HAPPENSTANCE AND THE COGNITIVE-AFFECTIVE PERSONALITY SYSTEM:
OPTIMIZING CHANCE IN VOCATIONAL EDUCATION

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ABSTRACT

The paper maps and compares vocational education and training cost-sharing mechanisms and regulatory instruments across the 12 newer EU Member States (Bulgaria, the Czech Republic, Estonia, Cyprus, Latvia, Lithuania, Hungary, Malta, Poland, Romania, Slovenia and Slovakia). It establishes which mechanisms and instruments are more successful and identifies shortcomings in their governance. Extensively using qualitative (literature review, surveys of VET experts) methods, the paper reviews and evaluates the developments of cost-sharing schemes in the newer EU Member States and provides recommendations to improve VET cost-sharing policies.

KEYWORDS:

vocational education and training (VET), VET financing, public investment in VET, private investment in VET, VET cost-sharing mechanisms, VET regulatory instruments, newer Member States

INTRODUCTION

In early 1998 a colleague of mine was invited to participate at an international summer school with the title “Educational controlling: models for increased effectiveness and efficiency and individual options for vocational education and training” in Sofia and to give a presentation on the topic of transfer evaluation. He could not attend, so he asked me if I was willing to give this presentation instead. Although I had neither worked on the topic of transfer nor on vocational education and training, I agreed to give the presentation. The unexpected invitation and the participation at the summer school had several consequences:

- I further developed the theory of situation specificity that I had developed earlier (Patry, 1991) to become a theory of transfer (Patry 1999a). This led to several research project proposals which, however, were all declined – among others with the reason “the theory of situation specificity is not known in the United States”. But it led also to several student papers and master’s theses.

- In Sofia, I met several people, among others Kęstutis Pukelis from Vytautas Magnus University in Kaunas. Several common endeavors ensued, such as a paper in Lithuanian about the transfer theory mentioned above (Patry 1999b), courses in Kaunas and several other papers (Patry 2005; Patry & Gastager 2004; Pukelis et al. 2008), as well as consultant to the two journals “Profesinis Rengimas - Tyrimai ir Realijos / Vocational Education - Research and Reality” and “Aukstojo mokslo kokybė / The Quality of Higher Education”, an evaluation etc.

- I also met and became friend with Rimantas Laužackas. So it came as a shock to learn that he passed away on the 14th of May, 2009.

- I suppose that this friendship was the reason to invite me to give a contribution to this conference for his 60th birthday which I was very happy to accept.

As you can see, a series of events that just happened – an invitation to a colleague, his time problems, my possibility and willingness to take his place, and the coincidence that in a Restaurant in Sofia there was a seat at the table where Kęstutis Pukelis was sitting that I could take – led finally to my being here and speaking to you today.

This is an example of what John D. Krumboltz and Al S. Levin (2004) call “happenstance” (see also Krumboltz 1998; Mitchell, Levin & Krumboltz 1999). Happenstance refers to unexpected, unplanned events that eventually turn out to be beneficial. Since they cannot be planned, they cannot be anticipated; how, then, can students be prepared to make most of them? The assumption is that the CAPS model proposed by Mischel and Shoda (1995) and some adaptations by Cervone (2005) can help to improve the happenstance model for VET.

I will first go into more details about happenstance (section 2), then I need to give definitions for two concepts that will be important (“superordinate-subordinate”; “meta”; section 3). In section 4 I will sketch a theoretical background – the cognitive-affective personality system by Mischel and Shoda (1995) – that permits a systematic account for this, and I will apply this theory to happenstance (section 5). The final section (6) will be a discussion.

