

Examining the effects of perceived relevance and work-related subjective well-being on individual performance for co-op students

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The purpose of this study was to examine the relationships between co-op students' perceived relevance of their work term, work-related subjective well-being (SWB), and individual performance at work. Data were collected using a survey of co-op students ($n = 1,989$) upon completion of a work term. Results of regression analyses testing a conditional process model show that perceived relevance has a significant indirect influence on performance through work-related SWB. These findings point to the significant role of connections between students' post-secondary studies and their work. Students who see a greater degree of connection between the work term and post-secondary are more likely to feel satisfied and engaged at work, and in turn are more likely to perform well. These results and their implications for co-op program administrators and organizations that employ co-op students are discussed. (*Asia-Pacific Journal of Cooperative Education*, 2016, 17(2), 119-134)

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A considerable number of organizations recruit and hire students who are enrolled in cooperative education (co-op) programs. Co-op programs are those that alternate academic and work terms which helps to integrate theory and practice (Patrick et al., 2008). Previous research has suggested that the performance of these employees provides great benefit to organizations (see Braunstein, Takei, Wang, & Loken, 2011 for review). However, less research has focused on the factors which contribute to co-op students' performance at work. This gap is noteworthy because the risks of inadequate performance are significant (Pennaforte & Pretti, 2015).

An emerging line of research suggests that students' performance during their work terms is linked with their work-related subjective well-being (SWB). Work-related SWB refers to students' overall evaluations of the favorableness of their role, and is characterized by both job satisfaction and work engagement (Bakker & Oerlemans, 2011). Some previous studies have demonstrated that work-related SWB and employee performance are strongly associated (see Christian, Garza, & Slaughter, 2011). Work-related SWB contributes to employee performance because engagement (a component of work-related SWB) leads to stronger devotion to work (Bower, 1991) and protects against burnout (Schaufeli, Bakker, van der Heijden, & Prins, 2009). In addition, work-related SWB may contribute to performance because satisfaction is closely tied with job-related knowledge (Egan, Yang, & Bartlett, 2004). These findings strongly suggest that improving co-op students' work-related SWB will contribute positively to their performance, yet no studies offer an empirical validation of this proposition.

Moreover, previous studies have not examined the factors which may enhance co-op students' work-related SWB. According to job enrichment theory (Herzberg, 1968) and psychological empowerment theory (Rappaport, 1981), the characteristics of co-op students'

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roles can be designed to provide meaning and personal relevance, which in turn influences feelings of engagement and satisfaction. This is consistent with the job characteristics model (Hackman & Oldham, 1975) which suggests that employees are more likely to be engaged in and satisfied with their roles when the work being done holds some personal relevance and meaning to them.

In the context of co-op, personal relevance in a job may largely emanate from the belief that the overall work experience is relevant to one's academic pursuits. Previous research within the work-integrated learning literature has identified students' perceptions of relevance between post-secondary and work to be an important factor in understanding their enjoyment or satisfaction with the experience (e.g., Apostolides & Looye, 1997; Drewery, Pretti, & Pennaforte, 2015; Hite & Bellizza, 1986; Wiseman & Page, 2001). This finding suggests that experiences which are perceived by students to be highly relevant in terms of connecting to academic pursuits are more likely to enhance feelings of work-related SWB, which in turn is expected to enhance co-op students' performance.

The purpose of this study was to examine the relationships between co-op students' perceived relevance, work-related SWB, and individual performance. Informed by co-op literature and by theories from psychology and organizational behavior, we proposed that co-op students' work-related SWB mediates the influence of their perceived relevance on individual performance. This study advances co-op research by highlighting the work-related consequences of integrating post-secondary and work (Coll et al., 2008). This is important given that co-op program success depends on bridging post-secondary and work (Jones, 2007; Kawana-Brown, 2007). This study also contributes to human resources practice by demonstrating a pathway to improve co-op students' workplace performance. Implications drawn from the study may directly impact the practice of co-op program administrators, which includes, but is not limited to, directors, employer liaisons, and those staff who support students directly. Furthermore, results can influence the practice of those workplace supervisors who recruit and manage co-op students in the workplace.

