Personal and Social Facets of Job Identity: A Person-Centered Approach

Elisabetta Crocetti · Lorenzo Avanzi · Skyler T. Hawk · Franco Fraccaroli · Wim Meeus

Published online: 28 June 2013

© Springer Science+Business Media New York 2013

Abstract

Purpose The purpose of this study was to examine egoidentity (Erikson, Psychol Issues 1:1–171, 1959; Identity, youth and crisis, Norton, New York, 1968; Marcia, J Pers Soc Psychol 3:551–558, 1966) and social identity (Tajfel and Turner, In: Austin WG, Worchel S (Eds.) The social psychology of intergroup relations. Brooks/Cole, Monterey, pp 33–47 1979; Turner et al., Rediscovering the social group: A self-categorization theory. Blackwell, Oxford, 1987) theories within the organizational literature. We adopted a person-centered approach to analyze whether employees classified in various identity statuses and identification profiles exhibited differences in job outcomes (i.e., burnout, job satisfaction, and organizational citizenship behaviors). We also analyzed interconnections among identity statuses and identification profiles.

Design/methodology/approach Participants were 515 employees (85.4 % women) between 24 and 64 years old. They completed self-reported questionnaires assessing personal identity, social identity, and job outcomes.

Findings Cluster analysis indicated that participants could be classified into four identity statuses (i.e., achievement, early closure, moratorium, and searching moratorium) and into four identification profiles (i.e., orthogonal combinations

of high vs. low organizational and group identification, respectively). Employees classified in the various identity statuses and identification profiles reported meaningful differences on job outcomes. Further, findings highlighted significant associations between identity statuses and identification profiles, giving rise to various identity configurations associated with job outcomes.

Implications This study highlights the importance of integrating different facets of job identity. These findings have relevant implications in terms of suggesting which dimensions of identity should be promoted in order to reduce workers' burnout, and enhance their satisfaction and organizational citizenship behaviors.

Originality/value This study provides evidence for integrating ego-identity and social identity theories. In doing so, it bridges developmental psychology literature on personal identity with social and organizational psychology literature on social identity, setting the basis for a comprehensive line of research.

Keywords Identity statuses · Identification · Burnout · Job satisfaction · Organizational citizenship behaviors · Person-centered approach

Introduction

Across the entire lifespan, individuals face the task of developing a firm identity and finding their place in society (Erikson 1959; Marcia 2002). Identity entails individuals' explicit or implicit responses to the question of "Who are you?". The answer to this question is particularly complex, since it involves different levels of individual and collective self-definitions that are related to multiple life domains. For instance, one could answer in reference to his/her job,

E. Crocetti (☑) · S. T. Hawk · W. Meeus
Research Centre Adolescent Development, Utrecht University,
Martinus J. Langeveldgebouw, Heidelberglaan 1,
3584CS Utrecht, The Netherlands
e-mail: e.crocetti@uu.nl

L. Avanzi · F. Fraccaroli University of Trento, Trento, Italy

W. Meeus Tilburg University, Tilburg, The Netherlands



political orientation, religious beliefs, nationality, and so on. The order of his/her answers would most likely indicate the salience of each identity dimension, with the most important cited first (Kroger 2007).

Given this complexity, identity is one of the most important constructs in the social sciences (Vignoles et al. 2011). Diverse disciplines have each focused on unraveling specific contributions of various identity facets. In psychology, for example, the *ego identity theory* (Erikson 1959, 1968) has provided a rich basis for the study of *personal identity*, which refers to aspects of self-definition at the level of the individual person. The *social identity approach* (Tajfel and Turner 1979; Turner et al. 1987), in contrast, has focused on people's identification with the groups and social categories to which they belong.

Job identity (also referred to as occupational, work, vocational, professional, or career identity; cf. Skorikov and Vondracek 2011) represents a core identity domain for most people, strongly impacting self-definition and personal well-being (cf. Bowling et al. 2010). Within this domain, the *personal* facet of identity refers to awareness of oneself as a worker doing a specific kind of occupation, whereas the *social* facet consists of the strength of identifications with social groups, such as the work team and the organization as a whole.

A priority in recent research (e.g., Schwartz et al. 2011) has been to attain a better grasp of the complexity of identity, both in terms of capturing distinct characteristics of personal and social identity facets, as well as understanding how these facets are interrelated. In line with these considerations, the purpose of the present study was twofold: (a) to examine how personal and social facets of job identity are associated with job outcomes, and (b) to analyze interconnections between personal and social facets. We considered three job outcomes of core importance to organizational research (e.g., Lavelle et al. 2007; Riketta and van Dick 2005; Schaufeli and Taris 2005; van Dick and Haslam 2012; van Knippenberg and van Schie 2000), namely burnout (a psychological state characterized by emotional exhaustion, depersonalization, and reduced professional accomplishment, which occurs as a result of work-related stressors; Maslach and Jackson 1981), job satisfaction (a pleasant emotional state tied to work performance; Smith et al. 1969), and organizational citizenship behaviors (extra-role discretionary behaviors characterized by civic virtue, prosocial aim, and organizational effectiveness that benefit the work-group and the organization; Organ 1990).

In order to achieve the study goals, we employed a person-centered approach (Bergman et al. 2003; von Eye and Bogat 2006) to distinguish particular groups of employees that are differentiated by their specific personal and social job identities. While variable-oriented empirical research is based on the proposition that populations are

homogeneous, person-oriented research is based on the notions that (1) distinct subgroups may exist within a certain population and (2), if they exist, aggregate-level parameters may contradict parameters estimated for groups or individuals (von Eye and Bogat 2006). To investigate the patterns of characteristics shared within a specific subgroup, person-oriented methods determine relationships at the individual level rather than the variable level. In this way, person-oriented methods emphasize the potential uniqueness of individuals (Bergman et al. 2003). Wang and Hanges (2011) recently emphasized that person-centered approaches (statistically applied by means of cluster analysis, latent class analysis, growth mixture modeling, etc.) allow organizational researchers to gain a more accurate and realistic understanding of organizational phenomena.

Personal Job Identity

Erikson's lifespan theory of psychosocial development (1959) was a pioneering contribution to the field of egoidentity studies. According to this theory, identity formation represents a core developmental task for young people (Erikson 1968), who must find their own place in society. Nonetheless, "identity formation neither begins nor ends with adolescence: it is a lifelong development" (Erikson 1959; p. 113).

Some scholars (e.g., Munley 1977) have proposed Erikson's theory as a framework for understanding career development and vocational behavior. In this respect, it is necessary to embrace a lifespan perspective to study different stages of personal identity formation in the job domain (Super 1980). Indeed, job identity is not achieved once and forever at the beginning of a career. Rather, job identity might be defined during adolescence and early adulthood, but could be constantly revised, adjusted, and renewed in connection with job and life experiences, organizational changes, and so on. More specifically, job organizational role transitions (e.g., promotions, retirement; Nicholson 1984) that are typical in work history, and recent changes in the labor market (e.g., high rates of unemployment, spread of flexible job contracts, and higher organizational mobility) that have led to the diffusion of "boundaryless" careers (e.g., Arthur and Rousseau 1996; Briscoe and Hall 2006; Hess et al. 2012), make formation and revision of personal job identity a relevant task throughout the entire life course.

Identity Statuses

Marcia (1966) further developed and operationalized Erikson's (1959) ideas on identity formation, and identified two guiding processes. *Exploration* consists of actively questioning and



weighing various identity alternatives before making a decision about which values, beliefs, and goals one wants to pursue. *Commitment*¹ involves making a relatively firm choice in an identity domain and engaging in significant activities toward the implementation of that choice.

Marcia (1966), juxtaposing the presence or absence of commitment and exploration, proposed a classification of individuals into four identity statuses. Specifically, individuals in the achievement status have enacted a commitment after a period of active exploration (e.g., they have committed to a specific job after having explored various alternatives). People in the foreclosure status are characterized by strong commitments without having explored other possible alternatives (e.g., they have chosen a particular job based solely on recommendations from their parents). Individuals in the *moratorium* status have not yet reached strong commitments, but are still actively exploring different alternatives (e.g., they are trying out different jobs in order to find out which fits best with their aspirations and competences). People in the diffusion status do not actively explore different identity alternatives and lack strong identity commitments (e.g., they are without a job and they do not care about this).

Various expansions of Marcia's model have been proposed in recent decades (cf. Meeus 2011 for a review). In particular, Meeus, Crocetti, and colleagues (e.g., Crocetti et al. 2008; Crocetti et al. 2013; Klimstra et al. 2010; Meeus et al. 2010), building upon previous work by Meeus (1996; Meeus et al. 1999), proposed a three-factor identity model focused on the interplay among commitment (individuals' firm choices regarding various developmental domains, and the self-confidence they derive from these choices), in-depth exploration (the extent to which individuals reflect on their current commitments, look for new information about them, and talk with other people about their commitments), and reconsideration of commitment (comparing present commitments with possible alternatives when existing commitments are no longer satisfactory). Thus, this model includes a dual cycle process (Meeus 2011). Individuals can explore their commitments in depth and decide whether they provide a good fit with one's overall talents and potentials (the identity development and maintenance cycle). If one's current commitments are not satisfying, or do not provide a good fit, they may be reconsidered in favor of other commitments (the identity revision cycle).

From the combination of these identity processes, it is possible to classify individuals into specific identity statuses (Crocetti et al. 2012a; Meeus et al. 2010) that both recall and expand upon Marcia's (1966) conceptualization. Specifically, individuals in the achievement status report high commitments that they explore deeply, and, being satisfied by their choices, do not reconsider them in favor of other options. Individuals in the early closure status are characterized by moderate commitments, not truly explored or reconsidered. Individuals in the moratorium status strive to find more satisfying alternatives that could fit their aspirations and needs, and thus exhibit low commitment, a medium level of in-depth exploration, and very high reconsideration of commitment. Individuals in the searching moratorium status are trying to find a new commitment that fits their aspirations even better, and thus are characterized by high levels of commitment, in-depth exploration, and reconsideration of commitment. Finally, individuals in the diffusion status do not seem to care about their lack of fulfilling commitments, and display low commitment, in-depth exploration, and reconsideration of commitment.

In this study, we examined identity statuses in adult employees. We expected to find all of the identity statuses previously documented by Crocetti, Schwartz, and colleagues' (2012) research conducted with young people, with the only exception being the diffusion status. We reasoned that, while it is common to find individuals in adolescent and youth populations who are not concerned about their lack of commitments and do not search for them, it is less likely to find a diffused job identity among adult employees. Generally speaking, the number of individuals in the diffusion status strongly decreases with age (Kroger et al. 2010) and the probability that individuals are in a diffusion status is lower in a particularly important identity domain such as job identity (Bowling et al. 2010). These theoretical arguments and findings lead to the following hypothesis:

Hypothesis 1 An empirically-based method of classification will allow differentiation in employee groups corresponding to the identity statuses of achievement, early closure, moratorium, and searching moratorium.

