies (Gati & Kulcsár, 2021; Gati & Levin, 2015). Its core pillar – attribute-based career preferences across all three stages of *PIC* – has demonstrated reliability and validity (Gati et al., 2006; Gati & Gutentag, 2015). The *Prescreening* stage is supported by findings showing that individuals who applied sequential elimination and selected one of the recommended occupations reported greater satisfaction with their occupational choice six years later (Gati et al., 2006). The *In-depth exploration* stage is validated by evidence that, once unsuitable options are excluded, individuals conduct more thorough evaluations of the remaining alternatives (Gati & Tikotzki, 1989). Regarding the *Choice* stage, research indicates that many individuals tend to select the option most closely aligned with their ideal career (Zakay & Barak, 1984; Medin et al., 1995) and perceive systematic, analytical comparisons as helpful in decision making (Amit & Gati, 2013). Chernev (2003) found that when an alternative matches – or comes closest to – one’s ideal alternative, the decision process is simplified and preference for that option increases. A comprehensive description of the *PIC* model, together with its empirical support, is provided by Gati (2023).

## Guiding Individuals Through the *Choice* Stage

The *Choice* stage involves systematically comparing alternatives to determine the most suitable option. A practical method for this purpose is the application of a multi-attribute (i.e., multi-criteria) compensatory model (Pitz & Harren, 1980; Sauermann, 2005; von Winterfeldt & Edwards, 1986). Each career alternative is quantitatively evaluated against a set of attributes or criteria relevant to the individual (e.g., income, prospects for professional advancement, autonomy, teamwork, use of numerical abilities, and absence of shift work). The overall suitability of an alternative is estimated by summing these evaluations, thereby reflecting the extent to which its characteristics align with the individual’s desired or ideal levels on each attribute (e.g., the individual prefers working *only indoors*, whereas the alternative involves working *mostly indoors*). This process helps individuals select the option that best corresponds with their desired characteristics (Katz, 1966; von Winterfeldt & Edwards, 1986) or that most closely resembles their *dream job* (Zakay & Barak, 1984).

Although translating judgments into numbers may seem counterintuitive, individuals actually make such trade-offs routinely in everyday life. For example, choosing a rental apartment requires weighing multiple attributes of varying importance, such as monthly rent, commute time, neighborhood safety, parking availability, and whether it includes an extra bedroom or balcony. Deciding whether an additional bedroom justifies an extra C\$400 per month and a 15-minute longer commute illustrates the daily compensatory evaluations that formal models are designed to capture. Quantification does not create these trade-offs; it simply makes them explicit.

Building on this rationale, *Comparing and Choosing* is an evidence-based, decision-theory-informed framework that adapts such compensatory models for career decision making. It provides a structured process to assist career counsellors in guiding clients through the systematic comparison and evaluation of their final alternatives, thereby facilitating the identification of the most suitable option at the *Choice* stage. The following section outlines the eight steps of the *Comparing and Choosing* framework and the ways in which career counsellors can support their implementation.

## Comparing and Choosing

Clients seek career counselling at various stages of the decision-making process. Many individuals need support in prescreening – reducing a broad pool of career alternatives to a manageable set of promising options. Others approach the counsellor with several possibilities and need help exploring them in depth to determine which should be included in the final shortlist. For clients at the *Choice* stage, who need support in selecting the best option from their shortlist, *Comparing and Choosing* offers an appropriate framework.

This section introduces *Comparing and Choosing* and its structured, stepwise process. We demonstrate how *Comparing and Choosing* can be implemented in counselling and present *Compare & Choose*, an

open-access, evidence-based decision-support system, informed by decision theory, that implements the steps of *Comparing and Choosing* in a user-friendly format. Appendix A provides a mini-case study illustrating how the *Comparing and Choosing* framework can be incorporated into the career counselling process.

