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Hope in Adolescent Careers: Mediating Effects of Work Motivation on Career Outcomes in Swiss Apprentices

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Abstract

Being hopeful is critical for individuals who are engaged in vocational pursuits. However, the empirical research examining how and why hope is related to work and career outcomes remains sparse. We evaluate a model that proposes that dispositional hope affects job performance and turnover intentions through increased work motivation in terms of autonomous goals (reason to motivation), positive affective experience at work (energized to motivation), and occupational self-efficacy beliefs (can do motivation). The hypotheses were tested among 590 Swiss adolescents in vocational education and training using path analysis and multiple mediation analyses. The results revealed that hope was positively related to all three motivational states and supervisor-rated job performance and negatively related to turnover intentions. Positive affect mediated the effects of hope on turnover intentions and performance. Autonomous goals mediated the effects of hope on turnover intentions. These results support the importance of hope to employee well-being and organizational outcomes.

Keywords: hope, work motivation, performance, turnover intentions, adolescent career

Introduction

Hope can be described as the perceived capability to pursue desired goals and to construct pathways toward these goals (Snyder, 2002), and has emerged as an important construct in the positive psychology literature. More recently, hope has been proposed to be a critical resource for vocational pursuits (Juntunen & Wettersten, 2006; Sung, Turner, & Kaechwinda, 2013) and organizational behaviors (Luthans & Jensen, 2002). Research suggests that hope is meaningfully related to pivotal organizational outcomes, such as job performance (Reichard, Avey, Lopez, & Dollwet, 2013). However, we know comparatively little about why hope affects organizational outcomes. In the present study, we investigate the mechanisms that link hope with job performance and turnover intentions among Swiss apprentices by examining the mediating role of work motivation. Specifically, the aims of this study are: (1) to establish the role of hope for job performance and turnover intentions among adolescents in vocational training; (2) to investigate a three factorial model of work motivation in relation to job performance and turnover intentions; and (3) to examine why hope is related to performance and turnover intentions by investigating the indirect effects of hope through increased work motivation.

Hope and Motivation at Work

Hope theory (Snyder, 2002) proposes that hope consists of pathways and agency thinking. Through various learning experiences throughout childhood, individuals form generalized beliefs about their capability to generate feasible routes to desired goals (pathways thinking) and about their capability to initiate and sustain actions that lead to these goals (agency thinking). These generalized beliefs constitute dispositional hope (Snyder, 2002). While dispositional hope shares similarities with other constructs, research has shown that it is conceptually and empirically distinct from generalized self-efficacy beliefs, self-esteem, and optimism (Alarcon, Bowling, & Khazon, 2013; Snyder, 2002).

To explore how hope affects organizational outcomes, we draw on a recent theoretical model of proactive motivation by Parker, Bindl, and Strauss (2010). This model integrates cognitive theories of motivation (specifically modern expectancy-value theory; Eccles et al., 1983) with approaches that place emotion at the center of motivational processes (Seo, Barrett, & Bartunek, 2004) to explain how distal antecedents influence goal-directed behavior. Parker and colleagues (2010) proposed that individual differences influence behavior via their influence on reason to, energized to, and can do motivational states.

Reason to motivational states reflect why individuals engage in a behavior. This concept is similar to the value (or utility) judgments of expectancy theory that reflect the value an individual places on a behavior (Eccles et al., 1983). Parker and colleagues (2010) drew specifically on self-determination theory to explain why individuals engage in certain behaviors. Self-determination theory proposes that individuals' motivations can be placed on a continuum that ranges from controlled to autonomous forms of motivation (Gagné & Deci, 2005). Controlled motivation "involves acting with a sense of pressure, a sense of having to engage in the actions" (Gagné & Deci, 2005, p. 334). In contrast, autonomous motivation concerns "acting with a sense of volition and having the experience of choice" (Gagné & Deci, 2005, p. 333). Behavior driven by autonomous reason to motivation reflects individuals' authentic values and interests and is associated with autonomous goals. Autonomous goals are pursued because they are perceived as being important, interesting or enjoyable, rather than being pursued out of obligation (Sheldon & Elliot, 1999).

Energized to motivation reflects the direct influence of affective experience on goal-directed behavior (Parker et al., 2010; Seo et al., 2004). Affect can trigger behavioral tendencies without the requirement of cognitive processing (e.g., Zajonc, 1980). Specifically, positive affect is likely to broaden

individuals' thought-action repertoire (Fredrickson, 2001) and can provide individuals with a sense of energy (Seo et al., 2004).