1. HAPPENSTANCE: LUCK IS NO ACCIDENT

The event in Sofia and its consequences represent happenstance in the sense of Krumboltz and Levin (2004): “Each and every person plays a key role in creating his or her own unexpected career- and life-enhancing events and transforming them into real opportunities.” (p. 1) The messages of the book are that unplanned events – chance occurrences – more often determine our life and career choices than all careful planning we do. The readers are encouraged to take actions to open up opportunities even when they do not know the outcomes, to take advantage of chance events, to keep the options open, and to make most of
what life offers (p. 5). People can control the actions that they take and how they react to positive and negative experiences, and those are powerful factors in determining the directions their life takes (p. 7). Unplanned events offer opportunities. Terrible catastrophes affect many lives – often in unexpected ways. Even in the worst of conditions there are ways to become engaged in constructive activities (p. 9). It is amazing to discover how many people actually want to help you if they know something about you (p. 11). Success is not in how much adversity you face, but in how you respond to it (p. 12). Persistent actions and hard work can enable people to find what they want (p. 15). It often pays to exert some effort in trying to modify the job or modify one’s approach to the job before giving up on it (p. 19).

The title of the book summarizes these points very well: “Luck is no accident”. People often think that they have been lucky given the unexpected events, but actually they did a lot to make luck happen.

The authors give a series of advices (p. 23):
- Make the most of unplanned events.
- Always keep your options open.
- Wake up – before your “dream” comes true.
- Try it – even without knowing the outcome.
- Go ahead and make mistakes.
- Take action to create your own luck.
- Go for the job – then learn the skills.
- Enjoy yourself – the good life is a balanced life.
- Overcome self-sabotage.
- Remember that luck is no accident.

While most of these advices are self-explanatory, the third one – “Wake up – before your ‘dream’ comes true” – needs some further explanation. The message is that one must not be surprised if the dream does not work out exactly as planned. The authors encourage the readers to pursue their dreams, but advice to keep the eyes and ears open along the way: Unplanned events can lead to even better outcomes if one is ready to seize the opportunities when they arise. This means: People should experiment with their dreams (p. 40 f)

2. “SUPER- AND SUBORDINATE” VERSUS “META”

For the further discussion it is necessary to distinguish two types of relationships between scientific concepts: “superordinate/subordinate” on the one hand and “meta” on the other. The definitions are as follows:
- Two concepts, objects or terms – or any variable used in research – can be on the same level or they can have a superordinate-subordinate relationship (see, for instance, Fujita, Trope, Liberman & Levin-Sagi 2006). A concept etc. that is categorized as subordinate with respect to another is an example of a superordinate concept (“x is an example of y” means that x is a subordinate to y and y is a superordinate for x). For instance, each of the categories “chair”, “table”, and “cupboard” are subordinate with respect to the superordinate category “furniture”. The table, in turn, can be superordinate with respect to categories like “three-leg table”, “four-leg table”, “round table”, “square table”, etc. It must be noticed that any superordinate category can be divided in several ways; “furniture”, for instance, can be divided into “tables”, “chairs”, “cupboards”, etc., but it can also be divided into “wooden furniture”, “steel furniture”, “plastic furniture”, or into “factory furniture” and “carpenter-made furniture”, etc. Which type is chosen to form subordinate categories depends on one’s aim or reason to perform a distinction between elements on the same level.
- A term or a concept $x_2$ can be “meta” (that is, have the prefix “meta”) with respect a
term or a category $x_1$ of its own type. This can be conceived in the way, that $x_1$ and $x_2$ are both subordinate to $y$, and $x_1$ is a $y$ of or about $x_1$. An example is meta-cognition which is cognition about cognition: We have the superordinate category “cognition” which means, in short, “thinking about something”. Cognition (“$y$”) can have two exemplars (subordinate categories): cognition about anything but one’s own cognitions ($x_1$) and cognition about those cognitions ($x_2$). Typically the concepts (here: $x_1$, $x_2$, and $y$) get the same name on both the superordinate and the subordinate level (in this case, “cognition”) which makes it difficult to distinguish the levels. Other examples are:

- **Meta-theory:** The superordinate level ($y$) is “theory” in the sense of “scientific statement”. On the subordinate level there are theories about education or another topic of interest (object theory, $x_1$) and theories about such theories ($x_2$) – the latter are meta-theories. This applies, for instance, to statements from theory of science.

