



# A longitudinal study of relations among apprentices' nonwork orientation, decent work, and job satisfaction

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## Abstract

The type of nonwork orientation and decent work perception are supposed to be important factors that influence well-being at work. In this study, 196 Swiss apprentices enrolled in a vocational education training were assessed twice during the first 24 months of their apprenticeship. The results showed that there are specific links between nonwork orientations, decent work, and job satisfaction over time. Concerning relations among decent work dimensions, the results highlighted the importance of safe working conditions to predict complementary values perception and the importance of this in predicting adequate compensation perception. Implications for practice are discussed.

**Keywords** Nonwork orientation · Decent work · Vocational education training

Students in vocational education training (VET) systems, such as those present in Switzerland and Germany, alternate days of work and days of school, and have thus to manage a complex work–school–life balance. In these systems, adolescents are expected to integrate rapidly into an adult world, and into organizations subjected to productivity and performance constraints (Masdonati et al., 2007). Recently, studies have been concerned with school and job satisfaction (Lüthi et al., 2021; Volodina et al., 2019) and the well-being of apprentices more generally (Jenni et al., 2017). In

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this regard, current theories make it clear that while society and organizations tend to value a heavy work investment at the expense of the other life domains (Gillet et al., 2018), more individuals are trying to achieve a more balanced allocation of their time and resources between their personal and professional lives. In their theory about nonwork orientations (NWOs), Hall et al. (2013) suggested that, depending on where individuals decide to allocate their resources (personal life, family, community service), there are different outcomes in terms of job and life satisfaction. On the other hand, theories make us aware of the importance of working conditions in fostering both job and life satisfaction. In particular, the Psychology of Working Theory (Duffy et al., 2016) considers decent work as a central aspect that enables workers' needs, job, and life satisfaction. Although these aspects might be important in explaining the well-being of apprentices, so far there are no studies that have looked at the relationships between NWOs, decent work dimensions, and job satisfaction. Studies on apprentices also showed that from the first year of VET to the second year, many factors change from the more tangible, such as salary, to the more psychological, such as professional socialization, professional knowledge, and soft skills of the apprentice (Stalder, 2017). As with gender, the apprenticeship year could therefore also influence NWOs, decent work perceptions, and job satisfaction.

Thus, the first aim of this study was to assess the effect of gender and year of apprenticeship on the levels of the NWOs, decent work dimensions, and job satisfaction, and the second aim was to investigate relationships between NWOs and decent work dimensions and their impact on job satisfaction over time in a sample of apprentices in southern Switzerland who have started their VET. The results of this study could be potentially relevant to promote well-being during apprenticeships and reduce early contract resignation.

## Job satisfaction

Locke (1976, p. 1300) defined job satisfaction as “a pleasurable or positive emotional state resulting from the appraisal of one’s job or job experiences.” Job satisfaction is also defined as “the extent to which people like (satisfaction) or dislike (dissatisfaction) their jobs” (Spector, 1997, p. 2). Being satisfied at work serves as a source of meaning, personal fulfillment, enrichment, happiness, and satisfaction—principal elements of subjective well-being (Diener, 1984; Kahneman & Riis, 2005; Myers & Diener, 1995).

One of the best known and most cited outcomes of job dissatisfaction is turnover, or more precisely for an apprentice, the early termination of the apprenticeship contract (Azeez et al., 2016; Tschopp et al., 2014). It is known from the literature that early termination of the apprenticeship contract is a risk factor of remaining without qualifications, unemployment, poverty, and health problems (Stalder & Schmid, 2012). A further aspect that marks the importance of job satisfaction for apprentices concerns future career development, as well as future career success. Indeed, apprentices who are satisfied with their apprenticeships and chosen professions will be more likely to have a positive career

development in the future that will lead to greater career success (Illies et al., 2020; Koekemoer, 2014).

## **Nonwork orientation**

During their training, apprentices have to deal with various demands from school and work. How these are managed can be influenced by their needs and interests, and thus by their inner drive towards nonwork roles. In an attempt to further understanding of how career development is linked with nonwork roles, Hall et al. (2013) proposed that research should consider individual differences in people's orientations toward various life roles, including, but not limited to, family roles. Such NWOs refer to the degree of concern that one has for other roles relative to one's career (Hall et al., 2013). Hall et al. (2013) introduced the concept of NWOs as a reaction to the nonspecific treatment of diverse nonwork-related domains (e.g., family, self, community, or leisure). According to the authors, NWO is a concept that includes three dimensions: personal life, family, and community. Individuals with a self-centered orientation (personal life) give more importance to time for oneself to pursue one's own interests (e.g., hobbies, training, etc.) (Hall et al., 2013; Voydanoff, 2001). Differently, family orientation is defined as the degree of importance attributed by an individual to the needs of the family compared with the needs of their own career (Hall et al., 2013). Finally, community concerns the degree to which the individual is interested in engaging in activities that serve the community (Hall et al., 2013).