Finally, can do motivational states reflect expectancies, individuals' assessments of how likely they are to be successful when they engage in a specific behavior (Eccles et al., 1983). Can do motivation includes efficacy expectations, individuals' beliefs "that a particular course of action will produce certain outcomes" (Bandura, 1977, p. 193). In the work context, these expectations are manifested as occupational self-efficacy, the conviction that work-related tasks can be successfully fulfilled (Rigotti, Schyns, & Mohr, 2008).

The model comprising reason to, energized to, and can do motivation can be applied for explaining how individual differences, such as dispositional hope, shape goal-directed behavior. It provides an alternative to previous approaches in the literature that have primarily focused on the cognitive processes through which hope is likely to influence job performance. For example, Peterson and Byron (2008) found that individuals who are high in hope generate greater numbers of solutions to a hypothetical problem and produce solutions of better quality. We propose that the effects of hope on performance and turnover intention are, at least in part, due to motivational processes. We expect hope to affect these outcomes through its effects on the three motivational states of autonomous goals (reason to), positive affect (energized to), and occupational self-efficacy (can do).

Hope and Autonomous Goals

Because high-hope individuals are by definition confident that they can attain their goals and can easily think of a number of alternative pathways to reach their goals (Snyder, 2002), we argue that hope is likely to be associated with an increased setting of autonomous goals. Even when they are facing constraints, hopeful individuals will have a greater sense of control and autonomy, which will make them more likely to set goals that they see as interesting or

important. Indirect support for these assumptions comes from two empirical studies that found a moderate positive correlation between hope and academic autonomy (Van Ryzin, Gravelly, & Roseth, 2009) and between hope and personal autonomy among adolescents (Shogren, Lopez, Wehmeyer, Little, & Pressgrove, 2006). This leads to our first hypothesis:

Hypothesis 1: Dispositional hope is positively related to autonomous goals.

Hope and Positive Affect

Affect is strongly tied to the evaluation of goal progress. Encountering barriers in one's goal pursuit leads to negative feelings, such as anger and anxiety, whilst the perception of oneself as advancing toward a positive state, particularly an autonomous goal, leads to positive affective states (Koestner, Lekes, Powers, & Chicoine, 2002; Snyder, 2002). We thus expect that high-hope individuals will, based on their more positive evaluations of their abilities to attain goals, experience greater positive affect than low-hope individuals. Empirical evidence confirms that hope predicts future positive affect (Ciarrochi, Heaven, & Davies, 2007) and that hope in the work context is positively related to positive affect (Rego, Sousa, Marques, & Cunha, 2012). The second hypothesis is:

Hypothesis 2: Dispositional hope is positively related to positive affect at work.

Hope and Occupational Self-Efficacy

The general conviction of high-hope individuals that their goals can be met should also fuel occupational self-efficacy, the belief that work-related tasks can be successfully completed. Additionally, high-hope employees are more likely to conceive different pathways to reach their goals when confronted with challenges, which should also enhance their self-efficacy beliefs. In support of these arguments, empirical studies have found positive correlations between dispositional hope and generalized (Alarcon et al., 2013) and occupational (Peterson & Byron, 2008) self-efficacy beliefs as well

as between work-specific hope and career decision-making self-efficacy (Juntunen & Wettersten, 2006). This leads to the third hypothesis:

Hypothesis 3: Dispositional hope is positively related to occupational self-efficacy beliefs.

The Mediating Effect of Motivation between Hope and Job Performance

Performance reflects the successful attainment of goals that contribute to the organization (Rotundo & Sackett, 2002). More specifically, hope should be related to job performance because high-hope employees are more persistent at completing their tasks, are less affected by obstacles, and deal more effectively with stressful work situations. Moreover, high hope employees can be assumed to possess greater numbers of strategies to attain their goals and to be more motivated to achieve those goals (Peterson & Byron, 2008). Empirical research has reported positive relationships between hope and self-rated, supervisor-rated, and objective measures of job performance (Reichard et al., 2013). We consequently expect:

Hypothesis 4: Dispositional hope is positively related to supervisor-rated job performance.

