The social validation and coping model of organizational identity development: A longitudinal test


Laura G. E. Smith  
University of Bath

Catherine E. Amiot  
Université du Québec à Montréal

Joanne R. Smith  
University of Exeter

Victor J. Callan  
The University of Queensland

Deborah J. Terry  
The University of Queensland

*Acknowledgements:* The authors would like to acknowledge the Australian Research Council (ARC) for providing the funding for this project (ARC project number LP0775277).

*Corresponding author:* Laura G. E. Smith, School of Psychology, University of Bath, Claverton Down, Bath. BA2 7AY.

*Email:* l.g.e.smith@bath.ac.uk

Considerable research has explored the variables that affect the success of newcomer on-boarding, socialization, and retention. We build on this research by examining how newcomer socialization is affected by the degree to which a newcomer’s peers and leader provide them with positive feedback. We refer to newcomers’ perceptions of this feedback as “social validation”. This study examined the impact of social validation from peers and leaders on the development of organizational identification over time and the turnover attitudes of new employees. We found that perceptions of social validation significantly predicted how new employees used coping strategies to adapt to their new role over time, and consequently the development of identification and turnover intentions. Specifically, increased peer social validation predicted a greater use of positive coping strategies to engage with the new organization over time, and less use of disengagement coping strategies. In contrast, initial leader validation decreased newcomers’ disengagement from the organization over time. These results highlighted the role of the social environment in the workplace in temporally shaping and validating newcomers’ adaptation efforts during transitions.

**Keywords:** social validation, socialization, organizational identification

THE SOCIAL VALIDATION AND COPING MODEL OF ORGANIZATIONAL IDENTITY DEVELOPMENT: A LONGITUDINAL TEST

Encouragement is incredibly underrated and that’s probably one of the most critical factors that’s helped me adjust to [the new organization]. I’m sure if [...] I hadn’t received a lot of praise and a lot of good feedback, I’d probably be in a completely different place, you know that would affect my functioning at work. (Female newcomer describing to the researchers how validating feedback from existing staff helped her to adjust to her new organization).

As illustrated by the opening quote, new staff are affected by the degree to which their peers and manager provide positive feedback about how effectively they are carrying out their role. This feedback is known as social validation, and is defined as the perception of positive social feedback from colleagues that affirms behaviors that are considered desirable and appropriate (Gioia & Chittipeddi, 1991). To date, no research has examined how newcomers’ perceptions of the validation received from their work colleagues influence their adaptation efforts throughout the transition into a new organization. Instead, the socialization literature has focused on the effectiveness of ‘on-boarding’ practices that emphasize providing knowledge and resources to support employees in learning their role as quickly as possible, or that help to build relationships with employees (Cashman & Smye, 2007; Conger & Fishel, 2007; Dai, De Meuse & Gaeddert, 2011). To our knowledge, none of these on-boarding practices focus on encouraging peers and leaders to provide validating feedback to
new hires that emphasizes that they are an important part of the organization.

To fill this gap, we develop and test a longitudinal model (illustrated in Figure 1) that investigates how newcomers’ developing perceptions of social validation from other employees predict those newcomers’ increased efforts to cope with the transition into their new workplace. These coping processes then predict the development of the newcomers’ organizational identification (Amiot, de la Sablonnière, Terry, & Smith, 2007) and turnover intentions. The model also directly captures the dynamic temporal processes that operate over time during the socialization period (Bauer & Green, 1994; Fisher, 1986). The current research thus makes a significant contribution to the literature by modeling the effect of the changes experienced in social validation received from work colleagues on the development of newcomers’ organizational identification and commitment over time through the process of coping. In doing so, we highlight that how people cope with transitions depends heavily on the relationships that develop over time within the group that they have joined (cf. DeRue & Ashford, 2010).

The Effect of Social Validation on the Development of Organizational Identification through Coping Processes

Coping with a Transition. Upon moving into a new group, newcomers use coping strategies to adjust to the unfamiliar environment (Lazarus & Folkman, 1984). Coping processes operate during a variety of life transitions, including starting a new job (Feldman & Brett, 1983), redundancy (Leana & Feldman, 1988, 1995; McKee-Ryan, Song, Wanberg, & Kinicki, 2005) and recovering from serious illness (Scrignaro, Barni, Magrin, 2011). Newcomers can choose to cope by actively engaging with a new group via engagement coping. Engagement coping strategies are directed toward the active management of the

transition into a new organization. These coping strategies include taking action and
developing strategies to improve the situation, seeking emotional and instrumental social
support, and positive reframing of the situation. This represents a constructive engagement
with the transition into the new group. Therefore, increasing use of engagement coping
strategies should have a positive effect on adjustment to the change over time (i.e.,
development of identification and commitment). For instance, during organizational mergers,
these active coping processes positively predict employees’ adjustment and identification
(e.g., Amiot, Terry, Jimmieson & Callan, 2006; Terry, Callan, & Sartori, 1996).

On the other hand, newcomers may come to distance themselves from the group via
disengagement coping. Disengagement or “avoidance” coping strategies involve a failure to
address the problems associated with moving to a new organization. As these strategies
involve disengagement from the new organizational context, this type of coping should have
a negative impact on the development of organizational identification. Extending the Lazarus
and Folkman (1984) model, we propose that perceptions of the social environment that the
newcomer enters are an important determinant of newcomers’ use of engagement and
disengagement coping strategies. Specifically, we propose that increased perceptions of
social validation (cf. Festinger, 1954) from leaders and peers that develop throughout the
socialization period are a unique and underexplored intragroup antecedent of the process of
coping with workplace transitions over time.

**Social Validation During a Workplace Transition.** Social validation is the
perception of positive social feedback from colleagues that affirms appropriate behaviors.
Social validation provides *identity cues* (Ashforth, Harrison & Corley, 2008) that are
“descriptive and normative information about the group (i.e. organizational) identity; about
what the prototypical group member thinks, feels and does” (Smith, Amiot, Callan, Terry & Smith, 2012; p. 332). Cues include reactions from existing staff about the validity of the newcomers’ actions (Ibarra, 1999). These may be explicit (e.g., “You did a great job today”) or implicit (e.g., non-verbal cues such as positive facial expressions in response to a task being completed satisfactorily; or a “slap on the back”). The cues provide information about the appropriateness of particular behaviors as judged by specific group norms and group standards (Smith et al., 2012). This feedback is important because we rely on the opinions of other people to evaluate the validity of our own opinions, behaviors or abilities (Festinger, 1954). The opinions of colleagues are especially important to newcomers when they enter a new organization (Louis, 1980; Moreland & Levine, 2001) given that newcomers have a relatively insecure and incomplete understanding of the new organization and its norms (Ashforth et al., 2008). Over time, it is critical that newcomers develop insights into their colleagues’ perspectives about the nature of the organization so that they engage and cope more effectively in their new work context (Ashforth et al., 2008). Receiving increased positive feedback over time assures newcomers that they are learning to behave appropriately within the organization, and motivates further positive engagement with the new context and work tasks. In turn, this facilitates the development of attachment to the new organization (Smith et al., 2012).

The social validation perceived from the new group should dictate, at least in part, the extent to which newcomers increasingly use engagement coping strategies to deal with the transition. The more validating feedback the newcomer receives over time, the more group insight they will have to engage constructively and appropriately with the tasks at hand. Therefore, we propose that increased perceptions of social validation contribute to the
development of organizational identification and commitment by increasing newcomers’ confidence that they are conducting themselves appropriately (cf. McGarty, Turner, Oakes, & Haslam, 1993), and confirming that it is worth investing efforts in adapting to the new social context. However, if new employees do not receive positive feedback, or if this feedback decreases, they are unlikely to engage in adaptation efforts. Instead, they are likely to increasingly disengage from the new group (Wrosch, Scheier, Miller, Schulz, & Carver, 2003). The resulting motivational downturn may lead to dis-identification with the organization over time (Amiot et al., 2006; Terry et al., 1996) and ultimately, greater intentions to leave the organization (Hausknecht & Trevor, 2011).

