

A Dispositional Approach to Work–School Conflict and Enrichment

Laurel A. McNall · Jesse S. Michel

Published online: 20 July 2010
© Springer Science+Business Media, LLC 2010

Abstract

Purpose The purpose of this study was to investigate a dispositional model of the work–school interface. In particular, we examined the relationship between core self-evaluations (CSEs) and proactive personality with both work–school conflict (WSC) and work–school enrichment (WSE) as well as a variety of work and school outcomes. **Design/methodology/approach** 314 employed college students were surveyed about their experiences managing work and school roles.

Findings Structural equation modeling showed that CSEs were related to both WSC and WSE as well as school outcomes, whereas proactive personality was related to WSE and job and school outcomes but not WSC. WSC was negatively related to school performance, whereas WSE was positively related to school and job satisfaction as well as school performance.

Implications Organizations, universities, and researchers should be aware that dispositional variables influence perceptions of work and school roles as well as important outcome variables, and that further intervention efforts may be needed to help students manage work and school roles.

Originality/Value Past studies have demonstrated that job characteristics influence the work–school interface, but this study is among the first to demonstrate that dispositional factors also relate to WSC and WSE.

Keywords College student employment · Work–school conflict · Work–school enrichment · Core self-evaluations · Proactive personality

According to the American Council on Education, during the 2003–2004 academic year, 78% of college students worked while they attended college. Employed students worked on average 30 h per week and “working while enrolled” was the single most common activity among American undergraduate students relative to other activities (e.g., living on campus, applying for or receiving financial aid) (King 2006). These results held regardless of demographical (e.g., age, gender, race, marital status, income) or institutional (e.g., type of institution attended) variables (King 2006). This comes at a time when college tuition, fees, and textbook prices rose by more than 200% from 1986 to 2004 (U.S. Government Accountability Office 2004) and students are increasingly borrowing money in order to fund their education (The Project on Student Debt 2008). Indeed, most students cite rising tuition, fees, and living expenses as their primary reason for employment (King 2006). Tuition is also expected to rise due to the recent economic downturn (Hendrix 2008). As student employment is so pervasive, it is important to understand the impact of employment on students’ education and work experiences.

Most research to date has focused on the negative effects of working while attending college. For instance, longer work hours have been associated with poorer academic

A version of this article was presented at the American Psychological Association 118th Annual Convention in San Diego, CA.

L. A. McNall (✉)
Department of Psychology, The College at Brockport,
State University of New York, 350 New Campus Dr,
Brockport, NY 14420, USA
e-mail: lmcnall@brockport.edu

J. S. Michel
Department of Psychology, Florida International University,
Miami, FL, USA

performance (Astin 1993; Di 1996; Miller et al. 2008; Trockel et al. 2000) and poorer study skills (Lammers et al. 2001). However, there are a few studies that have failed to reveal a negative relationship between work hours and grade point average (e.g., Furr and Elling 2000; Volkwein et al. 1989). In fact, Riggert et al. (2006) point out that the literature on student employment and higher education is inconsistent and contradictory, perhaps because no theoretical models have been developed to explain the relationship between employment and student outcomes.

One theoretical perspective that holds potential for understanding the work–school interface is role theory (Broadbridge and Swanson 2005; Butler 2007; Katz and Kahn 1978). Role theory posits that individuals hold multiple role memberships throughout the life span, and managing these roles can be challenging. Derived from a scarcity perspective, where individuals have limited resources, role theory suggests that involvement in multiple domains such as work and school can lead to interrole conflict (Greenhaus and Beutell 1985). Accordingly, *work–school conflict* (WSC) can be defined as the degree to which work hinders or interferes with a student’s capacity to meet their school-related responsibilities, demands, tasks, etc. (Markel and Frone 1998). For example, when a student must invest time and energy at work, this may deplete resources from the school role, thereby increasing perceptions of WSC.

There have also been calls for a more balanced approach to understanding multiple role occupancy by focusing not only on the costs associated with student employment but also the benefits (Barling et al. 1995; Broadbridge and Swanson 2005; Swanson et al. 2006). According to Marks’ (1977) expansionist approach, resources are not finite and multiple role memberships can be beneficial to individuals. Drawing on the work–family literature, Greenhaus and Powell (2006) suggested that several types of resources (e.g., skills and perspectives, social capital, material resources) may be accumulated through participation in work and family roles, and this may also apply to work and school roles. *Work–school enrichment* (WSE) is defined as the extent to which work experiences improve the quality of the school role (Butler and Matthews 2009; Greenhaus and Powell 2006). For instance, students may acquire important skills at work (e.g., networking, time management) that can be used to improve their performance at school.

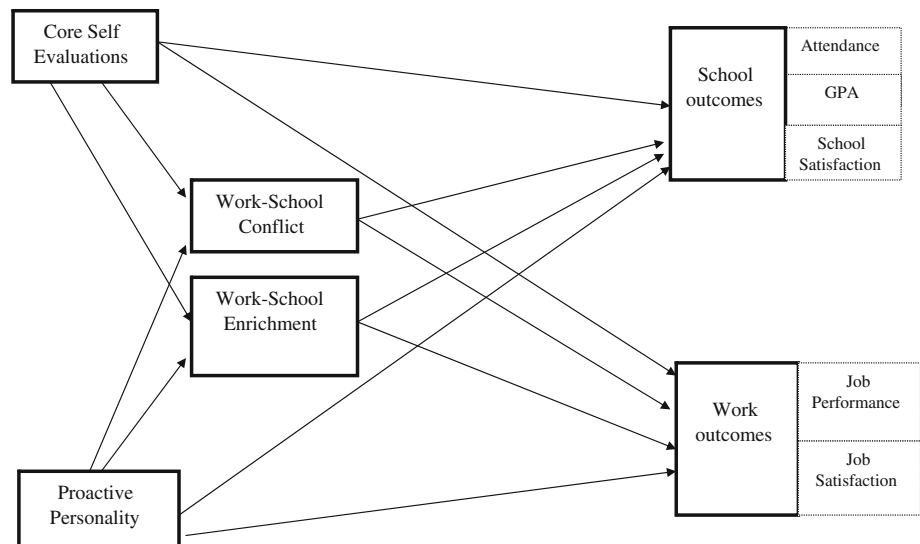
Little research has been done exploring both the negative and positive sides of the work–school interface. An exception to this is study by Butler (2007), who found that resource-enriching job characteristics led to work–school facilitation, whereas resource-depleting job characteristics led to work–school conflict. However, personal characteristics may also influence work–school perceptions. Indeed,

Carlson et al. (2006) argued that “likely antecedent factors of enrichment are individual and environmental characteristics that contribute to the acquisition and effective transfer of...resources across domains” (p. 149). The goal of this study is to better understand how personality influences perceptions of work and school conflict and enrichment, which in turn are theorized to impact various work and school outcomes. Specifically, we use Conservation of Resources (COR) theory to generate hypotheses about the relationship between two personality characteristics, core self-evaluations (CSEs) and proactive personality, and the work–school interface. We propose both CSEs and proactivity provide key control-related resources which help individuals be more successful at managing work and school roles.

