Zeitschrift für Arbeits- u. Organisationspsychologie (2014) 58 (N. F. 32) 4, 173 – 185

Push and Pull Motivations for Quitting

A Three-Wave Investigation of Predictors and Consequences of Turnover

Norbert K. Semmer[1,2] , Achim Elfering[1,2], Jürg Baillod[1], Martial Berset[1], and Terry A. Beehr[3]

Abstract. We report a new analysis of data from a multi-year study, some of which were previously published in the current journal. A longitudinal sample of 380 computer specialists was followed over two years, yielding three measures each of job satisfaction, organizational commitment, and turnover intentions, as well as actual turnover, and reasons for leaving, at Times 2 and 3. Career paths were more diverse than the classical distinction between stayers and leavers implies. Furthermore, although the largest single group of leavers cited "push" reasons, conforming to the classical withdrawal model, a sizable number were attracted to another job ("pull motivation"). In a three-wave structural equation model, job (dis)satisfaction predicted turnover, while organizational commitment exerted its influence only via its association with job satisfaction. As expected, however, attitudes predicted turnover only for participants with push motivation. Quitting, in turn, predicted an improvement in both satisfaction and commitment, indicating that it paid off for the individual. The necessity to study consequences of turnover and to distinguish between different subgroups of stayers and leavers is emphasized.
Key words: turnover, job satisfaction, commitment, intention to quit, turnover motivation

Push und Pull Motivation der Fluktuation: Eine Längsschnittanalyse der Antezedenzen und Folgen des Stellenwechsels über drei Messwellen

Zusammenfassung. Arbeitsunzufriedenheit und geringe organisationale Verbundenheit sind als Prädiktoren der Fluktuationsabsicht und des Stellenwechsels gut etabliert. Diese Vorhersage sollte aber vor allem auf Personen zutreffen, die ihre Stelle wechseln möchten, weil sie nicht zufrieden sind („push" – motivierte Fluktuation). Hingegen sollten Arbeitszufriedenheit und organisationale Verbundenheit nicht die Stellenwechsel derjenigen vorhersagen, die mit ihrer jetzigen Tätigkeit zufrieden sind und mit dem Wechsel ein verlockendes und herausforderndes Ziel verfolgen („pull" – motivierte Fluktuation). Dass Arbeitszufriedenheit und organisationale Verbundenheit Fluktuation nur bei Push-Motivation vorhersagen, stellt unsere zentrale Hypothese dar. Zudem gingen wir davon aus, dass dem Stellenwechsel ein Anstieg der Arbeitszufriedenheit und organisationalen Verbundenheit folgt, und zwar unabhängig von der Fluktuationsmotivation. Über einen Zeitraum von zwei Jahren wurden diese Annahmen über jährliche Befragungen (drei Messzeitpunkte) geprüft, wobei alle – auch diejenigen, die die Stelle gewechselt hatten – einbezogen wurden. 380 IT Spezialisten machten Angaben zu Arbeitszufriedenheit, organisationaler Verbundenheit und Fluktuationsabsicht zu allen drei Messzeitpunkten sowie zur tatsächlichen Fluktuation und zur Fluktuationsmotivation nach dem ersten und zweiten Jahr (Messzeitpunkte 2 und 3). Die erhobenen Daten – die teilweise bereits in der ZAO publiziert wurden – wurden in einem longitudinalen Strukturgleichungsmodell reanalysiert. Die Ergebnisse zeigten, dass die klassische Unterscheidung zwischen Wechselnden und Bleibenden die Berufsverläufe unzureichend abbildet. Obwohl erwartungsgemäß den meisten Stellenwechseln eine „push" Motivation zugrunde lag, wurde auch häufig eine „pull" Motivation berichtet. Unabhängig von der Fluktuationsmotivation stiegen Arbeitszufriedenheit und organisationale Verbundenheit nach Stellenwechseln an. Die organisationale Verbundenheit leistete keinen eigenständigen Vorhersagebeitrag, sondern war lediglich durch ihre längsschnittliche positive Verbindung zur Arbeitszufriedenheit bedeutsam, welche ein guter Prädiktor war. Die Vorhersage eines Stellenwechsels durch die Arbeits(un)zufriedenheit war bei „push" motivierten Wechseln erfolgreich, jedoch – wie erwartet – bei „pull" motivierter Fluktuation erfolglos. Für die Forschung und für das organisationale Anwendungsfeld ist die Unterscheidung von Fluktuationsmotivationen erfolgversprechend.
Schlüsselwörter: Fluktuation, Arbeitszufriedenheit, Organisationale Verbundenheit, Fluktuationsabsicht, Fluktuationsmotivation

The importance of attitudes toward the job (job satisfaction) and the organization (organizational commitment) as predictors of turnover is well-known (e. g., a meta-analysis by Griffeth, Hom, & Gaertner, 2000, found corrected correlations with turnover of -.22 and -.27, respectively). In fact, much turnover research has been based on models

[1] University of Bern, Switzerland
[2] National Centre of Competence in Research, Affective Sciences, University of Geneva, CISA, Geneva, Switzerland
[3] Central Michigan University

DOI: 10.1026/0932-4089/a000167

assuming important roles of job satisfaction and organizational commitment as predictors, as well as a mediating role of intention to quit (e. g., Marique & Stinglhamber, 2011; Steel & Lounsbury, 2009; Tett & Meyer, 1993). In addition, moderators have been suggested (e. g., type of person, or type of job; Senter & Martin, 2007). Despite some advances in terms of including other concepts (e. g., justice; Aquino, Griffeth, Allen, & Hom, 1997), research focusing on predictions of turnover by job satisfaction and organizational commitment has seemed to reach an impasse. New models have been developed, which postulate many different paths to turnover, including more situational triggers (e. g., shocks) and different types of leaving (Hom, Mitchell, Lee, & Griffeth, 2012). Reanalyzing an existing data set (Baillod & Semmer, 1994; Semmer, Baillod, Stadler, & Gail, 1996), we attempted to advance knowledge about turnover by examining the effects of work attitudes (job satisfaction and organizational commitment) on different forms of turnover (i. e., motivated by push or pull factors), and the effect of quitting, on employees' attitudes toward the subsequent job.

Turnover research typically involves two measurement periods. Presumed causal variables are measured at Time 1, and used to predict voluntary turnover, which is often the only variable assessed at time 2 (e. g., Goodwin, Groth, & Frenkel, 2011). Although this is useful with regard to relationships between predictors and turnover, that design is actually cross-sectional (see Steel, 2002), with only a few exceptions (e. g., Boswell, Shipp, Payne, & Culbertson, 2009; Boswell, Tichy, & Boudreau, 2005; Farkas & Tetrick, 1989). Furthermore, even longitudinal designs do not always contain measures close enough in time to assess ordering of processes that may follow each other quickly (see Hom & Griffeth, 1991). Measures at multiple time periods are important for examining variables that might predict turnover, because some studies report a drop in satisfaction or commitment just prior to quitting (e. g., Youngblood, Mobley, & Meglino, 1983), and research shows that the correlation between predictors and turnover decreases with time (e. g., Dickter, Roznowski, & Harrison, 1996; Semmer et al., 1996).

A different issue is the lack of research on consequences for the individuals who quit (e. g., Steers & Mowday, 1981). Berset (2005) showed that "leavers" benefit from turnover in terms of job satisfaction and organizational commitment. Boswell et al. (2005) showed a "honeymoon-hangover effect" in which quitting leads to higher job satisfaction after the change but is followed by a slight decrease further on.

It has been postulated that organizational commitment mediates the relationship between job satisfaction and turnover (Porter, Steers, Mowday, & Boulian, 1974). The opposite position has, however, also been advanced, suggesting that satisfaction mediates between commitment and turnover (see Tett & Meyer, 1993). Antecedents of both constructs are remarkably similar (e. g., job characteristics; DeConinck & Stilwell, 2004; Grebner et al., 2003), and no strong case can be made for a causal precedence of one of these attitudes over the other conceptually.