Sources of Social Validation. In the proposed model, we separate two sources of validation: Social validation from one’s peers and social validation from a leader. Although the perception of validation from leaders and peers is likely to influence coping in a similar way by increasing the use of engagement coping responses and decreasing disengagement coping over time, social validation may act in this way for different reasons. Leaders and peers hold roles of different status within the organization, and feedback from colleagues of different status is perceived differently (e.g., Ullrich, Wieseke, Christ, Schulze, & van Dick, 2007). Leaders are more likely than peers to be viewed as qualified to provide formal feedback about how well the individual is performing and adjusting to the new work environment (Ullrich et al, 2007). In contrast, feedback from equal-status peers is more likely to focus on developing task-relevant abilities and competences (Klimoski & London, 1974; Tucker, Cline, & Schmitt, 1967) rather than on overall performance (Borman, 1974; Zammuto, London, & Rowland, 1982).

As leaders are also representatives of the organizational identity, planned performance
both increased and decreased on each variable throughout their first few months in a new organization and to hence capture their patterns of intraindividual change. Overall, we hypothesized that changes in newcomers’ perceptions of social validation and in their use of coping strategies throughout the socialization period would predict changes in organizational identification, in identity conflict, and in turnover intentions over time.

----------------------------------

**Hypotheses.** Increased perceptions of social validation from peers and leaders throughout the socialization period should predict an increase in organizational identification through increasing the use of engagement coping during the transition process (H1a). Inversely, increased perceptions of social validation from peers and leaders should predict an increase in identification through reducing disengagement coping (H1b). Increased engagement coping strategies should predict increased organizational identification (H2a). Conversely, an increased reliance on disengagement coping should predict decreased organizational identification (H2b). Finally, increased organizational identification should predict decreases in identity conflict (H3a) and in turnover intentions (H3b).

**The Present Study**

**The Organizational Context.** This research tracked the experiences of new staff who joined a large public sector organization over a 12 month period. At the time of this research, the organization employed over 7,500 full-time permanent staff, with an intake of around 500 new staff per annum recruited from outside the organization. The organization was divided into 10 business divisions that included for example, city infrastructure, city...
business, city transport and corporate services. Divisions were situated in several locations across the city.

The final newcomer sample represented less than 2% of the organization’s population. New staff were recruited individually at disparate time points and entered existing small work teams ($n<8$) within their division. The size of the teams and how often they met were dependent upon the newcomer’s division and role. In general, the team structure consisted of a team leader with no more than 8 team members. This structure was very consistent across this large organization. We did not ask participants to disclose their team membership or leader details because this would require them to provide potentially identifying information and therefore violate the assurance of anonymity. We requested only divisional membership data. Only between 0.5 and 2.6% of any one division was comprised of newcomers.¹ According to organizational policy, we know that newcomers were distributed into different teams with different leaders to reduce disruption to team functioning. Once in a team, newcomers did not change teams during probation and all participants were in the same team at T1 and T2. Some of the new hires were team leaders, but in the survey we asked them to respond to the leader validation items by referring to the person they themselves reported to. All staff were able to identify their “team members” and “the person they reported to.”²

The organization had both local induction guidelines and a centralized corporate orientation program, in which all new permanent staff were expected to participate within 6 months of joining the organization. Local inductions were conducted in their workplace with a team leader. In these latter inductions, on a one-to-one basis the new staff member was introduced to the local work environment and work colleagues, and was familiarized with organizational procedures and the code of conduct. At corporate inductions, staff were

provided with information about the organizational structure, and the role of the divisions in supporting the city’s inhabitants and its infrastructure, within which their personal role was contextualized.

To directly capture the dynamic processes that take during the socialization period, the current research employed Latent Difference Score (LDS) mediation models using the structural equation modeling framework. These analyses test how longitudinal changes in each of the antecedent and process variables over time predict longitudinal changes in the outcome variables of the model (e.g., Hertzog, Dixon, Hultsch, & MacDonald, 2003). These latent change models are employed herein to identify reliable intra-individual differences in processes associated with organizational socialization and the development of organisational identification and commitment.

**METHOD**

**Participants and Procedure**

We invited new staff at the organization to complete two questionnaires, six months apart within their first year at the organization. Although there is no consensus regarding the precise length of the socialization process (Allen, 2006), this initial one year period has traditionally served as the primary time frame for studying socialization (Bauer & Green, 1994; Fisher, 1986). Previous longitudinal research on identity development has used a similar time frame (Amiot, Blanchard & Gaudreau, 2008; Amiot, Terry, Wirawan & Grice, 2010, Study 1). By using these two time points, we aimed to capture employees’ developing organizational identity at a time when it was relatively flexible rather than crystallized (Amiot et al., 2007). We administered the first survey to employees within 6 months of them joining the organization. Participants completed the Time 2 survey 6 months after the first
survey. This time lag enabled us to model intraindividual (rather than interindivdual) change over time; it was also this specific time lag and the change that took place over this time period (rather than the absolute time of measurement) that was of interest.

New employees were recruited to participate in this study by asking for volunteers via email and through approaches at all corporate inductions. Inductions were organized to take place within the first three months of the newcomer’s arrival. However, if new employees were unable to attend the first scheduled induction, they then waited 3 months until the next available induction. This recruitment procedure ensured that the first questionnaire of the study was distributed to new staff (both office-based and non-office-based) within six months of their entry into the organization (Time 1). Participants were informed that the questionnaires were designed to give them an opportunity to express their opinions about a range of issues associated with joining the organization. All participants were informed that their responses to the questionnaires were anonymous and at no time they would be made available to any personnel in the organization. Participants were recruited via email or post for the second questionnaire (Time 2) exactly 6 months after they had completed their Time 1 questionnaire. Participants were given a time limit within which they were asked to respond. Therefore, all responses occurred within one week of the initial recruitment email.

To preserve the anonymity and confidentiality of participants during the research recruitment process, representatives from the Human Resources department of the organization forwarded our recruitment email to all new employees at both Time 1 and Time 2. At Time 2, we included in this email an invitation to employees to complete the second survey if they had completed the first survey at Time 1. However, we also received completed surveys from participants who had not completed the Time 1 survey. Overall, the

Time 1 questionnaire was completed by 553 new employees, and 252 employees completed
the Time 2 questionnaire, 6 months later. In the final sample, we retained only the 139
participants who were matched across the questionnaires.

The final sample of 139 participants were aged 18 to 60 years ($M = 33.72$ years, $SD =
10.23$ years) and included 75 females and 48 males (14 did not report their gender).
Participants’ average tenure at T1 was 2.63 months ($SD = 1.80$) ranging from 0.25 to 6
months. Modal tenure was 1 month, median was 2. Therefore, on average most newcomers
had very little experience of the organization at the Time 1 sampling occasion. Data were
collected across all levels of seniority and all divisions of the organization. This final sample
included non-office based staff ($n = 16\%$), such as construction workers, waste disposal
workers, bus drivers and garage mechanics; and office-based staff who predominately
worked at a desk with a computer ($n = 83\%; 1\%$ missing values). The nature of the
interactions with other group members differed according to role, but there was an
organization-wide policy for regular team meetings and team leader feedback. During the
probation phase for new employees, full time staff received two appraisals conducted by their
leader (at 3 months and 6 months).

