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Workplace identity as a mediator in the relationship between learning climate and job satisfaction during apprenticeship

Suggestions for HR practitioners

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Abstract

Purpose – The purpose of this paper was to explore if and to what extent workplace identity can mediate the relationship between learning climate dimensions and job satisfaction in a group of apprentices.

Design/methodology/approach – Data were gathered thanks to a non-profit organization devoted to vocational training. Participants ($N = 87$) were apprentices working in different job contexts in central Italy.

Findings – Results showed that the relationship between learning climate and job satisfaction was mediated by workplace identity.

Originality/value – To the author's knowledge, this is the first attempt to evaluate the effect of learning climate and workplace identity on job satisfaction during apprenticeship.

Keywords Apprenticeship, Workplace identity, Job satisfaction, Learning climate

Paper type Research paper

1. Introduction

The recent literature on the learning climate has shown that specific organizational conditions may be capable of either hampering or stimulating learning activities as well as being a motivation to learning (Eraut, 2004; Nikolova *et al.*, 2014). In particular, the climate and culture towards learning may play a crucial role (Tracey and Tews, 2005; Cervai *et al.*, 2013; Cervai and Polo, 2015).

Training climate has been defined as a short-time instrumental variable capable of guaranteeing learning objectives, constituted by work-related factors that may influence training success and failure and the effectiveness of formal and informal training activities.

Several measures of the learning and training climate have been proposed in literature (for a brief review, see Nikolova *et al.*, 2014; Cervai and Polo, 2015). For this paper's aims, we will consider the instrument developed by Nikolova *et al.* (2014), which includes the dimensions of facilitation, appreciation and error avoidance.

If and to which extent does the learning climate, and in particular training opportunities, affect job satisfaction during apprenticeship? Do error avoidance and appreciation play a role in this process?



Moreover, are there some individual variables, especially those related to organizational identification, that can mediate the effect of the learning climate? These are the questions that have guided the present research, in which we have investigated the links between learning climate and job satisfaction in apprenticeship using data collected via a questionnaire. Although a certain number of papers analyse some of these relationships, as shown in the following sections, what makes the current work different from previous ones is the use of an integrated model which stands out for the fact of covering both organizational (learning climate) and individual dimensions (workplace identity) capable of impacting on employees' job satisfaction. In addition, at least to our knowledge, the present paper represents the first attempt to study these relationships within the apprenticeship context.

With these questions and aims as our starting point, the following sections present the theoretical background and our proposed research model, followed by the description of methodology and the discussion of the main results, along with the limits and practical implications of our study.

2. Theoretical background and hypotheses

2.1 *The learning climate*

In line with common definitions of climate, we suggest considering organizational learning climate as employees' perceptions of the employer's practices aimed at supporting and facilitating workplace learning.

Past research has shown that the learning climate may prevent from negative employee outcomes, like stress or turnover and may become an important predictor of valuable behaviours and attitudes, like the capability of innovation (Sung and Choi, 2014) or job satisfaction (Mikkelsen *et al.*, 1998; Govaerts *et al.*, 2011).

A review of the organizational learning literature (Nikolova *et al.*, 2014) has shown that the learning climate includes three different dimensions. In particular, the dimension of facilitation, in other words the organizational support for training, seems to be present in almost every attempt to measure the learning climate. For example, Bartram *et al.* (1993) include two different scales of organizational support, namely, opportunities and resources for learning. In addition, in the organizational support dimension of their learning climate model, Tracey and Tews (2005) used some items referring to perceived resources and opportunities for learning. More recently, and in a similar way, Kyndt *et al.* (2009) included some measures of learning opportunities.

A second dimension has gained momentum, referring to HRM policies: rewarding and appreciation for learning. Several authors have included some dimensions of appreciation. In particular, Tracey and Tews (2005) have used material and not material rewarding measures in their organizational support dimension, distinguishing between incentives for promoting learning behaviour and appreciation by managers. More recently, Kyndt *et al.* have developed the sub-scale of "appreciation and stimulation", and Song *et al.* (2009) have included the measure of perceived organizational rewards.

