



# Methodology of individual vocational counselling- Theoretical framework and Micro-Counselling

## Background material

### Egan's problem management counselling model

Gerard Egan's "The Skilled Helper - A Problem-Management and Opportunity- Development Approach to Helping" first appeared in 1975 and was reprinted in 2014. It is one of the world's best-selling reference books for service occupations. The practical guidance to overcome problems and open up new opportunities is likely to be the reason for this popularity (cf. Ertelt, Schulz, Frey, 2020). According to Egan, the client must answer four basic questions to solve his problem:

1. What specific problems should I work on ("Current scenario")?
2. What do I want instead of what I now experience as problematic ("Preferred Scenario")?
3. What "strategies" do I have to use to achieve this?
4. How can I translate planning into concrete "action"?

A three-step counselling model is used to answer these questions.

#### Stage I - Clarification of the current scenario includes

- the client's precise presentation of the story of a problem ("story"),
- helping the client visualise aspects that have not yet been sufficiently considered ("blind spots"),
- identify the problem areas that are important for counselling. The main focus is on those areas and untapped opportunities where significant changes can be brought about.

#### Stage II - Formulation of the preferred scenario

- identifying possibilities for a better future, supported by divergent thinking and brainstorming techniques,
- through a change process, where the counsellor helps to aim for realistic and motivating goals,
- strengthening self-actualisation tendencies by offering incentives to increase perseverance in achieving goals.

#### Stage III - Development of appropriate strategies of action

- presenting possible measures, including a well-considered examination of the various options,
- selecting the most suitable strategies,
- jointly developing a plan for organised measures to achieve the set goal.



Each step of the process (stage) requires specific counselling skills (cf. Ertelt, Schulz, Frey, 2020; cf. Egan 2014):

- **Stage I** of the help process is the assessment phase, in which the aim is not to narrow down the client with the help of a diagnostic scheme but to encourage self-reflection. A special attitude of attentiveness, active listening, empathy, professional and sensitive questioning and a summary that sets priorities and provides direction is helpful here. Added to this are self-disclosure skills, client-centred information transfer, such as the interpretation and explanation of previous findings, and a focus on narrowing down the problem areas to be treated.
- **Stage II** requires guidance on divergent and creative thinking, brainstorming, and formulating goals. The counsellor must also be able to persuade the client to engage with a future scenario.
- **Stage III** skills include defining the strategy with the client, weighing up different options for action (e.g. using the balance matrix method) and utilising supportive forces (e.g. through the client's network).

## Career decisions as a cognitive information process (CIP)

The theories of career development and career choice do not usually address the actual processes involved in the decision. This aspect is targeted by decision-theoretical approaches, where a distinction must be made between normative and descriptive models. Normative approaches assume how individuals should best decide; they are called prescriptive models. In contrast, descriptive models are based on observations of how decisions are actually made. The approach presented below is eclectic and belongs to descriptive approaches (Ertelt, Schulz, 1997; Ertelt, 2001; Peterson, Sampson, Reardon, Lenz, 1996). From the early perspective of cognitive information processing approaches, the processes involved in professional problem-solving have been treated in a differentiated way (cf. Ertelt, Feckler 1979; Ertelt 1982) and subsequently studied empirically on several occasions (Ertelt, Schulz, Frey, 2022). Similarly, Peterson et al. (1996) characterise the processes involved in occupational decisions with their '*Cognitive Information Processing*' (CIP).

Individual decision-making and problem-solving processes can ideally be divided into pre-decision, decision, and post-decision phases, each with characteristic information activities. Three types of information interact in different ways: Factual knowledge includes information about possible alternatives, their 'offers of satisfaction' and their ways and chances of realisation; valuation knowledge includes criteria that have developed from ideas about oneself in comparison to the perceived professional-social environment; problem-solving strategies show the individual which factual and valuing information is to be combined and how. Only the information included by the individual in a particular problem-solving situation is called 'decision premises'.