A Dispositional Model of the Work–School Interface

Our theoretical model (see Fig. 1) depicts that an individual’s personality is related to work and school outcomes, partially mediated by perceptions of work and school conflict/enrichment. Specifically, certain personality traits may be associated with perceptions of less resources, leading to perceptions of WSC as well as negative work and school outcomes. On the other hand, personality characteristics may also be associated with perceptions of more resources, thereby increasing WSE as well as positive work and school outcomes. Work–family researchers have found that both conflict and enrichment are independent constructs that are bidirectional in nature (Frone 2003). Applying this to the work–school interface, it is possible that one’s work role can interfere and enrich the school role and vice versa. The focus of this study is on one direction: how work affects school. Following the work of Butler (2007), we focus on this direction because “two out of three working students view themselves as students first who work to help pay for their expenses” (King 2006, p. 3). In other words, “students who work” are more common than “employees who study.” Given the primacy of the school role, it is important to examine how work can interfere and enrich the student role.

To our knowledge, little attention has been paid to the role of individual differences in understanding how people manage multiple roles within the work and school domains. However, Friede and Ryan (2005) described how personality may impact the work–family interface through several mechanisms, which may generalize to the work–school interface. First, an individual’s personality may impact the selection or creation of his or her work environment (Diener et al. 1984). Correspondingly, people may seek out challenging or supportive environments, which in turn may enhance perceptions of WSE and minimize perceptions of

Fig. 1 A dispositional model of the work–school interface

WSC. Second, personality will likely affect the manner in which a person perceives and responds to a situation. Thus, one person may perceive his/her work and school roles as conflicting, but to another person they may be enriching. Third, personality is likely to have an influence on the types of psychological resources and coping strategies that people use during stressful events in their lives. Individuals with certain personalities may select more effective coping strategies, which may assist them in managing work and schools domains.

Empirical research has supported the link between a variety of dispositional variables and both the positive and negative sides of the work–family interface (e.g., Andreassi and Thompson 2007; Beauregard 2006; Boyar and Mosley 2007; Bruck and Allen 2003; Carlson 1999; Sumer and Knight 2001; Wayne et al. 2004), but to our knowledge, this has not been tested in the work–school domain except for study by Swanson et al. (2006). Swanson et al. investigated the role of positive and negative affectivity as mediators and moderators of the relationship between perceived role congruence (role conflict, role balance, role enhancement) and outcomes (satisfaction and adjustment to university life) in a sample of university students in Scotland. They found greater support for affectivity as a mediator between role congruence and satisfaction and adjustment. Our study differs from Swanson et al. in that we focused on different psychological traits (CSEs and proactive personality) as antecedent variables, which are described in further detail below.

Core Self-Evaluations

One personality trait that is likely to influence the work–school interface is CSEs, which are defined as “the

fundamental assessments that people make about their worthiness, competence, and capabilities” (Judge et al. 2005, p. 257). This broad dispositional construct comprises *self-esteem* (overall value of person), *neuroticism* (tendency to experience negative or positive affectivity), *locus of control* (degree of control in one’s life), and *general self-efficacy* (judgment of one’s capabilities across a variety of situations; Judge et al. 1997). Thus, the CSE traits represent an individual’s basic orientation and how he or she approaches his or her environment (Judge and Hurst 2007). These overall perceptions that people have of themselves may provide the best example of how personality can influence multiple role memberships (Friede and Ryan 2005).

Several studies have explored how various dimensions of CSEs may impact the work–family interface. For instance, Andreassi and Thompson (2007) investigated the effects of internal locus of control, which is one component of CSE, on positive spillover and work–family conflict. Specifically, they found that individuals with an internal locus of control were more likely to experience positive spillover and less likely to experience work–family conflict. Beauregard (2006) found that self-esteem, another component of CSE, was negatively related to work interference with home but surprisingly, was not related to home interference with work.

Two studies have examined the role of CSEs in the work–family interface. First, Boyar and Mosley (2007) found, unexpectedly, that CSE did not positively predicted either direction of work–family facilitation, but CSE was negatively related to work interfering with family and family interfering with work. However, it should be pointed out that Boyar and Mosley’s measure of facilitation was based on four items drawn from earlier research that may not fully tap aspects of work-to-family enrichment. In

addition, Boyar and Mosley did not use Judge et al.'s (2003) measure of CSE. On the other hand, Masuda et al. (2009) found that CSEs were positively related to work-to-family enrichment when using a more recent measure of both enrichment (Carlson et al. 2006) and CSEs (Judge et al. 2003).

COR theory (Hobfoll 2002) may help to explain how CSEs may be related to the work–school interface. According to COR theory, individuals strive to obtain, retain, and protect resources, and individuals with resources are less likely to encounter stressful circumstances that could lead to impairments of psychological and physical well-being. When stressful situations do emerge, as is often the case when managing multiple roles, individuals with resources are more capable of solving problems and less negatively affected by resource drains (Hobfoll 2002).

Hobfoll (2002) identified several key resources that can be viewed as “management” resources. Two of these personality-based resources are self-efficacy and self-esteem, both of which make up the larger CSE construct. For example, Hobfoll notes that “those who possessed...high levels of self-efficacy might be more capable of selecting, altering, and implementing their other resources to meet stressful demands” (p. 308). By extension, high CSE individuals may be more equipped to, and more successful at, managing the demands and potential strains associated with work and school roles. Indeed, Judge et al. (2002) found that the four traits comprising CSEs were negatively and moderately related to strain, which is an important component of WSC (Greenhaus and Beutell 1985).

Hypothesis 1a CSEs are negatively related to WSC.