To test if participants comprising the final sample, who had completed both
questionnaires ($n = 139$), differed from those who had completed only the first or only the
second questionnaire, two series of Bonferonni $t$ tests were used. In the first series,
employees who had completed only the first questionnaire ($n = 553$) were compared with
those who had completed both questionnaires on the relevant Time 1 variables. A second
series of $t$ tests was conducted to compare employees who had completed only the second
questionnaire ($n = 252$) with those who had completed both questionnaires on the Time 2

This is a post-print version of the following article: Smith, Laura G. E., Amiot, Catherine E., Smith, Joanne R.,
Callan, Victor J. and Terry, Deborah J. (2013) The social validation and coping model of organizational identity
variables. On the basis of these tests, participants who completed both questionnaires were found not to differ from those who completed only the Time 1 questionnaire or only the Time 2 questionnaire. We used several procedural techniques to reduce common method bias (Harrison, Sluss & Ashforth, 2011; see also Podsakoff, MacKenzie, Lee, & Podsakoff, 2003). First, we temporally separated our predictor and process variables. Second, to increase psychological distance we grouped scale items together but separated the variables within each survey.

Measures

Participants completed questionnaires at both Time 1 and Time 2, both of which contained standardized scales. See Table 1 for means and inter-scale correlations. At both time points, the questionnaires measured perceptions of social validation by peers and leaders, coping strategies, identification with the organization, turnover intentions, and identity conflict. First, a 6-item scale measured the extent to which participants felt socially validated by their team members. This scale was developed by Smith and colleagues and presents excellent reliability (e.g., Cronbach’s $\alpha$ in the current study: Time 1 $\alpha = .96$; Time 2 $\alpha = .95$; Smith et al., 2012; Smith & Postmes, 2011). An identical 6-item scale (Time 1 $\alpha = .97$; Time 2 $\alpha = .98$) was adapted to measure perceived social validation by the person to whom the new staff member reported directly (e.g., team leader; hereafter referred to as “leader validation”). Items included, “My team (/The person I report to) makes me feel that my opinions about the correct way to do my job are valid”; “My team (/The person I report to) makes me feel that my beliefs about appropriate behavior at work are justified”; “My team (/The person I report to) makes me feel that I conduct myself appropriately at work”; “My team (/The person I report to) makes me feel certain that my views on how to do my

role are right”; “My team (/The person I report to) gives me confidence that I am doing my role well”; and “I feel that my opinions about work are shared by my team (/the person I report to).” On all of the items, participants responded on a scale of 1 (“Strongly disagree”) to 7 (“Strongly agree”). Therefore, low levels of validation capture the newcomers’ perceptions that they are not validated by their peers/leader – i.e., an absence of validating feedback, rather than a presence of negative, invalidating feedback.

The brief COPE inventory, validated by Carver (1997) and reliably used during various life transitions (e.g., Rosenberger, Ickovics, Epel, D'Entremont, & Jokl, 2004; Scrignaro, Barni & Magrin, 2011), was employed to measure the engagement and disengagement coping strategies used by newcomers at Time 1 and Time 2. The COPE inventory is similar to other measures in that it assesses coping responses that seem potentially dysfunctional as well as adaptive responses (e.g. Folkman & Lazarus, 1985; Billings & Moos, 1984). The COPE has the additional advantage that the scales are more theoretically based and diverse than other measures so the items used for engagement and disengagement coping are drawn from a larger sample of coping options or subscales. When completing the COPE, participants rated how often they used each action to deal with the problems and stress associated with adjusting to the organization (1 = never; 6 = always).

In accordance with prior research and at both time points, these items were divided into two scales to measure use of engagement coping strategies and the use of disengagement coping (Carver & Connor-Smith, 2010). This distinction also complements Morling and Evered’s (2006) discussion of primary and secondary control strategies. The COPE subscales used to assess engagement coping (12 items, Time 1 α = .93; Time 2 α = .91) included active coping (“I concentrate my efforts on doing something about the situation I'm in”; “I take
action to try to make the situation better”), planning (“I try to come up with a strategy about what to do”; “I think hard about what steps to take”), seeking emotional social support (“I get emotional support from others”; “I get comfort and understanding from someone”), seeking instrumental social support (“I try to get advice or help from other people about what to do”; “I’ve been getting help and advice from other people”), positive reframing (“I try to see it in a different light, to make it seem more positive”; “I look for something good in what is happening”), and acceptance (“I accept the reality of the fact that it has happened”; “I learn to live with it”). The COPE subscale measuring behavioral disengagement was used to assess disengagement coping (2 items, Time 1 $\alpha = .90$; Time 2 $\alpha = .92$) “I give up trying to deal with it” and “I give up the attempt to cope”).

A 10-item scale adapted from Leach et al. (2008) measured the extent to which participants identified with the organization (Time 1 $\alpha = .97$; Time 2 $\alpha = .98$). Items included, ‘I feel a bond with [the organization]; ‘I feel committed to [the organization]; ‘I think that [the organization] has a lot to be proud of”; ‘Being part of [the organization] gives me a good feeling”; ‘The fact that I am part of [the organization] is an important part of my identity”; ‘I feel solidarity with [the organization]; ‘I am glad to be [the organization’s] employee”; ‘It is pleasant to be part of [the organization]; ‘I often think about the fact that I am part of [the organization], and ‘Being an employee of [the organization] is an important part of how I see myself’. Participants responded to all items on a scale of 1 (“Strongly disagree”) to 7 (“Strongly agree”).

A single item measure was adapted from Bozeman and Perrewe (2001) to measure turnover intentions at Time 1 and Time 2: “I will probably look for a new job in the near future” (1 = Strongly disagree; 7 = Strongly agree). A 5-item scale was adapted from the
vignettes developed by Benet-Martinez, Leu, Lee, and Morris (2002; see also Downie, Koestner, ElGeledi, & Cree, 2004) to measure identity conflict at both phases (Time 1 $\alpha = .90$, Time 2 $\alpha = .87$; 1 = Strongly disagree; 7 = Strongly agree). Items included, “I feel that being an employee of [the organization] conflicts with some other aspects of myself (e.g., being a friend, sport)”; “It makes me uneasy to think about how different I am at work vs. outside of work”; “I cannot yet reconcile the fact that I’m an employee of [the organization] with other important parts of my personality”; “I don’t feel that being an employee of [the organization] brings anything more to who I already am: in fact it probably makes things more complicated” and “Being an employee of [the organization] clashes with who I consider myself to really be.

---

Insert Table 1 about here

---

Analytic Strategy

**Preliminary Analyses.** Prior to the main analyses, missing values (representing less than 5% of the sample on each measure) were estimated and replaced using an expectation-maximization method. Next, in our preliminary analyses we assessed the percentages of participants who exhibited change on the variables from Time 1 to Time 2 using the reliable change index (RCI; Christensen & Mendoza, 1986). The RCI statistic, not used in later modeling analyses, provides descriptive information about the proportion of participants who exhibited significant increases or decreases in their scores for each substantive variable over time (e.g., perceptions of peer validation from Time 1 to Time 2). We calculated the RCI using a procedure that has been employed to assess the psychological changes occurring...
during life transitions among normal populations (e.g., Amiot et al., 2008; Amiot et al., 2010; Roberts, Caspi, & Moffitt, 2001). The RCI provides a useful estimation of the percentages of participants who changed reliably over time. The RCI is also informative for non-intervention or natural history studies (Roberts et al., 2001), such as in the current study. Given our focus on changes over time, this statistical technique was considered useful at the conceptual level.

**Main Analyses.** For our main analyses, we examined whether changes in the antecedent variables – social validation and coping – predicted changes in organizational identification and in identity conflict and turnover intentions from Time 1 to Time 2. To do this, we tested Latent Difference Score (LDS) mediation models in Mplus version 5.1 (Muthén & Muthén, 2007). While RCIs are descriptive and illustrate the amount of change displayed by our participants over time, LDS models allow us to capture how intraindividual change in one variable *per se* is associated with the change in another. Therefore, LDS mediation models explicitly represent the direction and magnitude of the individual differences in change that existed in the targeted variables measured at Time 1 and Time 2 (Roberts et al., 2001; Selig & Preacher, 2009). Recently, LDS models have become more popular in applied research (See Selig & Preacher, 2009; Hamagami & McArdle, 2007; Hertzog et al., 2003; King et al., 2006; McArdle, 2001; McArdle & Nesselroade, 1994).