The argument that leavers sever their ties with the organization but may take on very similar jobs (Porter et al., 1976) is, of course, plausible, but so is the reverse: People may dislike their immediate job and leave, not only to get away from the organization but to get better job conditions. Empirically, meta-analyses (e. g., Chang, Rosen, & Levy, 2009; Tett & Meyer, 1993) have concluded that job satisfaction and organizational commitment both contribute to turnover (or turnover intentions). Analyses have, however, been based mostly on cross-sectional data.

Different Reasons for Quitting

It has long been recognized that there are many reasons for quitting, not just being pushed out of the job by unpleasant circumstances. In addition to "push" factors such as low satisfaction or commitment, there may be "pull" factors such as job opportunities, unexpected offers, or career aspirations (e. g., Lee & Mitchell, 1994; Maertz & Campion, 2004; Mobley, 1977). Most research has, however, concentrated on "push" models, conceptualizing turnover as withdrawal behavior based on attitudes toward the current workplace (e. g., Lee & Mitchell, 1994; Preenen, De Pater, Van Vianen, & Kaijzer, 2011).

Our understanding would benefit from assessing employees' reasons for quitting, associated career expectations, and the kinds of jobs they move into (e. g., Lee et al. 1996; Maertz & Campion, 2004), because the predictors for different types of turnover are likely to be different. Theoretically, it is to be expected that job attitudes are a much stronger predictor for push- than for pull-motivated turnover decisions. By definition, push-motivated turnover is a movement away from one's job, which implies that the perceived costs and benefits for staying (inducement utilities over contribution utilities, in March and Simon's terms [1958, p. 93]) are out of balance. This should be reflected in job attitudes predicting changes. Pull-motivated quitting, on the other hand, would be expected to occur even in the case of reasonably positive attitudes toward one's job and one's organization ("satisfied leaver"; Steers & Mowday, 1981), and this would render attitudes toward the present job and/or organization weaker predictors (see Hulin, Roznowski, & Hachiya, 1985). While such reasoning has been advanced in the literature, empirical evidence regarding these propositions is lacking.

Pull factors are occasionally added to a "withdrawal-framework," usually measured as perceived job alternatives (e. g., Gerhart, 1990; Steel & Landon, 2010). Prediction of turnover by such measures tends to be weak (about $\rho = .15$; meta-analysis by Griffeth et al., 2000). A second measure, ease of movement, assesses labor market conditions, which sometimes interact with turnover intentions in predicting turnover (Carsten & Spector, 1987; Gerhart, 1990). Overall, however, it is doubtful that such measures adequately assess pull factors at the individual level. Ease of movement, whether assessed through perceived alternatives or through the state of the job market, would mainly be expected to help in turning a desire into an intention, or an intention into action (Ajzen, 1991). It would not, however, constitute a strong motivational force in itself, and thus "high perceived ease of movement without an alternative offer may fail to result in turnover" (Gerhart, 1990, p. 467). This may be one of the reasons the relationship between ease of movement and turnover is typically so low. Also, as Steel and Griffeth (1989, p. 852) note, there is a difference between a vague concept of the availability of jobs and a concrete offer. To be considered motivational, job alternatives should therefore be concrete, attractive offers to the individual (cf. also Steel & Landon, 2010). Mobley's (1977) well-known model already considered that an evaluation of alternatives may be stimulated by "unsolicited or highly visible alternatives." Job offers, which sometimes are unsolicited (Gerhart, 1990), might represent instances of an almost pure "pull" motivation to quit.

However, pull factors do not need to be conceptualized exclusively in terms of job offers. The desire to try out something new; to expand one's skills, knowledge, and abilities; to seek a new challenge; or the like are further possibilities. These do not require dissatisfaction with one's current job or organization, and they could be instances of what Bruggemann (1974) called "progressive job satisfaction" (see Büssing, 1992), which implies that one wants to progress to a new job to advance one's possibilities for development (thus the term *progressive job satisfaction;* Bruggemann, 1974). As is the case for concrete job offers, such "developmental turnover" does not require low satisfaction with the current job or low commitment to the current organization; these attitudes therefore should not be strong predictors for all kinds of turnover that are based on pull motivation.

From these considerations we derived the following hypotheses:

Hypothesis 1: Attitudes toward the current work situation (job satisfaction and organizational commitment) will predict turnover for the sample as a whole (e. g., Steel, & Lounsbury, 2009).

Hypothesis 2: The association between attitudes and turnover will be mediated by turnover intention (e. g., Marique & Stinglhamber, 2011).

Hypothesis 3: Attitudes toward the current job will predict push-motivated turnover more strongly than pull-motivated turnover.

Consequences of Turnover

Theoretically, there are good reasons to assume that turnover normally should pay off – that is, result in increased job satisfaction and organizational commitment with regard to the new job situation (see Boswell et al., 2005, 2009). After all, many new jobs are accepted because they promise to provide more rewards than the old one did. As a consequence, one should expect more positive job attitudes after a voluntary job change. Even in those cases where the new situation is not as good as anticipated, one would expect positive attitudes as a consequence of dissonance reduction (Steers & Mowday, 1981). These assumptions are backed by a study by Boswell et al. (2005); however, some studies find little difference in attitudes toward old and new jobs (e. g., Gupta, Jenkins, & Beehr, 1992). Note that, in contrast to antecedents of turnover, its consequences in terms of positive changes in attitudes should not depend on reasons for quitting. In push motivation, an undesirable situation is left for one that is anticipated to be better; in pull motivation, a satisfying situation is left for one that is anticipated to be (even) better, as well. For the current data set, positive consequences of turnover for the job-specific attitude (i. e., job satisfaction) have been found for one time lag (Baillod & Semmer, 1994; Semmer et al., 1996), but the possible effects of turnover on attitudes toward the whole organization (organizational commitment) have not been investigated. When an employee turns over, he or she leaves not only the job but leaves the entire organization too, and there should be consequences for attitudes toward the employing organization as well as for the specific job.

Thus, for the first time, the present data set was analyzed comprehensively with regard to attitudinal consequences of turning over; specifically, we examined both time lags with regard to job satisfaction as well as with organizational commitment, and compared stayers with different types of leavers. We tested the following hypothesis (note that it refers to voluntary turnover):

Hypothesis 4: Turnover will predict a positive change in attitudes toward the new work situation (job satisfaction and organizational commitment) for all leavers (push-motivated, pull-motivated, and other reasons), as compared with participants who have stayed with their employer (e. g., Boswell et al., 2005).

Summary of the Present Study

As criticized by Hom et al. (2012), the typical turnover study does not allow for qualitatively different paths

leading to voluntary quitting. It concentrates on organizations rather than people; people are not followed after they quit, so that their reasons for quitting and their attitudes toward their new situation cannot be determined. The present study was designed so that some of these issues could be studied: It followed people over time, even if they had left their organization, and it repeatedly assessed job attitudes and reasons for quitting.

Previous research with the present data set showed that traditional path analyses using manifest variables could predict turnover between Waves 1 and 2 (Baillod & Semmer, 1994) and between Waves 2 and 3 (Semmer et al., 1996). Regarding the variables in the present study, the results of these previous analyses confirmed well-known basic findings on attitudes and turnover, as described above: Job satisfaction and organizational commitment predicted turnover intention, which, in turn, predicted turnover. In addition, turnover was preceded by a drop in job satisfaction. In the present study, we went beyond those previous reports by examining the implications of push and pull motivation for the predictive power of job attitudes. Furthermore, we report the relationship between turnover and subsequent attitudes toward the new work situation for two time lags. Methodologically, we used latent variables with multiple indicators, reducing measurement bias; relationships of all variables over time were considered simultaneously, including both the variables' stabilities and mutual influences on each other.