COR theory also predicts that individuals with resources are more likely to acquire other resources, which helps build “a solid resource reservoir” (Hobfoll 2002, p. 318). According to Greenhaus and Powell's (2006) work–family enrichment model, the generation of resources is a driver of the enrichment process. Thus, with more resources now available to an individual in Role A, the transfer of resources and improved functioning in Role B becomes more likely (Greenhaus and Powell 2006). Moreover, Greenhaus and Powell identified positive self-evaluations as key psychological resources, similar to Hobfoll.

Hypothesis 1b CSEs are positively related to WSE.

It is also likely that CSEs are directly related to both school and work outcomes. School outcomes include both school performance (involvement and competence at school, including attendance and grade point average; Butler 2007) and school satisfaction (attitudes toward one's educational experiences; Butler 2007). Work outcomes include both job performance (in-role performance; Van

Dyne and LePine 1998; Williams and Anderson 1991) and job satisfaction (degree of pleasure toward the job). Broadbridge and Swanson (2005) applied Lazarus and Folkman's (1984) transactional framework of stress and coping to students and argued that environmental pressures (e.g., course of study, year of study, working hours) may influence a variety of outcomes, including academic performance and school satisfaction via personality. Swanson et al. (2006) found that positive affect was an important predictor of satisfaction and adjustment to the university. Following this logic, it is likely that CSEs will be related to school outcomes. Indeed, components of CSEs, such as self-efficacy, have also been linked to academic achievement (Bandura 1997; Schunk 1991). In addition, previous research has found that CSEs are positively associated with work outcomes such as job satisfaction and job performance (Judge et al. 2003).

Hypothesis 2a CSEs are positively related to school performance and school satisfaction.

Hypothesis 2b CSEs are positively related to job performance and job satisfaction.

Proactive Personality

Like CSEs, proactive personality is another personality dimension that may impact the work–school interface. A person with a proactive personality is more likely to identify and act on opportunities, show initiative, and perseverance (Seibert et al. 1999). Rather than be hindered by situational constraints, a proactive person is empowered to engage in behaviors that he or she believes will lead to desired outcomes (Cunningham and De La Rosa 2008). Thus, proactive individuals feel the need to have a sense of control or have the ability to manipulate their environment (Bateman and Crant 1993). In contrast, less proactive people tend to be passive and reactive, maintaining status quo rather than acting to change their environment.

A small number of studies have applied proactive personality to the work–family context, which may have implications for the work–school context. In a sample of full-time employed parents in India, Aryee et al. (2005) found that proactive personality positively predicted work–family facilitation but not conflict. As far as conflict, Cunningham and De La Rosa (2008) found evidence that proactive personality was significantly negatively related to time-based family-to-work interference. Unfortunately, no studies to date have examined proactive personality among students who work.

Hobfoll (2002) notes that the “most widely studied resources in psychology today are aspects related to

control” (p. 308). Thus, proactivity, like CSEs, may be another control-related resource that has implications for the work–school interface. It is likely that a highly proactive individual will feel compelled to control and take charge of their work and school environments. As individuals with resources like proactivity are less likely to face stressful situations, and in the event that they do, are more suited to problem solving and less likely to experience resource loss (Hobfoll 2002), they will likely be more able to minimize the demands of work and school roles.

Hypothesis 3a Proactive personality is negatively related to WSC.

Greenhaus and Powell (2006) argued that “a proactive personality may be an important prerequisite for work–family enrichment, because individuals who are proactive may be particularly likely to develop skills, receive information and social support, seek flexibility in the time they are expected to commit to role activities, and apply resources generated in one role to another” (pp. 87–88). Applying this to the work–school interface, it is likely that individuals with proactive personalities may approach their studies and jobs differently than less proactive individuals. Since proactive people are looking for opportunities to take action in their environments (Bateman and Crant 1993), they may be more likely to take steps to alter their work or school situations to maximize enrichment.

Hypothesis 3b Proactive personality is positively related to WSE.

Past research has indicated that proactive personality is related to many important work-related outcomes, including job performance (Ashford and Black 1996; Crant 1995), entrepreneurial behavior (Becherer and Mauer 1999), both objective and subjective measures of career success (Seibert et al. 1999), and adjustment to the organization (Morrison 1993). Drawing on interactional psychology (Terborg 1981), which calls attention to the ways in which individuals influence situations and vice versa, more proactive people are likely to approach their work situations differently than less proactive people by creating “situations consistent with effective job performance” (Crant 1995, p. 536). In addition, proactive people may be more effective at selecting work environments that fit with their vocational needs and values, thereby leading to more positive affective reactions to the job (Seibert et al. 1999). On the other hand, no research to date has examined how a student’s proactive personality may influence school-related outcomes, but it is also likely that more proactive individuals select, create, and influence their school situations, which has implications for both school performance and school satisfaction.

Hypothesis 4a Proactive personality is positively related to job performance and job satisfaction.

Hypothesis 4b Proactive personality is positively related to school performance and school satisfaction.

Outcomes of Work–School Conflict and Enrichment

It is also the case that both WSC and WSE may directly influence important work- and school-related outcomes. According to Greenhaus and Powell (2006), resources from one role (e.g., work) enable improved performance in the other role (e.g., school), either directly through an instrumental path, or indirectly through an affective path. For example, the resources an employee gains in his or her work (e.g., material resources) may directly improve his or her performance in his or her school role. It could also be the case that resources operate more indirectly, producing enrichment via positive affect; that is, experiences gained at work may produce positive affect toward one’s work role in the form of enthusiasm, alertness, and higher energy, which can facilitate positive affect in the school role. In fact, WSE has been linked to both increased school performance and school satisfaction (Butler 2007). On the other hand, it could also be the case that work depletes resources from school through an instrumental path, resulting in decreased performance, or an affective path, resulting in decreased satisfaction (Butler 2007). Previous research indicates that WSC negatively impacts school performance and in turn, school satisfaction, via school readiness (Markel and Frone 1998).

Hypothesis 5 WSC is negatively related to (a) school performance and (b) school satisfaction.

Hypothesis 6 WSE is positively related to (a) school performance and (b) school satisfaction.