### The Eight Steps of *Comparing and Choosing*

The *Choice* stage entails a systematic process of comparing and evaluating the options on the client's shortlist and assisting them in selecting the most suitable one. To undertake this process, the client should have a shortlist of 2-4 final options and a preliminary understanding of the criteria relevant for comparison. These options and attributes are then incorporated and evaluated through *Comparing and Choosing*. Across the eight structured steps of *Comparing and Choosing*, the client's attribute-based preferences, which represent their ideal career (e.g., no more than a half-hour commute), are matched with the corresponding attributes of each option. This comparison produces an overall estimate of each option's suitability, indicating how well it aligns with the client's ideal career and thus supporting the identification of the best option.

The *Comparing and Choosing* framework fosters reflection, clarifies personal goals, and highlights trade-offs, thereby helping clients make better-informed decisions. Owing to its simplicity and structured sequence, it can be readily incorporated into one or two counselling sessions. In implementing the framework, the counsellor plays a central role by guiding the client, offering suggestions, asking clarifying questions, and drawing attention to critical issues at each step.

The following section outlines the eight steps of *Comparing and Choosing*, highlighting key aspects counsellors should address with their clients to foster meaningful engagement and enhance the likelihood of informed choices. Table 1 presents the Comparison Table (available for download via this [link](#)), which supports the implementation of the eight steps; the numbers in the table correspond to the step numbers in the list that follows.

#### 1. Listing Career Alternatives

**Client's task.** The client is asked to list 2-4 career alternatives on their shortlist. The alternatives are entered in the top row of the Comparison Table, under 1-Alternatives. These alternatives are typically identified prior to counselling sessions and exclude those characterized by attributes the client deems unacceptable (e.g., shift work), as such options would already have been eliminated. Thus, by the *Choice* stage, all shortlisted alternatives have been judged worthy of consideration among the finalists.

**Counsellor's role.** Once the career alternatives have been listed, the counsellor assesses whether the client's final shortlist is relatively homogeneous (e.g., school guidance counsellor, school psychologist, career counsellor, social worker) – generally considered more desirable (Gutentag et al., 2024) – or largely heterogeneous (e.g., chemist, business administrator, computer programmer, psychologist). If the shortlist appears arbitrary or if the client struggles to explain why certain alternatives were included, the counsellor may recommend revisiting the *Prescreening* and *In-depth exploration* stages. Counsellors may also ask whether any of the listed alternatives feel more intuitively suitable (while acknowledging that the client may respond “none”). The Discussion section addresses how the client's intuitive inclination regarding the most suitable option can be reconciled with the outcomes of the systematic comparison process.

#### 2. Identifying and Listing Attributes

**Client's task.** In this step, the client identifies at least 5 attributes or criteria considered important for comparing the finalist alternatives. Examples may include teamwork, income, shift work, manual dexterity, flexible hours, work environment, and distance from home. The selected attributes should represent characteristics that differentiate the alternatives. The client's chosen attributes are entered in the left column of the Comparison Table under 2-Attributes.

**Counsellor's role.** The counsellor supports the client in generating a balanced and relevant set of attributes by probing with clarifying questions (e.g., “Why is this attribute important to you?”) and suggesting

**Table 1**  
*The Comparison Table*

2-Attributes	3-Optimal Level	4-Attribute Importance	1- Alternatives						
			A		B		C		
			5-Fit <sup>a</sup>	7 <sub>a</sub> -Score <sup>b</sup>	5-Fit <sup>a</sup>	7 <sub>a</sub> -Score <sup>b</sup>	5-Fit <sup>a</sup>	7 <sub>a</sub> -Score <sup>b</sup>	
a. _____	_____	_____	_____	_____	_____	_____	_____	_____	_____
b. _____	_____	_____	_____	_____	_____	_____	_____	_____	_____
c. _____	_____	_____	_____	_____	_____	_____	_____	_____	_____
d. _____	_____	_____	_____	_____	_____	_____	_____	_____	_____
e. _____	_____	_____	_____	_____	_____	_____	_____	_____	_____
f. _____	_____	_____	_____	_____	_____	_____	_____	_____	_____
g. _____	_____	_____	_____	_____	_____	_____	_____	_____	_____
h. _____	_____	_____	_____	_____	_____	_____	_____	_____	_____
7 <sup>b</sup> - The overall suitability score		100	_____	_____	_____	_____	_____	_____	_____

Notes: The numbers preceding the labels in the table denote the sequence of filling out the table (e.g., begin with 1-Alternatives). The missing 6 refers to the screening of the client’s responses in the table, and revising them (if needed) before proceeding to 7<sub>a</sub>.