A third important dimension of the learning climate has recently been recognized: error management. As error is naturally present in every learning process, several authors have stressed the importance of measuring the error climate in specific terms. In particular, Rybowskiak *et al.* (1999) measured the employee error orientation, discovering how important errors are in the learning processes. In addition, Van Dyck *et al.* (2005) discovered that error management predicts organizational performance. Based on these

studies, [Van Dam \(2015\)](#) in her workplace goal orientation model has acknowledged the value of errors and the importance of error management, developing a specific measure of error avoidance consisting of five items.

Recently, [Nikolova et al. \(2014\)](#) have developed a new Learning Climate Scale, consisting of just nine items, referring to the three above-mentioned dimensions and showing very good psychometric properties.

2.2 Apprenticeship in Italy: a brief overview

Undoubtedly, apprenticeship is a high priority on the Italian political agenda, at least since the 1950s, when apprenticeship was first proposed. Two important reforms have changed the legal framework since 2011, and a number of subsequent normative provisions were introduced to reduce bureaucracy and support employers to start apprenticeships.

According to the latest Italian labour market reform, called the Job Acts (2015), apprenticeship is still used as a permanent employment contract for youth training and employment.

The Italian system consists of three main types of apprenticeship: two of them are deeply focused on training and lead to an education qualification, in line with the so-called German dual system (Article 41, paragraph 3, legislative Decree No 81/2015). An additional type of apprenticeship is a vocationally oriented scheme for young adults aged 18 to 29 years, with no educational qualifications, which leads apprentices to become skilled workers, with a maximum 120 h of training in three years (provided both inside and/or outside the company).

For what concerns the national literature, attention has been paid to the psychological dimensions of apprenticeship during the post-Second World War period, especially from the 1950s, years that saw a major economic revival in Italy and the rise of the apprenticeship as a labour policy. In particular, the research devoted to accident prevention and job-related stress should be mentioned ([Cataldi, 1956](#); [Pancheri, 1956](#); [Rotta et al., 1957](#)). In the late 1960s, some important national surveys were conducted on the auxometric and anthropometric indexes for the industrial sector apprentices ([Briziarelli et al., 1967](#); [Maggio and Stancari, 1964](#)), with the idea of defining the right age to join an apprenticeship programme. All these works, taken as a whole, also represent an attempt to inform the different employers about the duties they have to fulfil.

Perhaps the first work of psychology devoted to apprenticeship was carried out at the university of Bologna, where motivation and self-perceptions of apprentices have been studied ([Ricci Bitti, 1970](#); [Carugati, 1970](#)).

Starting from the results of this latter study, which focused on the perceived experience of apprentices, some authors have stressed how apprenticeship may be seen both as an opportunity and a pitfall ([Magni, 1999](#)), as the educational facilities it requires are not available in many cases. In particular, the Apprentice Pay Survey ([Tu et al., 2011](#)) indicated that within some frameworks, the volume of training being undertaken is quite modest. In addition, according to a recent [CEDEFOP study \(2015\)](#), the vocational-oriented apprenticeship, in other words, the one not focused on training, covers 91 per cent of all contracts, with only one-third of these apprentices enrolled in formal training activities provided by the regions.

It is easy to point out that the main weakness for apprenticeships is the training function and its quality, which unfortunately is very seldom assessed ([James, 2010](#);

Grindrod and Murray, 2011; Morciano *et al.*, 2014). This may be due to a general poor training culture and climate within companies.

By means of the present study, we decided to focus on vocational-oriented apprentices, aiming at analysing the training climate perceived by the apprentices themselves.

In particular, our attention is focused on the relationship between training climate and job satisfaction, with the following specific hypothesis:

- H1. Perceived organizational support for training positively affects job satisfaction during the apprenticeship.
- H2. Appreciation from organization for training activities positively influences job satisfaction during the apprenticeship.
- H3. Error avoidance negatively affects job satisfaction during the apprenticeship.
- H4. Workplace identity mediates the relationship between organizational support for training and job satisfaction.
- H5. Workplace identity mediates the relationship between appreciation for training and job satisfaction.
- H6. Workplace identity mediates the relationship between error avoidance and job satisfaction.

3. Method

3.1 Sample

The survey was conducted in ten different organizations based in central Italy. These organizations were selected on the grounds that they were from different employment sectors and that they have contracted at least one apprentice in the past 12 months. A total of 87 participants took part in the survey (the response rate was 93 per cent); 70 per cent were men, the average age was 23.7 years (SD 3.11), with a range between 18 and 31 years of age.