Unfortunately, little is known about how work–school experiences influence job outcomes, and Butler (2007) urged researchers to examine how the work–school interface may influence job performance and attitudes. It is plausible that in perceiving the work role as either depleting or enriching, the school role may also have implications for outcomes in the work domain. As mentioned earlier, Greenhaus and Powell (2006) argued that resources generated in one role, such as work, can produce positive affect in that same role, which may increase job performance and job satisfaction. Conversely, if resources are depleted in the work role, this may result in more negative affect in the work role, thereby decreasing job performance and job satisfaction. These propositions are consistent with recent empirical findings regarding both enrichment and conflict. For example, recent findings in the enrichment literature demonstrate that the

consequences of enrichment reside more strongly in the originating role rather than the receiving role. For example, Wayne et al. (2004) found that work-to-family enrichment was positively related to job satisfaction but not to family satisfaction. Likewise, Wayne et al. (2006) also found that work-to-family enrichment was more strongly related to positive work attitudes (e.g., affective commitment). In fact, McNall et al.'s (in press) meta-analysis found that work-to-family enrichment had a stronger effect on work-related outcomes (job satisfaction and affective commitment) whereas family-to-work enrichment had a stronger effect on a nonwork-related outcome (family satisfaction). Similar findings have also occurred in the conflict literature. For example, recent meta-analytic path analyses have found that work and family domains have significantly larger effects on same domain satisfaction outcomes (Michel and Hargis 2008), while both work-to-family conflict and family-to-work conflict have stronger effects on the originating domain satisfaction outcomes (Michel et al. 2009). Based on these findings, it is likely that WSC and WSE will have an influence on job outcomes.

Hypothesis 7 WSC is negatively related to (a) job performance and (b) job satisfaction.

Hypothesis 8 WSE is positively related to (a) job performance and (b) job satisfaction.

Method

Participants

Participants for this study were 314 students (40 Resident Assistants, 274 psychology students) from a medium-sized public college in the Northeastern United States. Participants were required to be working for 8 h per week in order to be eligible to participate (81.9% worked 25 h or less per week), and the majority (95.5%) were full-time students. Most students worked in off-campus jobs (60.1%). Seventy-six percent of the sample was female, and 92% of the sample was between 18 and 24 years of age. The majority of the sample was Caucasian (88%), followed by African American (5%), Hispanic (3%), Asian (2%), and Other (2%). For their participation, participants were given course credit (psychology students) or the opportunity to enter a drawing for a chance to win a gift card (resident assistants), but recruitment of the two samples did not differ.

Measures

Participants were asked to indicate agreement with each item using a 5-point Likert scale (1 = *Strongly Disagree* to 5 = *Strongly Agree*).

Core Self-Evaluations

Core self-evaluations, a higher order construct represented by self-esteem, neuroticism, locus of control, and general self-efficacy, were measured using 12 items from Judge et al. (2003). Sample items include “I complete tasks successfully” and “I am filled with doubts about my competence” (reverse scored).

Proactive Personality

Proactive personality was measured using the shortened 10-item scale from Bateman and Crant's (1993) Proactive Personality scale (PPS; see Siebert et al., 1999). This shortened version of the scale was created by selecting the 10 items with the highest average factor loadings across three scales by Bateman and Crant (1993). Siebert et al. provided validity and reliability evidence for this shortened scale. They found that the correlation between the 10-item scale and the full 17-item scale was .96. They concluded that the “shortened version of the PPS appears to be comparable to the full 17-item version” (p. 419). Sample items include “If I see something I don't like, I fix it” and “I am always looking for better ways to do things.”

Work–School Conflict

The degree to which work negatively interfered with school was measured with a five item scale developed by Markel and Frone (1998). Sample items include “Because of my job, I go to school tired” and “My job demands and responsibilities interfere with my school work.”

Work–School Enrichment

The degree to which work improved experiences at school was measured using a nine-item scale from Carlson et al.'s (2006) work–family enrichment scale. These items were modified to fit a work-school context. Sample items include “My involvement in work makes me feel happy and this helps me be a better student” and “My involvement in work helps me to gain knowledge and this helps me be a better student.”

Work Outcomes

Job performance was measured using a four-item scale from Van Dyne and LePine (1998). Sample items include “I meet performance expectations at work” and “I perform the tasks that are expected as part of my job.” Job satisfaction was measured using a three-item scale from Spector et al. (2007). Sample items include “In general, I like my job” and “After all, I am satisfied with my job.”

School Outcomes

Two measures of school performance were assessed—GPA and attendance. First, participants were asked to enter their student identification number for the purpose of retrieving their official college grade point average (GPA). Second, participants responded to three questions about attendance from Butler (2007). Sample items include “During any given week of school, I attended all of my classes” and “I skipped a whole day of classes without a real excuse” (reverse scored). School satisfaction was measured using a six-item scale from Butler (2007). Sample items include “I feel comfortable at this university” and “I am satisfied with my education at this university.”

Demographics

Participants were asked to report their age, sex, and year in school.

SEM Analyses

We first conducted a confirmatory factor analysis (CFA) to compare several factor structures to provide support for our proposed factor structure using structural equation modeling with AMOS software (Arbuckle and Wothke 1999). Next, we used structural equation modeling with a path analysis technique to test our hypotheses. Analyses were conducted using covariance matrices and the maximum likelihood method in LISREL 8.80 (Jöreskog and Sörbom 1993). Scale reliabilities and variances were used to set measurement parameters of our latent constructs; factor

loadings were set to the square root of the reliabilities while error variances were set to the variance of the measure multiplied by the value (1 – reliability). To evaluate the overall fit of the model, we report the chi-square statistic and the following fit indices: comparative fit index (CFI; Bentler 1990), normed fit index (NFI; Bentler and Bonett 1980), adjusted goodness of fit (AGFI; Tanaka and Huba 1989), root mean square error of approximation (RMSEA; Browne and Cudeck 1993), standardized root mean square residual (SRMR; Bentler 1995), and Akaike information criterion (AIC; Akaike 1974).

Results

Table 1 displays means, standard deviations, correlations, and coefficient alphas, for all study variables. However, given the strengths of SEM, we focus the presentation of our results on model fit and pathway estimates; likewise, we do not present nonsignificant pathway estimates as they are assumed to be nondifferent from zero.