CONCEPTUAL FRAMEWORK

Perceived Relevance

Previous research has revealed that co-op students assess the extent to which their work experiences are connected to their academic programs (Drewery, Pretti, & Pennaforte, 2015). While no formal definition for perceived relevance has been proposed, here we argue that relevance is a perception that the work experience, broadly defined, is connected to students' academic pursuits. Therefore, perceived relevance is subjective and may differ greatly between students. It has little to do with industry type or specific job titles, and more to do with the deeper relations that students make or do not make between work, academic studies, and post-graduation goals. This subjective view is consistent with the position forwarded by Warr and Inceoglu (2012), which states that "job features are often recorded in terms of incumbents' perceptions rather than through independent measurement" (p. 135). For example, students studying in an English program may not act as copy writers or book editors, but may organize marketing campaigns while investigating the effects of language on consumer behavior. Similarly, students in a psychology program may work as consultants in an engineering firm, applying their critical thinking abilities rather than specific program-related skills to be successful in the role. These examples explicate that students fulfill many roles during co-op experiences which may at face value seem

disconnected from their program when in fact are perceived by the student to be highly relevant. On the other hand, students who work in an objectively relevant role may perceive the relevance between the role and the academic program to be weak.

Work-Related Subjective Well-Being (SWB)

Research in work-related SWB, which has largely been advanced by Bakker and Oerlemans (2011), has built off previous work in SWB (e.g., Diener, 2000; Keyes, Shmotkin, & Ryff, 2002; Ryff & Keyes, 1995) and its affect (e.g., Russell & Carroll, 1999). Bakker and Oerlemans (2011) popularized work-related SWB research through an extension of Russell and Carroll's (1999) circumplex model of affect. This model, which describes that emotions are functions of two basic neuro-physiological axes (i.e., arousal/activation and pleasure), suggested that work-related SWB has two components: work engagement and job satisfaction. Brief explanations for these concepts are provided below.

Work engagement is "a positive, fulfilling, affective-motivational state of work-related well-being" (Leiter & Bakker, 2010, p. 1). It has been previously characterized by vigor, dedication, and absorption (Bakker & Demerouti, 2008; Schaufeli & Bakker, 2003; Schaufeli, Salanova, González-Romá, & Bakker, 2002). Engagement involves high levels of energy (Bakker, Albrecht, & Leiter, 2011) and, therefore, relates strongly to a sense of motivation (Rich, Lepine, & Crawford, 2010). Work engagement has also been characterized by high levels of pleasure and arousal while job satisfaction is characterized by high pleasure and low arousal (Bakker & Oerlemans, 2011). Indeed, other authors have noted that engagement and satisfaction are conceptually distinct (González-Romá, Schaufeli, Bakker, & Lloret, 2006).

The second component of work-related SWB, according to Bakker and Oerlemans (2011), is job satisfaction. According to Locke (1969, p. 316), job satisfaction is "the pleasurable or positive emotional state of an individual which results from the appraisal of one's job or job experience". Consistent with more recent work, this definition suggests that job satisfaction has both cognitive (e.g., Organ, 1988) and affective (Scarpello & Campbell, 1983) components. Job satisfaction is likely multidimensional in that it involves evaluations of multiple job aspects which culminate in one overall evaluation (Hulin & Judge, 2003).

Employee Performance

Previous research has described performance as being multifaceted, involving multiple domains and multiple forms of performance (e.g., Griffin, Neal, & Parker, 2007). Following the work of Griffin, Neal, and Parker (2007), performance may involve both team and individual domains, and may be proactive, prescribed, or prosocial. Given the scope of this study, we focus specifically on individual task performance and individual proactive performance. Previous studies have highlighted the importance of encouraging employees to fulfill their roles (Borman & Motowidlo, 1997) and to go *above and beyond* the duties associated with their roles (Crant, 2000).

THEORETICAL JUSTIFICATION

Relevance and Performance

Previous co-op literature has suggested that co-op students may be more motivated when they find a deep connection between their program and their work. For example, in interviews of co-op students after a work term, Drewery, Pretti, and Pennaforte (2015) drew a connection between students' perceived relevance and their professional and personal

development. Students may be more motivated to achieve (i.e., perform) and therefore develop when they see strong connections between post-secondary and work.