Profiles of Identity Statuses

According to Erikson's conceptualization, a stable identity is associated with healthy psychosocial functioning. Drawing upon the Eriksonian notion that identity fulfills a self-regulatory function, Adams and Marshall (1996) further theorized functions served by a stable identity. More specifically, identity provides individuals with (1) a sense of *structure* with which to understand self-relevant information; (2) a sense of consistency, coherence, and *harmony* among one's



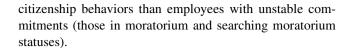
¹ In organizational literature, the term (organizational) commitment is widely used and refers to a construct indicating "employee's emotional attachment to, identification with, and involvement in the organization" (Allen and Meyer 1990, p. 1). However, in this article, the term commitment will be used to indicate a fundamental dimension of ego-identity according to Erikson and Marcia.

chosen values, beliefs, and commitments; (3) a *future* orientation and a sense of continuity among past, present, and future; (4) *goals* and direction through commitments and values chosen by individuals; and (5) a sense of *personal control*, free will, or agency that enables active self-regulation in the process of setting and achieving goals, moving toward future plans, and processing experiences in ways that are self-relevant (Serafini and Adams 2002). In this way, identity stability is expected to reduce maladjustment, increase satisfaction, and enhance active behaviors aimed at pursuing relevant goals.

A growing corpus of evidence has provided empirical support to this theoretical argument (for a review see Kroger and Marcia 2011). Studies have consistently highlighted that individuals in the high-commitment statuses (early closure and especially achievement) exhibit better psychosocial functioning than their counterparts in the moratorium status (and, to a lesser extent, searching moratorium), who are experiencing an identity crisis associated with distress and maladjustment. For instance, Luyckx et al. (2010) examined links between young employees' identity statuses related to future plans and goals and their job outcomes. They found that individuals in the early closure and achievement statuses showed the most optimal profiles, whereas respondents typified by a lack of meaningful commitments (those in the diffusion and moratorium statuses) reported higher burnout and lower work engagement. Similarly, Porfeli et al. (2011) found that university students who had achieved a strong vocational identity reported more positive feelings about their future work, as well as lower depression and anxiety; conversely, those in statuses characterized by a lack of stable commitments (i.e., searching moratorium, moratorium, and diffusion) exhibited more negative views about their future work, and reported higher depression and anxiety. Similarly, Crocetti et al. (2011), who applied the aforementioned three-factor identity model to a study of job identity in young people with permanent and contingent employment contracts, found that individuals in the moratorium status reported lower satisfaction with life and higher negative views of their past than their counterparts in the early closure and achievement statuses.

In the current study, we examined whether different identity statuses could be associated with differences in burnout, job satisfaction, and active behaviors that favor the community of membership (i.e., organizational citizenship behaviors). Theoretical and empirical evidence discussed above leads to the following hypothesis:

Hypothesis 2 Individuals confident in their commitments (those in the achievement and early closure statuses) will report lower symptoms of burnout and higher job satisfaction, and will be more likely to show organizational



Social Job Identity

One of most influential conceptualizations in the social field is the Social Identity Approach, which comprises two related, although distinct, theories: Social Identity Theory (SIT; Tajfel and Turner 1979) and Self-Categorization Theory (SCT; Turner et al. 1987). Both theories are founded on the premises that individuals belong to social groups, that they (partly) define themselves in terms of these memberships, and that, consequently, their thoughts, feelings, and behaviors will be influenced by the groups to which they belong (Haslam 2004; Haslam and Ellemers 2011). In this sense, social groups are not only features of the external world, but also contribute to a personal identity through internalization processes (Haslam 2004). Tajfel (1972) developed SIT to explain the results of "minimal group studies", showing that the mere categorization of group members promotes ingroup favoritism and outgoup discrimination. Tajfel argued that (1) people seek a positive self-concept; (2) personal identity derives partly from memberships in social groups; and (3) in order to achieve positive social identity, individuals need to have positive evaluations of their ingroup in comparison with relevant outgroups (see also van Dick 2001). On the other hand, SCT posits that individuals are able to categorize themselves into different levels of the self on the basis of categorical salience as single individuals, group members, or human beings.

Multiple Targets of Identification

In the organizational context, workers can identify with different targets. Until now, the most studied target of social identification is the organization as a whole (Ashforth et al. 2008). When individuals identify with their organization, they perceive their goals and values to be interchangeable with those of other ingroup members (Ashforth and Mael 1989). If people identify highly with their ingroup, they are more likely to trust, cooperate with, and be influenced by ingroup members, compared to outgroup members. Highly identified employees also endorse more organizational citizenship behaviors and altruistic acts, for example by working harder and helping colleagues (e.g., van Dick et al. 2006), and report higher job satisfaction and well-being than their low-identified colleagues (e.g., Wegge et al. 2006; van Dick and Haslam 2012 for a review).

A further target of possible identification is the workgroup (i.e., the group composed of colleagues performing



similar activities). Following the optimal distinctiveness theory (Brewer 1991), the work-group offers an important level of identification that balances two different human needs, namely to be member of a group, but also to be recognized as a unique individual. Research demonstrates that employees highly identified with their work-group are more likely to experience higher well-being, job satisfaction, and job involvement, and are less likely to have turnover intentions than lower identified employees (van Knippenberg and van Schie 2000).

Overall, consistent evidence suggests that both group and organizational identification influences job outcomes (Riketta and van Dick 2005). At the moment, however, few studies have addressed the interactive effects of identification with different targets (for exceptions, see Lipponen et al. 2005; van Dick et al. 2008). It would be useful, however, to develop more parsimonious models of identification that incorporate multiple targets, creating identification profiles (Ashforth et al. 2008) that allow us to examine not only what happens when employees are strongly (or weakly) identified with both work-group and organization targets, but also especially what happens when people identify more with one target (e.g., organization) but less with another target (e.g., group), and vice versa. In the school setting, for instance, considering multiple targets means simultaneously keeping in mind both the school (organization as a whole) and the teachers sharing the day-to-day job experiences (workgroup; for an empirical distinction between work-group and organization in school context, see Christ et al. 2003). In nested identities (e.g., groups within a larger organization), work-group membership implies also being a member of the organization (van Dick et al. 2008), and therefore it is more likely that employees will tend to have coherent (dis)identification with both targets (Ashforth et al. 2008). Since identity conflict is endemic to organizational life (Ashforth et al. 2008), however, it should not be surprising that contrasting values, objectives, or norms may lead some people to feel more connected with the fate of their work-group than their organization, or vice versa. These considerations lead to the following hypothesis:

Hypothesis 3 An empirically-based method of classification will allow us to differentiate employees into four identification profiles: high group and organizational identification (G&O–I), high group identification and low organizational identification (G-I), low group identification and high organizational identification (O–I), and low group and organizational identification (NO-I).

Correlates of Identification Profiles

As outlined by van Dick and colleagues (2008), well-being is likely to be higher when identifications concerning

nested group memberships are closely aligned. Inconsistent identifications (e. g., high identification with the workgroup and low identification with the organization, or vice versa) may generate dissonance and result in lower subsequent well-being. Identity is especially threatened when employees are unable to identify with either their workgroup or a larger organization, and this combination of low work-group and low organization identification thus represents the unhealthiest situation. Furthermore, employees who have reached a consistent and integrated sense of identification with different targets should also voluntarily expend more effort on behalf of their organization, since they are more likely to support the organization's goals (i.e., organizational citizenship behaviors). Supporting evidence in this regard has come from a study using a variable-centered approach (van Dick et al. 2008), in which employees who highly identified with both their workgroup and larger organization showed the highest level of job satisfaction and extra-role behaviors. These theoretical and empirical arguments lead to the following hypothesis:

Hypothesis 4 Employees in G&O–I profile will display lower symptoms of burnout, higher satisfaction, and more organizational citizenship behaviors than individuals in the low identification profiles. Employees high in work-group and low in organization identification (or vice versa) will show intermediate scores on these job outcomes.

Connecting Personal and Social Identity Approaches: An Overarching Theoretical Background

Until now, we have argued for the importance of personal and social facets of job identity. We can now move forward by asking: (1) Are these facets interrelated? and (2) What are their joint effects on job outcomes? To address these questions, we refer to the overarching theoretical background represented by theories of self-concept consistency (e.g., Festinger 1957; Heider 1958; van Knippenberg et al. 2004) and self-complexity (Linville, 1985, 1987).

Festinger (1957) stated that "[...] the individual strives toward consistency within himself" (p. 1). Consistency and inconsistency (replaced by Festinger with the terms consonance and dissonance) qualify *relevant* relationships between two self-related aspects. Relevance is defined by a certain degree of interdependence, suggesting that the two aspects are not irrelevant to each other. In contrast, two self-related elements are dissonant when they do not fit together, and this is a source of discomfort and distress. Consequently, the presence of dissonance gives rise to pressures to reduce or eliminate it (Festinger, 1957).

Similarly, Heider (1958) stressed the importance of a balanced state, which "designates a situation in which the

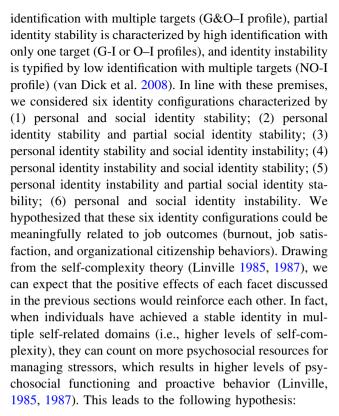


perceived units and the experienced sentiments co-exist without stress; there is thus no pressure toward change [...]" (p. 176). In other words, the balanced state refers to a harmonious condition in which two elements fit together without stress. In situations in which imbalance is perceived, people struggle to renew a condition of balance.

Drawing upon Festinger's (1957) and Heider's (1958) theories, we can hypothesize possible relationships between personal and social facets of identity. First, since personal and social facets refer to the same overarching construct (identity), relationships between them should be relevant, in terms of Festinger's conceptualization. This would imply that personal and social facets are not independent from each other, but rather are qualified by a certain degree of interdependence. Second, further building upon Festinger's (1957) and Heider's (1958) theories, we can advance specific hypotheses about how the expected interrelationship between personal and social identity facets should appear. Since we expect to find a concordance between personal and social identity facets, we may find overrepresentations of respondents in specific combinations of ego-identity statuses and identification profiles when juxtaposing personal and social identity classifications. More specifically, in light of the principle of self-consistency, we would expect a high cooccurrence of identity statuses and identification profiles that define a strong personal and social identity, respectively. Thus, we posit that individuals who are highly committed to their job, thoughtfully reflect on it, and are certain about their choice (achievement status) would also identify strongly with both their colleagues and the organization in which they are employed (G&O profile). Likewise, we expected that employees who are in the process of reconsidering their job because they no longer find it satisfactory (moratorium status) would also be more weakly identified with their colleagues and their organization (NO-I profile). Put briefly, we expected that:

Hypothesis 5 Significant associations between identity statuses and identification profiles will be characterized by high co-occurrence of achievement status and G&O–I profile, as well as high co-occurrence of moratorium and NO-I profile.