Fit<sup>a</sup> is the client’s perceived estimate of the fit between their optimal level in an attribute and the level that characterizes an alternative in that attribute (0 = no fit, 1, 2, 3, 4 = perfect fit).

7<sub>a</sub>-Score<sup>b</sup> is the product of Attribute importance and Fit, 7<sup>b</sup> – is the sum of the scores in column 7<sub>a</sub>, and represents the overall suitability of the alternatives. Step 8 involves comparing the suitability scores and circling the highest one.

additional ones the client may not have considered (e.g., opportunities for advancement, job security). For instance, if teaching is on the shortlist and the client arrived late to the first meeting, time management skills may be highlighted as relevant. Counsellors should ensure that the attributes selected meaningfully differentiate the alternatives and may encourage clients to refine broad categories (e.g., *work environment*) into more specific components (e.g., *indoor vs. outdoor work*).

Some clients may find it challenging to identify relevant attributes for comparing the finalist alternatives. In such cases, counsellors can facilitate client introspection and refer them to optional lists of commonly considered attributes (accessible through this [link](#)), which present three sets of attributes relevant to different career decision contexts (i.e., college, major or occupation, and job).

**3. Describing Optimal Levels of Attributes**

**Client’s task.** The client specifies their optimal (i.e., most desirable) level for each attribute (e.g., only indoors for work environment or none for shift work). These optimal levels characterize the client’s ideal alternative – their dream occupation or job. The responses are recorded in the second column from the left, adjacent to the Attributes column, under the 3-Optimal Levels heading.

**Counsellor’s role.** Counsellors may address any incongruities or inconsistencies in the client’s stated optimal levels, such as a preference for a high-paying job alongside a strong interest in working with toddlers – an unlikely combination in most occupations. In such cases, the counsellor should discuss the inconsistency with the client, highlight the low likelihood of achieving both goals within a single option, and encourage them to consider which attribute is more important or which alternative provides the best balance. Counsellors may also support the client in making the necessary, and sometimes difficult, compromises (e.g., longer-than-desirable commuting time) that can help pave the way for identifying the most suitable alternative.

#### 4. Rating the Attributes by Importance

**Client's task.** Not all criteria or attributes are equally important to the client. Therefore, the client is asked to assign relative importance ratings to each attribute so that the total across all attributes sums to 100. For example, an attribute rated 20 is regarded as twice as important as one rated 10. Higher importance ratings indicate that an alternative failing to meet the client's optimal level on that attribute will be significantly less appealing, whereas lower ratings suggest that such a gap would have only a minor effect on overall appeal. These ratings often reflect either a strong desire for, or aversion to, the attribute. The client records the ratings in the third column from the left, under 4-Attribute Importance.

**Counsellor's role.** To facilitate the rating task, career counsellors may suggest that clients first rank-order the attributes by importance and then assign numerical ratings, ensuring that the total equals 100. Counsellors can encourage clients who find it difficult to carry out Steps 2, 3, or 4, to reflect on past experiences that varied in how satisfying they were.

#### 5. Rating the Fit of an Attribute in Each Alternative

**Client's task.** Clients are asked to rate the perceived compatibility of each alternative with each attribute, proceeding row by row, attribute by attribute. Rating by attribute (row) rather than by alternative (column) reduces the likelihood of the halo effect (Wen et al., 2020). The perceived fit is reported on a 5-point scale, ranging from 0 (does not fit my preference for that attribute at all) to 4 (fits my optimal level for that attribute well). For example, if the optimal level is only indoors, a job that is entirely indoors would be rated 4, one that is mostly indoors 3, about equal indoors and outdoors 2, mostly outdoors 1, and only outdoors 0. The fit ratings are entered at the intersection of each alternative and attribute under the 5-Fit column.