Research investigating the effects of involvement in multiple roles generally supports the expansionist hypothesis: that engagement in multiple roles is generally positively related to increased well-being and resilience (Barnet, 2008). Although NWOs are conceptually related to involvement in nonwork roles, they more specifically tap into concerns for nonwork roles relative to an individual's career. Looking at the reality of apprenticeships in which the individual has to play three roles, that of student, worker, and teenager, the argument made about managing multiple life roles and the impact on well-being may indeed make sense; however, there are no studies concerning the relationship between NWOs and job satisfaction.

Regarding gender differences in nonwork orientation, it is traditionally stated in the literature that women take on most of the care work in a family (Greenhaus & Kossek, 2014). Studies show that women have lower work centrality and higher family centrality compared with men (Greenhaus & Kossek, 2014; Greer & Egan, 2012), and that they place less importance on objective success (e.g., salary, salary growth, and promotions) in comparison with subjective success (e.g., job and/or career satisfaction) (Greer & Egan, 2012). However, Hirchi et al. (2016) have found that there are few differences between men and women NWOs. These authors in fact highlighted that men have higher levels of personal life orientation compared with women, but that there are no gender-related differences in family orientation or community orientation levels.

## Decent Work

The concept of decent work was first advanced by the United Nations (UN) in 1948 within the Declaration of Human Rights. In Article 23, al. 1 and 3, it is stated that “Everyone has the right to work [...] to just and favorable conditions of work and to protection against unemployment [...] every worker has the right to just and favorable remuneration [...] to an existence worthy of human dignity” (p.75). The International Labor Organization (ILO) has been politically advancing the promotion of more social justice in this regard, leading to its inclusion in the United Nations 2030 Agenda (2015). In relation to this, it is interesting to consider the PWT (Psychology of Working Theory) (Duffy et al, 2016), which provides a link between contextual markers of social privilege and marginalization, personal resources, working conditions, achievement, and well-being. Firstly, the PWT defines decent work as work displaying five characteristics: (1) physical and interpersonally safe working conditions (e.g., absence of physical, mental, or emotional abuse), (2) hours that allow free time and adequate rest, (3) organizational values that complement family and social values, (4) adequate compensation, and (5) access to adequate health care. These characteristics, when properly present, lead to satisfy survival, social connection, and self-determination needs, which in turn positively affects work fulfillment and general well-being. Studies have indeed demonstrated the existence of a positive relationship between decent work and job satisfaction (Ribeiro et al., 2019; Wan & Duffy, 2022; Wang et al., 2019). However, while some longitudinal studies on decent work have already been published (Allan et al., 2020; Duffy et al., 2020), no study has been conducted in a sample of apprentices or young workers having to manage possible work–school–life conflicts. Hence, regarding the link between NWOs and decent work, there are no performed studies. Some insights are given by Hirschi et al. (2016), who found that all NWOs were significantly related to salary while only nonwork family orientation predicted career and life satisfaction.

Some authors have been interested in analyzing the construct of decent work by examining the differences between its five dimensions. For example, Svicher and Di Fabio (2022) revealed differences in perceptions between the five components of decent work. In particular, the dimensions of adequate compensation and free time and rest were not very central for the participants to their study. The fact that these indicators are not central according to participants led the authors to underline the urgent need to advocate for more decent remunerations and working hours in Italy, where the study was conducted. Differences regarding the five dimensions also emerged in the qualitative study by Vignoli et al. (2020). In this study, participants were asked to define what decent work meant to them. It emerged that the participants had emphasized different aspects corresponding to the five dimensions of decent work said by PWT, thus highlighting the importance of considering the construct of decent work not only in a global sense but also by focusing on its individual dimensions.

## Aims of the present study

No study has explored the interplay between NWOs and decent work, and no study has explored how both influence job satisfaction in a sample of apprentices. Before addressing the main aims of this study concerning the relationships among these variables, we wanted to do some preliminary analyses to examine the impact of gender and tenure on each variable. In fact, we expected that, regarding NWOs, in congruence with previous literature, there should be differences between men and women. Given the traditional view that women are more oriented towards other people's needs and interests and men more focused on themselves and their own-selves (Cruz et al., 2019; van der Vegt et al., 2020a, b), we expected women to have a NWO more family and/or community oriented, while men were expected to be more oriented towards their own personal sphere. Regarding the impact of tenure (Dodanwala et al., 2022; Huang et al., 2022), we assumed also that the type of NWO, decent work, and job satisfaction levels are different between the first and second year of VET. In fact, we assume that between the first (T1) and the second year of apprenticeship (T2), the NWO may change to become more personally focused, that the perception of decent work will improve, and thus also that job satisfaction will increase. Then, we planned to analyze the relationships between the considered variables.