We further propose that the positive link between hope and job performance can partially be explained by increased motivation at work. Because autonomous goals are pursued with more effort they are more likely to be attained (Sheldon & Elliot, 1999), which results in a better rating of job performance from supervisors (Greguras & Diefendorff, 2010). Positive affect facilitates engagement in action and approach behaviors (Bindl, Parker, Totterdell, & Hagger-Johnson, 2012) and increases positive valence, instrumentality, and outcome expectations (Erez & Isen, 2002). The consequent notion that positive affect is related to better performance has been supported in meta-analytic research (e.g., Shockley, Ispas, Rossi, & Levine, 2012). Finally, individuals with high occupational self-efficacy set more challenging goals, which oftentimes lead to superior performance and increased resilience in the

face of obstacles due to increased effort and continued goal pursuit (Latham & Pinder, 2005). In line with these arguments, occupational self-efficacy has been shown to be related to better work performance (e.g., Stajkovic & Luthans, 1998). We hence propose:

Hypothesis 5: The relationship between dispositional hope and job performance will be mediated by work-related motivation, which is comprised of autonomous goals, positive affect, and occupational self-efficacy beliefs.

The Mediating Effect of Motivation between Hope and Turnover Intentions

Theoretically, high-hope employees will have more positive outlooks about their work and career prospects because they can more easily envision pathways to their desired career goals and more strongly believe in their capabilities to achieve those goals. Consequently, high-hope employees will also be more resilient in the face of setbacks at work and deal more easily with stressful work situations. Indirect support for the negative relationship between hope and turnover intentions stems from studies that have found that psychological capital (PsyCap), which is the common core of hope, optimism, generalized self-efficacy beliefs, and resilience, is negatively correlated with turnover intentions (Avey, Reichard, Luthans, & Mhatre, 2011) and that hope is positively correlated with affective organizational commitment (Reichard et al., 2013). Thus, we expect:

Hypothesis 6: Dispositional hope is negatively related to turnover intentions.

Again, we assume that this relation can be partially explained by the mediating effect of increased motivation at work. Sherman (1989) found that feelings of autonomy and congruence between supervisor and personal career goals are related to greater need satisfaction and lower turnover intentions. This relationship may be explained by the facilitation of greater job satisfaction and well-being by autonomous goals, which in turn, are likely to lead to lower turnover intentions (Gagné & Deci, 2005).

Regarding positive affect at work, individuals that feel good at work should have a more favorable evaluation of their job, and experience less need to evade unpleasant or stressful situations at work because they possess better coping strategies (Thoresen, Kaplan, Barsky, Warren, & de Chermont, 2003). Meta-analytic research provides support for the argument that workers who feel good at work are less likely to think about leaving their job (Thoresen et al., 2003). Occupational self-efficacy entails the belief that one is prepared to deal with the challenges and requirements of the work environment and thus should also be related to fewer turnover intentions (e.g., Panatik, O'Driscoll, & Anderson, 2011). We hence propose:

Hypothesis 7: The relationship between dispositional hope and turnover intentions will be mediated by work-related motivation, which is comprised of autonomous goals, positive affect, and occupational self-efficacy beliefs.

To establish the unique effect of hope, we controlled for individuals' core self-evaluations. Core self-evaluations represent the "basic, fundamental appraisal of one's worthiness, effectiveness, and capability as a person" (Judge, Erez, Bono, & Thoresen, 2003, p. 304). By controlling for the effects of core self-evaluations, we determine the effects of hope via work motivation on job performance and turnover intentions over and above the effect of an established personality disposition.

Context of the Present Study

Our study was conducted in Switzerland, where approximately 70% of all adolescents are enrolled in one of over 200 different types of two- to four-year vocational education trainings (Federal Office for Professional Education and Technology, 2013). Adolescents work as apprentices in a company for three to four days a week and take classes in professional schools for one to two days per week. They receive a (reduced) salary and the employers expect them to perform to their best knowledge and ability. Our study participants were thus actively

engaged in a working role and engaged in a student role to a lesser degree. Hence the investigation of work motivation and organizational variables is pertinent among this group. A longitudinal study of Swiss adolescents in vocational education and training showed that dispositional hope affects perceived vocational competency, which supports the importance of hope among this group (Wandeler & Bundick, 2011). Despite the fact that vocational education and training is receiving increasing international attention from policy makers due the high rates of youth unemployment in many countries (International Labour Organization, 2012), adolescents in vocational education and training are underrepresented in the scientific literature: Most research that investigated hope in the work domain used adult samples.