Confirmatory Factor Analysis

Using CFA, we compared the fit of the hypothesized nine-factor measurement model with three alternatives: (1) an eight-factor model, which consisted of the fully distinguished model except job satisfaction and WSE were loaded on the same factor (due to the strong correlation between these two variables), (2) a four-factor model, which consisted of (a) personality variables (combining CSEs and proactive personality), (b) work–school variables

Table 1 Means, standard deviations, correlations, and coefficient alphas (in parentheses)

	Mean	SD	1	2	3	4	5	6	7	8	9	10	11	12
1. Age	1.12	0.51	–											
2. Sex	1.76	0.43	.05	–										
3. Year in school	2.59	1.10	.14*	–.00	–									
4. CSE	3.72	0.54	–.04	–.09	–.01	(.84)								
5. Proactive personality	3.68	0.47	.05	–.14*	.04	.43**	(.81)							
6. WSC	2.79	0.88	.08	.11	.08	–.24**	–.04	(.82)						
7. WSE	3.55	0.75	–.11*	.01	.02	.33**	.36**	–.24**	(.93)					
8. Job performance	4.42	0.50	–.13*	.04	–.01	.25**	.34**	–.06	.21**	(.87)				
9. Job satisfaction	3.91	0.88	–.04	.04	.08	.14*	.10	–.24**	.60**	.18**	(.91)			
10. Attendance	4.60	0.63	.02	.01	–.05	.27*	.15*	–.24**	.18**	.25**	.11	(.75)		
11. GPA	3.01	0.58	–.08	.02	.01	.14*	–.08	–.07	.14*	.11	.07	.22**	–	
12. School satisfaction	4.01	0.65	–.03	–.07	–.12*	.32**	.23**	–.13*	.34**	.14*	.23**	.17**	.19**	(.91)

Note. N = 308–314. For age, 1 = 18–24 to 6 = 55 +, for sex, 1 = male, 2 = female, for year in school, 1 = freshman to 4 = senior. WSC work–school conflict, WSE work–school enrichment, GPA grade point average, CSE core self-evaluations

* p < .05

** p < .01

Table 2 Confirmatory factor analysis results

Model	χ^2	df	CFI	NFI	RMSEA	Difference
One-factor	8734.18*	1326	.09	.09	.13	
Four-factor	4276.50*	1319	.64	.55	.09	4457.68*
Eight-factor	2922.46*	1298	.80	.69	.06	1354.04*
Nine-factor	2515.46*	1290	.85	.74	.06	407.00*

Note. $N = 308$. The one-factor model includes all of the variables. The four-factor model consists of personality variables, work–school variables, school outcomes, and job outcomes. The eight-factor model treats all constructs as separate factors, except job satisfaction is loaded onto work–school enrichment. The nine-factor model treats all constructs as separate factors. χ^2 = chi-square; df degrees of freedom, CFI comparative fit index, NFI normed fit index, $RMSEA$ root mean square error of approximation. Difference = difference in chi-square from the next model

* $p < .05$

(combining WSC and WSE), (c) school outcomes (combining GPA, attendance, and school satisfaction) and (d) job outcomes (job performance and job satisfaction), and (3) a one-factor model, incorporating all of the constructs in the model. In all models the factors were allowed to correlate with each other. As shown in Table 2, the hypothesized nine-factor model was a better fit than the eight-factor, four-factor, or one-factor model. Thus, the CFA results indicate support for the hypothesized nine-factor measurement model.

Dispositional Model of the Work–School Interface

Results of the SEM analyses indicate that our dispositional based model fit the data very well (see Table 3). In addition to model fit, it is appropriate to examine pathway magnitudes to better interpret a model; thus, we provide a summary of significant parameter estimates in Fig. 2.

Moderate to strong support was found for the effects of dispositional antecedents on WSC and WSE as well as direct effects on school and work outcomes. With regard to the work–school interface, CSEs were negatively related to WSC ($\beta = -.60, p < .05$) and positively related to WSE ($\beta = .30, p < .05$), supporting Hypotheses 1a and 1b. CSEs were positively related to both forms of school performance, attendance ($\beta = .29, p < .05$) and GPA ($\beta = .27, p < .05$), and school satisfaction ($\beta = .32, p < .05$), supporting

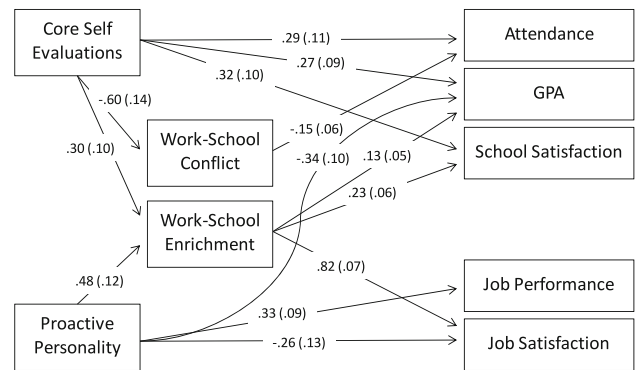


Fig. 2 Structural equation modeling results of the dispositional model of the work–school interface. Note. $N = 308$. Standard errors are in parentheses. Only significant pathways are displayed ($p < .05$)

Hypothesis 2a. Finally, CSEs were not a significant predictor of job performance or job satisfaction, providing no support for Hypothesis 2b. For proactive personality, we found a slightly different pattern of results. With regard to the work–school interface, proactive personality was not significantly related to WSC, providing no support for Hypothesis 3a, but was positively related to WSE ($\beta = .48, p < .05$), providing support for Hypothesis 3b. Proactive personality was positively related to job performance ($\beta = .33, p < .05$) but negatively related to job satisfaction ($\beta = -.26, p < .05$); thus, Hypothesis 4a only receives partial support as proactive personality was expected to be positively related to job satisfaction. Finally, proactive personality was a significant predictor of GPA ($\beta = -.34, p < .05$), but not school attendance or satisfaction, providing no support for Hypothesis 4b, as the relationship with GPA was in the inverse direction.

Moderate support was found for the effects of WSC and WSE on school and work outcomes. With regard to school outcomes, WSC was negatively related to one of the two forms of school performance, attendance ($\beta = -.15, p < .05$), but not school satisfaction, providing partial support for Hypothesis 5a but not Hypothesis 5b. WSE was positively related to one of the two forms of school performance, GPA ($\beta = .13, p < .05$), and school satisfaction ($\beta = .23, p < .05$), providing support for Hypothesis 6a and 6b. With regard to work outcomes, WSC was not

Table 3 Summary of fit Indices

Model	χ^2	df	CN	CFI	NFI	AGFI	RMSEA	90% CI	SRMR	AIC
Hypothesized model	24.01 ($p > .05$)	9	263.70	.97	.96	.92	.074	.039–.110	.035	96.01
Alternative comparison model	37.87 ($p > .05$)	14	225.90	.96	.94	.91	.075	.047–.104	.043	99.87
Alternative full mediation model	103.42 ($p > .05$)	19	107.16	.85	.83	.84	.120	.098–.144	.081	155.42

Note. χ^2 = normal theory weighted least squares chi-square, df degrees of freedom, CN critical n, CFI comparative fit index, NFI normed fit index, $AGFI$ adjusted goodness of fit index, $RMSEA$ root mean square error of approximation, $90\% CI$ RMSEA confidence interval, $SRMR$ standardized root mean square residual, AIC model Akaike’s information criterion

significantly related to job performance or satisfaction, providing no support for Hypothesis 7a and 7b. WSE was not a significant predictor of job performance, providing no support for Hypothesis 8a, but was a significant predictor of job satisfaction ($\beta = .82, p < .05$), providing support for Hypothesis 8b.