Factual premises mainly include occupational knowledge and subjective assessment of the chances of realising alternatives. Valuing premises are fuelled by interests, motivation, self-assessed abilities, and the influence of 'important' peers. Decision premises are normative/prescriptive and comprise subjective significant methods of problem-solving (cf. Mitchell, Krumboltz, 1996): (1) perception of the importance of a decision situation, (2) realistic determination of the necessary steps, (3) careful examination of previous experiences in similar situations, (4) development of various alternative measures, (5)



collection of information about these alternatives, (6) weighting the alternatives according to the criteria and eliminating unattractive alternatives.

However, a key issue for information processing in career guidance is how much information the individual needs to make an appropriate career decision. Opinions differ depending on whether one is guided by the normative idea that the client must be led to a rational decision or whether one thinks more in terms of actual problem-solving behaviour.

If people are expected to make rational decisions when choosing a career, for example, career guidance information management would have to make sure that they

- know all the alternative courses of action open to them and their contributions to the individual goals ('offers of satisfaction'),
- have sufficient evaluation criteria to assess these alternatives so that a preference scale according to (subjective) benefit emerges, and
- always choose the alternative that is not surpassed by any other in this order of preference.

The overload of the individual's capacity to absorb and process information, the reactions to information overload (information stress), individual conflicts and emotions, as well as the influence of coincidences or 'favourable opportunities' are largely neglected in these prescriptive models of decision-making (cf. Ertelt, 1992, p. 95; Holling et al., 2000, pp. 10 and 28). Therefore, these normative approaches are only suitable to a limited extent as a basis for future-oriented information management in career guidance, although a large number of national and international procedures for career and study guidance are still based on them (cf. Holling et al., 2000, p. 28). The descriptive models of human decision-making, which are oriented towards individual information needs and behaviour, seem more appropriate to the legal and professional-ethical framework of career guidance, i.e., they 'pick up' the addressee where he/she is at the moment in his/her problem-solving process. This is why we speak of a 'demand-oriented' approach, in contrast to the 'supply-oriented' character of prescriptive models.

Professional problems and decisions are usually complex in nature and, therefore, difficult to define clearly ('ill-defined situation'). There is rarely a 'right' solution and a clearly predictable conclusion or even a guarantee of a solution for a certain course of action. Such decision-making processes are usually accompanied by strong emotional involvement, such as problem-solving pressure, information stress, fear of irreversible wrong decisions due to incomplete information and doubts as to whether the selected alternative is actually the right one (cf. Peterson et al., 1996, pp. 428).

Descriptive models describe the 'heuristic' behaviour of humans in poorly defined decision-making situations: Solutions are approached step by step by means of a tentative procedure and simplification strategies, only a few alternatives are included in the calculation and only evaluated with a few criteria, finally, binding decisions are postponed as long as possible to be able to take new information into account.

Heuristics are simplifying rules used by people in decision-making processes to substantially reduce the cognitive effort of information processing; such 'muddling through' strategies are thus not an accident to be avoided in problem-solving, but the rule. Wegmann (2005, p. 25) describes ten such heuristics after a literature review and states that they can be distinguished from each other by the following



characteristics: 1. search rules for alternatives and/or their attributes, 2. stop rules for stopping the search and 3. decision rules for choosing an alternative. (cf. also Ertelt, Ruppert 2011).

| Example Heuristics        | 1. SEARCH RULE                                                            | 2. STOP RULE                                                                                               | 3. DECISION RULE                                                                                                                                                      |
|---------------------------|---------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Incrementalism            | Search for alternatives that deviate only slightly from the initial state | Search is terminated when an alternative is found that represents an improvement on the initial situation. | Decision in favour of an alternative that differs only slightly from the initial situation but is an improvement.                                                     |
| Take the 'best' heuristic | Search for an attribute that has the strongest decision-making power      | Search is terminated as soon as an attribute is found in which the alternatives differ                     | Decision in favour of the alternative with the higher value on the selected attribute                                                                                 |
| Satisfaction              | Search rule according to the random principle                             | Search is stopped as soon as an alternative corresponds to the "satisfaction level".                       | Decision in favour of the first alternative, which corresponds to the "satisfaction level".                                                                           |
| 'Minimalist' Heuristic    | Random search for a relevant attribute in which the alternatives differ   | Search ends as soon as an attribute is found in which the alternatives differ                              | Decision in favour of the known alternative. If neither or both are known, a decision in favour of the alternative with the higher value on the selected attribute. - |