Method

Participants

A total of 590 apprentices in their first year of vocational education and training participated in our study, 53% female, median age 17 years ($M = 18.11$, $SD = 2.78$). Participants were training in nine different vocations: construction draftsman and -woman (6%); electrician (6%); housekeeping professional (14%); IT specialist (2%); machine mechanic (6%); nurse (9%); office clerk (16%); plasterer (12%); and sales clerk (30%).

Procedure

We recruited participants through schools in German-speaking Switzerland where apprentices attend mandatory theoretical classes. We contacted 18 schools and nine agreed to participate. While we did not attempt to obtain a sample that is fully representative of the over 200 different apprenticeship types existing in Switzerland, we ensured that our sample was diverse in terms of type of vocational education and training by contacting schools specializing on different types of vocational trainings (e.g., crafts, industry, health). Data collection took place during regular class hours in the schools' computer room and was supervised by the

teachers. The survey was filled out online. The students were free to decline participation. We offered a prize drawing for 21 gift vouchers with a total value of approximately 880 USD as incentive. At the end of the survey, participants were asked whether they would be willing to provide contact details of their supervisors at work and permission to contact them. We obtained contact information for 172 supervisors from 210 students, and 23 students named shared supervisors. The supervisors were contacted within one to two months and asked to fill out a short questionnaire about the job performance of their apprentice. This process resulted in 136 performance ratings that were provided by 112 supervisors (65% response rate). Comparisons of the subsample with performance ratings to the remainder of the sample indicated that the two subsamples did not differ in any of the study variables. The supervisor ratings of job performance reduce common method bias in the respective analyses.

Measures

Table 1 presents the mean scores, standard deviations, Cronbach's alpha reliability estimates, and bivariate correlations of the study variables. The original scales were independently translated into German by the first two authors, both of whom are native German speakers and very familiar with the constructs. Any differences in the translation were discussed in a reconciliation meeting, and a final version of each item was agreed upon. This procedure is particularly useful for ensuring naturalness, connotation, and comprehensibility, which are often compromised by the employment of back-translation approaches (Van de Vijver & Leung, 1997). In the following paragraphs, we introduce the scales that we used in the data collection together with validity and reliability information from previous research.

Hope. Dispositional hope was assessed with the six-item (e.g., "I think I am doing pretty well") children's hope scale (Snyder et al., 1997) on a six-point scale from 1 (*none of the time*) to 6 (*all of the time*). The scale has simple and general wording and

is specifically targeted at children and adolescents with established validity for this group (Snyder, 2005). For example, the measure correlates with adolescents' self-perception of competency and with an approach attitude towards goals (Snyder et al., 1997). Reliabilities in the initial validation of the scale (Snyder et al., 1997) ranged from .72 to .86. In our study the hope scale reached an alpha of .82.

Autonomous goals. Autonomous goal pursuit was measured with Little's (1983) personal project analysis, which consists of an open format question that asks participants to provide three goals for their vocational future. Participants were subsequently asked four questions about each of their goals that were taken from Sheldon and Elliot (1999). These questions assessed intrinsic (i.e., "You pursue this striving because of the fun and enjoyment it provides you"), identified (i.e., "You pursue this striving because you really believe it's an important goal to have"), introjected (i.e., "You pursue this striving because you would feel ashamed, anxious or guilty if you didn't"), and extrinsic (i.e., "You pursue this striving because somebody else wants you to or because the situation demands it") reasons for pursuing each goal. The answers were provided on seven-point Likert scales that ranged from 1 (*not at all for this reason*) to 7 (*completely for this reason*). Following Sheldon and Elliot (1999), we aggregated the scores for each goal into a composite measure by subtracting the introjected and extrinsic scores from the intrinsic and identified scores. This procedure has been applied to assess the autonomy of work-related goals and showed significant relations to core self-evaluations and life satisfaction among undergraduate college students (Judge, Bono, Erez, & Locke, 2005). Hirschi, Lee, Porfeli, and Vondracek (2013) found the measure to be related to proactive career behaviors in a sample of German students and reported a reliability of .72. In our sample, this measure shows a same reliability estimate of .72.