- **Meta-analysis:** The superordinate level ($y$) is “analysis”, which means decomposing and making sense of something. On the subordinate level there are analyses of data that are found in a research ($x_1$) and analyses of these analyses ($x_2$).

Two terms, one of which ($x_2$) is identified as “meta” with respect to the other ($x_1$), hence, are related as follows: (1) both are on the same level within a superordinate-subordinate hierarchy, (2) both are subordinate to the same superordinate category ($y$), and (3) one (the “meta category”, $x_2$) deals in some way with the other ($x_1$).

Hence a meta-concept requires the reference to a superordinate category – something that often is not taken into account.

### 3. THE COGNITIVE-AFFECTIVE PERSONALITY SYSTEM

The so-called cognitive-affective personality system (Mischel & Shoda 1995; Mischel 2007) is a good base for a theoretical interpretation of happenstance as conceived by Krumboltz and Levin (2004). Based on a cognitive interpretation of the behaviorist learning theories, Mischel (1968, 1973) and Bandura (1969, 1977) have provided cognitive social learning theories that include factors which can account for behavior and action. Mischel’s concept originally contained five factors (1973). Later on (Mischel & Shoda 1995; Mischel 2007) a sixth factor was added, and the fourth and fifth factors were specified; Mischel and Shoda call this system “Cognitive-affective personality system”, short CAPS:

1. Competencies: Potential behaviors and scripts that one can do;
2. Encodings: Categories (constructs) for the self, people, events, and situations (external and internal) on which perception depends;
3. Expectancies and beliefs about the social world, about outcomes for behavior in particular situations, about self-efficacy; this refers to a subject’s concepts of “if-then-relations”: “If I do a, b will result” or “If I do nothing, c will happen” or “If I try to do d, I will be able to do it” (self-efficacy), etc.
4. Goals and values: Desirable outcomes and affective states; aversive outcomes and affective states; goals, values, and life projects;
5. Self-regulatory plans: Plans and strategies for organizing action and for affecting outcomes and one’s own behavior and internal states; internal processes for the current action (with substantial meta-cognitive components in the sense discussed above);
6. Emotions: Affective reactions, feelings, including physiological reactions.

Each of these factors is superordinate with respect to a series of subordinate factors (which are usually called “sub-factors”). A sub-factor is an element or a combination of elements that are examples of the factor. For instance people have different competencies (factor 1), such as intelligence, creativity, physical abilities, behavior repertoires, etc. (sub-factors for factor 1),
and the same applies to the other factors.

The factors and their sub-factors must not be seen as independent but are interrelated. The system is an attempt to account for the factors that are most important in human personality and, for the present purpose, for human actions. It would be shortsighted to believe that only one or two of these factors are of importance for behavior and action; rather this is a tentative system of what indeed might be important.

Further, when doing a specific study, the system is much too abstract to be translated one-to-one into constructs that could be used in hypotheses or the like; rather the factors and sub-factors and their interplay refer to a series of theories that may or may not be used in specific studies. The system provides a framework that permits the integration of different theories and studies. This integration does more justice to the complexity of human nature and human behavior, to the richness and uniqueness of individual lives (Mischel 1968) than when one tries to use one simple theory to account for everything. Cervone (2005) did not recognize this characteristics of CAPS sufficiently when he criticized it for its insufficient delineation between factors and for the insufficient account for the relationships between them: All of these issues need to be specified not in the general framework, but in concrete studies with specific targets of investigation, and the delineation and relationships may differ from one study (or topic) to another.

The CAPS model is superordinate to a series of subordinate theories; Cervone (2005, p. 432) and Mischel (2007, p. 271) call it a “meta-theory” but Mischel (loc. cit.) says that it is “a general framework that spells out a possible underlying structure” which clearly refers to a superordinate-subordinate relationship: CAPS as superordinate model has several subordinate theories, each of which, to some degree, can be explained using the superordinate CAPS concept. Figure 1 gives an example for the relationship between superordinate and subordinate theories: CAPS is superordinate with respect to Rotter’s (1954) theory of social learning with as most important the factors expectancy (CAPS factor 3) and values (factor 4), to the theory of expected utility (e.g., Feather, 1990) with the same factors, and to Bandura’s (1977) social learning theory that includes several of the CAPS factors. These theories, hence, are subordinate with respect to CAPS. In turn, they are superordinate to other (subordinate) theories that are mentioned in figure 1. And one could further develop the system.