To further examine interrelationships between personal and social identity facets, we considered *identity configu-* rations defined by specific combinations of conditions of stability/instability in personal and social identity. In line with the theoretical background (Crocetti et al. 2012b; Meeus et al. 1999), stability in the personal identity realm is defined by endorsement of stable commitments (statuses of achievement or closure), whereas identity instability is characterized by the search for new commitments (statuses of moratorium or searching moratorium). In the social identity realm, identity stability is defined by high



Hypothesis 6 Employees in the identity configurations characterized by personal and social identity stability will display lower symptoms of burnout, higher satisfaction, and more organizational citizenship behaviors than their counterparts in the configurations defined by instability in both personal and social identity. Employees classified in the configurations characterized by stability or partial stability only in personal or social identity will show intermediate scores on these job outcomes.

Method

Participants and Procedure

Participants were 515 teachers (85.4 % women) employed in primary, junior, and high schools located in small-to-medium sized cities. The age of the participants varied from 24 to 64 years (M=47.23; SD=9.12), their job tenure ranged from 1 to 42 years (M=20.16; SD=10.25), and their organizational tenure varied from 2 months to 36 years (M=10.33; SD=8.33). Most teachers had a university degree (62.1 %), a permanent contract (83.7 %), and were married (70.7 %).

Schools located in the central Eastern part of Italy were randomly selected for participation in the study. After having obtained permission from the principal of each school, an interviewer contacted teachers in the school



setting. Teachers were informed about the aims of the study and asked for their consent to participate. Approximately 85 % of the approached teachers accepted. They were given a self-report questionnaire and asked to return it after a few days. Participants did not receive any incentive for their participation.

Measures

Personal Identity

This construct was measured using the *Utrecht-Management of Identity Commitments Scale* (U-MICS; Crocetti et al. 2008; Italian version validated by Crocetti et al. 2010). The U-MICS consists of 13 items with a response scale ranging from 1 (*completely untrue*) to 5 (*completely true*). Sample items include: "My job gives me certainty in life" (commitment; 5 items), "I think a lot about my job" (in-depth exploration; 5 items), and "I often think it would be better to try to find a different job" (reconsideration of commitment; 3 items).

Social Identity

Group identification was assessed by means of the *Group Identification Scale* (van Dick et al. 2004), consisting of six items with a response scale ranging from 1 (*completely untrue*) to 5 (*completely true*). A sample item reads: "I identify myself as a member of my work-group". Organizational identification was assessed using the *Organizational Identification Scale* (Mael and Ashforth, 1992; Italian adaptation by Bergami and Bagozzi, 2000), which includes six items with a response scale ranging from 1 (*completely untrue*) to 5 (*completely true*). A sample item is: "When someone criticizes my organization, it feels like a personal insult".

Burnout

This construct was measured through the *Maslach Burnout Inventory* (MBI form Ed; Maslach and Jackson, 1981; Maslach et al. 1996; Italian validation by Sirigatti and Stefanile, 1993). This scale consists of 22 items with a response scale ranging from 1 (*never*) to 7 (*every day*). Sample items are: "I feel emotionally drained from my work" (emotional exhaustion; 9 items); "I treat my students as if they were impersonal objects" (depersonalization; 5 items); and "I deal very effectively with the problems of my students" (professional efficacy; 8 items). Since the depersonalization subscale demonstrated an unsatisfactory Cronbach's alpha, this factor was excluded from analyses.

Job Satisfaction

Items to assess job satisfaction were selected from the Italian version (Borgogni, 1999) of the Job Descriptive Index (Smith et al. 1969). This scale covers five facets of job satisfaction (work, pay, promotion, coworkers, and supervision). In our study we used five items, one for each facet, with a response scale ranging from 1 (completely untrue) to 5 (completely true). A single-item measure of job satisfaction is frequently used in workplace research, because of both non-psychometric advantages (such as cost-effectiveness, shortest survey) and theoretical considerations (Nagy, 2002; Wanous et al. 1997). Indeed, scales using multiple items may neglect some components of a job that are important to an employee, and even may include aspects of a job that are not important to an employee, leading in both cases to a misleading global index (Nagy, 2002). Furthermore, high correlations between single items and corresponding multipleitem measures of job satisfaction facets have been found in different studies, indirectly confirming the adequate reliability of single-item measures (Nagy, 2002; Wanous et al. 1997).

Organizational Citizenship Behaviors

Extra-role behaviors were measured with two dimensions of the *Organizational Citizenship Behaviors Scale* (OCB; Podsakoff and MacKenzie, 1989; Italian validation by Petitta et al. 2004), consisting of eight items on a scale from 1 (*completely untrue*) to 5 (*completely true*). Sample items are: "I help colleagues who have heavy workloads" (OCB toward colleagues; 4 items); and "I pay attention to information about school changes" (OCB toward organization; 4 items).

Results

Preliminary Analyses

First, since outliers can affect the results of cluster analysis (e.g., Milligan, 1980; Milligan and Hirtle, 2003; Norušis, 2009), we omitted 13 (2.5 % of the sample) univariate and/or multivariate outliers (i.e., participants who scored more than 3 *SD* away from the sample mean on one or more of the identity and identification variables).

Second, we tested a measurement model through Confirmatory Factor Analysis (CFA) in LISREL 8.71 (Jöreskog and Sörbom, 2004), using the Maximum Likelihood estimator. We examined several model fit indices (Kline, 2005): the Chi square/degree of freedom ratio (χ^2 /df) is acceptable with values between 1 and 5; the Non-Normed



Fit Index (NNFI) and the Comparative Fit Index (CFI) should be equal to or exceed .95, with acceptable values being higher than .90; the Root Mean Square Error of Approximation (RMSEA) should be equal to or less than .08. We tested a model with fourteen latent factors (i.e., three for personal identity, two for social identity, two for burnout, five for job satisfaction, and two for citizenship behaviors). Fit indices indicted a very good fit for this model: $\chi^2 = 3392.14$, df = 1344, $\chi^2/df = 2.52$, NNFI = .91, CFI = .92, RMSEA = .06. Means, standard deviations, reliabilities, and correlations for the study variables are reported in Table 1.

Job Personal Identity: Identity Statuses

Cluster Analysis

In order to study personal identity using a person-centered approach, we conducted a cluster analysis on standardized scores of identity commitment, in-depth exploration, and reconsideration of commitment. We followed Gore's (2000) two-stage approach that combines advantages of hierarchical and *k*-means clustering algorithms. Specifically, in the first step, a hierarchical cluster analysis was carried out using Ward's method based on squared Euclidian distances to individuate the optimal number of classes. In the second step, initial cluster centers of the best retained class-solution were used as non-random starting points in iterative *k*-means clustering, which yielded the final classification.

We compared cluster solutions with two, three, four, five, and six clusters on the basis of three criteria, namely the theoretical meaningfulness of each cluster, parsimony, and explanatory power (i.e., the cluster solution had to explain approximately 45-50 % of the variance in each of the identity dimensions; Milligan and Cooper, 1985). On the basis of these criteria, a four-cluster solution was retained as the most acceptable. Indeed, solutions with fewer numbers of clusters failed to extract theoretically meaningful identity statuses and explained little variance (falling under the threshold of 45-50 % of variance explained in each identity dimension), whereas solutions with a higher number of clusters violated the principle of parsimony, because they included clusters that represented only slight variations of previous clusters. In the second step, the initial cluster centers were used as non-random starting points in an iterative k-means clustering procedure.

This four-cluster solution explained 49 %, 50 %, and 65 % of the variance in commitment, in-depth exploration, and reconsideration of commitment, respectively. We used a double-split cross-validation procedure to examine the stability of the cluster solution (Breckenridge, 2000;

and correlations of the (in diagonal), Means (M), standard deviations (SD), reliabilities

	M	M SD 1	1	2	3	4	5	9	7	8	6	10	11	12	13	14
1. Commitment	3.58	3.58 0.77	.84													
2. In-depth exploration	4.01	0.55	.14**	.71												
3. Reconsideration of commitment 1.92	1.92	0.85	41***	11*	.78											
4. Organizational identification	3.49	0.70	.26**	.33***	08	.80										
5. Group identification	3.92	0.61	.13**	.14**	13**	.31***	.85									
6. Emotional exhaustion	2.81	0.98	29**	02	.47***	01	15**	98.								
7. Professional efficacy	4.84	0.97	.19***	.20***	15**	.23***	.34***	16***	.81							
8. Satisfaction for pay	2.45	1.07	.19***	02	22***	.02	.10*	28**	01							
9 Satisfaction for future security	3.06	1.20	.63***	04	20***	.16***	*60`	13**	.01	.29***						
10. Satisfaction for job results	3.88	69.0	.37***	.12**	28***	.12**	.21***	30***	.36***	.10*	.14**					
11. Satisfaction for superior	3.63	0.99	.19***	90.	18***	.21***	.35***	19***	.17***	.16***	.15**	.27***				
12. Satisfaction for coworkers	3.66	0.83	.16***	80.	16***	.22***	.61***	12**	.26***	.17***	.12**	.26***	.41***			
13. OCBs toward colleagues	3.38	0.76	.17***	.20***	14**	.22***	.28***	12**	.30***	80.	.02	.21***	.16***	.24***	.80	
14. OCBs toward organization	3.81	3.81 0.67	.21***	.29***	15**	.30***	.28***	10*	.35***	08	90.	.28***	.22***	.20***	.51***	.76

Note * p < 05, ** p < 01, *** p < 001. N = 502. OCBs Organizational citizenship behaviors. Response scales were 1–5 for all variables except for Emotional exhaustion and Professional



Tinsley and Brown, 2000). In this procedure, the sample is randomly split into halves (Subsamples A and B) and the full two-step procedure (hierarchical followed by k-means clustering) is repeated in each subsample. These new clusters are then compared for agreement with the original cluster by means of Cohen's (1960) kappa. We found that the same four clusters were replicated in each of these subsamples. Levels of agreement between the classification performed in the total sample and those conducted in the two subsamples were very high (Landis and Koch, 1977), with Cohen's (1960) kappa values of .83 and .89 for the first and second subsamples, respectively.