**Counsellor's role.** In rare cases where an alternative receives a very low fit rating (i.e., 0 or 1) on an attribute, the counsellor should encourage the client to reflect and explain why it was included among the finalists. In some cases, the alternative may have redeeming qualities (e.g., a 4 rating) on attributes that are more critical to the client. If the low fit rating stems from a lack of feasibility (e.g., rigorous medical school admission requirements), the counsellor may suggest alternatives that share key features with the unattainable one. Alternatively, such ratings may reveal inaccurate perceptions of an occupation's attributes, in which case the counsellor can facilitate access to more reliable career information (e.g., Gourde et al., 2025). Similar interventions may also be appropriate when clients struggle to realistically assess feasibility (e.g., What is the minimum SAT score required by prestigious universities?).

#### 6. Initial Summary Table

**Client's task.** Clients are encouraged to review their ratings and responses in the Comparison Table and, if they have second thoughts, revise the attribute importance or fit ratings before proceeding.

**Counsellor's role.** Counsellors can highlight unusual fit ratings during the review process. For example, based on the client's stated optimal level, the counsellor may note an alternative's rating that appears disproportionately high for a given attribute, informed by their professional experience and knowledge of both the client and the alternative. In such cases, the counsellor can encourage the client to gather additional information about the attribute in question and reconsider or adjust the rating in light of the new information and discussion.

#### 7. Combining Attribute Importance and Perceived Fit

**Client's task.** At this step, clients are guided in aggregating the information recorded in the Comparison Table. First, the compatibility score for an alternative on a given attribute is obtained by multiplying the attribute's importance rating by its fit rating (ranging from 0 to 4). This calculation is carried out for each attribute and for all alternatives, and the resulting scores are entered in the 7a-Score columns of the Comparison Table.

Next, the overall suitability score for each alternative is determined by summing its compatibility scores across all attributes. Discrepancies on essential attributes carry greater weight and therefore reduce the alternative's overall suitability estimate. These estimates are recorded in the bottom row of the Comparison Table (b-Overall Suitability Score), under the corresponding Score column for each alternative. (The free online *Compare & Choose* decision-support system, described in the next section, automatically computes both the compatibility and overall suitability scores).

**Counsellor's role.** In addition to presenting and guiding the client through this step, the counsellor should ensure that the client follows the correct sequence of computations.

### 8. The Final Comparison Table and Its Meaning

**Client's task.** The client reviews the completed Comparison Table, including the total suitability score for each alternative in the bottom row. The alternative with the highest suitability score is naturally the one most closely aligned with the client's ideal option. As the maximum possible suitability score is 400 (obtained when all attributes receive the maximum fit score of 4, multiplied by importance ratings that sum to 100), the gap between 400 and an alternative's score represents the distance between the client's ideal alternative and the alternative under consideration.

**Counsellor's role.** When reviewing the final summary table with the alternatives' total suitability scores, counsellors can ask clients about their satisfaction with the process and its outcome. They may then draw attention to the difference between the highest and second-highest overall suitability scores. A small difference between the two may indicate high suitability for both, and the client should therefore be encouraged to gather additional information about each alternative before making a decision.

These guidelines are particularly relevant when the *Comparing and Choosing* framework is applied within counselling sessions, where clients benefit from real-time feedback. They are equally applicable in online counselling, particularly when screen sharing is possible. In both settings, counsellors act as quality-control monitors, providing comments and interpretations that enhance the effectiveness of the *Comparing and Choosing* process and support clients in the *Choice* stage.