In our LDS models, the change in variables from Time 1 to Time 2 were latent variables embedded into the structural model. We included each construct measured at both Time 1 and Time 2, thus resulting in a total of 7 latent change factors. Using this LDS approach allowed us to focus on change in each of these constructs as well as absolute scores at each time point. Therefore, we could assess whether a change in one of the constructs (e.g., change in peer validation from Time 1 to Time 2) may be equally or more important than the
LDS modeling was considered appropriate in light of sample size requirements. Prior researchers have found reliable correlations of change between latent variables using the LDS technique with small samples (Hertzog et al., 2003 – sample of 302 but including many more parameters to estimate than the current model; Raz et al., 2005 – sample size of 72). When modeling covariance in change between latent constructs, smaller sample sizes are not a significant issue (Hertzog, Lindenberger, Ghisletta, & von Oertzen, 2006). Furthermore, this technique uses bootstrapped confidence intervals for the indirect effects, and multiple covariates in the change analysis. These methods are stable with a sample that includes less than 200 participants.

In Figure 2, the constructs ‘ΔPVal’, ‘ΔECoping’, and ‘ΔDCoping’ represent the latent factors for changes in peer validation, changes in engagement coping and changes in disengagement coping from Time 1 to Time 2, respectively. In addition, in Figure 3 the construct ‘ΔLVal’ represents the latent factor for changes in leader validation from Time 1 to
Time 2. In both figures, the constructs ‘∆OI’, ‘∆Turnover Intentions’ and ‘∆IdentConf’ represent the latent factors for changes in organizational identification, changes in turnover intentions and changes in identity conflict from Time 1 to Time 2, respectively. Each LDS model included the absolute scores at Time 1 and Time 2 (each created via two parcels of observed variables) to create each latent change factor, although these are not represented in Figures 2 and 3 in order to simplify the graphical depiction.

The models’ goodness of fit was tested by using the chi-square ratio, the comparative fit index (CFI; Bentler, 1990), the Tucker Lewis Index (TLI; Hu & Bentler, 1995), the standardized root mean residual (SRMR), and the root mean square error of approximation (RMSEA; Browne & Cudeck, 1993). The TLI is relatively independent of sample size (Marsh, Balla, & McDonald, 1988) and thus was particularly useful in the current context.

To test for the mediating roles of changes in engagement coping and disengagement coping in the associations between change in peer and leader social validation and change in organizational identification, and the mediating role of change in identification between change in coping strategies and the outcomes of change in identity conflict and change in turnover intentions, we calculated the bias-corrected bootstrap 95% confidence intervals in MPlus using the unbiased estimates of mediation effects provided by the LDS modeling. This is a robust method of testing for multiple mediation that also directly tests the significance of the indirect effects (MacKinnon, 2008; Selig & Preacher, 2009).

Parceling of Items. Scale items were aggregated into two parcels for each Time 1 and Time 2 variable (in other words, each Time 1 and Time 2 latent variable had two observed indicators). This enabled us to avoid under-identification of the model (Little, Cunningham, Shahar, & Widaman, 2002), and to create more parsimonious models with less various sources of systematic measurement or sampling error (Bandalos, 2002; Little et al., 2002). To construct the This is a post-print version of the following article: Smith, Laura G. E., Amiot, Catherine E., Smith, Joanne R., Callan, Victor J. and Terry, Deborah J. (2013) The social validation and coping model of organizational identity development: a longitudinal test. Journal of Management, 39 7: 1952-1978.
parcels, we used an internal consistency approach (Kishton & Widaman, 1994). First, we conducted an exploratory factor analysis on each scale to identify whether the scale was uni- or multidimensional. We then parceled the items to ensure that each parcel had a Cronbach’s alpha score of >.50 and items within the parcel loaded onto only one factor. Therefore, each parcel was reliable and unidimensional.

**RESULTS**

**Preliminary Analyses**

First, we calculated RCI scores to assess the magnitude of increase or decrease in identification and identity conflict exhibited by each individual over time. Higher RCI scores indicate an increase in the measure from Time 1 to Time 2. The specific formula used to obtain RCI scores is as follows (Christensen & Mendoza, 1986): \( RC = \frac{X_2 - X_1}{S_{\text{diff}}} \), where \( X_1 \) represents a person’s score at Time 1, \( X_2 \) represents that same person’s score at Time 2, and \( S_{\text{diff}} \) is the standard error of difference between the two test scores, which can be computed using the standard error of measurement: \( S_{\text{diff}} = (2(SE)^2)^{1/2} \). The standard error of the difference score represents the spread of the distribution of change scores that would be expected if no actual change has occurred. RCI scores smaller than -1.96 or larger than 1.96 are unlikely to occur without true change and are thus considered reliable. Furthermore, if change were random, then we would expect the distribution of RCI scores to be normal, with approximately 2.5% below -1.96, 2.5% above 1.96, and 95% of the participants remaining the same. Based on this formula, we can then use the RCI to identify the proportions of participants from our sample who significantly increased, significantly decreased, or showed no appreciable change in each of the variables over time (Christensen & Mendoza, 1986; Roberts, et al., 2001).

For perceptions of peer validation, 40.2% of participants perceived an increase over
time, 23.5% perceived that it stayed the same, and 36.4% perceived a decrease. Chi-squared statistics revealed that the percentage of newcomers whose perceptions of peer validation significantly changed over time differed significantly from the percentage expected by chance, $\chi^2 (1) = 132.00$, $p < .001$. For perceptions of leader validation, again 40.2% of participants reported that they perceived an increase, 26.2% perceived that it stayed the same, and 33.6% reported a decrease, again representing significant intra-individual change, $\chi^2 (1) = 122.00$, $p < .001$. For engagement coping, for 47.1% of participants we observed increased scores, for 15.2% scores remained the same, and for 37.7% scores decreased over time; $\chi^2 (1) = 138.00$, $p < .001$. For disengagement coping, for 24.1% of participants we observed increased scores, for 29.2% scores remained the same, and for 46.7% scores decreased over time; $\chi^2 (1) = 137.00$, $p < .001$. We observed that 33.8% of participants experienced an increase in organizational identification from Time 1 to Time 2, whereas 46.6% of newcomers experienced decreased identification, and 19.5% stayed the same, $\chi^2 (1) = 133.00$, $p < .001$. On the identity conflict variable, 29.8% of participants experienced a decrease, 54.2% reported an increase in conflict, and 16.0% stayed the same, $\chi^2 (1) = 131.00$, $p < .001$. Finally, for turnover intentions, 49.6% of participants reported an increase, 20.3% reported no change, and 30.1% reported a decrease, $\chi^2 (1) = 93.000$, $p < .001$. These results suggest that significant proportions of participants displayed reliable intra-individual changes over time on each variable.

Given the reliable variance in change on each variable, the correlations of the latent change factors were both meaningful and interpretable. In Table 2, we report the correlations between the latent change factors. Means, standard deviations and correlations between Time 1 and 2 variables are displayed in Table 1.

Latent Difference Score Modeling

There was a moderately high zero-order correlation of .64 between changes in leader and peer validation that suggested these variables might be multicollinear. This suggested that there was some multicollinearity. Such high associations among variables can create instability in the LDS findings and lower model fit. Therefore, in order to avoid statistical instability in the parameter estimates, team and team leader levels of validation were investigated in separate LDS models.

Figure 2 shows the significant paths in the LDS mediation model for change in peer validation. Fit indices for the model were: $\chi^2 (149) = 192.514$, $p = 0.009$; RMSEA = 0.046 (90% confidence interval: 0.024, 0.063); CFI = .983; TLI = .974; SRMR = 0.046.