3.2 Measures and data collection

A cross-sectional survey was used with an anonymous self-administered questionnaire. The questionnaire was planned on the results of two in-depth interviews with two vocational trainers experts in apprenticeship, following the guidelines of mix-methods applied to psychology (Flick, 1992; Denzin and Lincoln, 1998; Denzin, 2012; Cortini, 2014; Cortini and Tria, 2014).

The interviews' analysis led us to analyse the learning climate and workplace identity as key factors for job satisfaction in apprenticeship. In the questionnaire, there was an initial part aimed at collecting socio-demographic data (i.e. gender, age and educational level) and information regarding the employee's relationship with the organization (i.e. tenure and position in the organization), and a core part made up of a series of scales whose description follows hereafter.

3.2.1 Learning climate. The original scales developed by Nikolova *et al.* (2014) were used to assess the following dimensions of the learning climate: organizational support for training, appreciation for training and error avoidance. These measures showed high Cronbach's alpha reliability levels (the indexes go from 0.83 to 0.86). All the scales are

made up of three items on which respondents express an opinion on a seven-point Likert scale representing levels of agreement, resulting in a very easy-to-use instrument.

In particular, organizational support for training refers to the perceived support received by the employer (“My organization provides sufficient resources to develop my competences”); the appreciation dimension refers to the material and not material rewards provided by the employers for those employees who demonstrate that they are actively involved in learning (“In my organization, employees who make effort to learn new things, earn appreciation and respect”); finally, error avoidance refers to error management (“In my organization, one is afraid to admit mistakes”).

Factor analysis showed a structure definitely parallel to the original one, with three distinct dimensions: organizational support for training, appreciation for training and error avoidance.

3.2.2 Job satisfaction. Overall job satisfaction was measured with a single-item on a seven-point Likert scale, ranging from 1 (strongly disagree) to 7 (strongly agree). The choice of bypassing multiple-item measures lies in our intention of being easily understood by management and especially by apprentices. In addition, as shown by others (Wanous *et al.*, 1997; Nagy, 2002), the single item is obviously completed more quickly, and change scores are more interpretable, and, from a psychometric point of view, it compares favourably with multiple-item measures as concerns validity (Nagy, 2002; Mariani *et al.*, 2013). Finally, statistical techniques addressing the inability to determine internal consistency reliability for the single item of job satisfaction, which is considered the main weakness of a single-item measure, show promising results (Wanous *et al.*, 1997; Dolbier *et al.*, 2005).

3.2.3 Workplace identity. Workplace identity refers to the psychological relationship between the individual and the organization, or rather the specific division where one works. Based on social identity theory (Hogg and Abrams, 1988; Tajfel and Turner, 1986), organizational identification implies a deep perceived similarity and shared fate with the organization that may serve as precursors to self-categorization (Turner *et al.*, 1987; Mael and Ashforth, 1992; Dutton *et al.*, 1994), so that “organizational membership may positively reflect on the self and thus may contribute to positive self-conception” (Van Knippenberg and Sleebos, 2006, p. 573).

We prefer to talk here about *workplace* identity, instead of organizational identity to stress the very contextual factors determining the psychological relationship with own’s organization, which is always a relationship with a particular division or office; this is especially true for apprentices, who, generally speaking, have not spent long within the organization and may not know many people within the company except for the co-workers in their division.

Five items measured workplace identity (“My company applies to my ideas of a ‘good’ company”), based on the sub-scale developed by Klotz *et al.* (2014), who, in turn, on the grounds of the works by Heinemann and Rauner (2008), aimed at measuring workplace identity and vocational identity for apprentices. The scale uses a seven-point Likert scale, ranging from 1 (strongly disagree) to 7 (strongly agree). The Cronbach’s alpha for the workplace identity scale was 0.91.

4. Results

Table I presents the preliminary analysis of the data set: the means, standard deviations and inter-correlations of the main study variables.

First, scaled variables achieved good reliability, with Cronbach's alpha coefficients between 0.83 and 0.91.

4.1 Testing hypotheses

To test *H1*, *H2* and *H3*, we performed a multiple linear regression, to predict job satisfaction based upon the three different dimensions of the learning climate: organizational support for training, appreciation for training and error avoidance. Preliminary analysis was performed to ensure there was no violation of the assumption of normality, linearity and multicollinearity.