### The Online Compare & Choose Career Decision-Support System

Research has shown that decision aids, such as computer-assisted career planning systems, significantly enhance the career decision-making process (Copeland et al., 2011; Herath et al., 2024; Leung, 2022). They enable individuals to progress either with the support of their career counsellor or independently. Such tools foster more informed career decisions, particularly when combined with one-on-one counselling (Betz & Borgen, 2010; Gati et al., 2003; Leung, 2022; Whiston et al., 1998). Moreover, following the recommendations generated by these systems has been found to increase the likelihood of long-term career satisfaction (Gati et al., 2006).

In response to the need for decision-support tools at the *Choice* stage, Amit and Gati (2013) proposed developing a computerized module to help individuals systematically compare their career alternatives. This proposal led to the creation of *Compare & Choose* – a free, online decision-support module that guides users through the structured eight-step process of *Comparing and Choosing* described above. The module, accessible via this [link](#), adheres to principles of equity, diversity, and inclusion in counselling, as well as to established guidelines for designing computer-assisted career planning systems (Gati, 1994).

The *Compare & Choose* module concludes with tailored verbal feedback, following the summary table, which highlights key insights and offers practical recommendations. When the difference in overall suitability between the top alternatives is negligible, the feedback advises treating them as equally viable and encourages gathering more information or considering secondary criteria to tip the balance.

Gati et al. (2025) analyzed the responses of 412 deliberating individuals who, on their own initiative, used the online *Compare & Choose* module to identify the most suitable occupation from their shortlist. On average, users considered 3.12 finalist alternatives and employed 6.74 attributes for comparison – a number that resembles Miller's (1956) *magical number seven* as the optimal size of a set. The mean suitability score

across alternatives and participants was 303 ( $SD = 42$ ). Given that a score of 400 reflects a perfect match with the client's ideal alternative, a mean of 303 suggests that, for most users, the decision-making process involved compromises (Gati et al., 1997). These findings also provide insight into how individuals engage in deliberation when using the *Compare & Choose* module, demonstrating their ability to use the tool effectively. In the Discussion, both the *Comparing and Choosing* framework and the *Compare & Choose* decision-support module are referred to collectively as *C&C*.

## Discussion

Career decisions often have long-term implications for individuals' lives, making the selection of a suitable option especially significant (Bimrose & Mulvey, 2015; Kulcsár et al., 2020). Therefore, investing in the career decision-making process can be highly beneficial, including, if available, seeking support from a career counsellor, and using *C&C*. Those who engage in systematic *Prescreening* and thorough *In-Depth Exploration* are more likely to generate suitable finalists at the *Choice* stage (Gati, 2023). At that point, using *C&C* can help identify the most suitable alternative (Gati & Asher, 2001). *C&C* can be implemented either within counselling or independently as a self-help decision-support system; its use may enhance decision-making confidence and reduce the likelihood of future regret. The following sections outline further considerations for implementing *C&C* in career counselling.

### Implementing *C&C*: Considerations for Career Counselling

#### *Who is Likely to Benefit Most from C&C?*

Given the variability in individuals' decision-making styles and preferences, it is important to acknowledge that some individuals may feel less comfortable engaging with *C&C*, particularly those who prefer narrative or other qualitative approaches. Nevertheless, *C&C* may still benefit many of these individuals by reducing anxiety and resistance: it helps shift the focus from making an immediate, potentially overwhelming decision to comparing alternatives on specific attributes, thus making the process feel more structured and manageable. In addition, presenting the process as a sequence of steps with numerical estimates may frame it as a more structured task, enabling clients with personal or emotional concerns to engage with it more comfortably and effectively. This, in turn, may help some individuals progress more gradually in their career decision-making.

*C&C* can be effective for individuals with different vocational personalities. Within Holland's (1997) typology, Investigative and Realistic types may find its systematic structure appealing. Similarly, Harren's (1979) typology of decision-making styles suggests that rational decision-makers are likely to feel comfortable with its structured approach and reliance on quantitative inputs and outcomes. By contrast, Artistic or Social individuals may initially find the structured nature of *C&C* less appealing. However, Amit and Gati (2013) found that individuals generally perceive systematic comparisons of alternatives as more effective than holistic ones, particularly during the *Choice* stage. Interestingly, even those with an intuitive decision-making style did not favour the holistic model, suggesting that they, too, may benefit from a systematic approach.