Method

Sample and Procedures

The study was done with archival data, collected with confidential, paper-and-pencil questionnaires administered to clients of a private agency that advises computer specialists about career possibilities (cf. Baillod & Semmer, 1994; Semmer et al., 1996). The agency sent the questionnaires in 1990, and they were returned to the researchers at their university address. People returning the questionnaire gave their names and addresses so that we could contact them for two more waves of data; these were used for sending out questionnaires for Waves 2 and 3, after 1 and 2 years, respectively.

The original mailing was to 1,813 people in the German-speaking part of Switzerland. Of these, 638 usable questionnaires and addresses were returned (usable response rate of 37.5 %). At Time 2, 638 of the original participants were located and surveyed. From these, 581 usable questionnaires were returned, and 438 participants took part in Wave 3. A comparison of those who participated in all three waves with those who dropped out after Waves 1 or 2 showed no significant differences in age, organizational commitment, intention to leave, or job satisfaction. The dropout rate was higher in single compared with married participants and among participants in urban areas, however. The sample was predominantly male (92.1 %), worked full-time (92 %), with a mean age of 35 years, and was well educated (over 85 % had multiple years of technical training or university education), married (60 %), and lived in a household with children (46 %), with a mean of about 3 years and 10 months of organizational tenure.

The rate of those who voluntarily quit was almost 22.5 % between Waves 1 and 2, and 16.2 % between Waves 2 and 3. This probably reflects the deterioration of the economic situation in Switzerland during this period; this interpretation is corroborated by the fact that those who left involuntarily increased from 1.9 % to 3.2 % of the respective sample. Since the percentage of those who changed jobs declined, this implies that among those who left, the percentage of those who did so involuntarily more than doubled.

Of the 438 participants comprising the total longitudinal sample, some were excluded from the analyses. In line with the classical definition of voluntary leavers, we excluded those who left involuntarily and those who had announced that they would leave but had not yet left. This led to the exclusion of 58 people, yielding a longitudinal sample of 380 participants for analyses. Of these, 87 (22.9 %) were leavers between Times 1 and 2, and 56 (14.7 %) were leavers between Times 2 and 3. Overall, 103 people (27.1 %) changed their jobs once, 20 (5.3 %) twice, and therefore 123 (32.4 %) at least once. There were 257 stayers throughout the whole 2 years.

Measures

Job Satisfaction was measured in terms of satisfaction with work in general, using a Kunin faces scale, and the sum of five items asking about "job itself intrinsic satisfaction" adapted from Warr, Cook, and Wall (1979). The Kunin (1955) faces scale has a strong affective component, whereas the job itself intrinsic satisfaction scale is more cognitive (see Kaplan, Warren, Barsky, & Thoresen, 2009). We wanted to balance these components and give equal weight to each of them. Rather than using six indicators (each item of the intrinsic satisfaction scale plus the Kunin faces scale), which would have given more weight to the intrinsic satisfaction scale, we therefore used the faces scale and the sum of the intrinsic satisfaction scales as two indicators.

Organizational commitment was measured by the Organizational Commitment Questionnaire (Mowday, Steers, & Porter, 1979), translated into German by the third author (J.B.), but using a 5-point instead of a 7-point Likert scale format. One of the 15 items was excluded, however, because it referred to quitting and might cause item overlap with intention to quit.

Intention to quit was measured with four items (5-point Likert scale). These asked for the subjective probability that the employee would still be in the same company in 6 months and again in 2 years (see Bluedorn, 1982), about the frequency with which participants considered leaving their current position, and for the probability that they would send an application if informed about an attractive job in another company.

Motivation for quitting was measured with six newly created items that asked for the motivational basis for leaving the organization. These corresponded to questions as they would be asked in an exit interview, and were formulated on the basis of interviews with managers and with members of the consulting agency, concerning typical reasons people cite for their decision. Pull motivation was assessed with three items. After the lead-in phrase "I was pleased with my old position," participants were offered three possible reasons: (1) "however I could not resist the new offer"; (2) "but I wanted to try something new"; and (3) "however, it was only one step in my career." Two items related to push motivation: (4) "I had only one wish: Leaving" and (5) "I was not very happy in my old position, and therefore I looked for a new one." The last item referred to private reasons: (6) "My decision did not have much to do with my work; rather, it was due to private reasons." All items were dichotomous (yes/no). Those who answered Item 4 or 5, or both, positively, and who answered Items 1, 2, 3, and 6, negatively, were subsequently defined as push-motivated ($n = 41$ and 15, at Times 2 and 3, respectively). Those who affirmatively answered Items 1 and/or 2 and 3, but who negatively answered Items 4, 5, and 6, were defined as pull-motivated ($n = 17$ and 12, at Times 2 and 3, respectively). Note that both groups included only participants who answered Item 6 negatively – that is, those who did not leave for private reasons.

Analytic Procedures

AMOS 16.0 was used (a) to test the measurement equivalence of the constructs across each measurement point and (b) to model the latent path structure and test its equivalence over the two time lags. ANOVAs were subsequently used to test differences in mean levels.

Unless an indicator is a near perfect measure of the latent variable, several indicators are needed to represent it. Preferably, these are two quite different measures, as is the case for job satisfaction. For the other variables we used the parceling method (e. g., see Brooke, Russell, & Price, 1988; Kelloway, 1996; Little, Cunningham, Sharar, & Widaman, 2002). Commitment was broken into three indicators of five, five, and four items. For turnover intentions, one parcel consisted of two items about the probability of being with this employer in the future, and the other parcel contained two items about the frequency of considering leaving and the probability of filling out an application for another job. Actual quitting was considered to be validly represented by a single indicator (1 = *staying*; 2 = *leaving*).

Results

Relationships of Job Satisfaction, Organizational Commitment, and Turnover Over Time

Means, standard deviations, reliabilities, and correlations for all variables are shown in Table 1. We estimated structural equation models, containing job satisfaction and organizational commitment for three, and intention to quit and quitting for two, measurement points. The fit of an unconstrained (freely estimated) measurement model was acceptable, $\chi^2_{(132)} = 331.12$; $p < .05$; $\chi^2/df = 2.51$; standardized root mean square residual (SRMR) = .06; root mean square error of approximation (RMSEA) = .07; comparative fit index (CFI) = .96. To test metric invariance we specified loadings, error terms, and the autocorrelations of job satisfaction and organizational commitment to be equal across time. This model showed a similar quality of fit, $\chi^2_{(146)} = 370.74$; $p < .05$; $\chi^2/df = 2.54$; SRMR = .07; RMSEA = .07; CFI = .96.

In the structural model, the following paths were constrained to be equal for the two intervals: (1) the stabilities of both job satisfaction and organizational commitment, (2) the paths between job satisfaction and organizational commitment over time, (3) all paths between these variables and intention to quit as well as turnover, and (4) the paths from intention to quit to turnover. Since there was no convincing theoretical rationale for a causal preference of job satisfaction to organizational commitment or vice versa, we estimated the synchronous relationship between commitment and satisfaction as a correlation. For Wave 1, this correlation was estimated freely, because we did not have any predictors for either one of them. For Waves 2 and 3, however, the correlations (modeled as correlated errors of the respective endogenous latent variables) were constrained to be equal. This model is presented in Figure 1.

Especially notable in this model are the relationships between job satisfaction, intention to quit, and turnover. The paths leading from job satisfaction to intention, as well as those from intention to turnover, are very strong. This suggests that the inclusion of intention to quit is redundant, and that the relevant information may actually be contained in a more parsimonious model omitting intention to quit. We therefore estimated models that were identical to the first ones, except that they did not contain intention to quit.