*Table 1: Characteristics to distinguish heuristics.*

To record individual decision-making processes and the heuristics applied in the process, Tittel (2019) has developed and tested a questionnaire based on the ISM, which can be regarded as an essential aid in vocational guidance. This makes it possible to assign the corresponding questions to each of the heuristics dealt with, which serve for clear identification both during the counselling and for the subsequent content-analytical evaluation of recorded conversations. Based on this, a demand-oriented guidance-accompanying and guidance-following information management can be built up (cf. Tittel, 2019, pp. 91).

The quality of a demand-oriented guidance and information system now depends on how well it can adapt to the individual cognitive-affective individual information processing processes. In this sense, ideas such as Peterson et al.'s solution cycle described above, or the phase and stage breakdowns are diagnostic instruments for determining the individual's state in the decision-making process and are extremely helpful in conveying the respective helpful information. If a person is faced with a problem situation, e.g. triggered by dropping out of school, unemployment, or failure in education, they need information on the definition of the new situation for them, on the type of decision, on the disadvantages of not deciding on how to proceed and on the expected information effort.

According to this, aids for generating alternative courses of action are to be provided, whereby it is less important to have as large a number as possible, but rather an exemplary selection.



At the level of evaluating courses of action, information is needed to raise awareness of relevant evaluation criteria that can be used to assess the instrumentality of an alternative for individual goals.

In the decision-making phase, with a personally binding commitment to an alternative, the individual needs information that gives him or her information about his or her own decision-making ability, conflicts of choice and commitment, fear of loss, and chances of realisation.

In order to cope with the dissonance experiences that are characteristic of the post-decision phase, descriptive, reinforcing and interpretive information must be provided. It is particularly important, for example, in a new training position or job, to provide counselling and explanations in the case of doubts or failures so that rash reactions do not undermine the successful implementation of a decision.

Information structural guidance (ISM), which builds on these premises, refers to guidance support throughout a person's career. The focus is on decision-making and problem-solving behaviour in the transition phases, not only reactively but also proactively (cf. Ertelt, Schulz, Frey 2022).

### Information Structural Methodology for Counselling (ISM)

The Information Structural Methodology (ISM) combines Egans Problem Management and solution-oriented counselling. "The counselling process is understood as a *simulation of imagined cognitive-affective information processing procedures in the client* within the framework of a learning process towards the counselling goal" (Ertelt, Schulz, Frey, 2022).

In many vocational counselling services for young people and adults, the framework conditions are characterised by very limited counselling time, low contact frequency (often one-time counselling), high existential problem pressure on the client, high expectations on the diagnostic labour market-related skills and the matching-related competencies of the counsellor. Therefore, career counsellors have to reconcile sometimes conflicting role requirements to do justice to the client and the counselling situation as well as to international guidelines, especially regarding counselling ethics.

To understand the scientific background of ISM, the approach of Gati et al. (2019) seems helpful. The authors distinguish a) normative, b) descriptive and c) prescriptive decision models.

To a) According to these models, (1) each alternative should be evaluated according to its subjective usefulness for one's own goals and preferences and (2) according to the estimated probability of achieving the desired result. Normative models describe the behaviour of a perfectly rational decision-maker and assume that the advantages of an alternative can compensate for its disadvantages.

To b) Because people are generally incapable of such decision-making due to their limited capacity to absorb and process information, they are guided more by their strategies, the so-called heuristics. For Gati et al. (2019), this form of decision-making cannot be satisfactory from the perspective of professional guidance. Descriptive approaches are important for problem analysis, but this is just as insufficient for goal-oriented guidance as normative approaches.

To c) Therefore, the counselling-related three-phase prescriptive model "Prescreening", "In-depth Exploration", and "Choice "(PIC) was developed.