Table 1*Descriptive Statistics and Bivariate Correlations*

	<i>M</i>	<i>SD</i>	α	1	2	3	4	5	6
1. Hope	4.37	0.82	.85	-					
2. Autonomous goals	4.51	3.29	.72	.15***	-				
3. Positive affect	4.03	1.15	.74	.26***	.18***	-			
4. Occup. self-efficacy	4.34	0.61	.74	.60***	.17***	.27***	-		
5. Job performance	4.94	0.68	.93	.22*	.22*	.32***	.34***	-	
6. Turnover intentions	0.25	0.38	.81	-.28***	-.17***	-.31***	-.27***	-.39***	-
7. Core self-evaluations	3.71	0.57	.85	.56***	.14	.33***	.53***	.23**	.38***

Note. $N = 590$ for correlations not including job performance. $N = 136$ for correlations involving job performance. Turnover intentions was transformed using the natural logarithm \ln . * = $p < .05$, ** = $p < .01$, *** = $p < .001$.

Positive affect. High activated positive affect was assessed using four items (“enthusiastic”, “excited”, “inspired”, “joyful”) from the multi-affect indicator by Warr, Bindl, Parker, and Inceoglu (2014). We asked participants to remember the preceding week and to indicate how they felt while at work on a seven-point scale ranging from 1 (*never*) to 7 (*always*). Research established positive correlations of the measure with proactivity, extrarole performance, and proficiency at work among working adults (Warr et al., 2014). Warr et al. (2014) report reliabilities from .87 to .90. In our sample we attained an alpha of .74.

Occupational self-efficacy. Occupational self-efficacy beliefs were assessed with the six-item (“I feel prepared for most of the demands in my job”) German version of the short occupational self-efficacy scale by Rigotti and colleagues (2008) on a six-point scale that ranged from 1 (*not at all true*) to 6 (*completely true*). Construct validity was supported in prior research with positive correlations to job performance, job satisfaction, and organizational commitment among working adults and the reported reliability was .84 (Rigotti et al., 2008). Hirschi (2012) used the scale in a younger sample of German students, finding relationships with core self-evaluations, the perceived meaningfulness of one’s work, and calling. He

reported an alpha of .87. This measure reached an alpha of .74 in our sample.

Job performance. The supervisors evaluated their apprentices on five items (e.g., “The student executes the tasks that are expected”) assessing in-role job performance (i.e., the extent to which the apprentice meets the formally expected quality and quantity of work output) with the measure from Staufenbiel and Hartz (2000). The items were rated on a seven point scale ranging from 1 (*does not apply at all*) to 7 (*does fully apply*). In previous research, this instrument showed strong relationships with job satisfaction and affective commitment among working adults and attained a reliability of .91 (Staufenbiel & Hartz, 2000). The reliability in our sample reached .93.

Turnover intentions. Turnover intentions were assessed using a four-item (e.g., “I am planning to look for a new (apprenticeship) position”) measure by Kelloway, Gottlieb, and Barham (1999) on a five-point scale ranging from 1 (*strongly disagree*) to 5 (*strongly agree*). The original scale was minimally adapted to match the apprenticeship context: We replaced “new job” with “new (apprenticeship) position” and “this organization” with “this apprenticeship training firm”. In previous research, high scale scores were positively

related to stress (Kelloway et al., 1999), exhaustion, cynicism, and negatively related to job satisfaction and organizational commitment (Leiter, Laschinger, Day, & Oore, 2011). Kelloway et al. (1999) report reliabilities of .92 and .93 in samples of adult workers. The obtained scores showed a substantially skewed dispersion, indicating that for most apprentices the possibility to turnover is perceived as unlikely. We hence used a log-transformation in the subsequent analyses. The reliability in our sample was .81.

Core self-evaluations. We applied the 12-item (e.g., "I am confident I get the success I deserve in life") German version (Stumpp, Muck, Hülshager, Judge, & Maier, 2010) of the core self-evaluations scale with a five-point response scale from 1 (*strongly disagree*) to 5 (*strongly agree*). The scale is positively related to job performance and job satisfaction (Judge et al., 2003) as well as to affect and organizational commitment (Stumpp et al., 2010). Stumpp and colleagues reported scale reliabilities for the German version ranging from .81 to .87. In a sample of German students, Hirschi (2012) reported a reliability of .85, the same value as in our sample.