The final clusters are shown in Fig. 1. The first cluster consisted of 150 individuals scoring high on commitment and in-depth exploration, but low on reconsideration of commitment. The second cluster comprised 113 individuals with moderately high scores on commitment, low scores on in-depth exploration, and low scores on reconsideration of commitment. The third cluster included 102 individuals who scored low on commitment, moderate on in-depth exploration, and high on reconsideration of commitment. The fourth cluster consisted of 137 individuals scoring high on all three dimensions. Thus, we found clusters representing achievement, early closure, moratorium, and searching moratorium statuses, respectively. These results confirmed Hypothesis 1.

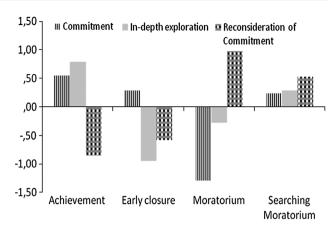


Fig. 1 Z-scores for commitment, in-depth exploration, and reconsideration of commitment for the four identity statuses

Chi Square Tests

We conducted a series of Chi square tests to examine whether participants' distribution in the four identity statuses varied as a function of their gender, educational title (teachers with a high school diploma vs. teachers with a university degree), and job contract (permanent vs. contingent). Results showed only a significant effect of job contract, χ^2 (3, N=502) = 43.36, p<.001, Cramér's V=.29, p<.001. As reported in Table 2, participants with a contingent contract were much more represented in

Table 2 Distribution of employees across the identity statuses and identification profiles

	Identity status	es						Total (%)
	Achievement	(%) Early	closure (%)	Moratoriur	n (%)	Searching moratorium (%)		
Job contract								
Permanent	30.5	24.5		15.2 (-)		29.8		100
Contingent	26.8	12.2 ((-)	46.3 (+)		14.6 (-)		100
Total	29.9	22.5		20.3		27.3		100
		Identification p	rofiles					Total (%)
		G&O (%)	O-I (%)		G-I (%)		NO-I (%)	
Job contract								
Permanent		28.3	26.7		30		15	100
Contingent		18.3	17.1		48.8 (+)		15.9	100
Educational title								
High school di	ploma	31.7	24.3		33.9		10.1	100
University deg	ree	23.6	25.6		32.6		18.3	100
Total		26.7	25.1		33.1		15.1	100

G&O high identification with both group and organization, O-I high identification with the organization, low identification with the group, G-I high identification with the group, low identification with the organization, NO-I low identification with both group and organization. Observed values indicated in bold are significantly different from expected values (i.e., standardized residuals higher than |2|): (+) indicates that the observed value is higher than the expected value



Table 3 Means of job and organizational tenure, burnout, job satisfaction, and organizational citizenship behaviors by identity statuses

	Identity status	es			F (3, 501)	η^2
	Achievement	Early closure	Moratorium	Searching moratorium		
Tenure						
Job tenure	20.69 ^{ab}	21.85 ^b	17.64 ^a	21.40 ^b	2.92*	.02
	(11.01)	(14.26)	(9.38)	(10.34)		
Organizational tenure	10.60 ^b	11.12 ^b	7.52 ^a	11.60 ^b	5.36***	.03
	(8.67)	(7.54)	(7.36)	(8.79)		
Burnout						
Emotional exhaustion	2.43 ^a	2.44 ^a	3.47 ^c	3.05^{b}	38.20***	.19
	(0.85)	(0.78)	(1.02)	(0.90)		
Professional efficacy	5.16 ^c	4.88 ^{bc}	4.49 ^a	4.70^{ab}	11.61***	.07
	(0.95)	(0.90)	(0.98)	(0.92)		
Job satisfaction about						
Pay	2.70 ^b	2.62^{b}	2.20^{a}	2.22 ^a	8.01***	.05
	(1.05)	(1.05)	(1.06)	(1.03)		
Future security	3.30^{b}	3.39^{b}	2.08 ^a	3.27 ^b	35.07***	.17
	(1.20)	(1.05)	(1.11)	(0.97)		
Job results	4.21°	3.91 ^b	3.42 ^a	3.85^{b}	31.24***	.16
	(0.64)	(0.63)	(0.70)	(0.58)		
Relationship with superior	3.87 ^b	3.64 ^{ab}	3.36 ^a	3.55 ^{ab}	5.78***	.03
	(1.03)	(0.93)	(0.99)	(0.94)		
Collaboration with coworkers	3.85 ^b	3.67 ^{ab}	3.48 ^a	3.58 ^a	4.87**	.03
	(0.84)	(0.81)	(0.82)	(0.82)		
Organizational citizenship behav	riors					
Toward colleagues	3.58 ^b	3.40^{b}	3.12 ^a	3.34^{ab}	8.24***	.05
	(0.75)	(0.75)	(0.68)	(0.76)		
Toward organization	4.08 ^c	3.73 ^{ab}	3.54 ^a	3.80^{b}	15.29***	.08
	(0.63)	(0.71)	(0.69)	(0.58)		

Note * p < .05; ** p < .001; *** p < .001. Different superscripts indicate significant differences between means (p < .05) on the basis of Tukey post hoc tests. Response scales were 1–5 for all variables except for Emotional exhaustion and Professional efficacy, for which the response scales were 1–7

the moratorium status than those with a permanent contract, and were less represented in the early closure and searching moratorium statuses.

MANOVAs

A preliminary Multivariate Analysis of Variance (MANOVA) was conducted to examine differences on job and organizational tenures reported by participants classified into the various identity statuses. Results indicated that identity statuses had multivariate effects on overall tenure, Wilks' $\lambda = .97$; F (6, 988) = 2.83, p < .01, $\eta^2 = .02$. Specifically, employees in the moratorium status reported lower job and organizational tenures than respondents in the other identity statuses (see Table 3).

We then conducted a series of MANOVAs on burnout, job satisfaction, and organizational citizenship behaviors, with identity status as the independent variable. Findings indicated that identity statuses had multivariate effects on burnout, Wilks' $\lambda = .78$, F (6, 994) = 22.44, p < .001,

 $\eta^2 = .12$; job satisfaction, Wilks' $\lambda = .68$, F (15, 1364) = 13.40, p < .001, $\eta^2 = .12$; and organizational citizenship behaviors, Wilks' $\lambda = .91$, F(6, 994) = 8.39, p < .001, $\eta^2 = .05$. Results of follow-up univariate analyses are reported in Table 3, along with post hoc comparisons. Participants in moratorium exhibited the highest levels of job burnout (i.e., scoring highest on emotional exhaustion and lowest on professional efficacy), and those in searching moratorium reported intermediate scores on burnout. In contrast, teachers in the high commitment statuses (achievement and early closure) reported the lowest levels of burnout, with the only difference being that achieved teachers displayed higher professional efficacy than their early closed counterparts. Findings regarding the various dimensions of job satisfaction showed that teachers in the moratorium status were the least satisfied about various aspects of their job, whereas their achieved colleagues were the most satisfied. In addition, teachers in the searching moratorium status were more likely to resemble those in the moratorium status, whereas early closed teachers were more



similar to achieved ones. Finally, employees in the moratorium status reported less organizational citizenship behaviors toward their colleagues than teachers in achievement or early closure (those in the searching moratorium status reported scores statistically equivalent to the other groups). A more differentiated picture emerged for organizational citizenship behaviors toward the larger organization, with teachers in the achievement status scoring highest, followed by those in searching moratorium, then by those in early closure, and finally by those in the moratorium group. Overall, these results confirmed Hypothesis 2.

Job Social Identity: Identification Profiles

Cluster Analysis

In order to obtain identification profiles, we followed the same procedure used for extracting identity statuses. After comparing different cluster solutions, we retained a final four-cluster solution (see Fig. 2) that explained 54 and 66 % of the variance in organizational and group identification, respectively. We tested the replicability of this solution by randomly splitting the sample into two halves and reconducting the cluster analyses. These same four clusters existed in each of the two random subsamples. Levels of agreement between the classification performed in the total sample and those conducted in the two subsamples were adequate, with Cohen's (1960) kappa values of .86 and .64 for the first and second subsamples, respectively.

The first cluster consisted of 134 individuals scoring high on both organizational and group identification (G&O–I). The second cluster comprised 126 individuals with high scores on organizational identification and moderately low scores on group identification (O–I). The third cluster consisted of 166 individuals who scored moderately high on group identification and low on organizational identification

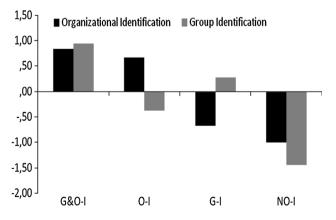


Fig. 2 Z-scores for organizational and group identification for the four identification profiles

(G-I). The fourth cluster included 76 individuals scoring low on both organizational and group identification (NO-I). Thus, these results confirmed Hypothesis 3.

Chi Square Tests

Chi square tests indicated that participants' distribution in the four identification profiles varied as a function of their job contract, χ^2 (3, N=502) = 12.46, p<.01, Cramér's V=.16, p<.01. In particular, teachers with a contingent contract were overrepresented in the G-I profile (see Table 2). The effect of the educational title was slightly significant, χ^2 (3, N=502) = 8.21, p<.05, Cramér's V=.13, p<.05. However, a further inspection at differences (i.e., standardized residuals) between observed and expected values did not yield any specific pattern of differences. Finally, the effect of gender was not significant.

MANOVAs

A preliminary MANOVA indicated that identification profiles had multivariate effects on overall tenure, Wilks' $\lambda = .93$; F (6, 988) = 6.08, p < .001, $\eta^2 = .04$). Employees in the G-I profile reported lower job tenure than those in the O-I profile, with the latter also reporting the highest levels of organizational tenure (see Table 4).