"Prescreening" means the pre-selection of possible vocational alternatives according to individual preferences and possibilities for action.

"In-depth exploration" means the in-depth study of these alternatives so that a few suitable courses of action emerge for final selection.

"Choice" means the final selection based on a detailed comparison of the remaining alternatives.

*"The PIC model integrates descriptive models with compensatory normative models by assigning them to different stages of the decision process with appropriate adaptations, turning the complex process of career choice into a sequence of well-defined tasks resulting in a rank-order of alternatives that best fit the individual". (Gati et al., 2019).*

ISM is a scientifically eclectic approach to counselling professional decision-making and problem-solving processes. The approach is descriptive, i.e. it does not prescribe how to solve problems (like the normative models) but is oriented towards the client's decision-making behaviour. ISM takes place in seven guidance steps and, in this respect, also has a prescriptive character in the sense of Gati et al. (cf. Ertelt, Schulz, Frey 2022):

**Step 1:** Define the situation and operationalise the concern or problem. This includes:

- Encouraging the client to describe the problem as comprehensively as possible (story),
- Differentiation of individual problem areas, together with the client,
- Assessment of the status in the problem-solving process in cooperation with the client,
- Preliminary analysis of the information needs related to the status of the problem-solving process (phase and stage reference),
- Determination of the client's involvement and problem pressure, taking into account the persons important to the client.

The necessary counselling skills include:

- Verbal and non-verbal encouragement to speak,
- a positive attitude of expectation,
- open and closed questions,
- Paraphrases and reflection of emotions,
- cognitive restructuring,
- Socratic dialogue.

**Step 2:** Definition of possible counselling goals

- Here, the client should play as active a role as possible and be encouraged to contribute concrete ideas for transforming the present (perceived as unsatisfactory) into a future state (perceived as satisfactory).
- The counsellor then shows his point of view from an expert point of view.



**Step 3:** Negotiation and conclusion of a counselling contract and prioritisation of the counselling goals (preferably in writing).

- What should definitely be discussed today?
- What can be the subject of follow-up counselling?
- Which goals cannot be optimally realised in counselling and should therefore be realised using other forms (e.g. self-information, media for self-assessment, job search databases)?

**Step 4:** Fine-tuning the process planning and implementation of the counselling contract

- Joint fine-tuning of the objectives and approach for today's consultation,
- differentiated information deficit analysis for the specific guidance problem.

**Step 5:** Diagnostic phase. Here, the danger of a survey that is as comprehensive as possible, often using non-specific test procedures, must be countered. Ethically and scientifically justified are only those diagnostic procedures that clearly relate to the problems agreed upon in the counselling contract. Above all, this means identifying missing, unstructured or incomplete decision-making premises in the client. The diagnostic areas in ISM refer to:

- *Factual knowledge:* Occupational information on training and activities (such as requirements, working conditions, job content, income, promotion prospects, job security), personal perspectives (suitability from a psychological and occupational health point of view), access requirements and conditions on the training and labour market.
- *Valuation knowledge (criteria for examining alternative courses of action):* Interests, competence assessments, cultural imprints, attitudes, and own professional experiences.
- *Prescriptive premises:* Decision-making style, information behaviour, previous experience with similar problem solutions, decision-making fears, dysfunctional thinking in decision-making and problem-solving processes, experience of conflict.
- *Emotions and conflicts* that accompany problem-solving and the decision-making process, e.g. fear of committing too early (reactance), cognitive dissonance in the post-decision phase or fear of negative reactions from important attachment figures.

Diagnosis in ISM does not at all mean the comprehensive clarification of the aforementioned premise areas but rather the identification and reduction of the client's specific information deficits. In this respect, there are methodological parallels to solution-oriented counselling.

**Step 6:** Elaboration and weighting of alternative courses of action to achieve the goals agreed in the counselling contract. This is followed by an examination of the extent to which the client can personally commit to an alternative (commitment). In this process, particular attention must be paid to feelings of reactance and phenomena of indecisiveness. If a viable decision has been made, agreements on the realisation are to be made, if possible, on the basis of concrete written plans. It is then particularly important to prepare for post-decision conflicts, especially if it is a far-reaching decision under information uncertainty.