Results

Measurement Model

To evaluate the empirical applicability of the measures with an adolescent sample and test the empirical distinctness of the measures, we established the quality of our measurement model by conducting a series of confirmatory factor analyses (CFA) using MPlus version 6 (Muthén & Muthén, 2010). First, we tested the empirical distinctness of the three motivational measures (i.e., autonomous goals, positive affect at work, occupational self-efficacy). The proposed three-factor model provided a good fit ($SB-\chi^2 = 90.91$, $df = 62$, $p = .01$, CFI = .98, TLI = .97, RMSEA = .03, SRMR = .04) and fit the data significantly better than a one-factor model or any of the three possible two-factor models combining two motivational constructs into one factor (all $p < .01$). Second, we examined the distinctiveness of hope from each of the three motivational constructs. In all cases,

the two-factor models separating hope from the motivational variable were superior to the one-factor model (each $p < .001$). Finally, we assessed the quality of the entire measurement model that included hope, the three motivational factors, job performance, and turnover intentions. This model fit the data well ($SB-\chi^2 = 520.53$, $df = 335$, $p < .001$, CFI = .95, TLI = .95, RMSEA = .03, SRMR = .06), and the separation of hope into the agency and pathways factors did not enhance the model fit ($\chi^2 = 26.01$, $df = 37$, $p = .91$).

Hypothesis Testing

The results in Table 1 show that hope was positively related to autonomous goals, positive affect at work, and occupational self-efficacy, supporting Hypotheses 1, 2, and 3, respectively. Moreover, hope was also significantly correlated with higher job performance and lower turnover intentions, supporting Hypotheses 4 and 6, respectively. Hypotheses 5 and 7 regarding the mediation effects were tested with a bias-corrected multiple mediation analysis with 5,000 bootstrapped samples (Preacher & Hayes, 2008) in Mplus. Job performance and turnover intentions were also regressed on core self-evaluations to control for the effect of competing personality variables. Some students did not complete all of the scales, and performance ratings were available for only 136 students. To avoid listwise deletion, which can bias study results (Graham, 2009), the missing scores on single measures and the missing performance ratings were estimated using maximum likelihood estimation with robust standard errors (MLR) in Mplus. This procedure yields accurate parameter estimates even for relatively large amounts of missing data (Graham, 2009).

The results of the path model (Figure 1) show that the direct effects of hope on job performance and turnover intentions were not significant. Autonomous goals and positive affect, but not occupational self-efficacy, exhibited significant specific direct positive effects on job performance and significant specific direct negative effects on turnover intentions.

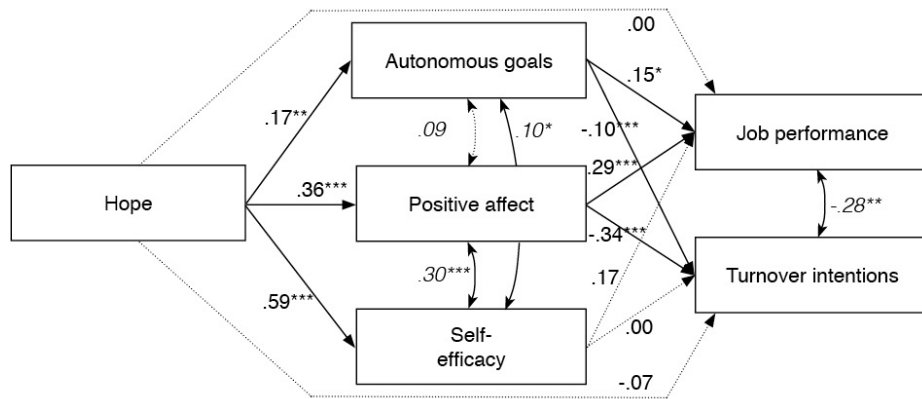


Figure 1. $N = 590$. Path model of dispositional hope, the three motivational variables autonomous goals, high activated positive affect at work, occupational self-efficacy beliefs, supervisor-rated job performance, and turnover intentions. Effects of core self-evaluations on turnover intentions and job performance were controlled for. Coefficients are standardized. Correlations are shown in italics. One-tailed significance tests were applied. * = $p < .05$, ** = $p < .01$, *** = $p < .001$

Table 2

Indirect Effects from Hope on Job Performance and Turnover Intentions, Controlled for Core Self-Evaluations