The first aim investigated how NWOs, decent work and job satisfaction are interrelated. Indeed, we expected that NWOs have an impact on job satisfaction and may mediate the relationship between decent work and job satisfaction. Secondly, concerning decent work, we assumed that it also has a direct impact on job satisfaction, as already largely suggested by previous literature (e.g., Ribeiro et al., 2019; Wan & Duffy, 2022; Wang et al., 2019). The second aim was to investigate the relationships over time among the five decent work dimensions, that is, safe working conditions, access to health care, adequate compensation, free time and rest, and complementary values. There are currently no studies concerned with the reciprocal relationship of the different components of decent work overtime. The adequate compensation component may play an important role given the current statutes of labor market conditions (ILO, 2015). We therefore expected that this specific component of decent work has an impact on the development of the four other decent work dimensions.

## Methods

### Participants and procedure

The current study was conducted in the southern region of Switzerland. Our study included apprentices enrolled in a 3 year VET program with the Federal VET Diploma. The apprentices who took part in the study came from five public vocational schools, with the purpose of having a representative image

of vocational training in the territory. The target sample size was 200 considering the rules of Muthén and Muthén (2002) who suggested that a sample size of about 150 is sufficient to assess simple CFA (Confirmatory Factor Analysis) models. Participation in the study was voluntary. Informed consent was requested from those who agreed to complete the questionnaire. Data collection took place during March–April 2021 and 2022. The apprentices filled in the questionnaire during a school lesson, in the presence of the first author of this study. It was an online questionnaire, which they filled in on a personal computer. The time required to complete the questionnaire was approximately 30 minutes. Only questionnaires completed by apprentices at the two points in time, that is, at the end of the first school year (T1) and at the end of the second school year (T2), were considered for the analyses. Before analyzing the data resulting from the questionnaires, a preliminary cleaning of the data was performed to avoid any sources of bias. Database cleaning was performed, excluding questionnaires with implausible answers, and questionnaires of students who took an excessively short time to complete the questionnaire. After that, different procedures to implement data cleaning were applied. Firstly, the data relating to responses for a specific scale when the apprentice did not provide a response for more than two items (i.e., when the missing responses for a scale were more than two) were eliminated. Secondly, the responses for each scale that diverged excessively from the distribution of the mean of the respondents were discarded, applying the Mahalanobis distance calculation and eliminating the resulting outliers. Finally, when an apprentice gave answers to a scale that were only in the neutral range (e.g., “neither agree nor disagree”), the data associated with his/her answers were eliminated. The final size of the sample was 196. There were 78 women (40%) and 118 men (60%). The mean age of women was 18.4 years ( $SD = 3.10$ ) and 18.6 years for men ( $SD = 3.30$ ). The vocations in which the apprentices were training were bricklayer (22.8%), plumber (10.7%), employee in logistics (10.4%), office worker (11.1%), heating systems installer (4%), retail worker (4.4%), pharmacist’s assistant (9.7%), medical practice assistant (19.5%), veterinary practice assistant (2.7%), and hairdresser (4.7%).

## Measures

### Job satisfaction

To assess job satisfaction, we used the Job Satisfaction Scale developed by Judge et al. (1998) through an Italian version of the questionnaire. The scale is composed by five items rated using a seven-point Likert-type scale, with responses ranging from 1 (“Don’t agree at all”) to 7 (“Totally agree”). The item scores are added together to obtain the total score. The higher the total score, the greater the individual’s job satisfaction. An item example is “I am quite satisfied with my current job.” The value of Cronbach’s alpha is 0.88 for the original scale (Judge

et al., 1998) and was .79 for the Italian version used in the study by Masdonati et al. (2019).

### **Nonwork orientation**

To measure NWO, we used the Nonwork Orientation Scale (Hall et al., 2013), which consist of 12 items that can be combined to form a total NWO score or can be used separately to measure the three NWO dimensions, that is, personal life (four items), family (five items), and community service (three items). The participants answer each item using a five-point Likert-type scale ranging from 1 (“to little or no extent”) to 5 (“to a great extent”). For each three dimensions, item scores are added together to obtain the dimension score. An example item for nonwork personal life orientation is “Finding time for myself is important to my overall quality of life,” for family nonwork orientation is “My career decisions are made in terms of how they will affect my family,” and for community service nonwork orientation is “It is important to me to have a job that allows me the flexibility to be involved in my community.” The items were translated in Italian based on the original scale. The Cronbach’s alpha is 0.76 for the original scale (Hall et al., 2013).