Figure 3 shows the significant paths in the LDS mediation model for change in leader validation. Fit indices for the model were: $\chi^2 (149) = 210.551$, $p < .001$; RMSEA = 0.055 (90% confidence interval: 0.036, 0.071); CFI = 0.977; TLI = 0.965; SRMR = 0.055. Therefore, both models had excellent fit.

The paths between the latent change factors (Figures 2 and 3) can be interpreted as follows. Based on the distribution of change scores observed in the current study (see section on the reliable change index), the positive relationship between change in peer validation and change in engagement coping meant that as perceptions of peer validation increased over time, so did use of engagement coping, $\beta=.220$, $p<.001$. A similar positive relationship existed for change in leader validation and change in engagement coping, $\beta=.154$, $p<.001$. The negative relationship between change in peer validation and change in disengagement coping meant that as peer validation increased over time, disengagement decreased, $\beta=-.189$, $p=.034$. The path between change in leader validation and change in disengagement coping was non-significant, $\beta=-.065$, $p=.354$. However, examination of the full LDS model that included the absolute scores for leader validation at each time point indicated there was a significant negative relationship between T1 leader validation scores and change in disengagement coping, $\beta=-.243$, $p=.003$; and a significant positive relationship between T1 leader validation scores and change in engagement coping, $\beta=.128$, $p=.002$. This suggested that T1 leader validation was related to decreased disengagement and increased engagement coping over time.

The negative relationships between change in disengagement coping and change in organizational identification indicated that increases in disengagement were related to decreases in identification ($\beta=-.420$, $p=.001$ for the peer validation model and $\beta=-.444$, $p<.001$ for the leader validation model). There was a marginally significant positive relationship between changes in engagement coping and changes in identification for the peer validation model, $\beta=.332$, $p=.082$, indicating that as engagement coping increased, so did identification. No such relationship was found in the leader validation model, $\beta=.231$, $p=.306$.

The negative relationship between change in identification and change in turnover intentions meant that as identification increased over time, turnover intentions were reduced over time ($\beta=-.526$, $p=.009$ peer validation model; $\beta=-.397$, $p=.066$ leader validation model). Similarly, a negative relationship between change in identification and change in identity conflict indicated that as identification increased over time, identity conflict was reduced ($\beta=-.325$, $p=.027$ peer validation model; $\beta=-.349$, $p=.020$ leader validation model). There was also a marginally significant positive path in the leader validation model between changes in disengagement coping and changes in identity conflict, $\beta=.246$, $p=.084$, whereby increased disengagement predicted increased identity conflict. Finally, we also found a significant negative path between changes in leader validation over time and changes in turnover intentions, $\beta=-.510$, $p<.001$, indicating that as leader validation increased, turnover intentions decreased over time.

Tests of Indirect Effects. Table 3 shows the results for the tests of indirect effects and the associated 95% bias-corrected bootstrap confidence intervals. Results indicated that increases in peer validation had a significant positive indirect effect on change in identification through both increased use of engagement coping strategies and decreased use of disengagement strategies over time. Increases in leader validation did not have these same effects; however, absolute T1 leader validation was related to increased organizational identification through decreased disengagement coping over time (but not through increased engagement coping). Decreased use of disengagement coping strategies had significant positive indirect effects on both decreased identity conflict and decreased turnover intentions through increased organizational identification over time.
DISCUSSION

This research represents the first test of a validation and coping model of newcomer organizational identity development. Our model uniquely combines insights on coping processes in organizations (Amiot et al., 2006; Terry et al., 1996), with Amiot et al.’s (2007) cognitive-developmental model of social identity integration, and recent findings on perceptions of social validation as an intragroup antecedent of identity formation (Smith et al., 2012). Our results showed that increased peer validation was related to increased organizational identification through increased use of engagement coping strategies and decreased use of disengagement coping strategies over time, providing partial support for H1a and H1b. This supports research reported elsewhere (Amiot et al., 2006, 2008, 2010), that active engagement coping increases individuals’ adjustment to a life transition and facilitates the integration of the new organizational identity into the self-concept. However, changes in perceptions of leader validation did not have the same effect. Instead, we found that initial (rather than changes in) perceptions leader validation were related to increased organizational identification through reducing disengagement coping over time. We explore this finding further below.

We also found tentative support for H2a: in the peer validation model, there was a trend towards a positive relationship between increases in engagement coping and increases in organizational identification. The data fully supported H2b: increased disengagement coping was related to decreased organizational identification. Our findings also fully supported H3a and H3b: increased identification was related to decreased identity conflict.
and decreased turnover intentions. Further, an increased use of disengagement coping strategies predicted an increase in both identity conflict and in turnover intentions through decreasing organizational identification over time. There was also evidence for a direct relationship between increased disengagement and increased identity conflict:

Disengagement coping appeared to impede identity integration. Taken together, these findings provide support for our proposition that coping strategies are an important mechanism by which a new organizational identity develops and becomes integrated into the self-concept over time.

One of the main novelties of the current research was to investigate the role played by social validation in the process of newcomer socialization. Our findings suggest that increased perceptions of social validation from peers contributes to the development of organizational identity through facilitating engagement coping and reducing disengagement coping. In addition, initial perceptions of social validation from leaders predicted the development of organizational identity, but only through reducing disengagement coping. One explanation for this pattern of relationships is that social validation from peers provides an “identity echo” from existing ingroup members (Ashforth et al., 2008; Gioia & Chittipeddi, 1991; Ibarra, 1999; Pratt & Rafaeli, 2001; Smith et al., 2012; Weick, 1995), that increases newcomers’ confidence that they are conducting themselves normatively (McGarty et al., 1993), motivates engagement coping, and encourages the formation of a positive attachment to the group (Leach et al., 2008; Smith, Murphy, & Coats, 1999). A reduction in such validation from peers may increase the likelihood that employees disengage from the new group (Wrosch, Scheier, Miller, Schulz, & Carver, 2003). The resulting motivational downturn may lead to dis-identification with the organization over time (Amiot et al., 2006;
Peer, rather than leader validation may have motivated the development of identity through the use of engagement coping strategies because of the relative proximity of peers to newcomers in daily work and the fact that peers are proximal role models for organizational norms and culture (see Ning Li et al., 2011). Leader validation may not have facilitated the same process because most employees will expect their leaders and managers to give them feedback as part of their leadership role. In contrast, peer feedback is not always an “expected” act from coworkers. Employees hence may respond more proactively to validating feedback from peers than from their leader since it is something their peers are not expected to do, and nor are they compensated for doing so. In other words, voluntarily displayed socialization behaviors from coworkers are extra-role and as such may be particularly valued, appreciated, and beneficial to engagement coping-based identity development.

In contrast, initial leader validation played a different role in the development of identity by more specifically reducing the newcomers’ use of disengagement coping. This validation from leaders early in the socialization period may act as a relational cue, providing a meta-perspective (“my organization’s view of me”), as well as a performance cue (cf. DeRue & Ashford, 2010). This is because leaders who are generally higher status organizational members than peers are more likely than peers to be viewed as representatives of the wider organization (Ullrich et al., 2007). Leader validation hence provides insight into both the leader’s opinion of the newcomer’s actions and how the newcomer is evaluated by the organization’s standards and guidelines. As leaders have authority in newcomers’ role negotiations and the power to influence organizational rewards and punishments (Graen,
1976), if newcomers receive low levels of social validation via their leader early in the socialization process, this is likely to be particularly discouraging (possibly more discouraging than a lack of feedback from peers) and to lead newcomers to disengage from the process of adjustment and of developing organizational identification.

