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How the perceived quality of in-company training matters: a study with apprentices in technical and retail occupations

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Abstract

Given the growing focus on initial vocational education and training (IVET) quality in Switzerland, a study investigating in-company training quality as perceived by 320 apprentices in technical and retail occupations was conducted. The aims were 1) to examine potential differences in the perceived quality of in-company training between the two occupational fields and 2) to analyze how the perceived quality of in-company training was associated with apprentices' sociocognitive learning processes (self-efficacy beliefs, self-regulated learning, help seeking tendencies) and their intention to prematurely terminate a contract. A survey was used to collect the data. The results reveal a single difference, related to time overload, between the two fields. Furthermore, multiple aspects of quality mattered for the sociocognitive processes considered, over and above the effects of control variables (motivations for choosing the apprenticeship). Finally, interaction effects between the occupational field and the quality aspects were found. The study constitutes a very first step in providing recommendations for in-company training.

Keywords

perception of training quality; in-company training; apprenticeship; sociocognitive processes

1 Conceptual and theoretical framework

The notion of VET training quality is becoming increasingly important in the discourse of educational stakeholders as well as on the legal level in Switzerland (Gonon, 2017). Training quality can be defined as a subjective conception of an ideal toward which the training should strive; it is based on the judgment of fitness for and of purpose (Wittek & Kvernbekk, 2011). Whereas quality is not directly measurable, the perceptions of quality are. Even if the Swiss VET system is acknowledged as high performing and internationally valued, it is essential, for maintaining and further developing this quality, to investigate how apprentices, vocational school teachers, and in-company trainers define and perceive the quality of VET. Indeed, training quality is a complex and multidimensional construct that might be defined differently by apprentices, trainers, and stakeholders (Ebbinghaus, Krewerth, Flemming, Beicht, Eberhard, & Granato, 2009). At the basis of this study is the assumption that investigating the



training actors' perceptions of quality allows for a deep understanding of what quality is and how these perceptions hold relevance for learning in the VET context.

Research on training quality has shown, in the Swiss context, that the perceived organizational and pedagogical quality of in-company training is generally high, and that it is predictive of outcomes such as premature contract termination (PCT) (Negrini, Forsblom, Gurtner, & Schumann, 2016). The role of in-company trainers in this quality has notably been underlined (Hofmann, Stalder, Tschan, & Häfeli, 2014). In addition, the way apprentices appraise in-company training has been found to be more critical for their satisfaction than their appraisal of the teaching in vocational schools (Stalder, 2003). However, most studies examining how training quality matters for apprentices have only considered satisfaction and PCT (or PCT intention) as outcomes of training quality. Despite their relevance for learning, important sociocognitive processes, such as apprentices' self-efficacy beliefs and self-regulated learning (Schunk & Zimmerman, 2008), have been largely ignored as outcomes of perceived quality. Indeed, the sociocognitive theory of learning (Schunk & Zimmerman, 2008) assumes that learning processes are affected not only by students' beliefs, such as their motivations, but also by how they perceive their learning environment.

Accordingly, this paper reports a study on the perceptions of apprentices—in two occupational fields—regarding the quality of in-company training and investigates how these perceptions relate to several sociocognitive outcomes relevant for successful learning: self-efficacy beliefs, self-regulated learning (motivational self-regulation and help seeking tendencies), and PCT intention. Apprentices' motivations for choosing to learn their occupation is considered, given their potential association with the sociocognitive outcomes considered. While connections were globally expected between the perceived quality aspects and sociocognitive processes, no specific hypothesis were formulated.

1.2 Research questions

The study was based on the following two research questions:

- Are there differences in the perceived quality of in-company training between the two occupational fields?
- How is the perceived quality of in-company training associated with apprentices' self-efficacy beliefs, self-regulated learning, help seeking tendencies, and PCT intention?