### **Decent work**

The validated Italian version of the Decent Work Scale (Masdonati et al., 2019) consists of 15 items rated on a seven-point Likert-type scale, with responses ranging from 1 (strongly disagree) to 7 (strongly agree). The questionnaire is divided in five three-item subscales: safe working conditions (e.g., “I feel emotionally safe interacting with people at work”), access to health care (e.g., “I get good health care benefits from my job”), adequate compensation (e.g., “I am rewarded adequately for my work”), free time and rest (e.g., “I have free time during the work week”), and complementary values (e.g., “The values of my organization match my family values”). For each of the five dimensions, item scores are added together to obtain the dimension score. The global decent work score is obtained by adding together the five-dimension scores. The higher the total score, the higher is the perception of decent work. The Cronbach’s alpha for all the English and Italian version of the scale is 0.86.

## **Results**

### **Preliminary analyses**

The Cronbach’s  $\alpha$  were computed to assess the internal consistency of the measured used. The scores are reported in Table 1: the values vary from 0.60 to 0.91, indicating acceptable to good reliability at each time point. Skewness ( $S$ ) and Kurtosis ( $K$ )

**Table 1** Cronbach's  $\alpha$  and correlations

Variable	$\alpha$	1	2	3	4	5	6	7	8	9
T1 NWO–personal life	0.82									
T1 NWO–family	0.89	0.18**								
T1 NWO–community service	0.62	0.41***	0.19**							
T1 decent work	0.80	0.09	0.14	0.14*						
T1 job satisfaction	0.81	0.05	0.08	0.08	0.33***					
T2 NWO–personal life	0.84	0.48***	-0.11	0.31***	0.03	-0.02				
T2 NWO–family	0.91	0.13	0.53***	0.19**	0.19**	0.10	0.06			
T2 NWO–community service	0.60	0.29***	0.14*	0.51***	0.17**	0.02	0.59***	0.17**		
T2 decent work	0.85	0.00	0.06	0.09	0.43***	0.09	-0.00	0.17**	0.10	
T2 job satisfaction	0.82	-0.14*	-0.07	0.01	0.24**	0.51***	-0.06	-0.01	0.06	0.31***

$\alpha$  Cronbach's alpha

\* $p < 0.05$ , \*\* $p < 0.01$ , \*\*\* $p < 0.001$



**Table 2** Mean and standard deviation, classified by gender and time of measure.

Variable	T1			T2								
	Male		Total	Male		Total						
	<i>M</i>	<i>SD</i>	<i>M</i>	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>					
1 NWO—personal life	4.25	0.62	4.36	0.57	4.28	0.63	4.30	0.60	4.54	0.49	4.39	0.57
2 NWO—family	3.68	0.88	3.06	1.05	3.38	0.98	3.48	0.97	3.10	0.96	3.32	0.98
3 NWO—community service	4.17	0.59	4.35	0.58	4.23	0.61	4.10	0.64	4.24	0.55	4.16	0.61
4 Decent work	4.88	0.89	4.83	1.06	4.74	1.02	4.58	0.96	4.34	1.12	4.48	1.03
5 Job satisfaction	5.26	1.05	5.55	1.01	5.19	1.14	5.05	1.08	5.23	1.09	5.13	1.08

*M* mean, *SD* standard deviation

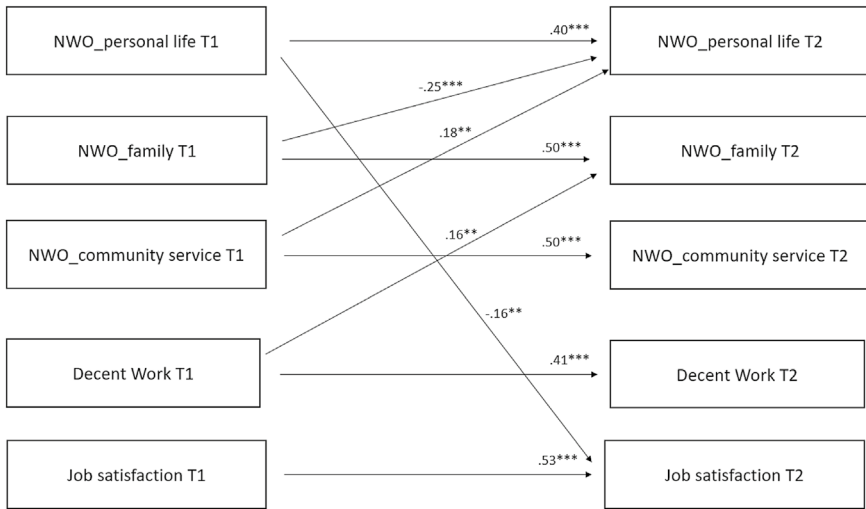
values ranged consistently between  $-1.26$  and  $0.87$ , indicating a roughly normal distribution of the scores for each scale at each time point.