A series of MANOVAs on job outcomes, with identification profiles as the independent variable showed significant multivariate effects on burnout, Wilks' $\lambda = .90$, F (6, 994) = 8.90, p < .001, $\eta^2 = .05$; job satisfaction, Wilks' $\lambda = .70$, F(15, 1364) = 12.38, p < .001, $\eta^2 = .11$; and organizational citizenship behaviors, Wilks' $\lambda = .89$, F (6, 994) = 10.36, p < .001, $\eta^2 = .06$. Results of follow-up analyses are reported in Table 4. Participants in the NO-I profile exhibited the highest levels of job burnout (i.e., scoring the highest on emotional exhaustion, and the lowest on professional efficacy), followed by respondents in the O-I and G-I profiles. Those in the G&O-I profile reported the lowest levels of burnout (in particular, they scored the highest on professional efficacy). Findings regarding job satisfaction indicated that teachers in the NO-I profile were the least satisfied, whereas their G&O-I colleagues were the most satisfied; teachers highly identified with only one target (O-I or G-I) reported intermediate levels of job satisfaction. In addition, teachers in G&O-I profile reported the most organizational citizenship behaviors toward their colleagues, those with high identification with only one target reported intermediate scores, and NO-I employees reported the lowest level of behaviors aimed at helping their colleagues. Furthermore, teachers in the G&O-I profile scored higher on citizenship behaviors toward their organization than their colleagues in any other



Table 4 Means of job and organizational tenure, burnout, job satisfaction, and organizational citizenship behaviors by identification profiles

	Identificat	ion profiles	F(3, 501)	η^2		
	G&O	O-I	G-I	NO-I		
Tenure						
Job tenure	20.43 ^{ab}	22.53 ^b	18.42 ^a	22.05 ^{ab}	3.65*	.02
	(10.05)	(10.46)	(9.92)	(16.60)		
Organizational tenure	10.54 ^{ab}	13.20 ^b	9.06 ^a	8.31 ^a	8.09***	.05
	(7.79)	(9.08)	(7.80)	(7.85)		
Burnout						
Emotional exhaustion	2.71 ^a	2.94 ^{ab}	2.69 ^a	3.04^{b}	3.56*	.02
	(0.99)	(0.99)	(0.93)	(1.01)		
Professional efficacy	5.25°	4.73 ^b	4.79^{b}	4.38 ^a	15.72***	.09
	(0.84)	(0.95)	(0.98)	(0.92)		
Job satisfaction about						
Pay	2.52 ^b	2.45^{b}	2.55 ^b	2.08 ^a	3.82**	.02
	(1.12)	(1.01)	(1.11)	(0.95)		
Future security	3.31 ^b	3.18 ^{ab}	2.90 ^a	2.79 ^a	4.73**	.03
	(1.13)	(1.17)	(1.20)	(1.28)		
Job results	4.05 ^b	3.80^{a}	3.89 ^{ab}	3.70^{a}	5.25**	.03
	(0.65)	(0.68)	(0.63)	(0.82)		
Relationship with superior	4.05°	3.48 ^b	3.66 ^b	3.07^{a}	19.06***	.10
	(0.86)	(0.99)	(0.88)	(1.10)		
Collaboration with coworkers	4.16 ^d	3.46^{b}	3.78°	2.86 ^a	58.10***	.26
	(0.66)	(0.69)	(0.75)	(0.80)		
Organizational citizenship behavior	ors					
Toward colleagues	3.64 ^c	3.36^{b}	3.33^{b}	3.06^{a}	10.82***	.06
	(0.77)	(0.69)	(0.70)	(0.82)		
Toward organization	4.13 ^b	3.82^{a}	3.65 ^a	3.61 ^a	17.39***	.10
	(0.57)	(0.71)	(0.60)	(0.74)		

identification with the organization, low identification with the group, G-I high identification with the group, low identification with the organization, NO-I low identification with both group and organization. * p < .05, ** *p* < .001, *** *p* < .001. Different superscripts indicate significant differences between means (p < .05) on the basis of Tukey post hoc tests. Response scales were 1-5 for all variables, except for Emotional exhaustion and Professional efficacy for which the response scales were 1-7

Note G&O high identification with both group and organization, O-I high

identification cluster. In brief, these results confirmed Hypothesis 4.

Relationships Among Identity Statuses and Identification Profiles

To examine the relationships among identity statuses and identification profiles, we conducted a Chi square test. Results showed significant associations among personal and social identity classifications, χ^2 (9, N=502) = 28.99, p < .001, Cramér's V=.24, p < .001. Main results (see Table 5) revealed that participants in the achievement status were more likely to highly identify with both their group and organization than respondents in any other status. Furthermore, teachers from the identity achievement group were less likely to fall within the G-I profile. Early closure teachers, on the other hand, were highly represented in this G-I profile. In addition, those in the moratorium status were more likely to report low identification

 Table 5 Cross-tabulation of identity statuses and identification

 profiles

	Identification profiles						
	G&O (%)	O-I (%)	G-I (%)	NO-I (%)	(%)		
Identity statuses							
Achievement	36.7 (+)	29.3	22.0 (-)	12.0	100		
Early closure	22.1	20.4	43.4 (+)	14.2	100		
Moratorium	19.6	20.6	35.3	24.5 (+)	100		
Searching moratorium	24.8	27.7	35.0	12.4	100		

Note G&O high identification with both group and organization, O-I high identification with the organization, low identification with the group, G-I high identification with the group, low identification with the organization, NO-I low identification with both group and organization. Observed values indicated in bold are significantly different from expected values (i.e., standardized residuals higher than |2|): (+) indicates that the observed value is higher than the expected value; (-) indicates that the observed value is lower than the expected value



Table 6 Means of burnout, job satisfaction, and organizational citizenship behaviors by identity configurations

	Identity configurations							η^2
Personal identity	Stability			Instability				
Social identity	Stability	Partial stability	Instability	Stability	Partial stability	Instability		
Burnout								
Emotional exhaustion	2.34 ^a	2.44 ^a	2.63 ^a	3.25 ^b	3.18 ^b	3.38^{b}	20.76***	.17
	(0.80)	(0.83)	(0.82)	(1.00)	(0.95)	(1.04)		
Professional efficacy	5.32^{d}	4.97 ^{bcd}	4.68 ^{bc}	5.14 ^{cd}	4.55 ^{ab}	4.13 ^a	14.49***	.13
	(0.92)	(0.95)	(0.80)	(0.72)	(0.94)	(0.94)		
Job satisfaction about								
Pay	2.71 ^{bc}	2.75°	2.21 ^{ab}	2.24	2.27	1.98 ^a	6.84***	.06
	(1.11)	(1.04)	(0.88)	(1.08)	(1.04)	(1.00)		
Future security	3.53 ^c	3.23 ^{bc}	3.35 ^{bc}	3.00^{bc}	2.80^{ab}	2.33 ^a	8.56***	.08
	(1.11)	(1.15)	(1.12)	(1.08)	(1.20)	(1.22)		
Job results	4.24 ^d	4.03 ^{cd}	3.94 ^{bcd}	3.78^{abc}	3.67 ^{ab}	3.50^{a}	12.38***	.11
	(0.56)	(0.65)	(0.81)	(0.69)	(0.61)	(0.77)		
Relationship with superior	4.16 ^d	3.69 ^{cd}	3.18 ^{ab}	3.87 ^{cd}	3.47 ^{bc}	2.98 ^a	12.57***	.11
	(0.86)	(0.96)	(1.03)	(0.83)	(0.89)	(1.16)		
Collaboration with coworkers	4.19 ^c	3.72 ^b	3.03^{a}	4.11 ^c	3.56 ^b	2.71 ^a	32.96***	.25
	(0.71)	(0.74)	(0.87)	(0.57)	(0.73)	(0.71)		
Organizational citizenship behavi	iors							
Toward colleagues	3.75 ^c	3.45 ^{bc}	3.15 ^{ab}	3.48 ^{bc}	3.24 ^{ab}	2.98^{a}	8.98***	.08
	(0.73)	(0.73)	(0.73)	(0.80)	(0.63)	(0.89)		
Toward organization	4.25°	3.80^{ab}	3.73 ^{ab}	3.97 ^{bc}	3.64 ^{ab}	3.51 ^a	12.20***	.11
	(0.51)	(0.70)	(0.73)	(0.62)	(0.59)	(0.73)		

Note *** p < .001. Different superscripts indicate significant differences between means (p < .05) on the basis of Tukey post hoc tests. Means with no superscript are not significantly different from any other mean. Response scales were 1–5 for all variables except for Emotional exhaustion and Professional efficacy, for which the response scales were 1–7

with both their group and organization. Overall, these findings supported Hypothesis 5.

Finally, we classified participants into six identity configurations: (1) personal and social identity stability (we grouped into this configuration 80 participants who had been previously classified in the clusters of achievement/ closure and G&O-I); (2) personal identity stability and partial social identity stability (149 employees previously classified in the clusters of achievement/closure and G-I/ O-I); (3) personal identity stability and social identity instability (34 respondents previously classified in the clusters of achievement/closure and NO-I); (4) personal identity instability and social identity stability (54 individuals previously classified in the clusters of moratorium/ searching moratorium and G&O-I); (5) personal identity instability and partial social identity stability (143 employees previously classified in the clusters of moratorium/searching moratorium and G-I/O-I); (6) personal and social identity instability (42 respondents previously classified in the clusters of moratorium/searching moratorium and NO-I). A series of MANOVAs on job outcomes with identity configuration as the independent variable indicated significant multivariate effects on burnout, Wilks' $\lambda = .74$, $F(10, 980) = 16.34, p < .001, \eta^2 = .14$; job satisfaction, Wilks' $\lambda = .62$, F (25, 1829) = 10.10, p < .001, $\eta^2 = .09$; and organizational citizenship behaviors, Wilks' $\lambda = .87$, F(10, 990) = 7.40, p < .001, $\eta^2 = .07$. Results of follow-up analyses are reported in Table 6. Findings indicated that, on a few outcomes (i.e., emotional exhaustion, satisfaction for collaboration with co-workers), there was a clear main effect of one facet. For emotional exhaustion, configurations characterized by personal identity stability-independent of the social identity facetreported lower emotional exhaustion than configurations defined by personal identity instability. Regarding satisfaction for collaboration with co-workers, scores were linked with social identity stability and were not moderated by differences in personal identity stability. In contrast, the pattern of differences among identity configurations was more articulated for all the other outcomes. In brief, findings indicated that the configuration characterized by stability in both personal and social identity facets scored more favorably on each outcome than the configuration defined by instability in both personal and social identity.



The other configurations, in which stability characterized only one identity facet, reported intermediate scores. Overall, these results supported Hypothesis 6.

Discussion

Job identity is a core identity domain. In this study, we sought to reach a more comprehensive understanding of identity in organizations by uncovering specific contributions of personal (Erikson, 1968; Marcia, 1966; Meeus, 2011) and social (Tajfel and Turner, 1979; Turner et al. 1987) facets of job identity to job outcomes, and then analyzing interconnections between these different facets. Using a person-centered approach (Bergman et al. 2003; von Eye and Bogat, 2006), we found that individuals' classifications in various identity statuses and identification profiles were significantly associated with job burnout, job satisfaction, and organizational citizenship behaviors. Identity statuses and identification profiles were also meaningfully interrelated, and identity configurations characterized by specific combinations of stability/instability in personal and social identity were related to job outcomes.