Table 1. Means, standard deviations, reliabilities, and intercorrelations of variables ($354 < N < 379$)

		n	Range	*M*	*SD*	*α*	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)
(1)	T1_KU	1	1–5	3.64	1.01	-													
(2)	T2_KU	1	1–5	3.72	1.01	-	.30												
(3)	T3_KU	1	1–5	3.75	0.94	-	.26	.39											
(4)	T1_JS	5	1–5	3.88	0.78	.82	.60	.20	.25										
(5)	T2_JS	5	1–5	3.93	0.83	.85	.24	.64	.37	.43									
(6)	T3_JS	5	1–5	3.93	0.82	.85	.19	.28	.64	.32	.48								
(7)	T1_COM	14	1–5	2.95	0.69	.90	.52	.21	.29	.46	.27	.19							
(8)	T2_COM	14	1–5	2.94	0.77	.92	.21	.56	.41	.26	.54	.32	.51						
(9)	T3_COM	14	1–5	3.04	0.75	.91	.22	.33	.65	.24	.40	.56	.45	.65					
(10)	T1_INT	4	1–5	2.88	1.10	.88	-.61	-.14	-.13	-.50	-.17	-.11	-.64	-.23	-.17				
(11)	T2_INT	4	1–5	2.51	1.02	.88	-.13	-.65	-.28	-.16	-.57	-.25	-.23	-.68	-.32	.22			
(12)	T3_INT	4	1–5	2.47	0.93	.84	-.16	-.28	-.65	-.19	-.31	-.56	-.26	-.35	-.67	.20	.34		
(13)	Turnover T1–T2	1	1–2	1.23	0.42	-	-.35	.13	.08*ns*	-.25	.11	.05*ns*	-.34	.16	.03*ns*	.54	-.21	-.04	
(14)	Turnover T2–T3	1	1–2	1.15	0.35	-	-.04*ns*	-.27	.14	-.02*ns*	-.15	.15	-.09*ns*	-.19	.19	.15	.37	-.15	.13

Notes. All Pearson correlations $p < .05$ unless noted as nonsignificant (*ns*). T1 = Time 1 (baseline); T2 = Time 2 (1-year follow-up); T3 = Time 3 (2-year follow-up); KU = job satisfaction measured with the Kunin item; JS = job satisfaction scale (content-oriented); COM = commitment scale; INT = intention-to-quit scale; Turnover (1 = *stay*; 2 = *leave*).

The fit of the more parsimonious unconstrained (freely estimated) measurement model was acceptable, $\chi^2_{(81)} = 235.04$; $p < .05$; $\chi^2/df = 2.90$; SRMR = .06; RMSEA = .08; CFI = .96, and significantly better than for the measurement model that included intention to turnover, $\Delta\chi^2_{(51)} = 96.08$; $p < .001$. To test the metric invariance we specified loadings, error terms, and the autocorrelations of job satisfaction and organizational commitment to be equal across time. This model showed a nearly identical fit, $\chi^2_{(95)} = 267.31$; $p < .05$; $\chi^2/df = 2.84$; SRMR = .07; RMSEA = .07; CFI = .96. Given the minimal difference in fit between these two models, we proceeded under the assumption that the psychometric properties of these constructs are equivalent across time.

We then specified a structural model without intention to turnover. Specifying such a model with the same constraints as the one depicted in Figure 1 led to a very good fit, $\chi^2_{(112)} = 195.4$; $p < .05$; SRMR = .06; CFI = .98; RMSEA = .047 (90 % confidence interval; CI [.036, .058]); $\chi^2/df = 1.74$, which is not significantly different from that of a model without these constraints, and so the more parsimonious model is to be preferred. This model is depicted in Figure 2.

The equality constraints imposed imply that all effects are replicated over time, and therefore the model is rather robust with regard to chance effects. The variance explained in this model was acceptable; it varied between 33 % and 36 % for job satisfaction, and between 53 % and 60 % for organizational commitment. For turnover, the model explained between 10 % and 15 % of the variance.

With regard to our first two hypotheses, which referred to the sample as a whole, these results imply that Hypothesis 1 (attitudes predict turnover) was confirmed for job satisfaction but not for organizational commitment. Consequently, Hypothesis 2 (the mediating role of intention) was not confirmed for organizational commitment. The indirect path from job satisfaction via turnover intention to turnover was strong (-.62, 95 % CI [-.84, -.44] for job satisfaction at Time 1 predicting turnover between Time 1 and Time 2, and -.73, 95 % CI [-.99, -.51] for job satisfaction at Time 2 predicting turnover between Time 2 and Time 3). However, paths between intention to quit and turnover were so high (.77 and .85) that intention to quit could be considered to be a redundant variable in the model.

Motivational Components in Turnover

The results concerning motivation to quit are depicted in Figure 3. As predicted, for leavers who were pushed, satisfaction with their former job did predict turnover. For those with pull motivation, however; satisfaction with their former job did not predict turnover – restricting the paths from both job satisfaction and organizational

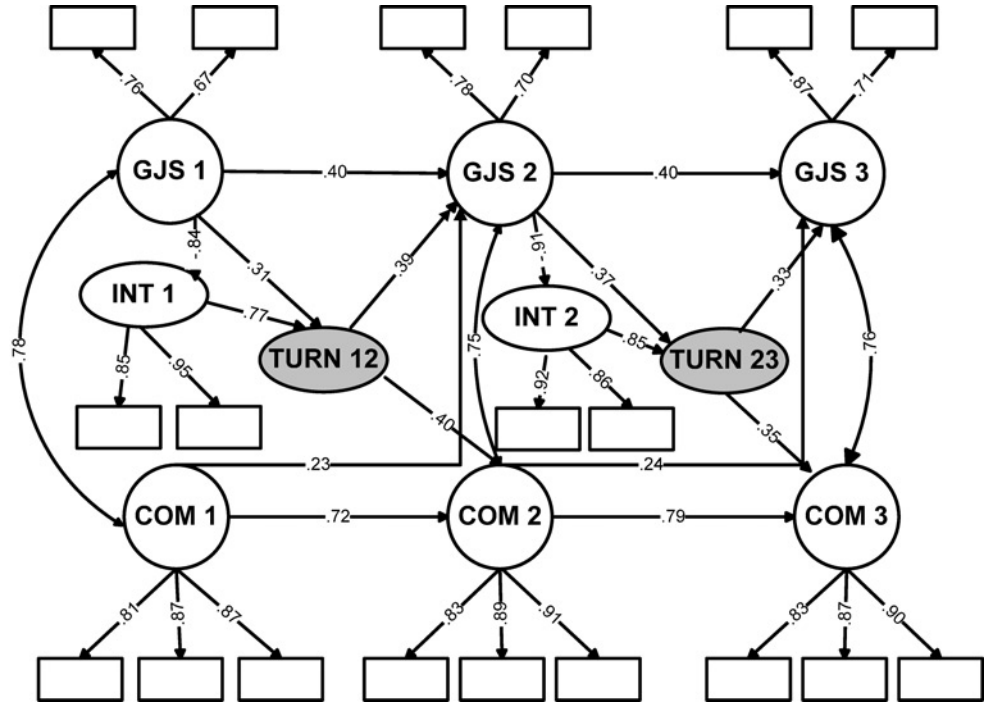

Figure 1. A three-wave model of general job satisfaction, organizational commitment, turnover intentions, and turnover. GJS = general job satisfaction; INT = turnover intention; TURN = turnover; COM = organizational commitment; $\chi^2 = 361.7$, $df = 179$, $p < .01$, SRMR = .06, CFI = .97, RMSEA = .055 (90 % CI [.047, .063]).