In the higher education learning literature, studies have shown that students are more motivated to perform when learning activities are perceived to be relevant to learning goals (Crookes & Schmidt, 1991; Keller, 1979). Perceived relevance in the classroom has also been linked to students' curiosity (Rossing & Long, 1981), suggesting that they may be motivated to go above and beyond their roles as a result of relevance.

In the organizational socialization literature, Liebermann and Hoffman (2008) provide similar evidence in that newcomers to an organization who perceive relevance between training content and job requirements have higher motivations to perform. Together, this previous research suggests that co-op students are more motivated to perform when they perceive a high relevance between post-secondary and work.

Relevance and Work-Related Subjective Well-Being (SWB)

Previous research also suggests that there may be a strong connection between perceived relevance and co-op students' work-related SWB. Following the job characteristics model forwarded by Hackman and Oldham (1976), core job characteristics including *task significance*, the degree to which the work done is personally meaningful or relevant, impacts work-related SWB (Wilks & Neto, 2013). Therefore, doing work which is more meaningful to the individual is more satisfying and engaging. This view is consistent with other research in the area of person-job fit (e.g., Edwards & Van Harrison, 1993) which suggests that work experiences closely akin to individuals' personal values lead to satisfaction and engagement (Ostroff & Judge, 2007). As Maslach and Leiter (2008, p. 501) state, "the greater the perceived congruity the greater the likelihood of engagement with work." Saks and Ashforth (1997) similarly conclude that employees' perceptions of fit (both a job and organization) drive important outcomes.

Following Gagné and Deci's (2005) self-concordance model of motivation, work which is perceived as relevant ought to buffer against the potentially negative impact of stressful conditions on happiness. Tadić, Bakker, and Oerlemans (2013) provide evidence for this using a sample of teachers, and other evidence has been provided which connects self-concordance and SWB (Sheldon & Kasser, 1995; Sheldon & Bettencourt, 2002). This evidence is closely linked to work in the area of goal theory that has similarly suggested that progress towards or achievement of a specific goal enhances well-being (Brunstein, 1993; Hasse, Heckhausen, & Köller, 2008; Little, Salmela-Aro, & Phillips, 2007; Messersmith & Schulenberg, 2010). Conversely, failure to achieve a certain goal creates emotional upset and distress (Carver & Harmon-Jones, 2009).

One final explanation for the relationship between relevance and work-related SWB may come from psychological contract theory (Rousseau, 1989; Rousseau & Tijoriwala, 1998). Employees' psychological contract dictates what they hold as acceptable or unacceptable at work, based on previous beliefs (McDonald & Makin, 2000). Because many co-op students hold that co-op work experiences should be connected to their academic pursuits, failure to find relevance may lead to a psychological incongruence (Rousseau & Tijoriwala, 1998), which ultimately leads to lower levels of job satisfaction (Robinson & Rousseau, 1994) and engagement (Parzefall & Hakanen, 2010). This breach of the psychological contract may also manifest in lower levels of performance (Turnley, Bolino, Lester, & Bloodgood, 2003).

The Moderating Role of Importance

The previous section outlined possible explanations for a direct relationship between relevance, as a value, desire, or goal, and work-related SWB. However, other research suggests that this relationship is likely moderated by the extent to which it is important for co-op work experiences to be relevant. That is, the relationship between relevance and work-related SWB may be different when relevance is *activated* or not.

Locke's (1976) value-perception model suggests that values determine employees' responses to certain job characteristics. Values that are important to the individual and that remain unfulfilled lead to dissatisfaction. Discrepancies (either positive or negative) between what is perceived and what is desired either satisfy or dissatisfy the individual only when the specific job characteristic was important. This perspective suggests that importance of perceived relevance would moderate the influence of relevance on work-related SWB.