	Point estimate	SE	Bootstrapping BC	
			Lower	Upper
<i>Total indirect effects</i>				
Hope → Job performance	.23***	.04	.17	.29†
Hope → Turnover intentions	-.14**	.04	-.21	-.05†
<i>Specific indirect effects</i>				
Hope → AG → Job performance	.03	.02	-.01	.06
Hope → PA → Job performance	.10***	.02	.07	.14†
Hope → SE → Job performance	.10	.07	-.02	.22
Hope → AG → Turnover intentions	-.02**	.01	-.03	-.01†
Hope → PA → Turnover intentions	-.12***	.03	-.16	-.08†
Hope → SE → Turnover intentions	.00	.04	-.07	.07

Note. $N = 590$. BC = Bias-corrected; CI = Confidence-interval; AG = Autonomous goals; PA = Positive affect; SE = Occupational self-efficacy. Standardized indirect effects. Confidence intervals obtained with 5000 bootstrapped samples. † = 95%-CI does not include zero. ** = $p < .01$, *** = $p < .001$.

Next, we evaluated the results of the multiple mediation analysis using one-sided 95% bias-corrected confidence intervals (Table 2). The results revealed significant total indirect effects of hope on both job performance and turnover intentions. This supports Hypotheses 5 and 7 that proposed that the relationship between hope and performance and between hope and turnover intentions is mediated by work motivation. Regarding the specific indirect effects, we found significant indirect effects on job performance via positive affect but not via the other two motivational variables autonomous goals and occupational self-efficacy. There were significant indirect effects of hope on turnover intentions via autonomous goals and positive affect at work but not via occupational self-efficacy.

Discussion

The general aim of the present study was to explore how and why dispositional hope is related to job performance and turnover intentions in a sample of adolescents who had recently started vocational education and training. Specifically, our aims were to investigate if hope is related to job performance and turnover intentions in this group, if work motivation can be investigated as a three factorial model in relation to job performance and turnover intentions, and if the relationships between hope and these two outcomes are mediated by the three motivational states: reason to (autonomous goals), energized to (positive affect at work), and can do (occupational self-efficacy beliefs).

The Relationship of Hope with Job Performance and Turnover Intentions

Our findings show that dispositional hope is associated with increased supervisor-rated job performance and reduced turnover intentions. This is in line with Hypotheses 4 and 6 of our study. We replicated previous findings regarding the relationships between hope and job performance among adults and managers (e.g., Peterson & Byron, 2008) and extended these findings to a sample of adolescents in vocational education and training.

Moreover, we expand research linking PsyCap with turnover intentions among adult workers (Avey et al., 2011) by showing that hope is related to turnover intentions among adolescents in vocational education and training.

Our results revealed that the three investigated factors of motivation (reason to, energized to, can do) were positively related to hope, performance, and turnover intentions. Our findings that dispositional hope was positively related to each of the three motivational states supports our first three hypotheses, is in accordance with previous findings of positive relationships between hope and motivation (e.g., Kenny, Walsh-Blair, Blustein, Bempechat, & Seltzer, 2010), and further extends this research into the organizational domain. These findings support the notion that the three-dimensional model of proactive motivation proposed by Parker and colleagues (2010) is suited for investigating work-related motivation among adolescents. Although Parker and colleagues proposed that the three motivational states are informed by a series of dispositional variables, hope has not yet been explicitly considered as an antecedent of motivation.

Previous research suggested that the relationship between hope and work-related performance is mediated by cognitive mechanisms (Peterson & Byron, 2008). Extending upon this research, we found that the relationship between hope and job performance and between hope and turnover intentions can also be explained by increased work motivation. This mediation is in line with our hypotheses. By proposing and empirically evaluating this mediating mechanism, our study addressed the need to study how more general personal dispositions (e.g., dispositional hope) are related to organizational outcomes. Our results provide support for the assumption that motivational variables are important in this regard (Barrick & Mount, 2005).

Examining more closely the proposed mediation, we found a significant indirect effect of hope on job performance through increased positive affect at

work. One possible explanation for this effect is that hopeful individuals are more likely to attain their goals at work (Snyder, 2002) and that goal progress produces positive affect (Koestner et al., 2002). Such positive emotions at work would in turn promote job performance due to their positive effects on engagement in proactive work behaviors, effort, and persistence (Bindl et al., 2012; Seo et al., 2004). The positive feelings at work would also lead to comfort and affective commitment (Maertz & Griffeth, 2004), consequently leading to lower turnover intentions.