2 Methods

2.2 Participants

A total of 320 apprentices ($M_{\text{age}}=18$ yrs. 8 months) in two occupational fields participated in the study: technical ($n=188$) and retail ($n=132$). They were enrolled in a dual VET program alternating between in-company training and professional school, in the French-speaking part of Switzerland.

2.3 Procedure and Instruments

During 20 minutes of regular class time, participants were asked to complete a survey including, among others, the following instruments.

The **perceived quality of in-company training** was assessed using a French translation of the *Inventar zur betrieblichen Ausbildungsqualität*¹ (Velten & Schnitzler, 2012). Thirty-nine items² assessed eight aspects of the quality of in-company training as perceived by the apprentices:

1. Task importance (3 items): how important the tasks performed by the apprentices in the company are;
2. Diversity and demand of the tasks (6 items): how varied and demanding the tasks are;
3. Autonomy/flexibility (3 items): how much the apprentices perceive being responsible for organizing the tasks;
4. Trainer assistance (4 items): how careful and open the trainer is perceived to be;
5. Trainer professional skills (8 items): how capable of effectively training the apprentices the trainer is perceived to be;
6. Feedback (5 items): how much regular and objective feedback the apprentices receive from the trainer;
7. Time overload (4 items): how sufficient the time given to the apprentices for executing their tasks is;
8. Relationships and integration with colleagues (6 items): how the colleagues care about the apprentices.

Regarding the **outcomes of perceived quality**, the following aspects were considered:

1. Self-efficacy beliefs (3 items): how the apprentices perceive their abilities to learn (source);
2. Help seeking tendencies (6 items): i) Instrumental help seeking (3 items): asking for the assistance necessary to overcome difficulties, such as asking for explanations or hints; ii) Expedient help seeking (3 items): asking others' help to avoid effort and easily gain the outcome;
3. Self-regulation of motivation (3 items): how well apprentices believe they can manage their affective and motivational processes to achieve their goals;
4. Premature contract termination intention (2 items): the apprentice's intention to quit the current training company for another one in the same field or to quit the professional field.

Finally, ten *Motivations for apprenticeship choice*, each with a single item, were assessed as **control variables**: salary, intrinsic career value, perceived trade utility, fallback career, social influences, perceived ability, working conditions, employability, instrumental value, and social pressure.

3 Findings

After testing the factorial validity of the instruments, an ANOVA was used to compare the answers between the two occupational fields in terms of their perceptions of quality (research question 1). A statistically significant difference ($F(1,318)=17.88$, $p<.001$, $\eta^2_p=.05$) was found for perceived *Time overload*: in the retail field, apprentices reported a higher overload

¹ Inventory of the in-company quality training.

² All items of the study had the same Likert response scale from 1="not at all true of me" to 6="very true of me."

($M=3.10$, $SD=1.01$) than in the technical field ($M=2.63$, $SD=0.97$). This difference might reflect stricter requests from the job market and poorer working conditions, already manifest during the apprenticeship, in the retail field. The seven other quality aspects considered were perceived at levels >3.5 .

To answer research question 2, four hierarchical multiple regression analyses (i.e., one for each outcome considered as a dependent variable³) were performed, including—as independent variables—occupational field in step 1, motivations for apprenticeship choice in step 2, and the eight aspects of perceived quality in step 3. The results, shown in Table 1, reveal that, over and above the effects of occupational field and *Motivations*, multiple aspects of quality mattered for the outcomes considered. The explained variance in the outcomes ranged from 13% to 37%.