**Step 7:** Evaluation of the counselling and preparation for dealing with post-decision conflicts (cognitive dissonance). Counselling must be accompanied by an evaluative analysis that includes the following aspects:



- *Input evaluation:* quality of the clarification of concerns as well as the consideration of the personality traits and problem background of the client
- *Goal evaluation:* scope and differentiation of the counselling goals, appropriateness of the goals to the person and the case, joint formulation and agreement of the goals, and correspondence with professional, ethical and legal-institutional norms.
- *Process evaluation:* Assessment of the methodology, the intermediate results, the involvement of the participants and the transparency of the counselling.
- *Output evaluation:* Assessment of the counselling results according to quality criteria
- *Transfer evaluation:* Determining the extent to which clients want to and are able to implement the counselling results.
- *Resource evaluation:* Assessment of the efficient use of human and material resources in counselling as well as the adequacy of the framework conditions (time, space, disturbances, etc.).

Finally, the corresponding counselling skills should be listed as examples for the central steps (cf. Ertelt, Schulz, Frey, 2022):

#### **Problem definition and goal setting**

- Verbal and non-verbal encouragement to speak
- Positive expectations
- Open and closed questions
- Paraphrases
- Reflection of the feelings
- Cognitive restructuring
- Socratic dialogue

#### **Development of alternatives**

- Brainstorming
- Other methods of creative thinking (partial change method, chessboard method, checklist method, similarities method, verbal reinforcement and positive expectation, modelling)

#### **Weighting of the alternatives**

- Concreteness
- Confrontation technique
- Comparison scheme for the evaluation of alternatives and their consequences
- Structuring
- Reinforcement

#### **Decision and personal commitment to an alternative**

- Positive challenge
- Encouragement to act
- Technique of logical consequences
- Concluding a contract for trading
- Forms of collective problem-solving (bargaining, persuasion, forced consent)
- Interpretation of feelings of reactance



### Preparation for disappointments in the post-decision phase

- Self-affirmation techniques
- Role play with role reversal
- Assigning homework
- Demonstrating techniques to reduce cognitive dissonance
- Modelling

Brüning (2021) discusses the application of ISM in other advisory settings, using the example of advisory-oriented controlling with a view to supporting managers.

The practical implementation of ISM can take place in the following steps (Ertelt, Schulz, Frey, 2022):

|                |                                                                                                                                                                                                                                                                                                                  |
|----------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Step 1:</b> | Definition of the client's initial situation and problem definition <ul style="list-style-type: none"> <li>- Story Telling (Client)</li> <li>- Cognitive Restructuring (Counsellor)</li> <li>- Status in the decision-making process</li> <li>- Assessment of problem pressure and client involvement</li> </ul> |
| <b>Step 2:</b> | Joint determination of possible counselling goals                                                                                                                                                                                                                                                                |
| <b>Step 3:</b> | Negotiate and conclude the counselling agreement ("Counselling contract") <ul style="list-style-type: none"> <li>- Determining the priority of the goals to be striven for</li> <li>- Transparent justification of the counselling process</li> </ul>                                                            |
| <b>Step 4:</b> | Fine-tuning of the counselling process <ul style="list-style-type: none"> <li>- Determining the status of the problem-solving process</li> <li>- Differentiated information deficit analysis</li> </ul>                                                                                                          |
| <b>Step 5:</b> | Diagnostic phase<br>Completion or elaboration of important data in the areas of "factual knowledge", "criteria" ((evaluative knowledge) and procedures ("prescriptive premises"))                                                                                                                                |
| <b>Step 6:</b> | Combining the results of the diagnostic phase to work out and weight alternative courses of action                                                                                                                                                                                                               |
| <b>Step 7:</b> | Evaluation of the counselling (goal, process, outcome) and preparation of the post-decision phase ("Cognitive dissonances")                                                                                                                                                                                      |

*Table 1: Steps for the practical implementation of ISM.*



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