We also found support for an indirect effect of hope on turnover intentions via autonomous career goals. We assume that hopeful individuals pursue goals that are more autonomous because they perceive their goals as more easily attainable and develop an increased number of pathways to achieve them (Snyder, 2002). Consequently, individuals with more autonomous goals are less likely to plan to leave their apprenticeship firm because their current workplace fulfills their psychological needs.

Contrary to our expectation, we did not find an indirect effect via occupational self-efficacy on either performance or turnover intentions. However, we established a significant bivariate relationship between hope, occupational self-efficacy, and the two outcome variables. This finding accords with previous research regarding the positive relationship between self-efficacy and job performance (Stajkovic & Luthans, 1998) and between self-efficacy and turnover intentions (Bauer, Bodner, Erdogan, Truxillo, & Tucker, 2007). In a series of post-hoc regression analyses, we established that neither the shared variance with dispositional hope nor core self-evaluations could explain the nonsignificant indirect effects from hope via occupational self-efficacy on performance and turnover intentions. Rather, we found that the inclusion of positive affect and autonomous goals in the regression model reduced the specific variance explained by occupational self-efficacy in job performance and turnover intentions to nonsignificant levels. This suggests that although the

three motivational states are distinct, their empirical overlap might diminish their specific effects on organizational outcomes.

Limitations and Future Research

Our study has several limitations. First, our results are based on cross-sectional data. Thus, we cannot make any empirically based causal conclusions. Other theoretical explanations might also be valid. For example, it is conceivable that better job performance leads to higher hope. Thus future research should explore the effects of hope on motivation, job performance, and turnover intentions in longitudinal studies and using experimental approaches. A further limitation of our study is that aside from job performance, all study variables were obtained by self-ratings. Therefore, it is possible that common method bias affected the observed relationships. In addition, some of the scales we used have not previously been validated in samples of German-speaking adolescents. A final limitation is that our results were based on a particular sample that is distinct in important ways from adolescent samples in other countries. Specifically, it is possible that the importance and prevalence of vocational education and training and the generally low youth unemployment rates in Switzerland affect the relationship between hope and work outcomes. Our findings thus need to be replicated with work-bound adolescents in other countries and with adults.

Practical Implications and Conclusion

There are a series of practical implications that arise from the results of our study. Our findings suggest that high-hope apprenticeship candidates are likely to pursue autonomous goals and to experience positive affect at work, and that they will consequently perform better and exhibit lower turnover intentions. Accordingly, the promotion of hope might be an important objective for career counselors, especially when counseling adolescents, as they might particularly benefit from a good start into their professional lives. Empirical evidence on interventions targeting hope in the vocational and

work context showed encouraging results: Feldman and Dreher (2012) found that even a short intervention could successfully increase hope in college students.

One possible approach for increasing hope would be to encourage students to specify goals regarding their future career path and to develop subgoals consisting of single steps needed to attain their goals as well as reflecting on available resources to attain them. This could increase students' agency thinking (Luthans & Jensen, 2002). Students could equally be encouraged to envision different ways of how to attain their vocational goals, enhancing pathways thinking. This could be further elaborated by discussing under which circumstances a specific pathway to a vocational goal should be chosen and which strategies could be applied when confronting obstacles for goal achievement (Luthans & Jensen, 2002).

In line with the findings of our study, we also suggest that not only hope but also the herein discussed motivational states – reason to, energized to, and can do – should be targeted to affect organizational outcomes. Letting apprentices participate in the setting of work goals could promote the availability of autonomous goals. Facilitating a supportive and agreeable social environment could increase apprentices' emotional well-being and positive emotions at work. Finally, giving challenging yet realistic job assignments and offering suitable role models and support is likely to enhance students' occupational self-efficacy.

In summary, our results suggest that hope is an important aspect in apprentices' career development and that motivation, particularly positive affect at work but also autonomous goals, should be considered as possible mechanisms through which hope influences positive organizational outcomes. The comprehensive model of motivation that included reason to, energized to, and can do components was appropriate for studying motivation in the work context. Finally, we conclude that nurturing hope in the workforce might lead to higher affective well-

being, the pursuit of goals that are perceived as more important and interesting, and ultimately, to a more efficient workforce.

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