In career counselling, the proactive involvement of the career counsellor in introducing and guiding the use of *C&C* can make it more accessible for clients who might otherwise feel overwhelmed by its analytical components. To reduce emphasis on the quantitative aspects of the process, counsellors may present it as a guided exploration of the client's preferences or as a collaborative conversation. Offering reassurance throughout the process can further help clients feel more comfortable and engaged.

Cultural differences may influence the relative effectiveness of decision-making processes. Yates and Oliveira (2016) reviewed studies linking East Asian cultures with holistic thinking. For instance, Koreans have been found to rate intuitive reasoning as more important than analytical reasoning, compared with participants from Western cultures (Buchtel & Norenzayan, 2008). Cognitive style has also been theoretically linked to social orientation, such that those who are relatively analytic tend to be individualists, while those who are relatively holistic tend to be collectivists (Varnum et al., 2010). Moreover, Japanese decision-makers

tend to favour non-compensatory schemes for addressing dilemmas, whereas Americans are inclined towards compensatory schemes (Yates & Oliveira, 2016). Nevertheless, *C&C* remains flexible in content and can accommodate diverse preferences. For example, individuals with a more dependent decision-making style (Harren, 1979) or those from collectivist cultures that value joint decision-making may benefit from using *C&C* within counselling by prompting discussions and incorporating input from family or close friends, thereby facilitating an interactive process. In this way, *C&C* can be adapted to varied decision-making styles, preferences, and cultural backgrounds. Still, it is important that counsellors adapt their feedback at each step in *C&C* to the client's specific sociocultural and ethnic background (Flores et al., 2005; Osipow & Littlejohn, 2013).

Finally, it is important to note that *C&C* is primarily a framework for comparing final alternatives, allowing individuals to input their own content and preferences. It can therefore be introduced to a wide range of clients who may differ in their concept of an ideal career, the alternatives they shortlist, and the criteria they use to compare them. These differences are reflected in the different content they enter into the Comparison Table, while following the same eight steps in the systematic comparison.

### ***When Should C&C Be Used?***

One way to evaluate where an individual is in their career decision-making process is by assessing their Range of Considered Alternatives (RCA; Gati et al., 2003), an expanded version of the Occupational Alternatives Question (Zenner & Schnuelle, 1976). The *RCA* is a self-report, multiple-choice item that asks respondents to select the statement that best describes them: (1) "I do not even have a general direction"; (2) "I have only a general direction"; (3) "I am deliberating among a small number of specific career alternatives"; (4) "I am considering a specific alternative but want to explore other options before deciding"; (5) "I know which career alternative I am interested in, but I want to feel confident in my choice"; and (6) "I am already sure of the career I will choose." Responses of (1) or (2), which indicate a lack of consideration of specific alternatives, suggest that the individual is at or prior to the *Prescreening* stage, whereas a response of (6) indicates that a choice has already been made. Accordingly, individuals who respond with (3) to (5) can be considered suitable candidates for using *C&C* at the *Choice* stage. Hence, the *RCA* can help counsellors determine whether *C&C* is an appropriate tool to introduce, either within sessions or as a resource for independent use.

### ***Considering Intuitions During C&C***

In the absence of an objective criterion, career counselling tools like *C&C* can help examine and validate clients' intuitive inclinations by systematically evaluating and comparing alternatives (Sauter, 1999). Gati et al. (2025) elicited deliberating individuals' career intuitions about the most suitable option in their shortlist in two ways – implicit and explicit – and compared these intuitions about the most suitable alternative from their shortlist to the outcomes generated by *Compare & Choose*. In Step 1 (listing career options), the first occupation listed was considered to reflect implicit intuition. Individuals also had the option to select the occupation they felt was most suitable, reflecting their explicit intuition.