Similarly, goal congruence theory (Argyris, 1964) suggests that negative outcomes result when important goals are inhibited. Therefore, we expected that lower levels of relevance, when important, would lead to lower satisfaction and lower engagement. Previous research supported this position (Bouckennooghe, Zafar & Raja, 2015; De Clercq, Couckennooghe, Raja, & Matsyborska, 2014; Kristof-Brown & Stevens, 2001).

The Mediating Role of Work-Related Subjective Well-Being

While research on performance has seldom extended to the co-op student context, previous research has suggested that those with higher work-related SWB have higher performance than those with low levels of work-related SWB (Boehm & Lyubomirsky, 2008; Schaufeli & Salanova, 2008). A number of explanations have been proposed for this relationship.

Employees with higher levels of work-related SWB tend to garner more resources (e.g., social connections). Happier employees tend to develop social resources from other employees, making them more effective in their roles (Bakker & Oerlemans, 2011; Bower, 1991). This outcome is consistent with Frederickson's (2001) broaden-and-build theory of positive emotions. The theory suggests that employees who are more pleasant build social and emotional resources which they can use in their work roles. Authors have also found that engagement in work may help employees to be more effective in their roles, freeing resources which can then be mobilized proactively (Kahn, 1990; Salanova, Agut, & Peiró, 2005). Dalal, Baysinger, Brummel, and LeBreton (2012) also confirmed that work engagement is an important predictor of citizenship behaviors.

Other explanations for the important role of work-related SWB in understanding performance include that well-being is linked with resilience (Lyubomirsky & Tucker, 1998) and motivation (Haase, Silbereisen, & Heckhausen, 2012). Resilience may allow students to work longer or better without burning out (Bakker & Demerouti, 2008). So, those students who perceive the characteristics of their co-op experience to be relevant to their post-secondary work, and who then report satisfaction and engagement, are more likely to be resilient to stressful job conditions, thus maintaining strong performance. Similarly, those employees who report high levels of work-related SWB might have higher levels of energy and commitment to mobilize towards achieving goals (Ashforth & Humphrey, 1995; Burke, 2008; Kahn, 1990). This increased focus may manifest in a higher level of task performance (Christian, Edwards, & Bradley, 2010). Studies have shown a strong relationship between job

satisfaction and performance (Judge, Thoreson, Bono, & Patton, 2001) and work engagement and performance (Halbesleben & Wheeler, 2008; Schaufeli, Taris, & Bakker, 2006).

METHOD

Participants and Procedure

Upon appropriate ethics clearance, data were collected via an electronic survey from undergraduates. Data analyzed in this study come as part of a larger more comprehensive data collection initiative which examined various aspects of students' co-op work term experiences. In this study, participants were 1,989 co-op students who had recently completed a work term and were now on an academic term. All participants were enrolled full-time and had previously completed at least two academic terms.

Measures

a. Perceived Relevance. Perceived relevance was operationalized by understanding to what extent students felt their work term was related to their academics. This relevance was measured based on responses to the question "how connected did you feel your work experience was to your academic program?" This item was measured on 10-point scale from 1 (not at all connected) to 10 (very connected).

b. Goal Activation. Goal activation was operationalized as the personal importance of the relevance between the work term and students' academics. Participants responded to the item "how important for you is it that work experience and your academic program be related?" on a 10-point scale from 1 (not at all important) to 10 (very important).

c. Work Engagement. Work engagement was measured using eight items from Schaufeli and Bakker's (2003) adapted version of the Utrecht Work Engagement Scale. One item ("I am enthusiastic about my job") was removed. Three subscales measure dedication ("I am enthusiastic about my job"), absorption ("I am immersed in my work"), and vigor ("At my work, I feel strong and vigorous"). This scale has been well-tested and used in previous research (e.g., Schaufeli et al., 2002; Langelaan, Bakker, van Doornen, & Schaufeli, 2006). All items were measured on a 5-point Likert scale from 1 (strongly disagree) to 5 (strongly agree) and were worded to reflect a past tense. A total sum was obtained to capture work engagement, with higher scores representing higher levels of work engagement. The Cronbach alpha score for the index was 0.916.