Figure 1 about here

![Diagram of CAPS model](image)

**Fig. 1.** Example for a superordinate theory, theories on the medium level and subordinate theories
This means that a theory can be subordinate with respect to a certain theory and superordinate with respect to other theories; for this reason the level of these theories is called “medium level” in Figure 1. But it is not just any theory that will fit into this framework. For instance, to be eligible as exemplar of CAPS, the subordinate theory must be conceived such that influence of other factors than the one it addresses are not negated but instead it is open for inter-theoretical relationships. If the author of a theory says, for instance, that expectations and goals are the only relevant variables and that the other variables are irrelevant, the theory would not fit into the CAPS system. Closures of mind – with the argument, for instance, that a “behaviorist” theory is inappropriate – must be avoided.

Cervone (2005) conceived a “personality architecture” that he applied to CAPS. He distinguished “structure” and “process” and applied this distinction not only to personality in general, but to “specifying a system of within-person constructs that model intraindividual personality structures and processes comprehensively” (p. 430; italics added). His argumentation with respect to the issues that are of interest here was as follows (p. 431 ff.):

a) “(P)eople construct meaning out of the situations they encounter.”

b) “The agent who constructs meaning is the whole person, not a subpart of the person”, hence it is appropriate to “view personality as a complex dynamical system”.

c) The properties of this system “include not only the system’s average tendencies, but also dynamic variations in behavior”.

d) “(T)hree distinctions (...) are fundamental to modeling personality architecture”: the distinctions between
1) “intentional and nonintentional mental contents”;
2) “global and contextualized assessment strategies”; and
3) “process and structure variables”.

e) Structure corresponds to knowledge, which is “enduring mental representations of the attributes of entities”, while process corresponds to appraisals, which are “dynamic evaluations of the meaning of encounters for oneself”; in short, structure is enduring, while process is dynamic.

f) “An analysis of intraindividual personality (...) enables one not only to describe observed patterns of coherence but also to explain them in terms of functional relations among underlying personality structures and processes.”

g) “By distinguishing knowledge structures from appraisal processes (...), one identifies general psychological mechanisms that enable people to respond to diverse situations in a coherent manner.”

Within his string of argumentation, he also refers to the CAPS model, for which, according to him, the following holds (p. 435):

i) “(P)ersonality systems are understood not only in terms of the content of their cognitive and affective units but also the coherent organization of those units.” This refers to b above.

ii) “(T)he personality system functions in interaction with the social environment, with situational features activating internal dynamics in a manner that may vary idiosyncratically from one person to the next”; this addresses the issues a, c, and d(iii), among others.

iii) The CAPS model highlights the importance of variability in response; people display behavioral profiles in which variability in behavior distinctively characterizes the individual.” This refers to g, among others.

However, Cervone (2005) does not apply the distinction between process (dynamic) and structure (enduring) to the CAPS factors. “Dynamic”, here, means that the respective (sub-) factor may vary from situation to situation, while “enduring” means that it is stable across situations. “Dynamic” and “enduring” are thought only as extremes of a continuum, and all intermediate states between fully dynamic (i.e., it applies only to one situation, one event) and fully enduring (it applies across all thinkable situations) can be imagined.
Based on this concept, the distinction depicted in table 1 is possible: Each factor can be decomposed into sub-factors that are more stable (enduring) and into sub-factors that are variable (dynamic). According to the principles presented above, the respective factors and sub-factors must not be seen as isolated from each other, rather they form an integrated whole and there are many interdependencies. Based on this concept it is possible to account for someone’s behavior in a particular situation.