In combination with the effect of initial leader validation on identity development through decreasing disengagement coping, we found that increasingly validating leadership was associated with reduced turnover intentions over time. This result is in line with research that has found a negative relationship between the quality of leadership and turnover. For example, Peterson and Luthans (2006) found that improving managers’ performance feedback and social recognition skills had a negative relationship with turnover rate. Similarly, George and Bettenhausen (1990) found a negative association between turnover and the extent to which leaders felt active, enthusiastic and optimistic. Given this past research and the findings we present here, it is possible that increasingly validating leadership provides employees with a form of psychological empowerment that improves their organizational commitment and reduces their turnover intentions (cf. Seibert, Wang & Courtright, 2011).

We found that change in leader validation and change in peer validation were relatively highly correlated. This could be due to the fact that peer and leader validation were assessed with the same scale items (i.e., adapted for each source of validation), and also by the conceptual overlap that could be expected among these variables. However, the correlation does not denote complete conceptual overlap: our results show that each source of validation was associated with different coping processes, attesting to the utility of distinguishing these two sources.
It is possible that the correlation may also reflect the fact that change in one source of validation produces change in the other source of validation. That is, if a leader provides increasing validation to the newcomer, then this might change the norm of social validation within the team, so that the practice of providing increased (or decreased) validation spreads from the leader to members of the team. Similarly, changes in peer validation might spread from the team to the leader – if the leader observes the team providing more validation, s/he might change his/her behavior so as to reflect the norms of the team. It would be interesting to investigate the nature of how the norm of social validation might spread and develop in future research. The implications are that there is a necessarily dynamic relationship between leaders and teams – leaders need to set the norms for their team, but they also need to reflect the wishes and actions of their team in order to be able to lead effectively (cf. Haslam, Reicher & Platow, 2011).

The inclusion of multiple sources of validation was a unique feature of this research. This is timely as it resonates with recent research on developmental feedback to newcomers by different sources (Li, Harris, Boswell & Xie, 2011), and also with developmental approaches to leadership that promote the use of multiple sources of data about the leader’s performance (Day & Harrison, 2007).

Our findings have significant implications for onboarding. Specifically, actions by co-workers and managers may have a differential impact on the development of new hire commitment. While our data provide information as to the relative contributions of peers and leaders as socialization agents, these interpretations are speculative and need to be tested in future research.

As another contribution, the current research investigated the changes taking place in
organizational identification over time. Findings uncovered using the reliable change index revealed that a significant proportion of participants displayed reliable intra-individual change in all of the variables over time. Interestingly, more participants reported decreased than increased organizational identification. This finding is consistent with prior research showing that during life and organizational transitions, a positively anticipated new organizational identity is likely to be revised in light of the reality (Amiot et al., 2010; Fichman & Levinthal, 1991). Initially, upon or even before entry, newcomers may develop a sense of identification with this new group, even if they have very little information about the group (Amiot et al., 2010). After newcomers discover the stress and problems associated with adjusting to an imperfect organizational environment, they may experience some disillusionment and a clash between their prior expectations and the organizational reality. However, a substantial proportion of participants in our sample also reported an increase in identification over time. This demonstrates that our data capture the variety of intra-individual changes that occurred during this time period, and therefore we were able to model the processes leading to identity development for the newcomers.

Coping strategies also changed as participants adapted (or failed to adapt) to the new workplace. Results showed there was intraindividual variability in coping strategies over the entire socialization period, with nearly half the participants using more engagement coping strategies over time, and less disengagement. In the coping literature, it is possible to consider coping as a trait (dispositional, in that individuals prefer using a stable and consistent set of coping actions regardless of the situations; e.g., Amirkhan, 1990; Long & Schutz, 1995) and also as a state (individuals change their coping utilization across time and throughout different situations; e.g., Carver & Scheier, 1994; Folkman & Lazarus, 1985; Raffety, Smith,
The intraindividual change in coping that we witnessed in the present research provides evidence to support this latter view of coping as a state-based mechanism.

**Implications for Theory.** The current model represents a novel integration of insights from literatures into coping processes, perceptions of the intragroup environment, newcomer socialization, and identity development. Using novel statistical techniques, it also allowed us to capture the temporal processes that took place over time during the socialization process. While psychologists are well-equipped to predict and understand short term contextual changes in identity, there is little research that has investigated the intra-individual identity change processes that newcomers experience over time (Ethier & Deaux, 1994), and how perceptions of the social environment in the workplace impact on coping and adaptation efforts to facilitate work transitions (cf. Amiot et al., 2006). Here, we present the first longitudinal data that provide support for the idea that peers and leaders play a role in the development of organizational identification via coping mechanisms (cf. Amiot et al., 2007; Harter, 1999; Mascolo & Fischer, 1998). We present evidence that organizational identity development is founded in developing intragroup relationships and interdependence (Gaertner, Iuzzini, Witt, & Orina, 2006; Gaertner & Schopler, 1998).

**Implications for Practice.** Peers have long been recognized as important players in the socialization process (Louis, 1980). Work on online communities and social networks shows that unstructured interactions with peers can sustain and organize activities on a large scale (Faraj & Johnson, 2011; Wasko & Faraj, 2005), highlighting the need to rethink traditional structured approaches to employee socialization and onboarding. In contrast, socialization programs (e.g., onboarding tactics such as new staff inductions) are often
organized and administered by staff in the human resources department in organizations rather than by team members (e.g., Allen, 2006; Ashforth & Saks, 1996; Morrison, 1993a). Our findings and other studies that show that peers are an important part of a network of socializing agents (e.g., Ashforth et al., 2008; Louis, 1980; Morrison, 1993a, b), bring into sharp focus the importance of developing organizational interventions that encourage day-to-day interactions of newcomers with existing group members and their leaders during the socialization process.

Limitations. The current research examined intra-individual change using two time points within the newcomers’ first 12 months at the new organization. However, some researchers have called for using three time points in longitudinal research, in order to ensure the difference between time points is not due to measurement error (see Ployhart & Vandenberg, 2010). We acknowledge that measuring change at three time points is useful in reliably disattenuating relationships among key variables. However, theory and previous research on identity development suggests that we sampled the variables at appropriate points in time, which allowed us to capture how newcomers’ developing perceptions of the social environment came to predict changes in their coping responses over time (see Cole & Maxwell, 2003; Selig & Preacher, 2009). Given that the socialization period is relatively short, time points beyond the first 12 months at a new organization would perhaps not capture the process of interest, which is identity development in newcomers, but would rather capture identification change in more established employees. Further, our integration of the Reliable Change Index (RCI) in our research adds value to the two-wave design we employed and is methodologically innovative in this discipline. We hope the use of this statistical procedure in the current research provides an example of how the RCI can capture the extent to which
employees changed during one of many important organizational transitions.

**Future Directions.** In this research, we focused on the development of one particular work identity (i.e., the organizational identity). Yet there are additional workplace identities that may develop in the work context over time. For example, research shows that within a workplace, employees may identify with their team, division, organization, and also with their role and profession (Ibarra, 1999; Riketta & van Dick, 2005). Indeed, as we speculated above, long-term disengagement with the process of adapting to one specific group (e.g., the work team) may facilitate the development of an alternative identity. Unfortunately, the present data do not speak to the long-term effect of disengagement, but future research should directly investigate the possibility that disengagement can help develop alternative identities.

Future research should also examine the interplay between the development of different work identities. Research in other domains investigates the relationship between multiple identities and how they are integrated and interrelated within the self-concept (Roccas & Brewer, 2002) and how these different identities affect organizational outcomes (Smith et al., 2012). A next stage for this research would be to investigate the processes underlying the development of multiple interrelated identities throughout the socialization period.