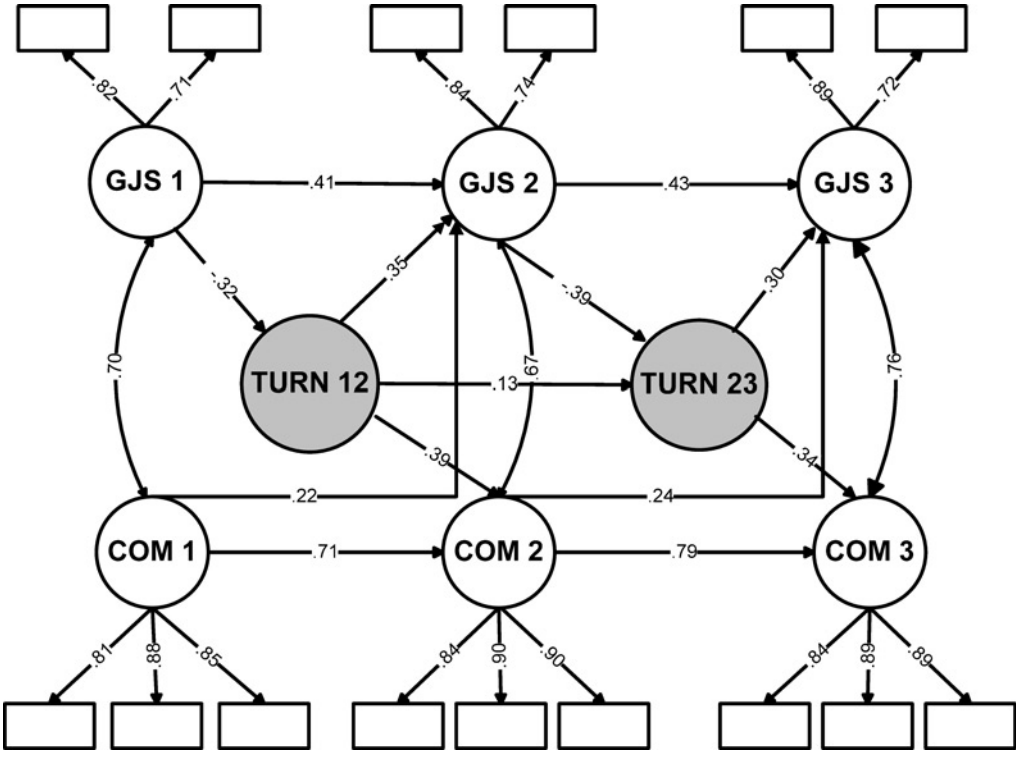

Figure 2. A three-wave model of general job satisfaction, organizational commitment, and turnover. GJS = general job satisfaction; INT = turnover intention; TURN = turnover; COM = organizational commitment; $\chi^2 = 195.4$, $df = 112$, $p < .01$, SRMR = .06, CFI = .98, RMSEA = .047 (90 % CI [.036, .058]).

commitment to zero yielded a very satisfactory model. Again, results were replicated – that is, the paths from Time 1 to Time 2 were not significantly different from those leading from Time 2 to Time 3. Parameters for each model were as follows: $Pull_{(1-2)}$: $\chi^2_{(37)} = 56.6$; $p < .05$; SRMR = .05; CFI = .98; RMSEA = .055 (90 % CI [.022, .085]; $\chi^2/df = 1.53$; $Pull_{(2-3)}$: $\chi^2_{(38)} = 66.0$; $p < .05$; SRMR = .05; CFI = .98; RMSEA = .068 (90 % CI [.039, .094]; $\chi^2/df = 1.74$; $Push_{(1-2)}$: $\chi^2_{(36)} = 75.7$; $p < .05$; SRMR = .04; CFI = .98; RMSEA = .070 (90 % CI [.048, .092]; $\chi^2/df = 2.10$; $Push_{(2-3)}$: $\chi^2_{(37)} = 47.6$; $p = .11$; SRMR = .04; CFI = .97; RMSEA = .055 (90 % CI [.047, .063]; $\chi^2/df = 1.23$. When comparing models with paths that were freely estimated for each group with models where both groups were forced to have the same path coefficients from job satisfaction to turnover (restrained models), the latter were significantly worse in fit, $\Delta\chi^2_{(2)} = 9.3$; $p < .01$, in the model including Time 1 and Time 2; and fit $\Delta\chi^2_{(2)} = 11.7$; $p < .01$, in the model including Time 2 and Time 3. These results imply that Hypothesis 3 (interaction between attitudes and motivation) was confirmed.

Mean-Level Trajectories

To test for differences in the development of job satisfaction and organizational commitment, we conducted ANOVAs with Group as a between-subject factor, with four levels: pull-motivated leavers, push-motivated leavers, other leavers, and control group (i.e., stayers), and Time as a within-subject factor (two levels). These analyses were done separately for the intervals from Time 1 to 2 and from Time 2 to 3. For testing Hypothesis 4, which predicted positive changes in attitudes for all groups of leavers, as compared with stayers, the most important results referred to the significance of the interaction between group and time, and to significant changes in attitudes for the leavers. In addition, we report differences in attitudes at the various time points

Job Satisfaction. For the first time lag, the interaction Group × Time was significant, $F_{(3,489)} = 43.29$, $p < .001$, indicating that the development of job satisfaction was significantly different for the different groups. Specifically, there was a significant increase in job satisfaction for all three groups of leavers between Time 1 and 2 – push motivation: $T_{(54)} = 7.12$, $p < .001$; pull-motivation: $T_{(22)} = 3.44$, $p > .05$; and other reasons: $T_{(38)} = 2.95$, $p > .05$. By contrast, job satisfaction of stayers decreased from Time 1 to Time 2, $T_{(375)} = -5.13$, $p < .001$. These results are in line with Hypothesis 4, which predicted an increase in job satisfaction for all leavers.

In terms of means at Time 1, only push-motivated leavers differed from the other groups ($p < .05$ as indicated by a post hoc Scheffé test), which did not differ from one another. At Time 2, job satisfaction of push-motivated leavers was higher than that of stayers ($p < .05$, Scheffé test); job satisfaction of the other two groups of leavers did not differ from any of the other groups significantly.

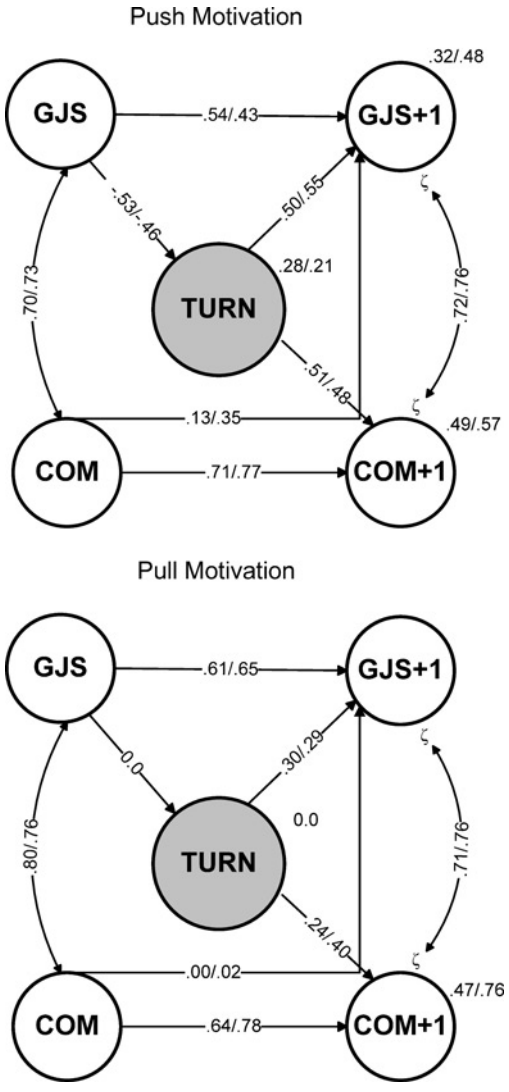

Figure 3. Prediction of turnover for leavers with push vs. pull motivation. GJS = general job satisfaction; TURN = turnover; COM = organizational commitment.

For the second time interval, results were remarkably parallel to the first time interval. Again, the interaction Group × Time was significant, $F_{(3,383)} = 30.16$, $p < .001$, and again, there was a significant increase in job satisfaction for all leavers – push motivation: $T_{(21)} = -5.49$, $p < .001$; pull motivation: $T_{(12)} = -3.28$, $p = .007$; other reasons: $T_{(30)} = -3.10$, $p = .004$. Thus, Hypothesis 3 was confirmed for job satisfaction with regard to the second time lag as well. The only difference worth mentioning refers to means: At Time 3, pull-oriented leavers were significantly higher in job satisfaction than stayers ($p < .05$, Scheffé test). Mean level trajectories for job satisfaction across time for the four groups are depicted in the upper part of Figure 4.