In addition to pathway estimates, several variables were allowed to correlate based on theoretical similarity. CSEs were allowed to correlate with proactive personality ($r = .13, p < .05$). WSC and WSE were allowed to correlate ($r = -.13, p < .05$). Finally, the two school performance variables were allowed to correlate ($r = .07, p < .05$).

Overall, this dispositional model of the work–school interface accounted for 10.0% of the variance in WSC, 20.4% of the variance in WSE, 16.8% of the variance in attendance, 8.3% of the variance in GPA, 20.5% of the variance in school satisfaction, 17.7% of the variance in job performance, and 45.5% of the variance in job satisfaction.

Alternative Models and Post hoc Analyses

In an effort to examine the appropriateness of our model we tested (1) an alternative mediated model without direct effects from CSEs to work outcomes and proactive personality to school outcomes, and (2) a fully mediated model without the pathways from CSEs to school and work outcomes, and proactive personality to school and work outcomes. Results for the alternative mediated model indicated that the model fit the data well, but not as well as the hypothesized model (see Table 3). Further, a χ^2 difference test ($5, N = 308$) = 13.86, $p < .05$ indicated that these models are statistically different. Similarly, results for the fully mediated model indicate that the model was statistically different from hypothesized model: χ^2 difference ($10, N = 308$) = 79.41, $p < .05$. Further, this new model did not fit the data well (see Table 3). These results suggest that the better fitting and statistically different hypothesized model is a more accurate depiction of the role that personality plays within the work–school interface.

We then conducted a series of regression analyses controlling for age, sex, and year in school. We also included resident assistant status as a control variable given that resident assistants (RAs) may differ on some of our focal variables compared to non-RAs (e.g., RAs need a minimum 2.5 GPA to apply for the job). The following significant relationships emerged: resident assistant status was a significant predictor of WSE ($\beta = .59, p < .01$), grade point average ($\beta = .36, p < .01$), and school satisfaction ($\beta = .32, p < .01$); year in school was a significant predictor of school satisfaction ($\beta = -.09, p < .05$); and age was a significant predictor of job performance ($\beta = -.11, p < .05$). As for our model pathways, only two

changes occurred. Newly significant relationships included WSC and job satisfaction ($\beta = -.11, p < .05$) and WSE and attendance ($\beta = .15, p < .05$). Overall, these modest changes suggest that these control variables have very little impact on the generalizability of the hypothesized model.

Discussion

The experience of being employed and attending school is a common experience for many college students (King 2006). Previous research has begun to explore the processes by which work influences the school experience (Butler 2007). The purpose of this study was to examine antecedent variables beyond job characteristics that may drive the work–school interface as well as important work and school attitudes and behaviors. In particular, two dispositional variables were explored: CSEs and proactive personality. In a recent monograph reviewing over 20 years of research, Eby, Casper, Lockwood, Bordeaux, and Brinley (2005) urged work–family researchers to pay greater attention to the role of individual differences in understanding how people experience work and family domains, and by extension, more work is also needed to understand work and school domains. Our study attempts to address this gap in the literature.

Dispositional Variables and WSC/WSE

Our results indicate that CSEs, but not proactive personality, are related to WSC. Thus, more efficacious, emotionally stable individuals who have positive self-evaluations and feel like they have control over their environment are less likely to feel that work interferes with school. However, the degree to which someone shows initiative and acts on opportunities had no bearing on perceptions of conflict. Other researchers have not found a significant relationship between proactive personality and work–family conflict (Aryee, Srinivas and Tan 2005). As a prototypical proactive person enjoys taking action and persevering to bring about change, and does not wait for others to be a force for change (Bateman and Crant 1993), he or she may perceive less of a conflict in managing multiple roles. A slightly different pattern emerged for WSE, which further supports the notion that WSC and WSE are distinct constructs (Butler 2007; Frone 2003). Both CSEs and proactive personality were related to WSE, which supports and extends, with regard to work–school, Greenhaus and Powell's (2006) theory of work–family enrichment. That is, CSEs and proactive personality offer key control-related assets that enable the transfer of resources from work to school. In this case, individuals higher in CSEs are more likely to frame situations positively, and individuals higher in

proactivity are more likely to seek out and seize opportunities to manipulate their environments, resulting in the perception of greater benefits by having both a work and school role.

Dispositional Variables and School/Work Outcomes

It is also the case that the dispositional variables were directly related to school and work outcomes as the hypothesized model fits the data better than the mediated models. Individuals with high CSEs were more likely to perform better and be more satisfied with school, but surprisingly this was not the case for job performance and satisfaction. This is contrary to previous research linking CSEs to job performance and job satisfaction (Judge et al. 2003). However, CSEs may be more closely related to school outcomes due to the salience of the school role for this college student population (King 2006). As most of these individuals probably identify more with the role of student than worker, their positive self-evaluations may be more influential on school outcomes.

On the other hand, more proactive individuals were more likely to report being higher job performers, consistent with previous research (Ashford and Black 1996; Crant 1995), but surprisingly were less satisfied with their jobs, which is contrary to previous findings by Seibert et al. (1999). It is possible that students higher in proactivity are less satisfied with their jobs because they view them as more temporary types of positions rather than careers. Indeed, King (2006) reports that among “students who work,” most (68.6%) are not working in jobs related to their academic major. Furthermore, many college students are working in jobs where their skills and abilities are not being utilized (Hammes and Heller 1983). Thus, for individuals who are predisposed to identify and act on opportunities in their environment, it may be more frustrating and less satisfying to have fewer opportunities for control. However, more research is needed to test if this negative relationship holds in other studies.