d. Job Satisfaction. The extent to which students experienced job satisfaction due to a positive emotional state was measured using two self-developed scale items. These items were "I was very satisfied by this work experience" and "this work experience met all of my expectations". These items were measured on a 5-point Likert scale from 1 as "strongly disagree" to 5 as "strongly agree". The Spearman-Brown coefficient for these items was 0.899.

e. Performance. Two types of performance were measured: individual task performance (ITP) and individual proactive performance (IPP). Each type was measured using Griffin, Neal, and Parker's (2007) work role performance instrument. Three items (e.g., "I carried out the core parts of my job well") measured task proficiency, and three items (e.g., "I initiated better ways of doing my core tasks") measured task proactivity. The reliability for both sub-scales was adequate (proficiency: $\alpha = .741$; proactivity: $\alpha = .820$).

f. Demographic Variables. A brief demographic questionnaire collected three additional variables. *Sex* (1 = male, 2 = female) was included given that it has previously been established as an important driver of SWB (e.g., Ng & Feldman, 2010). We also collected data on students' *GPA* (1 = 50-59, 2 = 60-69, 3 = 70-79, 4 = 80-89, 5 = 90+). Finally, information was collected on students' *program of study*. Students were categorized as being either *accreditation bound* or *non-accreditation bound* based on the connection between their academic program and field of practice. This variable was included given previous research which suggests perception of relevance may differ across programs (Kawana-Brown, 2007). Examples of programs included in the *accreditation bound* group (coded as 1) include engineering, accounting, teaching, pharmacy, and architecture, while examples of programs included in the *non-accreditation bound* group (coded as 0) include English, biology, psychology, classical studies, and anthropology.

Analysis Plan

Analyses began with tests for non-normality of data in which no problems were identified. Next, factor analyses were conducted to test the factorability of the data. Three principal axis factor analyses with varimax rotation using work engagement and job satisfaction items were conducted (1: four distinct factors; 2: two distinct factors, 3: one factor). Analyses revealed the best solution was a one-factor solution. The Kaiser-Meyer-Olkin measure of sampling adequacy was .917 and the Bartlett's test of sphericity was significant ($\chi^2(45) = 13898.190, p < .001$), well above suggested cut-off values. The factor accounted for 57% of the variance extracted. Given that the focus of the study was on work-related SWB and not specifically on its sub-components, the work engagement and job satisfaction items were combined to form a total work-related SWB index ($\alpha = .926$). Tests which followed involved a series of linear regressions, including a moderation analysis and a mediation analysis using the IBM SPSS PROCESS macro developed by Hayes (2013). Figure 1 shows the conceptual model for the study. The model proposes that work-related SWB mediates the relationship between relevance and performance and that goal activation moderates the relationship between relevance and work-related SWB.

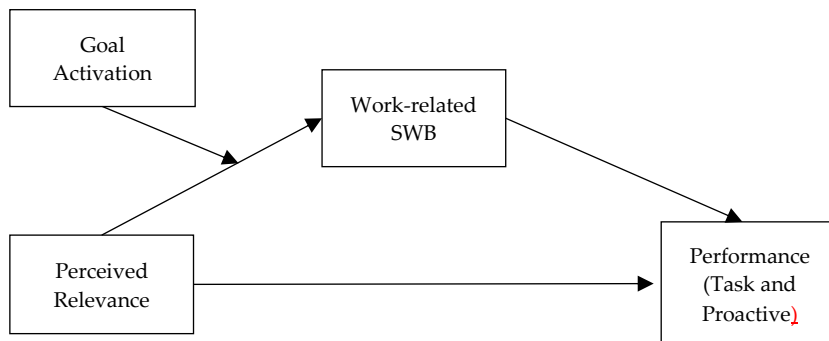


FIGURE 1: Conceptual model of co-op students' perceived relevance, work-related subjective well-being, and performance.

RESULTS

Description of Participants

Descriptive statistics were calculated. Table 1 shows the means, standard deviations, and correlations between the key variables. Participants came from a variety of faculties with

engineering (25.1%) and arts (23.7%) being the largest groups. Participants on average have completed 4.01 previous work experiences (SD = 1.55) with 24.9% indicated that had only one previous experience. Roughly half of participants worked in organizations smaller than 200 employees. 55.3% of the sample identified as male, and the average age of participants was 20.1 years old.