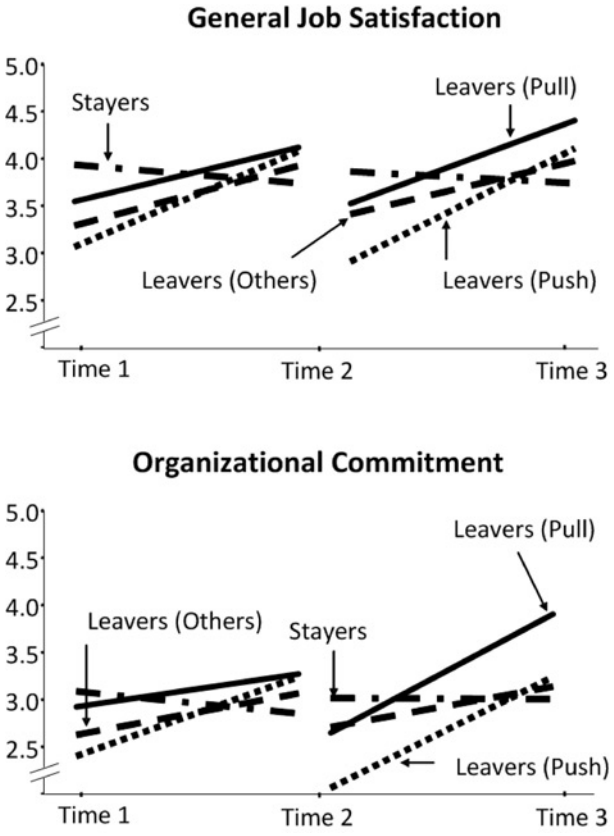

Figure 4. Changes in general job satisfaction and organizational commitment for stayers and for push- vs. pull-motivated leavers.

Organizational Commitment. As shown in the lower part of Figure 4, the pattern for organizational commitment paralleled that for job satisfaction. Again, the interaction Time × Group was significant for the first time lag, $F_{(3,487)} = 52.48$, $p < .001$, indicating that the development of organizational commitment was significantly different for the different groups. All groups of leavers showed an increase in commitment from Time 1 to Time 2 that was significant, as determined by *t* tests for dependent samples – push motivation: $T_{(54)} = 6.88$, $p < .001$; pull: $T_{(22)} = 1.99$, $p = .06$; other leavers: $T_{(38)} = 2.57$, $p < .05$. As with job satisfaction, the commitment of the stayer/control group decreased, $T_{(373)} = -8.31$, $p < .001$. Thus, Hypothesis 3 was confirmed for organizational commitment for the first time lag. For the second time interval, the results were remarkably parallel. Again, the interaction Group × Time was significant, $F_{(3,379)} = 49.91$, $p < .001$, and again, there was a significant increase in organizational commitment for all leavers – push motivation: $T_{(21)} = 6.88$, $p < .001$; pull motivation: $T_{(12)} = 4.75$, $p < .001$; other leavers: $T_{(27)} = 2.67$, $p < .05$; however, it did not significantly change in stayers, $T_{(319)} = -0.45$, $p = .65$. These results confirmed Hypothesis 3 for organizational commitment for each time lag.

With regard to means, again stayers, other leavers, and pull-motivated leavers did not significantly differ from one another at Time 1, whereas the push-motivated leavers were significantly less committed to their organization than both stayers and pull-motivated leavers ($p < .05$, Scheffé test). Groups of leavers did not differ from one another at Time 2, and only push-oriented leavers had significantly higher values than the stayers ($p < .05$, Scheffé test). The results were very similar for the second time lag; the only notable difference was that at Time 2, push-oriented leavers were significantly lower in commitment than other leavers and stayers, and at Time 3, pull-oriented leavers were significantly higher in commitment than all other groups ($p < .05$, Scheffé test).

Discussion

In new analyses with an existing data set by way of structural equation models involving three waves of measurement, we found the following results, which held for both time lags. Job satisfaction, but not organizational commitment, predicted turnover, in spite of organizational commitment's consistent bivariate relationship with turnover (and turnover intentions) here and in previous research (e. g., Griffeth et al., 2000; Richards & Schat, 2011). These results supported Hypothesis 1, but only for job satisfaction, not for organizational commitment. Instead, there was a path from organizational commitment to subsequent job satisfaction, which we had not predicted. In Hypothesis 2, we had postulated that turnover intention would mediate between attitudes and actual turnover, as has often been found; however, turnover intention proved a redundant and unnecessary variable in our analyses.

Most importantly, and in line with our Hypothesis 3, however, job satisfaction predicted turnover only for participants with push motivation (i. e., who wanted to get away from their job), and not for those with pull motivation (i. e., who were attracted to another job). Only push-motivated leavers therefore behaved in a way that conformed to the classical withdrawal model of turnover. Finally, and in line with Hypothesis 4, turnover predicted both subsequent job satisfaction and organizational commitment in the new job, regardless of the reason for quitting.

With regard to our results for the total sample, several points are noteworthy. Our findings are in line with classical turnover research in that job satisfaction does predict turnover. Contrary to many other findings (e. g., Marique & Stinglhamber, 2011; Tett & Meyer, 1993), however; organizational commitment did not contribute to the prediction of turnover once job satisfaction was controlled.

At first sight, our results seem to be yet another variant on the diverse findings regarding the relative strength of job satisfaction and organizational commitment in predicting turnover or turnover intention. Note, however, that in previous research, most results were obtained with a design where all predictors were measured at one time (e. g., see the meta-analysis by Griffeth et al., 2000). Few studies measured both satisfaction and commitment repeatedly (exceptions include Farkas & Tetrick, 1989; who, however, measured actual turnover only once). Our study measured attitudes three times, and turnover twice. The study makes a comparatively strong case for the influence of job satisfaction on turnover, while the impact of organizational commitment is indirect, via its relationship with job satisfaction.

The interaction of job satisfaction and commitment might add information in predicting turnover compared with the simple additive values of both of these work-related attitudes (Blau & Boal, 1987; Wegge, Schmidt, Parkes, & van Dick, 2007). The idea is that individuals are tied to their job both by task-related and organization-related attitudes. If one attitude is low, the other one will have – relatively – maximum influence on turnover intentions. Sagie (1998) showed that organizational commitment predicted voluntary absence from work best if job satisfaction was low. Similarly, one would expect commitment to affect turnover more strongly if job satisfaction is low; however, this should only hold for push-motivated turnover, whereas for pull-motivated turnover, no prediction by job satisfaction, commitment, or their interaction can be expected at all. However, additional tests of such a three-way interaction to predict turnover using logistic regression analysis showed no significant three-way interactions in the present data.

A second important theme is the likely influence of quitting on subsequent attitudes. Our findings strongly suggest that turnover pays off for the individual, being part of a cycle of self-selection and adaptation to one's working situation that can lead to a good fit of the person to the job and the organization (consistent with Boswell et al., 2005; and Wright & Bonett, 1992). Two alternative interpretations deserve future research attention: (1) postmove justification of the decision to quit (i. e., dissonance reduction); and (2) the degree to which improvement in attitudes may be only a temporary "honeymoon" experience (Boswell, et al., 2009); previous analyses of the data set reanalyzed in this study suggest, however, that job satisfaction, although tapering off somewhat, does not return to prechange levels (Semmer et al., 1996; cf. Semmer & Schallberger, 1996).