Another surprising finding in this study was the negative relationship between proactive personality and GPA. As proactive people tend to create situations that are aligned with more effective job performance (Crant 1995), we expected that this same logic would apply to school performance; however, this was not the case for proactive students in the current sample. One possible explanation is related to self-selection. Proactive individuals may seek out and select more challenging environments, and in this case, may pick more difficult classes. Consequently, these findings may then be related to our school performance indicator of GPA, as college GPA does not take into account the influence or contamination of individual differences in course choice (cf. Berry and Sackett 2009). That is, some

researchers have suggested that college GPA may not be a useful measure of academic achievement, as students self-select courses of various difficulty, as well as other influences such as instructor grading policy (Elliott and Strenta 1988; Ramist et al. 1990). Again, more work is needed to better understand this relationship, especially because our results suggest that proactive personality plays an important role in GPA, perhaps more important than CSEs or WSE given the comparisons between our hypothesized model and our alternative models. Stated alternatively, without the pathway from proactive personality to GPA within our hypothesized model, variance explained reduces from 8.3 to 3.0%, suggesting that proactive personality is a much stronger predictor of GPA than CSEs, WSC, and WSE combined.

WSC/WSE and School/Work Outcomes

Though WSE was related to both school and work outcomes, WSC was only related to one measure of school performance (attendance), and this relationship was approximately half the magnitude as the relationship found for CSEs and attendance. One possible explanation of these results is that performance and satisfaction are not proximal outcomes associated with WSC. Indeed, Butler (2007) did not find a relationship between WSC and school satisfaction, whereas Markel and Frone (1998) found an indirect relationship. This suggests that other intervening variables may explain the relationship between WSC and school and work outcomes. For example, Markel and Frone (1998) found that school readiness (defined as attendance, effort, and preparedness) was one such intervening variable between WSC and school performance among 16 to 19-year old employed students.

On the other hand, and consistent with Butler (2007), WSE was positively related to GPA and school and job satisfaction. Particularly noteworthy is the relationship between WSE and job satisfaction, which was the strongest relationship in our study ($\beta = .82$). This calls attention to the importance of building perceptions of WSE as a way to increase job satisfaction. More specifically, as school is such a central role in a student’s life, working students who experience WSE will be vastly more satisfied with their jobs than students who do not experience WSE. Interestingly, the transfer of resources from work to school results in higher satisfaction in the originating role domain (i.e., work) compared to the receiving role domain (i.e., school). This parallels work–family research that has also found that the consequences of enrichment stem from the originating role domain rather than the receiving role domain (McNall et al. *in press*; Wayne et al. 2004; Wayne et al. 2006). Thus, employers should care about building resources that can be transferred from work to school

because it will not only have an effect on the school domain but it will have an even stronger effect in the work domain. That is, organizations will likely see a return in the form of increased job satisfaction.

Interestingly, neither WSC nor WSE were related to job performance, but it should be noted that job performance was a self-report measure. It may be necessary to examine these relationships using manager ratings of job performance, or more objective types of performance indicators (e.g., absenteeism), but unfortunately this information was not available in this study.

Possible Limitations

As with any study, there are limitations in this study that should be acknowledged. One potential limitation is that most of the results presented here are based on cross-sectional self-report data, which increases concerns for common method bias and conclusions regarding causality. It is possible that some of our relationships are inflated due to common method bias (e.g., WSE and job satisfaction), but several of our bivariate correlations between personality and the work–school interface (proactive personality and WSC), personality and work–school outcomes (proactive personality and job satisfaction), and the work–school interface and outcomes (WSC and job performance) were nonsignificant. We also obtained students' GPA from official college records rather than self-report, somewhat mitigating the concerns for common method bias (Podsakoff, MacKenzie, Lee, and Podsakoff 2003). However, future research should assess the work–school interface (WSC and WSE) and outcome variables (e.g., performance) from more than one source (e.g., supervisor, coworker, roommate) to further mitigate this potential limitation.

With regard to cross-sectional data, we used structural equation modeling to fit a series of structural models. Our hypothesized model showed good fit; however, this just means that our model is a plausible explanation for the observed patterns of covariance (James, Muliak, and Brett 1982). Accordingly, we tested other plausible models for comparison, further supporting our hypothesized model. Nonetheless, future research should seek to establish if the general structure implied by our model is consistent with a truly causal model by collecting and structuring studies so as to best satisfy the requisite conditions for causal inference (see James et al. 1982). Stated alternatively, strong conclusions cannot be drawn about causality as this study measured participant perceptions at one point in time; thus, future research would benefit from more longitudinal data (see Butler and Matthews 2009), given the stability of dispositional variables such as CSEs and proactive personality (Bateman and Crant 1993; Judge, Bono, and

Locke 2000). These findings would also assist in pinpointing the direction of causality.

A second potential limitation is that this sample represents a relatively homogenous group of students with little racial or demographical diversity (e.g., 92% between 18 and 24 years of age, 88% Caucasian) from one educational institution. However, this should not be a pervasive problem for several reasons. Though the current sample was relatively homogenous, traditional college students at four-year institutions are in fact a very homogenous population with regard to age and race (Shin 2005). For instance, according to the U.S. Census Bureau in 2003, 87% of full-time students at four-year schools are between the ages of 15 and 24, and of these students, 80% are Caucasian (Shin 2005). In addition, we attempted to obtain more diversity than a random sampling by including both resident assistants and students currently employed. Nonetheless, as the student population is becoming increasingly diverse (Glod 2009), future researchers should employ more diverse populations to test whether our results generalize. As Dipboye (1990) reminds us, replication is the key to generalize any findings.

Third, we assumed that the majority of our sample comprised “students who work” rather than “employees who go to school” based on the percentage of students enrolled in school full-time (95.5%) and the number of hours worked per week (81.9% working 25 h or less). However, we did not ask participants whether they identified more as “students who work” or “employees who go to school.” Future research may wish to consider a measure of work and school salience to tap this more directly.

Lastly, more information is needed to understand the broader context of students who work. Sinclair, Martin, and Michel (1999) found that job attitudes vary between full-time and various subgroups of part-time employees (e.g., moonlighters, college students, people providing supplemental income to their families, people providing primary income to their families), and these different groups may approach the work–school interface differently as well. The type of work that students are performing may also be a major factor in managing work and school roles. Indeed, Butler (2007) found that job–school congruence (i.e., when the job requires knowledge or skills developed in school) is strongly related to work–school facilitation. In addition, it would be interesting to explore the intersection of work and school with additional roles, such as family and community roles.