TABLE 1: Descriptive statistics and correlations amongst model constructs

	M	SD	α	Pearson Correlations			
				(1)	(2)	(3)	(4)
(1) Perceived Relevance	6.181	2.687	--	--			
(2) Goal Activation	7.703	2.340	--	.357**	--		
(3) Work-Related SWB	3.476	.860	.926	.440**	.076**	--	
(4) Task Performance	4.367	.551	.834	.116**	.108**	.248**	--
(5) Proactive Performance	3.667	.862	.893	.068**	.002	.279**	.291**

Note. ** Correlation significant at the $p < .01$ level

Work-Related Subjective Well-Being

Regression analyses were used to determine whether goal activation moderates the influence of perceived relevance on work-related SWB. Table 2 shows the result without (Model 1) and with (Model 2) the moderator. Participants' sex, GPA, team size, organization size, program type, and number of work terms were entered as control variables.

TABLE 2: Results of linear regression analyses examining the influence of co-op students' perceived relevance on their work-related subject well-being moderated by goal activation

	Model 1		Model 2	
	B	SE	B	SE
Constant	2.155***	.172	2.780***	.223
Sex	.051	.047	.055	.047
GPA	.048	.025	.053*	.025
Team size	.150***	.039	.144***	.038
Organization size	.002	.013	.001	.013
Program	-.161***	.0147	-.161***	.047
Work terms	.029	.016	.033*	.016
Relevance	.147***	.009	.016	.031
Goal Activation	-.028**	.011	-.108***	.021
Interaction	--	--	.016***	.004
	R^2	.221***	.240***	

Notes: $n = 1,061$, B = unstandardized coefficient, SE = standard error, * $p < .05$ ** $p < .01$ *** $p < .001$

Results from these analyses suggest that team size and program type have significant direct effects on work-related SWB, while sex, GPA, organization size, and number of work terms

do not. Perceived relevance and goal activation also have significant direct effects on work-related SWB.

Results from the moderation analysis also suggest that there is a significant interaction between perceived relevance and goal activation. The nature of the interaction was explored using the “pick-a-point” approach described in Hayes (2013). Figure 2 illustrates the interaction effect using plus one (i.e., “high”) and minus one (i.e., “low”) standard deviation away from the mean for each of the variables (i.e., perceived relevance and goal activation). Plotting the interaction shows that goal activation moderates the influence of perceived relevance on work-related SWB such that the influence is more positive at higher levels of goal activation. Mean work-related SWB scores at low levels of perceived relevance are low, and are high at high levels of perceived relevance. This pattern represents a *cross-over interaction*.

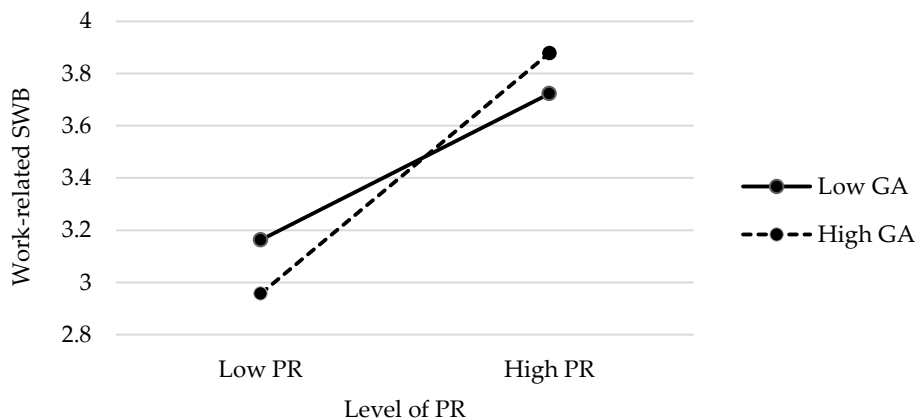


FIGURE 2: Interaction between perceived relevance and goal activation.