**Table 1.** Structure (stable, enduring) and processes (variable, dynamic) with respect to the CAPS factors

<table>
<thead>
<tr>
<th>FACTOR</th>
<th>LABEL</th>
<th>STABLE (ENDURING)</th>
<th>VARIABLE (DYNAMIC)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Competencies: Potential behaviors and scripts that one can do; abilities and repertoire of behaviors that are available</td>
<td>Ability</td>
<td>AS</td>
<td>AV</td>
</tr>
<tr>
<td>Encodings: Categories (constructs) for the self, people, events, and situations (external and internal)</td>
<td>Coding</td>
<td>CS</td>
<td>CV</td>
</tr>
<tr>
<td>Expectancies and beliefs: Subjective if-then-relationships dealing with the social world, with outcomes for behavior in particular situations, with self-efficacy</td>
<td>Expectancies</td>
<td>ES</td>
<td>EV</td>
</tr>
<tr>
<td>Goals and values: Desirable outcomes and affective states; aversive outcomes and affective states; goals, values, and life projects</td>
<td>Goals</td>
<td>GS</td>
<td>GV</td>
</tr>
<tr>
<td>Self-regulatory plans: Plans and strategies for organizing action and for affecting outcomes and one’s own behavior and internal states</td>
<td>Plans</td>
<td>PS</td>
<td>PV</td>
</tr>
<tr>
<td>Affects: Feelings, emotions, and affective responses.</td>
<td>Feelings</td>
<td>FS</td>
<td>FV</td>
</tr>
</tbody>
</table>

In the situation presented at the beginning – a colleague was invited to an international summer school, he could not go and so he asked me to go instead – the following enduring and variable sub-factors according to CAPS (table 1) were determining for my decision to go to the summer school:

1. **Competencies:** I had some enduring knowledge about transfer and particularly about situation specificity (AS). At the moment the colleague told me about the topic to be discussed, I had the idea that I could apply the theory of situation specificity to transfer, that is, I had a certain ability which was very specific to this situation: Before that moment, I had not thought about this, and later on I further developed the idea, hence it was quite dynamic (processual, AV).

2. **Encoding:** This deals with perception, with the translation of what is perceived into meaning. My colleague talked to me in German, which I understand and can decode; this is an enduring perception principle: It does not depend on the situation whether I understand German or not (CS). I know my colleague quite well and we have a common history; hence I interpret what he says in function of what we have experienced together. This means that this sub-factor of encoding is dynamic to a certain degree: It is focused on the individual person I am talking with – my colleague –, and it constantly develops (CV).

3. **Expectations:** I have the general (enduring) expectation that if I make a presentation in a conference or a summer school or the like, then I can improve the theory of situation specificity. This is a stable concept with respect to an “if-then”-relationship (ES) – by the way it applies also to the presentation today. Another if-then-assumption was that I could meet people working in this domain. On the other hand there was a very specific expectation: I had been in Bulgaria once before and done some work with a colleague of mine, and if I accepted the invitation, I would be able to see her again; this expectation was absolutely specific to this situation (EV) because the
summer school was going to take place in Sofia.

4. Values: Let me first mention that we always have several goals simultaneously (Patry 1997), some of which may be enduring, while others are dynamic. Developing the theory of situation specificity is important for me; I had been working since the late 1970s on this topic, so this is an enduring value or goal (GS). The same applies to meeting people who might be interested in this theory. On the other hand, I had time to go there, that is I had no other commitments, so I had no goal that was in opposition to going to Sofia (possible aversive event was no threat); having time for such things is rather the exception than the rule, and hence the value varies from situation to situation: Sometimes I have other goals that are more important (such as teaching at my University, which I am required to do), sometimes not; hence this particular feature of the goal system is variable, or processual (GV). Another dynamic goal was to see my colleague from Bulgaria.