The *C&C* outcomes can either support or challenge clients' intuitive inclinations and counselors' personal opinions. When the results match intuition, the alignment serves as a form of self-endorsement, because the systematic comparison is based entirely on the client's own inputs. In such cases, comparing intuitive preferences and qualitative inclinations with *C&C* outcomes enables individuals to integrate different perspectives into their decision-making and to broaden their repertoire of career decision-making strategies. However, the best alternative identified through systematic comparison may differ from the one that is intuitively favoured. Such discrepancies may signal an internal conflict, where an alternative possesses both appealing qualities and significant shortcomings. These conflicts are a common challenge in career decision-making (Gati et al., 1996) and have been linked to lower life satisfaction (Samson et al., 2024).

When such conflicts arise, their resolution often requires counsellors to support clients in clarifying personal values and preferences and in gathering additional information through exploratory experiences (e.g., internships, short-term projects). They can also help clients recognize that, while no single alternative in the

real world of work fully satisfies all priorities, a systematic comparison of the finalist options can help identify the most suitable one.

Career counsellors may also hold personal opinions about the most suitable alternative for a client. When the counsellor's and client's intuitions align, confidence in the chosen alternative is strengthened, and if the C&C outcome also supports this option, confidence is reinforced further. In such cases, C&C can function as a quality-control mechanism (Gati & Asher, 2001). Conversely, when the counsellor's opinion and the client's inclination diverge, it may be appropriate to pause and explore the reasons for this discrepancy. Here, C&C and its outcome can provide valuable insights into the source of disagreement.

### **Future Research**

C&C suggests several directions for future research that could enhance practice and benefit both clients and counsellors. Future studies should evaluate C&C's effectiveness when integrated into counselling sessions and when used as a standalone self-help tool. In addition, research should explore the added value of C&C within counselling across diverse client groups.

### **Conclusions**

The PIC model is recommended for clients facing career decisions with multiple options and many criteria. C&C is specifically designed to support the *Choice* stage, when individuals are comparing a few final alternatives. In this paper, we introduced both the *Comparing and Choosing* framework and the *Compare & Choose* decision-support system that implements it – both guide individuals through a systematic comparison of career options on their final shortlist. When used in counselling sessions, career counsellors can assist clients by applying the eight steps of the *Comparing and Choosing* framework, guiding them to evaluate attributes, prioritize key factors, and weigh trade-offs. At each stage, counsellors can provide feedback that not only supports clients in identifying the most suitable career option but also enhances self-awareness and enriches the overall counselling process.

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## Appendix A

### Helping Claire Choose Among Job Offers Using C&C

We believe that choosing among a shortlist of alternatives – for example, jobs – is one of the most common decision-making situations. To illustrate how career counsellors and guidance practitioners can apply the C&C framework in this context, we present the case of Claire, the client, and Adrianna, her advisor.

Claire, an economics major, received several job offers at a career fair and sought guidance. From their very first meeting, Adrianna framed Claire's dilemma as part of the *Choice* stage and reassured her that uncertainty at this point is both natural and manageable. She explained that their work together would be a collaborative process of systematically clarifying Claire's preferences and carefully weighing her options – keeping Claire's voice at the centre while drawing on Adrianna's professional guidance and facilitation.

Adrianna began by inviting Claire to list her job offers. Claire identified the following: joining the finance department in her hometown municipality, becoming an investment advisor, and working in the accounting department of a medium-sized high-tech startup. When Adrianna gently asked whether any of the options seemed intuitively most appealing, Claire hesitated briefly before responding: "For me, being an investment advisor seems the most attractive job."

Claire listed the following attributes as relevant for comparing the three jobs: prospects for professional growth, responsibility, variety of tasks, analytical work, and work-life balance. Adrianna listened attentively, then gently reminded her of the burden of her student loans. Smiling, she asked, "And income doesn't matter?" This prompted Claire to add income as her second-most-important attribute. Adrianna's probing demonstrated how the counsellor's interventions can expand clients' awareness of overlooked but crucial criteria.