Job Identity Statuses

The present research is the first to apply a three-factor identity model—originally developed to capture identity dynamics in young people (Crocetti et al. 2008; Klimstra et al. 2010; Meeus et al. 2010)—to an adult population. Findings indicated that identity statuses previously extracted in studies conducted with adolescents (Crocetti et al. 2012a) were also replicated among adults, with only one exception. Specifically, in line with Hypothesis 1, participants could be classified in four identity statuses: achievement, early closure, moratorium, and searching moratorium. We did not find evidence of a diffused status, which is characterized by low scores on all the identity processes. We can suggest two possible explanations for this result. First, this finding may concern the age of the participants. As outlined in a meta-analysis (Kroger et al. 2010), the number of individuals in the diffusion status strongly decreases with age, with only 14 % of adults between 30 and 36 years remaining in this status. Since the mean age of our sample was higher (47 years, with a range of 24-64 years), the likelihood of finding diffused employees was lower. Second, this result might be related to the specific content domain considered in this research, since the probability that individuals are in a diffusion status is lower for particularly salient identity domains. In other words, since vocation represents a core identity domain for the adult working population (cf. Bowling et al. 2010), it would be less probable to find employees who do not care at all about their lack of fulfilling commitments. Furthermore, the characteristics of the teachers' work, with continuous interactions with pupils and their parents, and also with colleagues and superiors, demand a high level of work engagement, which is not compatible with a status of diffusion (Kyriacou, 2001). In addition, large surveys conducted with Italian teachers (cf. Cavalli and Argentin, 2010) have documented how continuous challenges provided by organizational changes (e.g., resizing of school classes; introduction of new technologies) make it difficult for any teacher to preserve a passive, diffused identity. Overall, our results highlight the importance of attending to participants' specific characteristics and their contexts when studying identity statuses.

We also found that teachers with a contingent contract and those with lower job and organizational tenure scores were overrepresented in the moratorium status. These findings are consistent with extensive literature (for a review see De Cuyper et al. 2008) emphasizing that identity development in the organizational context can be more challenging for individuals with unstable contracts. Our results suggest that these individuals are more likely to reconsider their job commitment and believe that other occupations are more appealing.

Regarding differences among identity statuses on the various job outcomes, teachers classified in statuses characterized by a stable job commitment (i.e., early closure and, to a stronger extent, the achievement status) exhibited lower burnout, perceived higher job satisfaction, and were more likely to perform organizational citizenship behaviors. In contrast, employees questioning their job commitment (i.e., searching moratorium and, to a stronger extent, the moratorium status) reported higher burnout, were less satisfied, and engaged in fewer organizational citizenship behaviors. Interestingly, results regarding the various facets of job satisfaction highlighted that identity statuses explained large portion of variance in responses related to satisfaction regarding future security and job results (17 and 16 %, respectively). In contrast, identity statuses explained less variance on satisfaction for relationships with coworkers and superiors (3 % in both variables). Thus, identity statuses were more related to satisfaction for job characteristics and outcomes than for the job relationships dimension.

Overall, these results were consistent with Hypothesis 2, and are in line with an extant identity literature (Kroger and Marcia, 2011; Meeus, 2011) showing that identity stability provides a sense of direction, self-certainty, and well-being (Adams and Marshall, 1996; Berzonsky, 2003; Luyckx et al. 2010; Porfeli et al. 2011). Thus, individuals with a firm identity have more resources to actively pursue their objectives and to appropriately face stressful situations at work, and they can adopt more proactive behaviors in order to reach their goals and those of their organizations.



Job Identification Profiles

The present research is also the first to use a data-driven method of classification to individuate identification profiles based on two targets (i.e., work-group and the organization as a whole). In line with Hypothesis 3 (cf. van Dick et al. 2008), we extracted four identification profiles, namely G&O–I, G-I, O–I, and NO-I. In addition, we found that teachers with a contingent contract and with lower job and organizational tenure scores were overrepresented in the G-I profile. These individuals may have difficulty identifying with their organizations, since they must repeatedly move between schools when temporary contracts end (cf. De Cuyper et al. 2008).

In accordance with Hypothesis 4, results clearly indicated that employees who had achieved identification with both targets (G&O–I) reported lower burnout, higher job satisfaction, and more organizational citizenship behaviors than employees who were not identified with either the work-group or the organization as a whole (NO-I). Overall, those who identified with only one target (G-I or O–I) still experienced less burnout, reported higher job satisfaction, and implemented more organizational citizenship behaviors than NO-I employees.

With regard to burnout, workers in the G-I and G&O-I profiles reported lower emotional exhaustion than employees in the NO-I profile, while those in the O-I category reported intermediate scores. In this sense, individuals' links with the work-group may be more self-protective against exhaustion and callous behaviors than their links with the larger organization. This may involve two different processes. On the one hand, as outlined by Haslam (2004), high identification does not necessarily protect employees from exhaustion because strongly identified employees may choose to work harder to achieve organizational goals than employees with weaker identifications (Avanzi et al. 2012; van Dick and Haslam, 2012). On the other hand, lower identification with the work-group may result in these same individuals receiving less social support from colleagues (van Dick and Haslam, 2012). Because teachers in the O-I profile have relatively high levels of organizational identification, they could be faced with a strong "overload" and, at the same time, they could receive less social support from their colleagues because they are not identified with the work-group. This situation could make them more vulnerable to emotional exhaustion. In contrast, teachers who strongly identify with their workgroup, but weakly identify with their organization, might feel less pressure to work toward achieving the organization's goals and may receive more social support from their colleagues. This combination of less "overload" and more social support may make these individuals less vulnerable to emotional exhaustion.

Findings regarding the second dimension of burnout (i.e., professional efficacy), as well as results concerning job satisfaction, highlight the highly adjusted profile of employees in the G&O-I group. In fact, these workers reported the highest levels of professional efficacy, and high satisfaction for various facets of their job. In particular, these employees displayed very high levels of satisfaction regarding the relational dimension of their work, perceiving positive relationships with their superiors and high-quality collaborations with colleagues. Thus, differently from what found for identity statuses, identification profiles are more strongly related to satisfaction for relational issues associated with the work experience. This confirms that employees who are highly identified with their "in-group" tend to perceive in-group members more positively and, as a consequence, experience greater satisfaction in their work relationships (van Dick and Haslam, 2012).

In addition, our findings regarding organizational citizenship behaviors are consistent with van Dick and colleagues' (2008) results, which revealed that people highly identified with both their organization and work-group reported higher organizational citizenship behaviors than employees who identified strongly with only one of the targets, or who identified with neither of the targets.

Bridging Together Personal and Social Identity Facets

In this study, we sought to understand whether and how personal and social identity facets are interrelated. Building upon self-consistency theories (Festinger, 1957; Heider, 1958), we formulated Hypothesis 5, focused on interconnections between personal and social facets of job identity. Consistent with our expectations, we found that personal and social identity facets were significantly associated. Results indicated that teachers in the achievement status were more likely to identify with both their group and organization than were teachers in any other status. In addition, achieved teachers were less likely to be classified in the G-I profile, whereas this profile was more common among early-closed teachers. This latter finding is in line with literature showing that early-closed individuals tend to exhibit high social conformity (Kroger and Marcia, 2011). Finally, employees in the moratorium status were more likely to report low identification with both their group and organization.

In brief, these results indicate that those who have achieved a strong personal identity are more likely to have a strong social identity, and vice versa. Future longitudinal studies are necessary to clarify the dynamic of this interdependence. We conjecture that people with a strong personal identity can establish more mature interpersonal relationships within their work context (e.g., Erikson, 1959), and those who strongly identify with both their



work-group and their organization receive greater support in developing a firm job identity. Social identity satisfies many fundamental needs, such as the need to belong to a larger group, as well as needs to reduce uncertainty about one's self-concept and to find meaning about their place within the social world (Ashforth et al. 2008). Overall, people try to achieve a social identity in order to acquire a positive self-concept (van Dick, 2001). Thus, employees who have achieved strong organizational and work-group identification have probably satisfied these needs to a greater extent, which subsequently reinforces their personal identity in a recurring cycle.

To further integrate personal and social identity facets, we finally examined identity configurations defined by specific combinations of identity statuses and identification profiles. Specifically, we focused on six identity configurations obtained by crossing statuses corresponding to stability (achievement/closure) and instability (moratorium/ searching moratorium) in personal identity with identification profiles typified by stability (G&O-I), partial stability (G-I/O-I), and instability (NO-I) in social identity. Consistently with Hypothesis 6, we found that teachers in the identity configurations characterized by personal and social identity stability reported a more adjusted profile (i.e., lower symptoms of burnout, higher satisfaction, and more organizational citizenship behaviors) than their colleagues in the configurations defined by instability in both personal and social identity. Further, employees in the configurations characterized by stability or partial stability in personal or social identity reported intermediate scores on job outcomes. From the perspective of Linville's (1985, 1987) selfcomplexity theory, these results suggest that having reached a condition of stability in one facet has a buffering effect that protects from a condition of instability experienced in other self-related aspects.

Regarding this general pattern, it must be mentioned that only on two outcomes (i.e., emotional exhaustion and satisfaction for collaboration with co-workers) did we find a clear main effect of one facet that was independent from the other facet. More specifically, teachers in configurations characterized by personal identity stability, independently from the social identity facet, reported lower emotional exhaustion than those in configurations defined by personal identity instability. Further, employees in configurations characterized by social identity stability exhibited more satisfaction for collaboration with co-workers than their counterparts classified in configurations defined by social identity instability, independently from the personal identity facet. These results are consistent with differences in percentages of variance explained by identity statuses and identification profiles. In fact, larger differences were found on emotional exhaustion (identity statuses and identification profiles explained 19 and 2 % of the variance, respectively) and on satisfaction for relationship with co-workers (identity statuses and identification profiles explained 3 and 26 % of the variance, respectively). These combined results suggest that, while personal and social identity facets have a combined effect on most outcomes, they have specific influences on some outcomes. In particular, personal job identity has a key importance for emotional exhaustion, which is the central aspect of the burnout construct (Kristensen, Borritza, Villadsena, and Christensen, 2005), while social identity is more tied to relational aspects of job satisfaction (i.e., relationships with coworkers), highlighting the relational and comparative nature of this construct (Ashforth et al. 2008). In brief, both dimensions are related to job outcomes, with some particulars that could be considered when planning interventions aimed at promoting well-being at work.

Theoretical and Practical Implications

This study has relevant theoretical and practical implications. From a theoretical point of view, results suggest the importance of conceptualizing job identity in terms of both personal and social facets. In this way, it would be possible to capture identity complexity (Linville, 1987) and propose more straightforward predictions on relationships between identity and job outcomes.

Regarding practical implications, findings point to the differential but interrelated roles played by employees' personal and social identities. This suggests that managers should seriously consider "identity issues" in their organizations. In particular, decisions to either deal with both personal and social identity facets or focus on only one of them should depend on specific organizational problem and goals.

Specifically, people who achieve a firm personal identity and who are able to identify with both organizational targets (work-group and larger organization) showed the most positive profile from both an employee (e.g., higher professional efficacy) and an organizational (e.g., higher organizational citizenship behaviors) point of view. In this sense, employers should reinforce both personal and social identities in order to promote employees' perceptions of professional efficacy and organizational citizenship behaviors.