5. Self-regulatory plans: When asked whether I wanted to make this presentation, the first reaction is always to check my agenda to see whether I indeed have time. This is an enduring strategy to deal with such situations (PS). In this particular situation, I did not have my agenda with me, so I had to use another strategy, namely to ask my colleague to wait until I could check my schedule (PV). Further, in order to be able to decide I had to get more information about the event, so one additional strategy was to ask him to send me the documents about the summer school; this strategy is intermediate between enduring and variable and is required when the information about the event is not sufficient.

6. Emotions: Spielberger and others distinguish enduring traits and specific states in emotions (see Spielberger 2006, for a historical account for this distinction). I may have general (enduring) tendencies to react emotionally in a certain way but in this particular situation this is not noteworthy. As to the variable feelings (FV), I was quite pleased about this invitation and that my colleague thought of me to replace him.

This is only a short account of the relevant sub-factors in this particular situation, and many more aspects were important. The aim here was not to provide a detailed analysis of the decision making in this situation, but to illustrate the concept. Such a detailed analysis would be possible, though, and in case of problematic behavior using the principles discussed above might provide a powerful diagnostic tool. But this tool still remains to be developed.

To avoid misunderstandings, let me emphasize some characteristics of the system presented above that are important:

- The different factors and sub-factors must not be seen as independent, rather the system is an attempt to account for the different relevant (sub-) factors whereas in fact they form an integrated whole with mutual influence. For instance, the expectations are important particularly with respect to those (potential) behavior outcomes that are important (highly valued, i.e. goals).
- Within a particular situation, for each factor several sub-factors may be important. For instance, we have several goals simultaneously, some enduring, some variable. It will never be possible to identify all sub-factors, but maybe it is possible to find the most important ones.
- Again, it is important to notice that the distinction “enduring” or “stable” vs. “variable” or “processual” or “dynamic” is not meant to be dichotomous: A sub-factor is not either dynamic (and then very variable) or enduring (and then very stable), but rather there is a continuum between being fully stable and being fully variable (this is in contrast to Cervone 2005, who conceives a factor as either structure or process).
- “In this social cognitive view of personality, if different situations acquire different meanings for the same individual, as they surely do, the kinds of appraisals, expectations and beliefs, affects, goals, and behavioral scripts that are likely to become activated in relation to particular situations will vary.” (Mischel 2004, p. 5).
4. APPLICATION OF CAPS TO HAPPENSTANCE

The application of the so conceived CAPS model to happenstance provides new theoretical concepts with respect to vocational education and training. These are just some preliminary thoughts, and it is certainly promising to continue on this path.

Competencies: Traditionally education has put its focus on enabling students to do something. Much of vocational education and training consists in teaching the students’ knowledge and skills that will be useful in their professional life. These are enduring competencies, or at least they are often thought to be; however, research has shown that much of the knowledge that is acquired is inert knowledge (Whitehead 1929/1967; Renkl 1996), that it is learned in one situation but that there is no transfer to practical situations (see also Patry 1999b). So although competencies may be enduring, its actualization in a given situation is not at all trivial. The error of many educators is to think that just because someone has learned something means that he or she will also apply it. This means that competencies are necessary but not sufficient conditions: It is necessary to have certain competencies, but having them does not guarantee success.

From the point of view of happenstance, however, some competencies might not even be necessary. In their chapter “Go for the job – then learn the skills”, Krumboltz and Levin (2004) state: “While there are some jobs which require specific educational preparation, you never learn all that you need to know form that initial training.” (p. 119) Hence in the happenstance concept competencies are seen as much more dynamic (variable) than usually conceived. There are some competencies that are required. A surgeon or a pilot who learns the necessary skills on the job may put people in danger. And being able to learn on the job requires that some prerequisites are already given. Some may be trivial, like being able to read and write as necessary condition in all white collar jobs. Others are not trivial and possibly can be compensated by other abilities. This means that helping the students acquire competencies within VET is certainly not wrong, but it is not sufficient, and it would also be inappropriate to let the students think that it is sufficient.