Another aspect of this research that is worth exploring in future research is the nature of the intragroup validation environment. It is possible that perceptions of validation are less important in contexts in which newcomers work relatively independently of others, and thus validation is less available and/or expected; or in situations where a newcomer offers complementary fit (cf. Kristof, 1996). Further, in the workplace, certain coworkers may engage in validation of newcomers more than others (i.e., there is inter-individual variation in

validation of newcomers). If newcomers relied on the social validation efforts of one team member (for example in dyadic mentoring), then that individual group member would have disproportionate influence over the newcomer’s understanding of the workplace. In group-based mentoring, any negative effect of one individual member would be diluted, especially if combined with a leader who is validating and creating norms of validation. In the present research, the way in which we measured social validation provided an indication of this group norm for social validation within the newcomer’s workplace environment rather than individual member’s contributions to this environment. This is a strength of the current research, as validation needs to provide group-level identity cues rather than individual-level cues to be maximally informative for the newcomer. It would be valuable, in future research, to explore diversity in coworker validation in order to understand the impact of such variability on coping and adaptation.

**Conclusion.** This research focuses on the processes involved in coming to see oneself, and being seen by others, as an organizational ingroup member. As most people will make several of these significant work transitions in their lifetime, they are likely to experience the identity challenges we highlight and capture in this research. However, while this psychological process is commonly experienced, it is seldom studied. In acknowledging the necessary role of perceptions of other people around us in shaping and validating our adaptation efforts, here we emphasize the very interdependent and dynamic nature of our wellbeing and social cognition during these transitions from one workplace to another.

REFERENCES


doi: 10.1177/0149206308316059


Jokisaari, M., & Nurmi, J. E. 2009. Change in newcomers' supervisor support and


1381-1401. doi: 10.1177/001872679504801201


McArdle, J. J. 2001. A latent difference score approach to longitudinal dynamic structural analyses. In R. Cudeck, S. du Toit, & D. Sorbom (Eds.), *Structural equation


Muthén & Muthén.


doi:10.1177/0149206309352110


Terry, D. J., Callan, V. J., & Sartori, G. 1996. Employee adjustment to an organizational merger: Stress, coping and intergroup differences. Stress Medicine, 12: 105-122.


FOOTNOTES

1 To establish the extent of statistical interdependence between individual-level outcomes and differences between divisions, intraclass correlations (ρ) were computed. The intraclass correlations ranged from: ρ=.0001 for T1 leader validation to ρ=.047 for T2 turnover intentions, indicating that only between 0.01% and 4.71% of the variability in outcomes was associated with differences between divisions. Further investigation showed that there was no meaningful difference between divisions on the outcome variables. This suggests that it is unnecessary to partial out variance caused by division using multi-level modeling (Tabachnick & Fidell, 2007) and therefore the data was analyzed at the individual level.

2 We were not able to establish differences between the newcomers who joined as team members versus as leaders on the relevant measures, as the relevant data were not collected.

3 To test whether associations observed in the model varied as a function of the specific organizational tenure of participants, we explicitly modeled organizational tenure at the time of measurement (T1) as both a predictor and a moderator of the effects of social validation. When tenure was entered as an antecedent to the coping variables in the peer validation model, analyses showed that tenure was not a significant predictor of engagement coping (β = -.005, p = .354), or disengagement coping (β = .006, p = .421). In the leader validation model, tenure was not a significant predictor of engagement coping (β = -.003, p = .603), or disengagement coping (β = .006, p = .446). When tenure was included as an antecedent in the model, the associations between leader validation and peer validation and engagement / disengagement coping were still significant and in the same direction. Further,
when tenure was included in the peer validation model as an antecedent, the model fit did not quite reach acceptable levels, $\chi^2 (170)=290.791, p<.001; \text{RMSEA}=.071; \text{CFI}=.957; \text{TLI}=.936; \text{SRMR}=.063$ (fit indices for the leader validation model were: $\chi^2 (170) = 234.405, p=.0008; \text{RMSEA}=.052; \text{CFI}=.97; \text{TLI}=.963; \text{SRMR}=.054$). When tenure was included as a moderator of the associations of the models, no paths were significant. Therefore, we report our final model without including tenure given that this final model was more parsimonious and best suits the data.
Table 1
Descriptive Statistics and Zero-order Correlations between Variables

<table>
<thead>
<tr>
<th></th>
<th>M</th>
<th>SD</th>
<th>1.</th>
<th>2.</th>
<th>3.</th>
<th>4.</th>
<th>5.</th>
<th>6.</th>
<th>7.</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. T1 peer social validation</td>
<td>5.49</td>
<td>1.08</td>
<td>(0.96)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. T2 peer social validation</td>
<td>5.59</td>
<td>1.09</td>
<td>0.29**</td>
<td>(0.95)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3. T1 leader social validation</td>
<td>5.29</td>
<td>1.34</td>
<td>0.69**</td>
<td>0.22*</td>
<td>(0.97)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4. T2 leader social validation</td>
<td>5.38</td>
<td>1.37</td>
<td>0.23**</td>
<td>0.50**</td>
<td>0.34**</td>
<td>(0.98)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5. T1 Engagement coping</td>
<td>4.70</td>
<td>0.65</td>
<td>0.43**</td>
<td>0.38**</td>
<td>0.36**</td>
<td>0.18*</td>
<td>(0.93)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>6. T2 Engagement coping</td>
<td>4.75</td>
<td>0.62</td>
<td>0.30**</td>
<td>0.54**</td>
<td>0.24**</td>
<td>0.39**</td>
<td>0.53**</td>
<td>(0.91)</td>
<td></td>
</tr>
<tr>
<td>7. T1 Disengagement coping</td>
<td>2.07</td>
<td>0.93</td>
<td>-0.17*</td>
<td>0.02</td>
<td>-0.20*</td>
<td>-0.18</td>
<td>-0.21*</td>
<td>-0.13</td>
<td>(0.90)</td>
</tr>
<tr>
<td>8. T2 Disengagement coping</td>
<td>1.81</td>
<td>0.92</td>
<td>-0.21*</td>
<td>-0.26**</td>
<td>-0.31**</td>
<td>-0.24**</td>
<td>-0.34**</td>
<td>-0.28**</td>
<td>0.35**</td>
</tr>
<tr>
<td>9. T1 organizational identification</td>
<td>5.38</td>
<td>1.07</td>
<td>0.39**</td>
<td>0.37**</td>
<td>0.47**</td>
<td>0.22*</td>
<td>0.36**</td>
<td>0.30**</td>
<td>0.03</td>
</tr>
<tr>
<td>10. T2 organizational identification</td>
<td>5.21</td>
<td>1.20</td>
<td>0.26**</td>
<td>0.44**</td>
<td>0.25**</td>
<td>0.38*</td>
<td>0.26**</td>
<td>0.39**</td>
<td>0.02</td>
</tr>
<tr>
<td>11. T1 identity conflict</td>
<td>2.01</td>
<td>1.05</td>
<td>-0.33**</td>
<td>-0.21*</td>
<td>-0.39**</td>
<td>-0.24**</td>
<td>-0.27**</td>
<td>-0.22**</td>
<td>0.30**</td>
</tr>
<tr>
<td>12. T2 identity conflict</td>
<td>2.33</td>
<td>1.16</td>
<td>-0.22*</td>
<td>-0.26**</td>
<td>-0.19*</td>
<td>-0.25**</td>
<td>-0.14</td>
<td>-0.25**</td>
<td>0.20*</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>13. T1 turnover intentions</td>
<td>2.49</td>
<td>1.72</td>
<td>-0.22*</td>
<td>-0.14</td>
<td>-0.34**</td>
<td>-0.22*</td>
<td>-0.07</td>
<td>-0.12</td>
<td>0.02</td>
</tr>
<tr>
<td>14. T2 Turnover intentions</td>
<td>2.89</td>
<td>1.91</td>
<td>-0.14</td>
<td>-0.23**</td>
<td>-0.22*</td>
<td>-0.43**</td>
<td>-0.06</td>
<td>-0.14</td>
<td>-0.07</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>1. T1 peer social validation</td>
<td>5.49</td>
<td>1.08</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. T2 peer social validation</td>
<td>5.59</td>
<td>1.09</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3. T1 leader social validation</td>
<td>5.29</td>
<td>1.34</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4. T2 leader social validation</td>
<td>5.38</td>
<td>1.37</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5. T1 Engagement coping</td>
<td>4.70</td>
<td>0.65</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6. T2 Engagement coping</td>
<td>4.75</td>
<td>0.62</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>7. T1 Disengagement coping</td>
<td>2.07</td>
<td>0.93</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>8. T2 Disengagement coping</td>
<td>1.81</td>
<td>0.92</td>
<td>(0.92)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>9. T1 organizational identification</td>
<td>5.38</td>
<td>1.07</td>
<td>-0.23**</td>
<td>(.97)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>10. T2 organizational identification</td>
<td>5.21</td>
<td>1.20</td>
<td>-0.38**</td>
<td>0.55**</td>
<td>(.98)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th></th>
<th>Time 1 Identity Conflict</th>
<th>Time 2 Identity Conflict</th>
<th>Time 1 Turnover Intentions</th>
<th>Time 2 Turnover Intentions</th>
</tr>
</thead>
<tbody>
<tr>
<td>11</td>
<td>T1 identity conflict</td>
<td>2.01 1.05</td>
<td>0.18* -0.50** -0.25** (.90)</td>
<td></td>
</tr>
<tr>
<td>12</td>
<td>T2 identity conflict</td>
<td>2.33 1.16</td>
<td>.38** -0.22* -0.43** 0.20* (.87)</td>
<td></td>
</tr>
<tr>
<td>13</td>
<td>T1 turnover intentions</td>
<td>2.49 1.72</td>
<td>0.20* -0.50** -0.28** 0.43** 0.13</td>
<td></td>
</tr>
<tr>
<td>14</td>
<td>T2 Turnover intentions</td>
<td>2.89 1.91</td>
<td>0.32** -0.19* -0.39** 0.11 0.33** 0.45**</td>
<td>___</td>
</tr>
</tbody>
</table>