SWB = subjective well-being; PR = perceived relevance; GA = goal activation. “High” and “Low” = $M \pm 1$ SD.

Individual Performance

Two regression analyses examined the direct effects of perceived relevance, work-related SWB, and control variables on two types of performance: individual task performance and individual proactive performance. Results from the analyses (Table 3) revealed that females reported lower task performance, that GPA was negatively associated with task performance, and that students in professional programs report lower task performance. The direct effect of perceived relevance on task performance was not statistically significant. The direct effect of work-related SWB on task performance was highly significant. Results also revealed that no control variable had a significant effect on proactive performance, and that the direct effect of perceived relevance on proactive performance was not statistically significant. The direct effect of work-related SWB on proactive performance was highly significant.

To probe the indirect (i.e., mediation) effect of perceived relevance on performance through work-related SWB, a mediation analysis (see Hayes, 2013) was conducted for each type of performance (Table 4). Effects are significant if their confidence intervals do not encompass zero (Hayes, 2013). Results suggest that the total effect of perceived relevance is significant, the direct effect of perceived relevance is not statistically significant, and that the indirect

effect of perceived relevance is significant for both types of performance. Therefore, perceived relevance is said to have a significant indirect effect on both individual task performance and individual proactive performance through work-related SWB (see Preacher & Hayes, 2004).

TABLE 3: Results for regression analysis examining the effect of co-op students' perceived relevance and work-related subjective well-being on two types of self-reported performance

	Individual Task Performance (n = 1,050)		Individual Proactive Performance (n = 1,064)	
	B	SE	B	SE
Constant	4.183***	.119	2.558***	.188
Sex	-.110***	.034	.027	.054
GPA	-.044*	.018	.009	.029
Team size	.015	.028	-.036	.045
Organization size	-.012	.009	.024	.015
Program	-.161***	.034	-.085	.054
Work terms	-.015	.012	.024	.018
Relevance	.001	.007	-.006	.011
Work-related SWB	.175***	.022	.294***	.035
<i>R</i> ²	.112***		.084***	

Notes: B = unstandardized coefficient, SE = standard error * p < .05 ** p < .01 *** p < .001 *Mediation Analyses*

TABLE 4: Total, direct, and indirect effects of co-op students' perceived relevance on two types of self-reported performance

	Individual Task Performance				Individual Proactive Performance			
	B	SE	95% CI		B	SE	95% CI	
			LL	UL			LLCI	ULCI
Total effect	.025	.006	.013	.038	.035	.010	.015	.055
Direct effect	.001	.007	-.013	.014	-.006	.011	-.028	.016
Indirect effect	.024	.004	.018	.033	.041	.006	.029	.054

Notes: B = unstandardized coefficient, SE = standard error, CI = confidence interval, LL = lower limit, UL = upper limit. Effects for which CIs do not cross zero are significant (see Hayes, 2013)

DISCUSSION

Many organizations employ co-op students, suggesting that a wide array of managers are interested in the factors which influence co-op students' performance. In this study, we investigated the role of one job characteristic, perceived relevance, and co-op students' work-related SWB (Bakker & Oerlemans, 2011) to understand their influence on individual performance.

Job characteristics research (Hackman & Oldham, 1976), had suggested that favourable job characteristics when held as important to the individual would be more likely to influence job satisfaction and work engagement. Our results indeed support this position. Co-op students who perceive there to be a strong connection between their work roles and their academic programs are also more likely to report higher levels of work-related SWB. This effect was buffered by the role of goal activation such that the effect of perceived relevance on work-related SWB was more positive for those with activated goals.