A series of  $t$ -tests allowed us to analyze the impact of gender and tenure. Table 2 presents the means and standard deviations for men and women, for T1 and T2. Gender had a significant impact on the level of NWO–family both at T1,  $t(170) = -4.10$ ,  $p < 0.001$ ,  $d = 0.94$ , and T2,  $t(164) = -2.47$ ,  $p = 0.007$ . For the two time points, men scored higher than women: at T1, the mean score for men was 3.68 and for women it was 3.06, while at T2 the mean score for men was 3.48 and for women it was 3.10. In addition, we observed a gender difference for NWO–community service at T1,  $t(169) = 2.00$ ,  $p = 0.024$ ,  $d = 0.59$ , and for NWO–personal life at T2,  $t(155) = 2.65$ ,  $p = 0.004$ ,  $d = 0.56$ . In both cases, women scored higher than men. In fact, for NWO–community service at T1, the mean score for women was 4.35 and for men it was 4.17. For NWO–personal life at T2, the mean score for women was 4.54 and for men it was 4.30. Regarding the difference between the two measurement times, significant differences emerged for decent work,  $t(189) = 5.26$ ,  $p < 0.001$ ,  $d = 0.96$ , and for job satisfaction,  $t(157) = 3.98$ ,  $p < 0.001$ ,  $d = 0.98$ . For decent work, the mean scores at T1 were significantly higher than those at T2, while for job satisfaction, the mean scores at T2 were higher. After that, a repeated measure ANOVA was performed to verify the existence of an interaction effect between gender (men versus women) and time of measure (T1 versus T2). A significant interaction effect between gender and time of measure emerged only for NWO–family,  $F(1, 145) = 4.51$ ,  $p = 0.035$ ,  $\eta^2 = 0.09$ . The NWO–family score was higher for men at T1 ( $M_{T1} = 3.68$ ) than for women at T2 ( $M_{T1} = 3.09$ ) and for men the mean score decreases over time ( $M_{T2} = 3.48$ ), while it remains stable for women ( $M_{T2} = 3.10$ ).

Finally, correlations between variables range from 0.14 ( $p < 0.05$ ) between decent work (T1) and NWO–community service (T1) to 0.59 ( $p < 0.001$ ) between NWO–personal life (T2) and NWO–community service (T2). Over time, interesting correlations are found between decent work and NWO–family (0.17,  $p < 0.01$ ) and between decent work and job satisfaction (0.24,  $p < 0.01$ ).

## Cross-lagged analysis

The first aim of this study was to analyze the longitudinal reciprocal relations between the three different NWOs, decent work, and their impact on job satisfaction. Hence, a cross-lagged structural equation model (SEM) was defined that included all constructs as observed variables. Specifically, we ran a path model based on summary data resorted by total mean score for all the three variables: for NWO the three different dimensions (personal life, family, and community service) were analyzed separately, while for decent work and job satisfaction, the global score was considered. In the model, the observed variables at T1 predicted the latent variables at T2 (Figure 1). To assess the adequateness of the model, we used the comparative fit index (CFI) and the Tucker–Lewis index (TLI), which indicate a good fit when values were equal or above 0.90 (Medsker et al., 1994). We also used the root mean square error of approximation (RMSEA) value as an index of model fit, which is considerable as acceptable when is equal or below 0.08 (Byrne, 2001). In addition to the already mentioned CFI,