In addition, what can be called “meta-ability” is asked for: the ability to deal appropriately with skills and cognitive abilities (Butcher & Harvey 1998). With respect to management development Butcher, Harvey and Atkinson (1997, p. 2) say:

In this complex environment, management development cannot be based on a particle breakdown of managerial skills and knowledge, which are then acquired through training. The flexible and appropriate use of knowledge and skills is enabled by more fundamental, generic competencies, or ‘meta-abilities’. A meta-ability is an underlying learned ability which plays an important role in enabling a wider range of management knowledge and skills to be used effectively. There are four meta-abilities of particular relevance to managers. These are:

- cognitive skills: cognitive complexity and flexibility; visionary ability, gaining clarity, and perceptual acuity;
- self knowledge: self-understanding and awareness which allows managers to deal flexibly with diverse and complex managerial situations;
- emotional resilience: exerting self-control and discipline; managing emotions appropriately, having personal resilience and a balanced self-view;
- personal drive: having a personal achievement orientation and ambition for responsibility, being able to motivate self and others, and taking personal risks.

While Butcher et al. focused on management, it would be important to address the question of meta-ability in VET, too. This might be an interesting research program.

Encoding: The second factor addresses the question of perception. Several issues are relevant here. First of all, vocational actions are situation dependent (see above, Cervone’s 2005 first argument: People construct meaning out of the situations they encounter; Mischel 1968; etc.). But someone can act in function of the situation only if and insofar he or she perceives situational differences. Meaning making is central function of encoding.
The question is, then, whether and how the person makes meaning. Krumboltz and Levin (2004) address particularly the question of finding a job. Here it is important to perceive opportunities of different kinds. The main problem is that the focus of perception, i.e. the area of opportunities that are regarded as acceptable, is often too narrow. The authors (p. 35) give the following advice about keeping the options open:

- Avoid tunnel vision
- React to pressure by remaining open-minded
- Liberate yourself from unrealistic expectations
- Respond positively to challenging questions
- Refuse to serve a life sentence of misery.

In terms of the structure versus process issue of CAPS, again, this means that it is important that the encoding factor be kept variable and adapted to the particular situational condition. And again the different factors interact: The first advice refers to perception; the other ones contain a relationship between perception and the other factors.

**Expectations:** Krumboltz and Levin (2004, p. 12) insist in making the most of unplanned events. This means not only keeping the eyes (perception) open, but also to keep the expectations open. In any given situation many more outcomes are possible than we can assume and anticipate. In an decision model of the type of expected utility in which every action has a determined set of outcomes with probabilities that can be estimated, there is little freedom to include events that can occur but that are highly unlikely and therefore cannot be anticipated. This means that when deciding what to do, these events cannot be taken into consideration, but once the decision has been taken one must not stick to the features that led to the decision (e.g., the particular expectations and values) but be flexible to vary them in function of the particular conditions – that is, to be more variable (more processual) than traditional.

**Self-efficacy** (Bandura 1982) is another important expectation, for instance with respect to career decision-making (Tracey 2008).

**Values:** Krumboltz and Levin’s (2004) third chapter (p. 39ff.) is entitled “Wake Up – Before Your Dream Comes True!” This means:

- Deciding is easy – making it happen is the hard part (p. 43);
- Test your dream – one step at a time (p. 44);
- Don’t stick with a bad choice (p. 46);
- Listen to advice, but make up your own mind (p. 50);
- Reassess priorities as circumstances change (p. 52);
- Passions are created by taking action (p. 53);
- Don’t “marry” an occupational goal (p. 54);
- Open yourself to other alternatives (p. 56);
- Do not succumb to external pressure to set specific goals (p. 35).