*p < .05

**p < .01

T1 = Time 1; T2 = Time 2

M = mean; SD = standard deviation

Cronbach’s alphas are in parentheses

Table 2

Zero-order Correlations between Latent Change Factors

<table>
<thead>
<tr>
<th></th>
<th>1.</th>
<th>2.</th>
<th>3.</th>
<th>4.</th>
<th>5.</th>
<th>6.</th>
<th>7.</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. ΔPeer social validation</td>
<td>___</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. ΔLeader social validation</td>
<td>0.64**</td>
<td>___</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3. ΔEngagement coping</td>
<td>0.21**</td>
<td>0.26**</td>
<td>___</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4. ΔDisengagement coping</td>
<td>-0.25**</td>
<td>-0.15</td>
<td>-0.10*</td>
<td>___</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5. ΔOrganizational identification</td>
<td>0.36**</td>
<td>0.49**</td>
<td>0.16**</td>
<td>-0.42**</td>
<td>___</td>
<td></td>
<td></td>
</tr>
<tr>
<td>6. ΔIdentity conflict</td>
<td>-0.24*</td>
<td>-0.30*</td>
<td>-0.11*</td>
<td>0.35**</td>
<td>-0.46**</td>
<td>___</td>
<td></td>
</tr>
<tr>
<td>7. ΔTurnover intentions</td>
<td>-0.34*</td>
<td>-0.93**</td>
<td>-0.09</td>
<td>0.45**</td>
<td>-0.66**</td>
<td>0.64**</td>
<td>___</td>
</tr>
</tbody>
</table>

*p < .05

**p < .01

### Table 3

<table>
<thead>
<tr>
<th>Indirect Effect</th>
<th>95% confidence interval</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Peer validation model</strong></td>
<td></td>
</tr>
<tr>
<td>( \Delta PVal \rightarrow \Delta ECoping \rightarrow \Delta OI )</td>
<td>0.000, 0.174*</td>
</tr>
<tr>
<td>( \Delta PVal \rightarrow \Delta DCoping \rightarrow \Delta OI )</td>
<td>0.011, 0.198*</td>
</tr>
<tr>
<td>( \Delta ECoping \rightarrow \Delta OI \rightarrow \Delta IdentConf )</td>
<td>-0.350, 0.005</td>
</tr>
<tr>
<td>( \Delta DCoping \rightarrow \Delta OI \rightarrow \Delta IdentConf )</td>
<td>0.026, 0.335*</td>
</tr>
<tr>
<td>( \Delta ECoping \rightarrow \Delta OI \rightarrow \Delta Turnover Intentions )</td>
<td>-0.483, 0.005</td>
</tr>
<tr>
<td>( \Delta DCoping \rightarrow \Delta OI \rightarrow \Delta Turnover Intentions )</td>
<td>0.054, 0.496*</td>
</tr>
<tr>
<td><strong>Leader validation model</strong></td>
<td></td>
</tr>
<tr>
<td>( \Delta LVal \rightarrow \Delta ECoping \rightarrow \Delta OI )</td>
<td>-0.033, 0.119</td>
</tr>
<tr>
<td>( \Delta LVal \rightarrow \Delta DCoping \rightarrow \Delta OI )</td>
<td>-0.025, 0.085</td>
</tr>
<tr>
<td>( LVal1 \rightarrow \Delta ECoping \rightarrow \Delta OI )</td>
<td>-0.026, 0.099</td>
</tr>
<tr>
<td>( LVal1 \rightarrow \Delta DCoping \rightarrow \Delta OI )</td>
<td>0.048, 0.208*</td>
</tr>
<tr>
<td>( \Delta ECoping \rightarrow \Delta OI \rightarrow \Delta IdentConf )</td>
<td>-0.329, 0.044</td>
</tr>
<tr>
<td>( \Delta DCoping \rightarrow \Delta OI \rightarrow \Delta IdentConf )</td>
<td>0.050, 0.343*</td>
</tr>
<tr>
<td>( \Delta ECoping \rightarrow \Delta OI \rightarrow \Delta Turnover Intentions )</td>
<td>-0.427, 0.053</td>
</tr>
<tr>
<td>( \Delta DCoping \rightarrow \Delta OI \rightarrow \Delta Turnover Intentions )</td>
<td>0.026, 0.411*</td>
</tr>
</tbody>
</table>

*Number of samples = 2000

*\( p < .05 \)

\( \Delta PVal = \) changes in peer validation; \( PVal1 = \) Time 1 peer validation; \( \Delta LVal = \) changes in leader validation; \( LVal1 = \) Time 1 leader validation; \( \Delta ECoping = \) changes in engagement coping; \( \Delta DCoping = \) changes in disengagement coping; \( \Delta OI = \) changes in organizational identification; \( \Delta IdentConf = \) changes in identity conflict.
Figure 2

Factors Predicting Change in Organizational Identification over Time: Peer validation

Beta coefficients appear on each path. The standard error for each path is in parentheses. ***p<.001; **p<.01; *p<.05; †p<.08. Dashed paths are non-significant at p>.10. ΔPVal = changes in peer validation; ΔECoping = changes in engagement coping; ΔDCoping = changes in

disengagement coping; $\Delta OI$ = changes in organizational identification; $\Delta$Turnover Intentions$= \Delta$ changes in turnover intentions; $\Delta$IdentConf$= \Delta$ changes in identity conflict.

Figure 3

Factors Predicting Change in Organizational Identification over Time: Leader Validation

Beta coefficients appear on each path. The standard error for each path is in parentheses. ***p<.001; **p<.01; *p<.05; †p<.09. Dashed paths are non-significant at p>.10. ∆LVal = changes in leader validation; ∆ECoping = changes in engagement coping; ∆DCoping = changes in disengagement coping; ∆OI = changes in organizational identification; ∆Turnover Intentions = changes in turnover intentions; ∆IdentConf = changes in identification confidence.

changes in identity conflict.