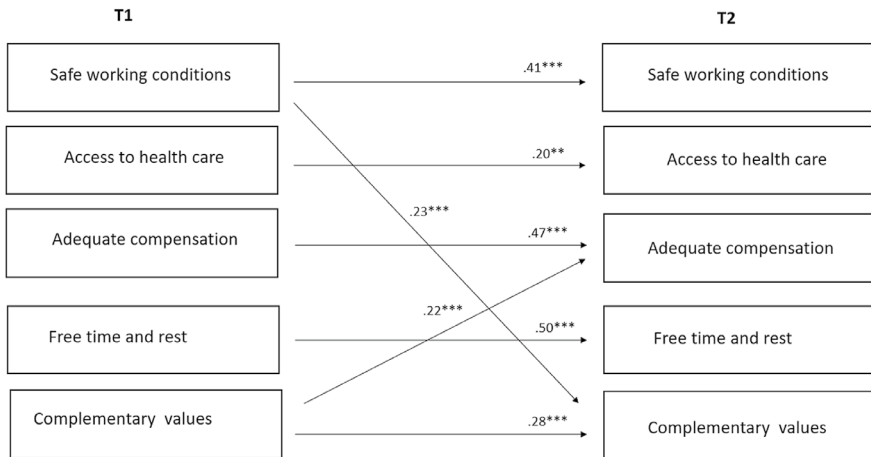
Note Only significant paths are reported. The participants completed the questionnaire at the end of their first year (T1) and at the end (T2=T1+12 months) of their second year of apprenticeship.

\*  $p < .05$ , \*\*  $p < .01$ , \*\*\*  $p < .001$ .

Figure 1 Cross-lagged structural equation model with NWO–personal life, NWO–family, NWO–community service, decent work, and job satisfaction

TLI, and RMSEA, we used the chi-squared per degrees of freedom ( $\chi^2/df$ ), which indicates a good fit when the value is equal to or below 3 (Kline, 2005). Our model fitted adequately to the data,  $\chi^2(16) = 16.345$ ,  $p = 0.429$ , TLI = 0.998, CFI = 0.999, and RMSEA = 0.001. NWO–personal life at T1 was found to significantly predict job satisfaction at T2, while NWO–family and NWO–community service had a significant impact on NWO–personal life at T2. Lastly, decent work was found to have a significant impact on NWO–family at T2. Job satisfaction was found to have no impact on the other variables over time.

The second aim was to assess the relationship between dimensions of decent work, i.e., safe work conditions, access to health care, adequate compensation, free time and rest, and complementary values during time; therefore, a second cross-lagged SEM model including only the five dimensions of decent work was specified. This model was computed considering the raw mean score and adequately fitted the data,  $\chi^2(18) = 21.129$ ,  $p = 0.273$ , TLI = 0.979, CFI = 0.992, and RMSEA = 0.030. As reported in Figure 2, the autoregression paths were all significant; scores were higher for adequate compensation and free time and rest. Moreover, only safe working conditions and complementary values were significant predictors of the other dimensions at T2. In fact, safe working conditions at T1 seemed to positively predict complementary



*Note.* Only significant paths are reported. The participants completed the questionnaire at the end of their first year (T1) and at the end (T2=T1+12 months) of their second year.

\*  $p < .05$ , \*\*  $p < .01$ , \*\*\*  $p < .001$ .

**Figure 2** Cross-lagged structural equation model with the five decent work dimensions

values at T2, and complementary values at T1 appeared to positively prognosticate adequate compensation at T2.

## Discussion

In the VET system, where apprentices must cope with the challenges of the school and work environment, it is important to know how different personal and contextual factors might influence their occupational well-being to create interventions fostering optimal educational and professional experience. In particular, three interesting aspects emerged from this study. First, in this study, and contrary to expectations, men in apprenticeships have a higher nonwork family orientation than women, who, on the other hand, have a higher nonwork community service and a higher nonwork personal orientation than men. Second, that nonwork personal orientation could be a partial mediator between nonwork family and nonwork community orientation and job satisfaction. The perception of decent work, moreover, would seem to allow for nonwork family orientation later on. And thirdly, that for apprentices, it might be important to perceive that one has safe working conditions to be able to have a perception of complementary values later on, which in turn might allow for a greater perception of receiving adequate compensation. An in-depth discussion of these aspects is given below.

## Gender and school year differences

As mentioned above, for gender, we found that male apprentices tend more to have a nonwork family orientation during the first year of VET. Interestingly, this result appears to be in contrast with what is usually stated by the literature regarding the tendency of women toward the family and men towards their personal sphere (Dean & Jayachandran, 2019). The increased male orientation toward the family sphere on the part of apprentices might be indicative of a society that is moving toward more egalitarian gender roles. In addition, some men may have chosen to pursue an apprenticeship because, compared with other forms of education and training, this allows them to earn a salary, albeit a low one, and thus financially support their families (both their parents, for the younger ones, and their partner and children, for those who are already a few years older). In support of this statement, some studies had previously been interested in gender differences in earnings orientation: these studies had in fact seen that men, compared with women, were more oriented toward the salary dimension. For example, Barron (2003) had cited, in her study on differences in salary negotiation between men and women, a male perspective that higher salary was associated with self-determination and prestige. Judge and Livingston (2008), on the other hand, had shown how a male orientation toward earnings (traditional gender orientation) was nevertheless linked to less gendered attitudes where, for example, home and family care was also seen as a task that men were also expected to do. Consistent with this result, female apprentices are also more likely to have a nonwork community service orientation during the first year and a nonwork personal life orientation in the second year. These differences would seem to suggest that women tend to initiate their own career path, thinking less than men to their future parental role, and more than men to their role in the community; this is also confirmed by a higher level of personal nonwork orientation of women in the second year.