Next, Adrianna guided Claire in articulating her optimal levels for each attribute, framing the exercise as an opportunity to describe her *ideal job portrait* rather than as a technical requirement. Claire replied that she is seeking high-potential professional growth and a job with significant responsibility. She would clearly prefer a job offering a high income; however, as an entry-level economist, she would be willing to consider any job with a reasonable salary – over C\$80,000 with adequate fringe benefits. Given her high GPA, she aspires to use her strong analytical skills to the fullest in a job that offers a flexible work-life balance when she becomes a mother.

Adrianna introduced the weighting exercise, explaining the rationale for distributing 100 points across attributes. She observed Claire's allocations and noted a potential contradiction: both high responsibility and flexible work-life balance had been assigned identical weights, potentially masking an underlying tension. To prompt reflection, Adrianna asked: "Which would make you feel more dissatisfied – too much responsibility with an adequate work-life balance, or adequate responsibility without a flexible work-life balance?" This encouraged Claire to refine her ratings and deepened her self-understanding.

Adrianna asked Claire to estimate the fit between her ideal level on the first attribute – high prospects for professional growth – and the corresponding level in the first job, the town's finance department. Claire was reminded that fit ratings ranged from 4 (a perfect match) to 0 (an unacceptable gap). She rated the finance department job as a 2, citing limited opportunities for courses and training. Using the same procedure, she rated Jobs B and C as 4 and 3, respectively. She then assessed the fit for all attributes, rating each job's fit one attribute at a time, while Adrianna periodically checked to ensure the ratings genuinely reflected her sense of fit.

After completing the fit ratings, Adrianna asked Claire whether she was satisfied with her evaluations – both the perceived importance of the attributes and the extent to which each job aligned with her ideal characteristics. Once Claire confirmed, they calculated the overall suitability scores for the three jobs. Table 2 summarizes Claire's inputs and provides an overview of her evaluation of the three options.

Table 2 shows that Job B received the highest suitability score (330), followed closely by Job C (318). In contrast, Job A – the town's finance department, which reflected Claire's implicit intuition as her first-listed alternative—scored considerably lower (228), suggesting it could be removed from the shortlist. Claire observed that the results confirmed her initial intuition about Job B (investment advisor) and told Adrianna she now feels more confident in choosing the investment advisor job.

**Table 2**

*Claire’s Comparison Table*

Attributes	Attribute Importance	The Jobs					
		A Town’s finance department		B Investment advisor		C Accounting in a high-tech start-up	
		Fit <sup>a</sup>	Score <sup>b</sup>	Fit	Score	Fit	Score
Professional Growth	25	2	50	4	100	3	75
Responsibility	10	2	30	4	60	3	45
Variety of tasks	10	2	20	3	30	4	40
Using analytical skills	18	3	54	3	54	4	72
Work-life balance	15	3	30	2	20	2	20
Income	22	2	44	3	66	3	66
Job’s overall Suitability score	100		228		330		318

*Note:* Fit<sup>a</sup> is Claire’s perceived fit between her optimal level in an attribute and the level that characterizes a job in that attribute (4=high, 3, 2, 1, 0=no fit at all). Score<sup>b</sup> is the product of Attribute Importance and Fit.

As a career advisor, Adrianna also formed her own opinion. Based on her knowledge of Claire, she deliberated between Job B (investment advisor) and Job C (accounting in a high-tech start-up). While recognizing the alignment between Claire’s intuition and the C&C results, she noted the narrow gap between the two jobs and encouraged Claire to explore both further by consulting current or former employees. She emphasized the value of complementing structured analysis with real-world insights and reassured Claire that the close scores indicated strong alignment with her aspirations, thereby reducing decision-related stress. Claire agreed to gather additional information and return for further guidance if needed.

This case illustrates how C&C can be used to systematically compare the finalist alternatives at the *Choice* stage, while also demonstrating the counsellor’s critical role. By implementing a structured yet flexible process, Adrianna was able to support Claire in reducing uncertainty, balancing her personal opinion and Claire’s intuitive inclination with systematic comparison, and enhancing her overall decision-making confidence.