A significant regression equation was found ($F(3,81) = 11.55; p < 0.001$), with an $R^2 = 0.30$. Only organizational support and training appreciation were significant predictors of job satisfaction for apprentices (Table II).

We decided to go further and test with three independent mediation models, the power of workplace identity to mediate the relationship between all the learning climate dimensions and job satisfaction.

4.2 Mediation analysis

There are two different methods for performing mediation analyses: multiple regression and structural equations models (SEM). Even if several authors (Baron and Kenny, 1986; Hoyle and Smith, 1994; Kenny *et al.*, 1998) prefer to use SEM because it allows for a better control of measurement error and gives good information about the fit of the model, we follow the guidelines of those (Holmbeck, 1997; Frazier *et al.*, 2004) who suggest using multiple regression in case of a small sample size, like ours.

We tested our hypotheses following the guidelines described by Preacher and Hayes (2004), who developed an SPSS macro, called INDIRECT, that incorporates the normal theory approach (i.e. the Sobel test), a bootstrap approach and Baron and Kenny's (1986)

	NI	M	SD	Alpha	2	3	4	5
Job satisfaction	1	5.50	1.52	–	0.510**	0.395**	–0.125	0.699**
Organizational support for training	3	4.98	1.36	0.88		0.512**	–0.119	0.594**
Appreciation for training	3	4.40	1.58	0.83			–0.053	0.578**
Error avoidance	3	3.68	1.74	0.86				–0.236**
Workplace identity	5	5.39	1.21	0.91				

Table I.
Descriptive statistics
and correlations

Notes: * = $p < 0.05$; ** = $p < 0.01$; N = 88; NI = number of items

	B	SE B	β
Organizational support for training	0.425	0.116	0.391***
Appreciation for training	0.218	0.100	0.230*
Error avoidance	–0.032	0.079	–0.038
$F = 11.55^{***}$			
$R^2 = 0.30$			

Table II.
Summary of simple
regression analysis
for learning climate
dimensions
predicting job
satisfaction

Notes: (N = 86); * = $p < 0.05$; *** = $p < 0.001$

approach to quantify the indirect effects of the predictor on the dependent variable. In particular, the use of bootstrapped confidence intervals (CI) was necessary to avoid problems related to our limited sample size (MacKinnon *et al.*, 2004; Preacher *et al.*, 2007) and to take into consideration also the potential mediation for the dimension of error avoidance, which definitely seems interesting to us, besides the fact it is not among the significant predictors of job satisfaction in the first regression analysis we proposed.

We performed three different mediation analysis for each of the dimensions of the learning climate, by the aid of the macro INDIRECT.

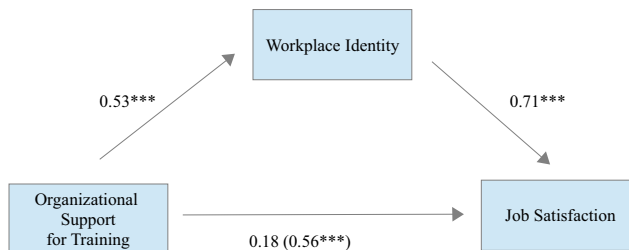
First, it was found that workplace identity significantly mediated the relation between organizational support for training and job satisfaction (Figure 1) [indirect effect = 0.390, *SE* = 0.108, 95 per cent CI (0.2025, 0.6255)]; as zero is not in the 95 per cent CI, we can conclude that the indirect effect is significantly different from zero at $p < 0.05$, and that, as predicted, change in workplace identity mediates the relationship between training support and job satisfaction.

It was also found that workplace identity significantly mediated the relation between appreciation for training and job satisfaction (Figure 2) [indirect effect = 0.379, *SE* = 0.112, 95 per cent CI (0.1780, 0.6115)]; as zero is not in the 95 per cent CI, we can conclude that the indirect effect is significantly different from zero at $p < 0.05$, and that, as predicted, change in workplace identity mediates the relationship between appreciation for training and job satisfaction in apprenticeship.

In addition, it was found that workplace identity significantly mediated the relation between error avoidance and job satisfaction [indirect effect = -0.141, *SE* = 0.069, 95 per cent CI (-0.3012, -0.024)] (Figure 3); as zero is not in the 95 per cent CI, we can conclude that the indirect effect is significantly different from zero at $p < 0.05$, and that change in workplace identity mediates the relationship between error avoidance and job satisfaction in apprenticeship.