Basing our study on individuals rather than organizations enabled us to investigate whether there is some stability in quitting (Semmer et al., 1996). There was a weak but significant positive path from quitting between Times 1 and 2 to quitting between Times 2 and 3. Thus, turnover may have a (rather weak) stable component – another interesting topic for future research. For instance, some people might hold unrealistically high expectations, which enhances turnover (Wanous, 1992), or they may lack social competences, making it difficult to develop positive working relationships. Even though somewhat stable individual differences might predict job change (e. g., personality and vocational interests; Wille, De Fruyt, & Feys, 2010), some of the control group *stayers* at Time 2 became *leavers* at Time 3, so that stable traits would not explain the results very well.

The concepts of push and pull motivations are particularly noteworthy, showing that the motivational processes involved in turnover are complex and that the theoretical relationship between job attitudes and turnover may apply to some employees (or situations) more than others. On the other hand, even the push–pull motivation distinction might be overly simple, because there was also a small set of people in a "mixed" motivation category, with a combination of pull and push considerations (14 % and 17.3 % in the two time periods). Future research and theory should aim at developing a better understanding of such a mixed motivation.

A substantial minority of our sample (almost one quarter) reported pull motives for their turnover. As expected, attitudes toward the original job did not predict turnover well for this group because, by definition, it is the characteristics of the new offer that are important rather than characteristics of the current situation. This group deserves more attention in turnover research. It is also interesting to note that some payoff in terms of more positive attitudes occurred not only for people who left for push reasons but also for those with a pull motivation.

For practical considerations, knowing attitudes may be more helpful than knowing intentions. This is because once the intention is there, the decision might be hard to reverse, whereas an attitude that signals a propensity to leave without an intention already being formed might offer some opportunities to intervene if the organization wants to prevent the particular person from quitting.

In this context, the phenomenon of "near-quitting" is of special interest. Near-quitting refers to the indication that one had been on the verge of quitting during a given period (the past year in our case) but did not do it. A substantial proportion of the stayers – about 40 % – indicated that this had been the case. Their attitudes (job satisfaction, organizational commitment, and related variables such as facets of job satisfaction) were lower than those of stayers without near-quitting (Semmer et al., 1996). So near-quitting may be quite a sensitive indicator for a development toward quitting that would be rather easy to assess.

A final remark concerns the practical significance of data like ours. It is sometimes deplored that "satisfaction,

commitment, and intention/cognitions account for a relatively small proportion of turnover variance" (Tett & Meyer, 1993, p. 279). We disagree. Especially in the case of skewed distributions, percentage variance explained often conveys quite an inadequate picture, inducing overly pessimistic interpretations. It has been shown that rather small correlations may well imply large differences in proportions or probabilities (Rosenthal, 1990). For the time lag from Time 1 to Time 2, Baillod and Semmer (1994) followed Rosenthal's advice to convert correlations to other forms of effect size and divided the sample into four groups of approximately equal size, according to their values on the job satisfaction scale at Time 1, they then calculated the percentage of those who had quit by Time 2. The rate of quitting was lowest in the most satisfied group, which contained 6.5 % of future leavers. It rose to 13.7 % and 25.9 % in the second and third groups, respectively, and reached 47.8 % in the least-satisfied group. Thus, the probability of subsequent quitting in the least-satisfied group was more than seven times that of the most satisfied group. The correlation between the two variables was $r = .37$, which implies an explanation of less than 14 % of the variance.

Limitations

The study also had a limitation that should be addressed in future research. The study left out so-called shock experiences that have been reported to be more often the immediate cause of turnover than job dissatisfaction (Holtom, Mitchell, Lee, & Eberly, 2008; Hom et al., 2012). Shock experiences are specific events employees encounter, usually in their workplace, that result in their taking action toward leaving. Attitudes tend to develop more slowly and to persist longer than shock experiences, which could be as fast and immediate as a single event (e. g., a fight with the boss), but both may affect turnover intentions and actions.

We conclude that attitudes are good predictors of turnover, but they are much better predictors for some types of turnover (i. e., push-motivated) than for others (i. e. pull-motivated). In addition, turnover is a good predictor of post-turnover attitudes. Changing jobs is more than just withdrawal; people do not just *go from here*, but they *go somewhere,* and they seem to perceive the new place as a better place. Turnover is often an attempt for a better job, even a career development occasion, and for many people this attempt can be successful.

References

Ajzen, I. (1991). The theory of planned behavior. *Organizational Behavior and Human Decision Processes, 50*, 179 – 211.

Aquino, K., Griffeth, R. G., Allen, D. G., & Hom, P. W. (1997). Integrating justice constructs into the turnover process: A test of a referent cognitions model. *Academy of Management Journal, 40*, 1208 – 1227.

Baillod, J., & Semmer, N. (1994). Fluktuation und Berufsverläufe bei Computerfachleuten [Turnover and career paths among computer specialists]. *Zeitschrift für Arbeits- und Organisationspsychologie, 38*, 152 – 163.

Berset, M. (2005). *Fluktuation bei Berufsanfänger/innen* [Turnover among young people]. (Unpublished master's thesis). Department of Psychology, University of Bern, Switzerland.

Blau, G. J., & Boal, K. B. (1987). Conceptualizing how job involvement and organizational commitment affect turnover and absenteeism. *Academy of Management Review, 12*, 288 – 300.

Bluedorn, A.C. (1982). A unified model of turnover from organizations. *Human Relations, 35*, 135 – 153.

Boswell, W. R., Shipp, A. J., Payne, S. C., & Culbertson, S. S. (2009). Changes in newcomer satisfaction over time: Examining the pattern of honeymoons and hangovers. *Journal of Applied Psychology, 94,* 844 – 858.

Boswell, W. R., Tichy, J., & Boudreau, J. W. (2005). The relationship between employee job change and job satisfaction: The honeymoon-hangover effect. *Journal of Applied Psychology, 90,* 882 – 892.

Brooke, P. P., Russell, D. W., & Price, J. L. (1988). Discriminant validation of measures of job satisfaction, job involvement, and organizational commitment. *Journal of Applied Psychology, 73*, 139 – 145.

Bruggemann, A. (1974). Zur Unterscheidung verschiedener Formen von "Arbeitszufriedenheit" [Distinguishing different forms of job satisfaction]. *Arbeit und Leistung, 28,* 281 – 284.

Büssing, A. (1992). A dynamic view of job satisfaction in psychiatric nurses in Germany. *Work & Stress, 6,* 239 – 259.

Carsten, J. M., & Spector, P. E. (1987). Unemployment, job satisfaction, and employee turnover: A meta-analytic test of the Muchinsky model. *Journal of Applied Psychology, 72,* 374 – 381.

Chang, C., Rosen, C. C., & Levy, P. E. (2009). The relationship between perceptions of organizational politics and employee attitudes, strain, and behavior: A meta-analytic examination. *Academy of Management Journal, 52*, 779 – 801.

DeConinck, J. B., & Stilwell, C. D. (2004). Incorporating organizational justice, role states, pay satisfaction and supervisor satisfaction in a model of turnover intention. *Journal of Business Research, 57,* 225 – 231.

Dickter, D. N., Roznowski, M., & Harrison, D. A. (1996). Temporal tempering: An event history analysis of the process of voluntary turnover. *Journal of Applied Psychology, 81,* 705 – 716.

Farkas, A. J., & Tetrick, L. E. (1989). A three-wave longitudinal analysis of the causal ordering of satisfaction and commitment on turnover decisions. *Journal of Applied Psychology, 74,* 855 – 868.

Gerhart, B. (1990). Voluntary turnover and alternative job opportunities. *Journal of Applied Psychology, 75,* 467 – 476.

Goodwin, R. E., Groth, M., & Frenkel, S. J. (2011). Relationships between emotional labor, job performance, and turnover. *Journal of Vocational Behavior, 79,* 538 – 548.

Grebner, S., Semmer, N. K., Lo Faso, L., Gut, S., Kälin, W., & Elfering, A. (2003). Working conditions, well-being, and job-related attitudes among call centre agents. *European*

Journal of Work and Organizational Psychology, 12, 341–365.

Griffeth, R. W., Hom, P. & Gaertner, S. (2000). A meta-analysis of antecedents and correlates of employee turnover: Update, moderator tests, and research implications for the next millennium. *Journal of Management, 26,* 463–488.