Results also suggest that work-related SWB fully mediates the influence of perceived relevance on both types of performance. Relevance plays a role in workers deciding whether to be engaged in the workplace, as they must determine if it is personally valuable for them to perform well (Kahn, 1990). When they find a connection with an important personal value, they may be more likely to reciprocate with positive work performances. So, when co-op students perceive their work roles to be highly relevant to their academic studies, particularly when that is something which is important to them, work-related SWB is higher. This finding is consistent with earlier psychological contract theory work which posited that delivering on salient values or goals will enhance the employee experience (Kahn, 1990; Wayne, Shore, & Liden, 1997). It is furthermore consistent with research on work-related SWB which has suggested that aligning values at work may create satisfaction and engagement for employees (Bakker & Oerlemans, 2011). In turn, work-related SWB positively influences individual task performance and individual proactive performance. Therefore, creating an experience which is perceived by the student to be relevant kick-starts the influence of work-related SWB on performance. Creating conditions which support perceptions of relevance ultimately improves performance through the mechanism of enhanced work-related SWB.

CONCLUSION

To our knowledge, this study is the first to bridge the co-op literature regarding the role of perceived relevance and the work-related SWB literature. Work-related SWB provided a crucial link in the relationship between co-op students' perceived relevance and their individual performance. When co-op students believe the work they do is highly relevant to their academic programs, they are more satisfied with and engaged in their jobs. In turn, this causes them to be proficient in their roles and to go above-and-beyond the call of duty within the organization.

Implications for Practice

Results from this study may inform practice for the managers of co-op students and for higher education institutions. Managers may focus their efforts on two main practices. First, managers may recruit and select students whose academic discipline aligns with the position for which they are hiring. Second, employers may look to provide opportunities within the requirements of the job in order to increase the connection for students between work and academic studies. Following these steps may help to tailor the position to the students' values, which ultimately promotes work-related SWB (Glisson & Durick, 1998; Parker, Turner, & Griffin, 2003). This is the case because having a job which aligns with values is intrinsically pleasing and likely creates job satisfaction and higher well-being (Gagné & Deci, 2005). In turn, should managers follow these steps, they may also find that they are supporting goal congruence in their co-op students, which ultimately leads to increased individual performance (Kristof-Brown & Stevens, 2001).

Given the benefit of academic relevance to the performance of the student in the workplace, it is worthwhile to consider ways that students can gain information about the relevance of potential roles for students of their program. Practitioners within co-op programs may help to enhance perceived relevance by assessing the relevance between students' potential work roles and the material covered in their academic studies. This may be done through the creation of a classification or labeling system that examines the objective characteristics of work roles and academic programs. Student advisors who have knowledge of the role, or

students who have previously worked in those roles may be important to this process. It would also be important to engage faculty members in this process.

Additionally, meetings with student advisors could help students with setting goals, expectations and understanding organizational and personal values (Parsons, Caylor & Simmons, 2005). These types of meetings may alter students' attitudes towards seemingly disconnected roles. Students may instead focus attention on deeper connections (e.g., on the transferrable skills) which could be developed. Practitioners may also turn to reflection assignments to find deeper connections, as reflection has been shown to increase co-op students' sense of direction (Drewery, Nevison, & Pretti, 2016) which may be satisfying.

Limitations and Future Research

This study provides a number of directions for future research. First, the data were collected via online surveys so all measures were self-reported. While this may lead to students over or under-exaggerating their work engagement and job satisfaction, other researchers have successfully used self-reported data (see Barberger-Gateau, Fabigoule, Rouch, Letenneur, & Dartigues, 1999; Vandenabeele, 2009). Second, the job satisfaction scale used in this research was self-constructed. However, it had high reliability and correlated with work engagement, as is suggested in previous research studies (e.g., Rich, Lepine, & Crawford, 2010). The academic relevance and academic importance items were also self-developed, as these had not previously been measured in the co-op context. Future research may include more rigorous creation and testing of constructs to measure students' goal salience and academic relevance in the workplace. Third, because whether the work experience was relevant or not was measured through a subjective assessment, future research could probe the objective characteristics of work that are *relevant*. This approach could also use ratings from student's supervisors or co-workers to improve reliability of performance ratings. Fourth, this study only looked at students in co-op, however it may be valuable to analyze the role of relevance by looking at both co-op and non-co-op students as well as other forms of work-integrated learning (WIL). This would be particularly interesting as previous research suggests that met expectations are dependent on the quality of previous experiences, which could include co-op work terms (Dickerson, 2009). Finally, future research could use a longitudinal design to monitor if students adjust their expectations or values throughout the term.

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