Our results also showed specific relations between personal and social identity facets and job outcomes. Social identity profiles were more related to relational aspects (i.e., satisfaction for relations with colleagues and superior) of job satisfaction, whereas personal identity statuses were more intertwined with satisfaction for job aspects related to future security and job results and, importantly, to emotional exhaustion. Consequently, employers should target specific facets of social and personal identity when their aim is to improve satisfaction for particular job dimensions and to reduce emotional exhaustion.



Thus, employers should decide to make salient and reinforce personal or social identities on the basis of specific goals and problems. For example, if the management aim is to increase employees' capability of working together in order to achieve shared goals, the best strategy would be to consistently support the social identity facet, for example by implementing socialization strategies that make salient employees' membership to the organization. On the other hand, if the management priority is to effectively address problems of emotional exhaustion, the best strategy would be to focus on personal identity, for example planning training courses on coping strategies tailored to the specific identity statuses classifying the employees. In this respect, it is worthwhile to refer to the four-phase "ASPIRe" model, developed by Haslam, Eggins, and Reynolds (2003) to manage personal and social identity in organizational activities. The goal of this model is to achieve both organizational success and employees' well-being. In this sense, employers should firstly be aware of the relevant identities that employees use to define themselves, because it is on the basis of these identities that they think, feel, and behave. They should then facilitate employees' ability to achieve a consistent and harmonious state by consolidating all relevant identities, moving from lower-levels to higher-level of self (personal-work-group-organization) and establishing goals that are pertinent to those identities. For example, since social identities are relational and comparative, it may be useful to reinforce identification with the organization as a whole by making the organizational identity salient in different contexts (in general meetings, organization of school festivities, etc.), and by referring to the organization's history, its core activities, its mission, and its competitors.

Limitations and Suggestions for Future Research

This study should also be considered in light of some limitations. First of all, the research utilized a cross-sectional design, and we therefore cannot draw any conclusion about direction of effects. The current study builds upon an established theoretical background (Erikson, 1968; Marcia, 1966; Meeus, 2011; Tajfel and Turner, 1979; Turner et al. 1987) suggesting that identity statuses and identification profiles can account for differences in job outcomes. Alternative explanations are possible, however, and a case could be made for the existence of reciprocal relationships. For instance, high levels of job satisfaction likely support maintenance of current identity choices, and prevent a reconsideration of them. Therefore, we urge future longitudinal studies to thoroughly examine the direction of effects between personal/social identity and relevant job outcomes. In addition, longitudinal studies are necessary to (a) uncover trajectories of personal and social identity over time; (b) unravel how these trajectories vary when individuals approach relevant career events, such as promotion and retirement; and (c) examine interrelations between personal and social identity facets (Schwartz et al. 2011).

Another limitation concerns the use of self-report measures for all the constructs examined. Some of the findings might be due to common method variance or effects of social desirability. Others have noted, however, that common method variance could be a "methodological urban legend" and its effect may be variable or negligible (Spector, 2006). In any respect, it would be important in future studies to obtain data from different sources, for example peer ratings of teachers' organizational citizenship behaviors (Podsakoff et al. 2003).

A final shortcoming concerns characteristics of our sample, which mainly consisted of female teachers. Future studies should examine a wider range of occupations and more gender-balanced samples, in order to confirm the documented pattern of results on personal and social identity and job outcomes in other organizational contexts.

Conclusion

This study highlights the importance of studying and integrating different facets of job identity, as each facet had a specific impact on job outcomes (i.e., burnout, job satisfaction, and organizational citizenship behaviors). These findings can have relevant implications in terms of suggesting which dimensions of identity need to be promoted in order to reduce workers' burnout and enhance their job satisfaction and organizational citizenship behaviors. In conclusion, this research could be a starting point for future studies aimed at gaining a more comprehensive understanding of antecedents, correlates, and outcomes of various job identity facets.

Acknowledgments Elisabetta Crocetti was supported by a Marie Curie fellowship (FP7-PEOPLE-2010-IEF; Project No. 272400).

References

Adams, G. R., & Marshall, S. (1996). A developmental social psychology of identity: Understanding the person in context. *Journal of Adolescence*, 19, 1–14.

Allen, N. J., & Meyer, J. P. (1990). The measurement and antecedents of affective, continuance and normative commitment to the organization. *Journal of Occupational Psychology*, 63, 1–18.

Arthur, M. B., & Rousseau, D. M. (1996). The boundaryless career: A new employment principle for a new organizational era. New York: Oxford University Press.

Ashforth, B. E., Harrison, S. H., & Corley, K. G. (2008). Identification in organizations: An examination of four fundamental questions. *Journal of Management*, 34, 325–375.



- Ashforth, B. E., & Mael, F. (1989). Social identity theory and the organization. *Academy of Management Review*, 14, 20–39.
- Avanzi, L., Van Dick, R., Fraccaroli, F., & Sarchielli, G. (2012). The downside of organizational identification: Relations between identification, workaholism and well-being. Work & Stress, 26, 289–307.
- Bergami, M., & Bagozzi, R. P. (2000). Self-categorization, affective commitment and group self-esteem as distinct aspects of social identity in the organization. *British Journal of Social Psychol*ogy, 39, 555–577.
- Bergman, L. R., Magnusson, D., & El Khouri, B. M. (2003). Studying individual development in an interindividual context. A personoriented approach. Mahwah, NJ: Lawrence Erlbaum Associates.
- Berzonsky, M. D. (2003). Identity style and well-being: Does commitment matter? *Identity: An International Journal of Theory and Research*, 3, 131–142.
- Borgogni L. (1999). L'approccio sociale cognitivo allo studio delle variabili organizzative [The social cognitive approach at the study of organizational variables]. Unpublished doctoral thesis. Padua, Italy: University of Padua.
- Bowling, N. A., Eschleman, K. J., & Wang, Q. A. (2010). A metaanalytic examination of the relationship between job satisfaction and subjective well-being. *Journal of Occupational and Orga*nizational Psychology, 83, 915–934.
- Breckenridge, J. N. (2000). Validating cluster analysis: Consistent replication and symmetry. *Multivariate Behavioral Research*, 35, 261–285.
- Brewer, M. B. (1991). The social self: On being the same and different at the same time. *Personality and Social Psychology Bulletin*, 17, 475–482.
- Briscoe, J. P., & Hall, D. T. (2006). Special section on boundaryless and protean careers: Next steps in conceptualizing and measuring boundaryless and protean careers. *Journal of Vocational Behavior*, 69, 1–3.
- Cavalli, A., & Argentin, G. (2010). Gli insegnanti italiani: Come cambia il modo di fare scuola [Italian teachers: How changes the way of doing school]. Bologna: il Mulino.
- Christ, O., Van Dick, R., Wagner, U., & Stellmacher, J. (2003). When teachers go the extra mile: Foci of organisational identification as determinants of different forms of organisational citizenship behaviour among schoolteachers. *British Journal of Educational Psychology*, 73, 329–341.
- Cohen, J. (1960). A coefficient of agreement for nominal scales. Educational and Psychological Measurement, 20, 37–46.
- Crocetti, E., Palmonari, A., & Pojaghi, B. (2011). Work identity, well-being, and time perspective of typical and atypical young workers. In M. Cortini, G. Tanucci, & E. Morin (Eds.), Boundaryless careers and occupational well-being. An interdisciplinary approach (pp. 181–190). London: Palgrave MacMillan.
- Crocetti, E., Rubini, M., & Meeus, W. (2008). Capturing the dynamics of identity formation in various ethnic groups: Development and validation of a three-dimensional model. *Journal of Adolescence*, 31, 207–222.
- Crocetti, E., Schwartz, S., Fermani, A., Klimstra, T., & Meeus, W. (2012a). A cross-national study of identity statuses in Dutch and Italian adolescents: Status distributions and correlates. *European Psychologist*, 17, 171–181.
- Crocetti, E., Schwartz, S., Fermani, A., & Meeus, W. (2010). The Utrecht-Management of Identity Commitments Scale (U-MICS): Italian validation and cross-national comparisons. *European Journal of Psychological Assessment*, 26, 169–183.
- Crocetti, E., Scrignaro, M., Sica, L. S., & Magrin, M. E. (2012b). Correlates of identity configurations: Three studies with adolescent and emerging adult cohorts. *Journal of Youth and Adolescence*, 41, 732–748.

- Crocetti, E., Sica, L. S., Schwartz, S. J., Serafini, T., & Meeus, W. (2013). Identity styles, dimensions, statuses, and functions: Making connections among identity conceptualizations. *European Review of Applied Psychology*, 63, 1–13.
- De Cuyper, N., De Jong, J., De Witte, H., Isaksson, K., Rigotti, T., & Schalk, R. (2008). Literature review of theory and research on the psychological impact of temporary employment: Toward a conceptual model. *International Journal of Management Reviews*, 10, 25–51.
- Erikson, E. H. (1959). Identity and the life cycle: Selected papers. *Psychological Issues*, 1, 1–171.
- Erikson, E. H. (1968). *Identity, youth and crisis*. New York: Norton. Festinger, L. (1957). *A theory of cognitive dissonance*. Evanston, IL: Row, Peterson and Company.
- Gore, P. A., Jr. (2000). Cluster analysis. In H. E. A. Tinsley & S. D. Brown (Eds.), Handbook of applied multivariate statistics and mathematical modeling (pp. 297–321). San Diego, CA: Academic Press.
- Haslam, S. A. (2004). *Psychology in organizations: The social identity approach* (2nd ed.). London: Sage.
- Haslam, S. A., Eggins, R. A., & Reynolds, K. J. (2003). The ASPIRe model: Actualizing social and personal identity resources to enhance organizational outcomes. *Journal of Occupational and Organizational Psychology*, 76, 83–113.
- Haslam, S. A., & Ellemers, N. (2011). Identity processes in organizations. In S. J. Schwartz, K. Luyckx, & V. L. Vignoles (Eds.), *Handbook of identity theory and research* (pp. 715–744). New York: Springer.
- Heider, F. (1958). *The psychology of interpersonal relations*. New York: Wiley.
- Hess, N., Jepsen, D. M., & Dries, N. (2012). Career and employer change in the age of the 'boundaryless' career. *Journal of Vocational Behavior*, 81, 280–288.
- Jöreskog, K. G. & Sörbom, D. (2004). LISREL (Version 8.71), Scientific Software International. Chicago, IL.
- Klimstra, T. A., Luyckx, K., Hale, W. W., I. I. I., Frijns, T., van Lier, P. A. C., & Meeus, W. H. J. (2010). Short-term fluctuations in identity: Introducing a micro-level approach to identity formation. *Journal of Personality and Social Psychology*, 99, 191–202.
- Kline, R. B. (2005). *Principles and practices of structural equation modeling* (2nd ed.). New York: Guilford.
- Kristensen, T. S., Borritza, M., Villadsena, E., & Christensen, K. B. (2005). The Copenhagen Burnout Inventory: A new tool for the assessment of burnout. Work & Stress, 19, 192–207.
- Kroger, J. (2007). *Identity development: Adolescence through adult-hood* (2nd ed.). Thousand Oaks, CA: Sage.
- Kroger, J., & Marcia, J. E. (2011). The identity statuses: Origins, meanings, and interpretations. In S. J. Schwartz, K. Luyckx, & V. L. Vignoles (Eds.), *Handbook of identity theory and research* (pp. 31–53). New York: Springer.
- Kroger, J., Martinussen, M., & Marcia, J. E. (2010). Identity status change during adolescence and young adulthood: A metaanalysis. *Journal of Adolescence*, 33, 683–698.
- Kyriacou, C. (2001). Teacher stress: Directions for future research. *Educational Review*, *53*, 27–35.
- Landis, J. R., & Koch, G. G. (1977). The measurement of observer agreement for categorical data. *Biometrics*, 33, 159–174.
- Lavelle, J. J., Rupp, D. E., & Brockner, J. (2007). Taking a multifoci approach to the study of justice, social exchange, and citizenship behavior: The target similarity model. *Journal of Management*, 33, 841–866.
- Linville, P. W. (1985). Self-complexity and affective extremity—Don't put all of your eggs in one cognitive basket. *Social Cognition*, *3*, 94–120.
- Linville, P. W. (1987). Self-complexity as a cognitive buffer against stress-related illness and depression. *Journal of Personality and Social Psychology*, 52, 663–676.