Gupta, N., Jenkins, G. D., Jr., & Beehr, T. A. (1992). The effects of turnover on perceived job quality. *Group and Organization Management, 17*, 431–445.

Holtom, B. C., Mitchell, T. R., Lee, T. W., & Eberly, M. B. (2008). Turnover and retention research: A glance at the past, a closer review of the present, and a venture into the future. *Academy of Management Annals, 2*, 231–274.

Hom, P. W., & Griffeth, R. W. (1991). Structural equations modeling test of a turnover theory: Cross-sectional and longitudinal analyses. *Journal of Applied Psychology, 76,* 350–366.

Hom, P. W., Mitchell, T. R., Lee, T. W., & Griffeth, R. W. (2012). Reviewing employee turnover: Focusing on proximal withdrawal states and an expanded criterion. *Psychological Bulletin, 138*, 831–858.

Hulin, C. L., Roznowski, M., & Hachiya, D. (1985). Alternative opportunities and withdrawal decisions: Empirical and theoretical discrepancies and an integration. *Psychological Bulletin, 97,* 233–250.

Kaplan, S. A., Warren, C. R., Barsky, A. P. & Thoresen, C. J. (2009). A note on the relationship between affect(ivity) and differing conceptualizations of job satisfaction: Some unexpected meta-analytic findings. *European Journal of Work and Organizational Psychology, 18*, 29–54.

Kelloway, E. K. (1996). Common practices in structural equation modeling. In C. L. Cooper & I. T. Robertson (Eds.), *International Review of Industrial and Organizational Psychology, 1996* (Vol. 11, pp. 141–180). Chichester, UK: Wiley.

Kunin (1955). The construction of a new type of attitude measure. *Personnel Psychology, 8*, 65–78.

Lee, T. W., & Mitchell, T. R. (1994). An alternative approach: The unfolding model of voluntary employee turnover. *Academy of Management Review, 19,* 51–89.

Lee, T. W., Mitchell, T. R., Wise, L., & Fireman, S. (1996). An unfolding model of voluntary employee turnover. *Academy of Management Journal, 39,* 5–36.

Little, T. D., Cunningham, W. A., Sharar, G., & Widaman, K. F. (2002). To parcel or not to parcel: Exploring the question, weighing the merits. *Structural Equation Modeling, 9*, 151–173.

Maertz, C. P., Jr., & Campion, M. A. (2004). Profiles in quitting: integrating process and content turnover theory. *Journal of Applied Psychology, 47,* 566–582.

March, J. G., & Simon, H. A. (1958). *Organizations.* New York: Wiley.

Marique, G., & Stinglhamber, F. (2011). Identification to proximal targets and affective organizational commitment: The mediating role of organizational identification. *Journal of Personnel Psychology, 10,* 107–117.

Mobley, W. H. (1977). Intermediate linkages in the relationship between job satisfaction and employee turnover. *Journal of Applied Psychology, 62,* 237–240.

Mowday, R. T., Steers, R. M., & Porter, L. W. (1979). The measure of organizational commitment. *Journal of Vocational Behavior, 14,* 224–247.

Porter, L. W., Crampon, W. J., & Smith, F. J. (1976). Organizational commitment and managerial turnover: A longitudinal study. *Organizational Behavior and Human Performance, 15,* 87–98.

Porter, L. W., Steers, R. M., Mowday, R. T., & Boulian, P. V. (1974). Organizational commitment, job satisfaction, and turnover among psychiatric technicians. *Journal of Applied Psychology, 59,* 603–609.

Preenen, P. T. Y., De Pater, I. E., Van Vianen, A. E. M., & Kaijzer, L. (2011). Managing voluntary turnover through challenging assignments. *Group and Organization Management, 36,* 308–344.

Richards, D. A., & Schat, A. C. H. (2011). Attachment at (not to) work: Applying attachment theory to explain individual behavior in organizations. *Journal of Applied Psychology, 96,* 169–182.

Rosenthal, R. (1990). How are we doing in soft psychology? *American Psychologist, 45,* 775–776.

Sagie, A. (1998). Employee absenteeism, organizational commitment, and job satisfaction: Another look. *Journal of Vocational Behavior, 52*, 156–171.

Semmer, N., Baillod, J., Stadler, R., & Gail, K. (1996). Fluktuation bei Computerfachleuten: Eine follow-up Studie [Turnover among computer specialists: A follow up study]. *Zeitschrift für Arbeits- und Organisationspsychologie, 40*, 190–199.

Semmer, N., & Schallberger, U. (1996). Selection, socialization, and mutual adaptation: Resolving discrepancies between people and their work. *Applied Psychology: An International Review, 45,* 263–288.

Senter, J. L., & Martin, J. E. (2007). Factors affecting the turnover of different groups of part-time workers. *Journal of Vocational Behavior, 71*, 45–68.

Steel, R. P. (2002). Turnover theory at the empirical interface: Problems of fit and function. *Academy of Management Review, 27,* 346–360.

Steel, R. P., & Griffeth, R. W. (1989). The elusive relationship between perceived employment opportunity and turnover behavior: A methodological or conceptual artifact? *Journal of Applied Psychology, 74,* 846–854.

Steel, R. P., & Landon, T. E. (2010). Internal employment opportunity and external employment opportunity: Independent or interactive retention effects? *Military Psychology, 22,* 282–300.

Steel, R. P., & Lounsbury, J. W. (2009). Turnover process models: Review and synthesis of a conceptual literature. *Human Resource Management Review, 19*, 271–282.

Steers, R. M., & Mowday. R. T. (1981). Employee turnover and post-decision accommodation process. *Research in Organizational Behavior, 3,* 235–281.

Tett, R. P., & Meyer, J. P. (1993). Job satisfaction, organizational commitment, turnover intention, and turnover: Path analyses based on meta-analytic findings. *Personnel Psychology, 46,* 259–293.

Wanous, J. P. (1992). Organizational entry: Recruitment, selection, orientation, and socialization of newcomers (2nd ed.). Reading, MA: Addison-Wesley.

Warr, P., Cook, J., & Wall, T. (1979). Scales for the measurement of some work attitudes and aspects of psychological well-being. *Journal of Occupational Psychology, 52,* 129–148.

Wegge, J., Schmidt, K.-H., Parkes, C., & van Dick, R. (2007). 'Taking a sickie': Job satisfaction and job involvement as interactive predictors of absenteeism in a public organiza-

tion. *Journal of Occupational and Organizational Psychology, 80*, 77–89.

Wille, B., De Fruyt, F., & Feys, M. (2010). Vocational interests and Big Five traits as predictors of job instability. *Journal of Vocational Behavior, 76,* 547–558.

Wright, T. A., & Bonett, D. G. (1992). The effect of turnover on work satisfaction and mental health: Support for a situational perspective. *Journal of Organizational Behavior, 13,* 603–615.

Youngblood, S. A., Mobley, W. H., & Meglino, B. M. (1983). A longitudinal analysis of the turnover process. *Journal of Applied Psychology, 68,* 507–516.

Submitted: 25. 09. 2013
Revision submitted: 18. 06. 2014

Prof. Dr. Achim Elfering
Prof. em. Dr. Norbert K. Semmer

Department of Psychology
Fabrikstrasse 8
3012 Bern
Switzerland
E-mail: achim.elfering@psy.unibe.ch
E-mail: norbert.semmer@psy.unibe.ch

Dr. Jürg Baillod

büro a&o
Waaghausgasse 5
3011 Bern
Switzerland

Dr. Martial Berset

University of Applied Sciences and
Arts Northwestern Switzerland FHNW
FHNW School of Applied Psychology
Institute of Humans in Complex Systems
Riggenbachstrasse 16
4600 Olten
Switzerland

Prof. Dr. Terry A. Beehr

Department of Psychology
Central Michigan University
Mount Pleasant, MI 48859
USA