## Nonwork orientations and job satisfaction

The results of the SEM model showed that there is an impact of nonwork family orientation (negatively) and community service orientation (positively) on nonwork personal life orientation, and that this latter has a negative effect on job satisfaction. Moreover, in the model, a direct and positive influence of decent work perception on family nonwork orientation emerged. The possible chain of effects that seems to emerge would imply that a better perception of working conditions would be followed by a greater possibility for family orientation, which would be followed by a lower personal orientation (further favored by a community service orientation) that would finally result in a lower job satisfaction. Previous authors (e.g., Barnet, 2008; Schomburg, 2007) have shown that engagement in multiple roles, i.e., not just work, increases individual well-being, and Hirschi et al. (2016) found that nonwork family orientation predicted career satisfaction. However, our findings seem to show that, at the beginning of an apprenticeship, having a personal life nonwork orientation, i.e., having the need also for adequate free time to cultivate personal interests

and passions, that might be increased by the need for being implicated in the community, could be seen as an early indicator of future job dissatisfaction. Practically, a personal life nonwork orientation could therefore induce a work–school–life conflict, foster future job dissatisfaction, and then perhaps a future apprentices contract dissolution.

### **Decent work and nonwork orientation**

The results of this study showed a significant impact of decent work on family nonwork orientation. As explained above, few studies have investigated the link between perceptions of decent work and nonwork orientation, and even fewer when it concerns longitudinal studies. Looking at the PWT reference model (Duffy et al., 2016), decent work permits to satisfy three types of needs: survival needs, social connection needs, and self-determination needs. In this sense, the impact of decent work on family nonwork orientation can be explained by the fact that an optimal, hence decent, working environment allows the needs of primary social connection, both directly with colleagues and indirectly with family, to be satisfied. Thinking in the context of an apprenticeship, a young person will be more oriented toward the needs of others, and especially of the family, when decent working conditions permits it. According to Hall et al. (2013), family nonwork orientation would lead to higher life satisfaction, which is also an outcome of decent work perception according to PWT.

### **Considering the five decent work dimensions**

The cross-lagged analysis showed more stability in time concerning the perception of adequate free time and rest, adequate compensation, and safe working conditions, whereas somewhat less stability of the perception of complementary values and access to health care. For the latter, a possible explanation could be related to experiences related to this very dimension that are more likely to have been experienced after 2 years. The fact of having had a positive or negative experience could indeed influence this perception. With regard to the perception of complementary values, the explanation can be found in the relationships between variables that emerged in the model and are discussed below. Indeed, the analysis of the reciprocal effects of the five decent work dimensions highlighted that two dimensions of decent work are particularly relevant, since they are linked in time, for apprentices: safe working conditions and complementary values. In fact, complementary values seem to mediate the relationship between safe working conditions and adequate compensation perception. In particular, the link between the dimensions of safe working conditions and complementary values could possibly mean that being able to benefit from secure working conditions would then allow the person in the future to focus on elements of major importance, such as the presence of a complementarity of values between him/herself and the work mission (complementary values dimension). If the dimension of safe working conditions appears to be more basic in terms

of needs, the importance of complementary values as an indicator of decent work would seem to occur after the first one has been achieved.

Another possible explanation could lie in the fact that perceiving the company where one works is careful to provide safe working conditions could increase the employee's perception of having personal values in line with organizational ones. Moreover, it resulted that complementary values perception at T1 positively predict the dimension of adequate compensation at T2. Therefore, considering the presence of complementary values as important in defining decent work in the first place would then allow the person in the future to appreciate the dimension of adequate compensation.