5. Discussion

These significant mediation models provide support for the prediction that apprentices experience differences in job satisfaction due to their different workplace identities. Consequently, these results suggest a series of guidelines for HR managers during apprenticeship. Indeed, they should develop specific training plans and seek to appreciate every single learning outcome in apprentices, along with an adequate error management, while they should, at the same time, invest in workplace identity, supporting organizational socialization also for newcomers in every manner and means available.



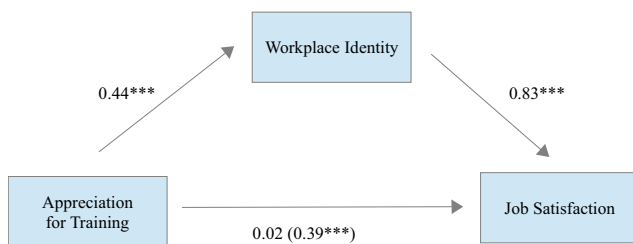
Note: *** = $p < 0.001$

Figure 1.
Indirect effect of organizational support for training on job satisfaction through workplace identity

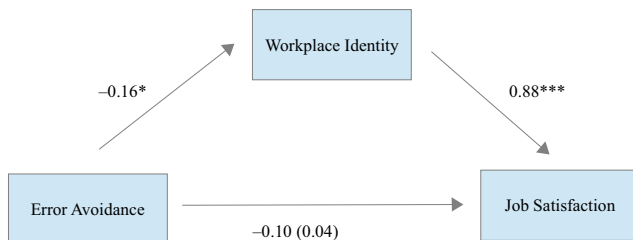
Other studies have stressed the important role that workplace identity can play in job satisfaction development (Porter *et al.*, 1974; Maier and Brunstein, 2001), focusing on expert workers. When one talks about apprenticeship, there may be the risk of not taking into account the role of workplace identity, since, in view of the fact that apprentices are always newcomers or, at any rate workers with very limited tenure, they are not thought to have yet developed workplace identity. Our results, on the contrary, seem to suggest the need for organizational identification starting from the earliest relationships between employer and employee.

In such a sense, it seems to us mandatory to develop training plans aiming at a time to focus on both professional and social skills (Manuti *et al.*, 2015), focused on organizational socialization that has been acknowledged to be an important predictor of organizational identity (Dodd-McCue and Wright, 1996; Yang, 2008; Allen and Shanock, 2013). At the moment, as we have tried to stress, training plans aimed at developing specific professional skills during apprenticeship are neither sufficiently developed nor assessed. Our results suggest investments in professional training and organizational socialization, which may be understood as an additional training capable of forging workplace identity.

Finally, our results may reiterate the suggestions for HR managers proposed by Klotz *et al.* (2014) who have called for integration plans on the workplace during apprenticeship. Apprentices need support to develop their sense of self as workers, and employers ought to provide participatory practices. In other words, apprentices need concrete opportunities for active participation in work processes, while, unfortunately, they are generally pushed to take on observational roles or to perform isolated and repetitive and/or monotonous tasks. Such an emphasis on active participation and



Note: *** = $p < 0.001$



Notes: * = $p < 0.05$; *** $p < 0.001$

Figure 2.
Indirect effect of
appreciation for
training on job
satisfaction through
workplace identity

Figure 3.
Indirect effect of
error avoidance on
job satisfaction
through workplace
identity

socialization during apprenticeship should become a central leitmotif for securing the development of a satisfied workforce in the future.

6. Limitations and future research

The finding of the present study should be interpreted in the light of some limitations. First, our study is cross-sectional in design, which limits our capability to draw out the causal relationship between the variables under investigation.

Further, we used a small sample size, which should definitely be enlarged. Specifically, our data were collected only in the context of vocationally oriented apprenticeship; it would be necessary to collect data also for the other types of apprenticeship; this would lead to additional practical suggestions in terms of labour policies planning.

In consideration of the current study's findings, we suggest avenue for future research that advance greater understanding of the processes of organizational socialization and workplace identity forging during apprenticeship. In particular, these recommendations include further investigation of the different roles managers and co-workers may play.

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