In sum, this means that the goals must be variable, but there must be one (or several) enduring goals on the superordinate level: a set of goals within which several subordinate goals may fit. The details may differ, but the overruling principle is enduring. It is possible that for instance the subject’s preference for some of Holland’s six factors in the RIASEC (Realistic, Investigative, Artistic, Social, Enterprising, and Conventional) model, and the interest-occupation congruence (see, for instance, Tracey 2008), represent such a superordinate goal system. For instance, a specific young person may be interested to get a job in the Social domain (or maybe in an adjacent domain in the RIASEC model, namely Enterprising or Artistic, or a combination thereof), but the details of the job are not specified. Tracey and other studies showed that several of the variables in this field can be influenced through courses or within the ontogenetic development. For happenstance this might be important because it is possible that early in the development an inappropriate interest-occupation congruence may have been established (e.g.
through influence of the family), and it might be necessary for the subject to change his or her interest focus, that is, to become aware of his or her real interests. Krumboltz and Levin (2004) provide several examples of this kind.

**Self-regulatory plans:** We all have our self-regulatory strategies to deal with situations we are confronted with. One is to reduce complexity to be able to deal with the situation: We eliminate everything that is out of our specific interest (see factor 2: Encoding). From the point of view of making the most of happenstance this is just what should be avoided. This can be generalized and applied to all factors and sub-factors discussed above. That means that self-regulatory plans can be used to make them more flexible, more variable. It could well be that courses like the one presented by Tracey (2008) have an influence on how the subjects manage the different factors (in Tracey’s case, the goals). Further research would be necessary for that.

**Emotions:** The affective factor is much less accessible cognitively than the other ones: Although we may have cognitive control about our emotions to a certain degree, it requires probably specific self-regulatory strategies to do so (such as deliberate confrontation with anguishing stimuli which spontaneously one would tend to avoid) – this is suggested in many therapeutic interventions.

Another issue is that lack of control, or uncertainty, may cause anxiety. However, happenstance in the sense of Krumboltz and Levin (2004) is based on uncertainty: “Unplanned events are a normal and expected part of the career development process” (Krumboltz 1998, p. 391), not to say that one should teach people to generate beneficial unplanned events for themselves (Mitchell et al., 1999). To achieve this it is necessary to overcome the fears of uncertainty that many have.

### 5. DISCUSSION

Several conclusions are crucial:

- It would be important in VET to focus more on process as compared in structure, while in traditional VET the focus of education and training is more on structure. This is not to say that the structure issues should be neglected but it is important to be very selective about the enduring factors to be taught to the students and about the attitude towards the competencies and other stable factors. VET should also appropriately deal with the distinction between enduring superordinate factors and variable (processual) sub-factors.

- The different (sub-) factors interact highly, that is, each factor (or sub-factor) has an influence on the other ones, and each factor (and sub-factor) cannot be seen independently of the other ones. This is of particular influence when the process issue (or variability) is relevant because the variability of a given sub-factor will depend on the other (sub-) factors, whether structural or processual. For instance, self-regulatory plans (factor 5) might be particularly important to “manage” one or the other sub-factor so that the subject is able to deal appropriately with happenstance.

- Structural factors may be required to permit the sub-factors to become processual. It might also be necessary to conceive meta-sub-factors like the meta-ability discussed in factor 1. For other factors meta-sub-factors are appropriate as well. For instance one could conceive a meta-expectation: the expectation that if one has an expectation, other outcomes (and maybe better ones, factor 4) can arise than the ones one has expected. Or one could think of a meta-goal, which means that the goal is to find the goal with which one can really identify.

This means that research is necessary. These are just a few hints and possibilities but these need to become further developed. Krumboltz and Levin (2004) provide one framework for this, Mischel and Shoda’s (1995) CAPS another. And given that both are superordinate theories to many other theories, it will be important to integrate other theories into the system. Which ones
will these be? Some were mentioned above, and it turned out that they, in turn, need to be changed, for instance to be questioned with respect to structural or processual issues: Maybe the features of a given theory are much more variable than assumed so far.

Other theories not mentioned above will have to be integrated as well. Every reader will certainly come up with some theories that are particularly promising. They should be pursued. On which ones should the focus be especially put? That is an issue of happenstance.

**REFERENCES**

SANTRAUKA


PAGRINDINĖS SĄVOKOS:

atsitiktinumas, kognityvinė-afektyvinė asmenybės sistema, meta-sąvokos, veiksmas
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