### **Decent work and job satisfaction**

Decent work perception is lower in the second year. Instead, job satisfaction tends to be higher in the second year than in the first. Moreover, in the SEM model, the link between the two variables was nonsignificant. These findings appear to be in contradiction with our hypothesis and with what previous literature states (Blustein et al., 2016; Nam & Kim, 2019; Wang et al., 2019), i.e., that job satisfaction is one of the outcomes of decent work. Probably, the fact that this is a sample of apprentices just entering the labor market, may explain the differences in our results compared with previous literature where data were collected in samples of adult workers. The observed increase in job satisfaction may be explained by the fact that apprentices, during their first year, are still at the beginning of their professional identity development phase, as well as tending to have a lower knowledge of the technical skills of the job they are training for. A higher satisfaction will therefore be reported in the second year when professional identity is more developed and technical skills more successfully managed: both inevitably lead the apprentice to greater job satisfaction (Stalder, 2017). Thus, for apprentices, other variables that have been highlighted as important for job satisfaction in adults, such as relations with colleagues and supervisor and occupational self-efficacy (Lent & Brown, 2006, 2008), might be more important than the perception of decent work in influencing their job satisfaction.

### **Practical implications of the study**

Concerning practical implications, this study suggests that taking NWOs into account during career guidance at middle school could help increase job satisfaction later on. Indeed, the more the profession chosen is in line with personal interests and values and permits for a balance between work and the personal sphere, the higher the future job satisfaction will be. This might be even more important for women, who, as highlighted in this study, have more personal and community oriented NWOs than men. Considering this aspect when choosing a profession could subsequently moderate the negative effect found in this study of a personal NWO on job satisfaction.

Furthermore, it is important to consider NWOs as functional to people's future well-being (Barnet, 2008). First, in line with the transition to adulthood, it is

important that people have the opportunity (but not the obligation, of course) to develop an increasing orientation toward starting a family of their own. In this sense, our study highlighted how the perception of decent work enables the development of a family NWO, and thus further emphasizes the importance of training companies meeting the necessary requirements to be able to offer suitable working conditions. Monitoring the learning and working environments of apprentices would make it possible to ensure that these aspects are respected. Second, the development of a personal life NWO, especially in young people, should not be hindered by a family NWO. Although a person's type of NWO may be particularly linked to his or her personality and personal interests and goals, it would be important to provide the necessary supports so that one type of NWO does not exclude another. At the very least, it would be important to check that these aspects are not hampered by working conditions.

Finally, the study shows that two dimensions of decent work are particularly important for apprentices, as they positively influence the perception of other dimensions. These are safe working conditions and the perception of complementary values. In the context of career guidance in middle school, it would therefore be important that these aspects were also taken into account, first when choosing a profession, and second when looking for a training company with which to stipulate an apprenticeship contract. The more the person's needs in relation to these aspects are met by the profession and the company, the greater the possibility that the person will develop a sense of belonging to the company, thanks to an ever-better perception of the complementarity of values and be satisfied with the salary aspects.

### **Limitations of the study and future directions**

This study has limits that should be considered when interpreting the results and that might indicate some future research lines. A first limitation of this study concerns the low reliability of the nonwork community service orientation subscale. Future studies might consider using a more reliable scale to assess this variable. Second, we had the possibility of achieving only two data collections. A third data collection at the end of the last year of apprenticeship would also have made it possible to study the evolution of the variables considered throughout the whole course of the apprenticeship and would have made it possible to further study the relationships between the considered variables. A three-wave study would have permitted to better assess the mediation relationships emerged in this study. Thus, future studies might examine the relationships between variables highlighted in the present study through a more extensive longitudinal design. A third limitation is the relatively small sample size. A larger sample of apprentices would have permitted to also consider some moderators, as gender. A third limitation of this study is that this research involved adolescents in a specific region of Switzerland, which has a specific labor market and social reality. We assume that our results can be generalized to similar contexts, where the VET system is similar. However, comparative



longitudinal studies involving adolescents in different countries might be useful to assess the generalization of our results to apprentices in similar and different social and economic contexts.

Finally, although no direct effect of decent work on job satisfaction was found, future studies might further investigate possible mediators of this relationships, such as work fulfillment or life satisfaction (Duffy et al., 2016). Lastly, future studies could include the variable of satisfaction with the training, which would indeed seem to have an impact on decent work. In this regard, Duffy et al. (2022) have recently show that decent education predicts decent work.

## Conclusions

The results of this study highlight the strong relationship that exists over time between personal life NWO and job satisfaction, and between decent work and family NWO in a VET system that involves an alternation between school and work. The importance of safe working conditions and of perception of complementary values to predict better decent work perceptions in the following school years also emerged. All these aspects should be considered in the context of career guidance in middle school, especially when choosing a profession and a training company.

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## Declarations

**Conflict of interest** The authors have no competing interests to declare that are relevant to the content of this article.

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