For instance, both *Instrumental* and *Expedient* tendencies to seek help were explained by *Relationships with colleagues*, meaning that good relationships are associated with seeking more help in either of the two tendencies. However, *Instrumental help seeking* and *self-regulation* were also explained by the quality of *Feedback* as perceived by the apprentices. More precisely, the less the apprentices receive feedback from the trainer, the more they will look for help to be able to find the answers independently, and the more they will self-regulate their motivation for their training. Furthermore, in the hierarchical multiple regression analyses, several interaction effects between the occupational field and the quality aspects were found. For instance, *Self-efficacy beliefs* were more strongly tied to *Task importance* for apprentices in retail than in technical occupations. Similarly, *Expedient help seeking* was more strongly tied to *Autonomy/flexibility* and to *Relationships and integration with colleagues* for apprentices in retail than in technical occupations. On the contrary, *Expedient help seeking* was more strongly tied to the *Trainer assistance* for the technical apprentices than for those in retail. These interactions reveal that the importance of the aspects of perceived quality differs between the occupational fields.

³ Motivational self-regulation and instrumental help seeking items were found to load on a single factor and, thus, merged in a single composite score.

Table 1 Results of multiple hierarchical regression analyses

Model	Instrumental help seeking and self-regulation				Expedient help seeking				Self-efficacy beliefs				Premature contract termination intention			
	1	2	3	β	1	2	3	β	1	2	3	β	1	2	3	β
Professional field	.0	-	-.04		.15	.13*	.12		-.09	-.01			.11	.04		
<i>Motivations for apprenticeship choice</i>																
Salary	.06								.09							
Intrinsic career value	.04	-	-.07			.09	.10		-		-.06		.12*	.15		
Perceived trade utility	4	.0	-.02			-.08	-.06		.06		.07		.18**	.12*		
Fallback career	4*	.1	.12*			.14*	.13*		-		-.01		.03	.04		
Social influences	2	.0	.08			.05	.03		.02		-.06		.13*	.06		
Perceived ability	1	.1	.10			-.15*	-.14*		.09		-.05		.05	.06		
Working conditions	5**	.1	.11*			-.11	-.12*		.04		.37***		-	-		
Employability	1	.1	.06			.01	.03		***	.42	.07		.09	.04		
Instrumental value	.05	-	-.03			.16**	.17**		.06		.05		.13*	.08		
Social pressure	0	.1	.09			.05	.06		.06		.14**		.06	.07		
Quality of in-company	0	.0	.00			.08	.07		.16**		.07		.07	.05		
									-		-.06		.10	.08		
									.07							

<i>training</i>									
Task importance for the company		.07						.37***	-
Task diversity and demand		.04						.05	.05
Autonomy and flexibility		.08						.05	-
Trainer assistance		.16						.08	.24***
Trainer professional skills		.02						-.03	.09
Trainer's feedback		-.17*						-.14	-
Time overload		-.11						-.08	.01
Relationships and integration with colleagues		.18**						-.04	-.08
R^2									-.02
	.0	.12	.24	.02	.10	.17	.00	.29	-.10
	.2	4.2***	5.67***	6.9**	2.70*	2.33*	.24	12.57***	.15
Variation of F	2	4***	4***	1**	*	*	.07	5.4***	.27
Note									7***

Professional field was coded retail=0; technical =1.

4 Research significance

The contribution of this study is threefold. First, it revealed how apprentices' perceptions of the quality of in-company training matter for several sociocognitive outcomes, over and above the effect of motivations for apprenticeship choice. Apprentices feel more or less able to learn, ask for help in different ways, and have more or less PCT intention depending on the way they perceived their training.

Second, the study showed that perceived quality differs in only one aspect between the two fields considered. The same quality aspects are perceived as high in both fields; notably, the apprentices perceive that the task they are asked to perform is of high importance to the company, and that these tasks are diverse and demanding.

Finally, despite few differences in the perceived quality between the fields, the results revealed that some aspects of perceived quality play a different role depending on the two occupational fields considered. For a salesperson, expedient help seeking is more strongly based on autonomy and flexibility, trainer assistance, and relationships with colleagues than it is for apprentices in the technical field. In the technical field, seeking expedient help does not depend on these quality aspects. This means that quality should be investigated in relation to a specific field rather than at a more general level. The study constitutes a very first step in providing recommendations for in-company training.

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Biographical notes

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