- Lipponen, J., Helkama, K., Olkkonen, M.-E., & Juslin, M. (2005). Predicting the different profiles of organizational identification: A case of shipyard subcontractors. *Journal of Occupational and Organizational Psychology*, 78, 97–112.
- Luyckx, K., Duriez, B., Klimstra, T., & De Witte, H. (2010). Identity statuses in young adult employees: Prospective relations with work engagement and burnout. *Journal of Vocational Behavior*, 77, 339–349.
- Mael, F., & Ashforth, B. E. (1992). Alumni and their alma mater: A partial test of the reformulated model of organizational identification. *Journal of Organizational Behavior*, 13, 103–123.
- Marcia, J. E. (1966). Development and validation of ego-identity status. *Journal of Personality and Social Psychology*, 3, 551–558.
- Marcia, J. E. (2002). Identity and psychosocial development in adulthood. *Identity: An International Journal of Theory and Research*, 2, 7–28.
- Maslach, C., & Jackson, S. E. (1981). MBI: Maslach Burnout Inventory. Palo Alto, CA: Consulting Psychologists Press.
- Maslach, C., Jackson, S. E., & Leiter, M. P. (1996). Maslach Burnout Inventory Manual (3rd ed.). Palo Alto, CA: Consulting Psychologists Press.
- Meeus, W. (1996). Studies on identity development in adolescence: An overview of research and some new data. *Journal of Youth and Adolescence*, 25, 569–598.
- Meeus, W. (2011). The study of adolescent identity formation 2000–2010. A review of longitudinal research. *Journal of Research on Adolescence*, 21, 75–94.
- Meeus, W., Iedema, J., Helsen, M., & Vollebergh, W. (1999). Patterns of adolescent identity development: Review of literature and longitudinal analysis. *Developmental Review*, 19, 419–461.
- Meeus, W., Van de Schoot, R., Keijsers, L., Schwartz, S. J., & Branje, S. (2010). On the progression and stability of adolescent identity formation: A five-wave longitudinal study in early-to-middle and middle-to-late adolescence. *Child Development*, 81, 1565–1581.
- Milligan, G. W. (1980). An examination of the effect of six types of error perturbation on fifteen clustering algorithms. *Psychomet*rika, 45, 325–342.
- Milligan, G. W., & Cooper, M. C. (1985). An examination of procedures for determining the number of clusters in a data set. *Psychometrika*, 50, 159–179.
- Milligan, G. W., & Hirtle, S. C. (2003). Clustering and classification methods. In J. Schinka & W. Velicer (Eds.), Comprehensive handbook of psychology (pp. 165–186). New York: Wiley.
- Munley, P. H. (1977). Erikson's theory of psychosocial development and career development. *Journal of Vocational Behavior*, 10, 261–269.
- Nagy, M. S. (2002). Using a single-item approach to measure facet job satisfaction. *Journal of Occupational and Organizational Psychology*, 75, 77–86.
- Nicholson, N. (1984). A theory of work role transitions. Administrative Science Quarterly, 29, 172–191.
- Norušis, M. J. (2009). Cluster analysis. In M. J. Norušis (Ed.), SPSS 17.0 Statistical Procedures Companion (pp. 361–391). Upper Saddle River, NJ: Prentice Hall.
- Organ, D. W. (1990). The motivational basis of organizational citizenship behavior. In B. Staw & L. Cummings (Eds.), Research in organizational behavior (pp. 43–72). Greenwich: CT JAL Press.
- Petitta, L., Borgogni, L., Mastrorilli, A., & Scarpa, A. (2004). Organizational citizenship behavior ed efficacia dell'organizzazione [Organizational citizenship behavior and organizational efficacy]. Bollettino di Psicologia Applicata, 243, 15–29.
- Podsakoff, P. M., & MacKenzie, S. B. (1989). A second generation measure of organizational citizenship behaviors. Unpublished Manuscript, Indiana University.

- Podsakoff, P. M., MacKenzie, S. B., Lee, J. Y., & Podsakoff, N. P. (2003). Common method biases in behavioral research: A critical review of the literature and recommended remedies. *Journal of Applied Psychology*, 88, 879–903.
- Porfeli, E. J., Lee, B., Vondracek, F. W., & Weigold, I. K. (2011). A multi-dimensional measure of vocational identity status. *Journal* of Adolescence, 34, 853–871.
- Riketta, M., & Van Dick, R. (2005). Foci of attachment in organizations: A meta-analytic comparison of the strength and correlates of workgroup versus organizational identification and commitment. *Journal of Vocational Behavior*, 67, 490–510.
- Schaufeli, W. B., & Taris, T. W. (2005). The conceptualization and measurement of burnout: Common ground and worlds apart. Work and Stress, 19, 256–262.
- Schwartz, S. J., Vignoles, V. L., & Luyckx, K. (2011). Epilogue: What's next for identity theory and research. In S. J. Schwartz, K. Luyckx, & V. L. Vignoles (Eds.), *Handbook of identity theory and research* (pp. 933–938). New York: Springer.
- Serafini, T. E., & Adams, G. R. (2002). Functions of identity: Scale construction and validation. *Identity: An International Journal of Theory and Research*, 2, 361–389.
- Sirigatti, S., & Stefanile, C. (1993). *Manuale: MBI, Maslach Burnout Inventory*. Florencey: Organizzazioni Speciali.
- Skorikov, V., & Vondracek, F. W. (2011). Occupational identity. In S. J. Schwartz, K. Luyckx, & V. L. Vignoles (Eds.), *Handbook* of identity theory and research (pp. 693–714). New York: Springer.
- Smith, P. C., Kendall, L. M., & Hulin, C. L. (1969). The measurement of satisfaction in work and retirement. Chicago, IL: Rand McNally.
- Spector, P. E. (2006). Method variance in organizational research truth or urban legend? Organizational Research Methods, 9, 221–232.
- Super, D. E. (1980). A life-span, life-space approach to career development. *Journal of Vocational Behavior*, 16, 282–298.
- Tajfel, H. (1972). Experiments in a vacuum. In J. Israel & H. Tajfel (Eds.), The context of social psychology. London: Academic Press.
- Tajfel, H., & Turner, J. C. (1979). An integrative theory of intergroup conflict. In W. G. Austin & S. Worchel (Eds.), *The social* psychology of intergroup relations (pp. 33–47). Monterey: Brooks/Cole.
- Tinsley, H. E. A., & Brown, S. D. (2000). Multivariate statistics and mathematical modeling. In H. E. A. Tinsley & S. D. Brown (Eds.), *Handbook of applied multivariate statistics and mathematical modeling* (pp. 3–36). San Diego, CA: Academic Press.
- Turner, J. C., Hogg, M. A., Oakes, P. J., Reicher, S. D., & Wetherell, M. S. (1987). Rediscovering the social group: A self-categorization theory. Oxford: Blackwell.
- Van Dick, R. (2001). Identification in organizational contexts: Linking theory and research from social and organizational psychology. *International Journal of Management Reviews*, 3, 265–283.
- Van Dick, R., Grojean, M. W., Christ, O., & Wieseke, J. (2006). Identity and the extra mile: Relationships between organizational identification and organizational citizenship behaviour. *British Journal of Management*, 17, 283–301.
- Van Dick, R., & Haslam, S. A. (2012). Stress and well-being in the workplace: Support for key propositions from the social identity approach. In J. Jetten, C. Haslam, & S. A. Haslam (Eds.), *The* social cure: Identity, health, and well-being (pp. 175–194). Hove: Psychology Press.
- Van Dick, R., Van Knippenberg, D., Kerschreiter, R., Hertel, G., & Wieseke, J. (2008). Interactive effects of work group and organizational identification on job satisfaction and extra-role behavior. *Journal of Vocational Behavior*, 72, 388–399.
- Van Dick, R., Wagner, U., Stellmacher, J., & Christ, O. (2004).
 The utility of a broader conceptualization of organizational



- identification: Which aspects really matter? *Journal of Occupational and Organizational Psychology*, 77, 171–191.
- Van Knippenberg, D., Van Knippenberg, B., De Cremer, D., & Hogg, M. A. (2004). Leadership, self, and identity: A review and research agenda. *The Leadership Quarterly*, 15, 825–856.
- Van Knippenberg, D., & Van Schie, E. C. M. (2000). Foci and correlates of organizational identification. *Journal of Occupa*tional and Organizational Psychology, 73, 137–147.
- Vignoles, V. L., Schwartz, S. J., & Luyckx, K. (2011). Introduction: Toward an integrative view of identity. In S. J. Schwartz, K. Luyckx, & V. L. Vignoles (Eds.), *Handbook of identity theory and research* (pp. 1–27). New York: Springer.
- Von Eye, A., & Bogat, A. (2006). Person-oriented and variable-oriented research: Concepts, results, and development. *Merrill-Palmer Quarterly*, 52, 390–420.
- Wang, M., & Hanges, P. J. (2011). Latent class procedures: Applications to organizational research. *Organizational Research Meth*ods, 14, 24–31.
- Wanous, J. P., Reichers, A. E., & Hudy, M. J. (1997). Overall job satisfaction: How good are single-item measures? *Journal of Applied Psychology*, 82, 247–252.
- Wegge, J., Van Dick, R., Fisher, G. K., Wecking, C., & Moltzen, K. (2006). Work motivation, organizational identification, and wellbeing in call centre work. Work & Stress, 20, 60–83.