Implications for Research, Theory, and Practice

The results of this study have several important theoretical and practical implications. As far as theory, one implication revolves around the specific pathway estimates of the

hypothesized model. For example, CSEs had consistent and moderately strong effects on both WSC and WSE and school outcomes. This is an important implication as students higher in CSEs not only perceive lower conflict and higher enrichment, but they also perform better and are more satisfied with their school. Similarly, proactive personality also had moderately strong effects on both WSE and work outcomes, suggesting that students higher in proactive personality perceive higher enrichment and perform better in their work role. These results indicate that both personality traits are important predictors of the work–school interface as well as certain work and school outcomes. Contrary to the thought that individuals higher in CSEs and proactive personality would be better performers and more satisfied in both work and school, our results suggest that CSEs are a direct predictor of school outcomes but not work outcomes, and vice versa for proactive personality, except for GPA. As such, this study provides important insight on the nonsymmetrical nature of CSEs and proactive personality on work and school outcomes. In addition, these results suggest that dispositional characteristics should be incorporated into models of the work–school interface.

Furthermore, this study offers a more balanced approach to the work–school interface by examining not only the negative or conflict aspects of managing multiple role memberships (Frone et al. 1992; Markel and Frone 1998), but also the positive or enrichment aspects of these same roles (Butler 2007; Greenhaus and Powell 2006). This is an important contribution as the vast majority of work–family research has taken a conflict or resource drain perspective. As more researchers have called for investigations of broader “work-life” issues (Greenhaus and Powell 2006) that encompass nonwork roles besides family, this study suggests that the school role is an important nonwork role that warrants further attention (along these lines, it may also be worthwhile to examine how the school role conflicts or enriches the work role). As this study showed that WSC and WSE have different antecedents and outcomes, and are only minimally related ($-.13$ in path models), this study suggests that WSC and WSE are unique and important constructs. Future research should continue to explore both processes to uncover ways of maximizing enrichment and minimizing conflict, along with dispositional influences beyond that of CSEs and proactive personality (e.g., cognitive ability, conscientiousness).

Finally, from a practical perspective, our results suggest that universities and organizations should be aware that college student employment has both negative and positive effects on school and work outcomes. To minimize negative effects, some researchers recommend limiting working hours to less than 20 h per week (e.g., Dundes and Marx 2006) and favoring on-campus over off-campus jobs (e.g.,

Astin 1975; Butler and Matthews 2009). However, giving the rising costs of higher education, this may not be an option for some students. Therefore, workplace interventions, such as flexible schedules and job enrichment may be more appropriate in balancing work and school roles (Markel and Frone 1998). In particular, giving students control over what and how work is done, as well as linking job requirements to skills learned in college, are strongly related to WSE (Butler 2007).

In addition, our results emphasize the importance of personality in the work–school interface. Indeed, different personality types seem to have different strategies for coping with the demands of multiple roles. Even though CSEs and proactivity are considered dispositional traits, it is possible that they may be improved by training. For instance, Kirby et al. (2002) found that students’ proactivity significantly increased through training, suggesting that “an individual’s proactivity is probably impacted by both personality trait and trainable skills” (p. 1548). Similarly, Judge and Hurst (2007) raised the possibility of interventions to influence behavior changes that in turn could result in enhancements in state CSEs. Thus, colleges and universities may wish to offer training to students on how to identify stressors in their environment and locate appropriate coping strategies to deal with these stressors (Friede and Ryan 2005), especially for low CSE individuals who may experience greater resource drain. Indeed, research has found that time management training results in higher academic performance and lower stress (Macan, Shahani, Dipboye and Phillips 1990). An academic seminar that focuses on building self-efficacy, gaining a sense of control, and taking initiative may be useful for increasing perceptions of WSE.

Conclusion

In summary, working college students are now the norm (King 2006), and more attention is needed to understand the positive and negative aspects of being employed while pursuing higher education. Our results indicate that dispositional variables play an important role in managing work–school roles, which should be attended to give their importance in determining critical outcomes variables, including performance and satisfaction in both the work and school domains.

Acknowledgment We thank Olajiwon McCadney and Bradie Morgott for their assistance with data collection.

References

- Akaike, H. (1974). A new look at the statistical model identification. *IEEE Transactions on Automatic Control*, 19, 716–723.

- Andreassi, J. K., & Thompson, C. A. (2007). Dispositional and situational sources of control: Relative impact on work-family conflict and positive spillover. *Journal of Managerial Psychology*, 22, 722–740.
- Arbuckle, J. L., & Wothke, W. (1999). *AMOS users' guide (Version 4.0)*. Chicago: Small Waters Corporation.
- Aryee, S., Srinivas, E., & Tan, H. (2005). Rhythms of life: Antecedents and outcomes of work-family balance in employed parents. *Journal of Applied Psychology*, 90, 132–146.
- Ashford, S. J., & Black, J. S. (1996). Proactivity during organizational entry: The role of desire for control. *Journal of Applied Psychology*, 81, 199–214.
- Astin, A. W. (1975). *Preventing students from dropping out*. San Francisco: Jossey-Bass.
- Astin, A. W. (1993). *What matters in college*. San Francisco: Jossey-Bass.
- Bandura, A. (1997). *Self-efficacy: The exercise of control*. New York: W. H. Freeman.
- Barling, J., Rogers, K., & Kelloway, E. K. (1995). Some effects of teenagers' part-time employment: The quantity and quality of work make the difference. *Journal of Organizational Behavior*, 16, 143–154.
- Bateman, T. S., & Crant, J. M. (1993). The proactive component of organizational behavior. *Journal of Organizational Behavior*, 14, 103–118.
- Beauregard, T. A. (2006). Predicting interference between work and home: A comparison of dispositional and situational antecedents. *Journal of Managerial Psychology*, 21, 244–264.
- Becherer, R. C., & Mauer, J. G. (1999). The proactive personality disposition and entrepreneurial behavior among small company presidents. *Journal of Small Business Management*, 28–36.
- Bentler, P. M. (1990). Comparative fit indices in structural equation modeling. *Psychological Bulletin*, 107, 238–246.
- Bentler, P. M. (1995). *EQS structural equations program manual*. Encino, CA: Multivariate Software.
- Bentler, P. M., & Bonett, D. G. (1980). Significance tests and goodness of fit in the analysis of covariance structures. *Psychological Bulletin*, 88, 588–606.
- Berry, C. M., & Sackett, P. R. (2009). Individual differences in course choice result in underestimation of the validity of college admissions systems. *Psychological Science*, 20, 822–830.
- Boyar, S. L., & Mosley, D. C. (2007). The relationship between core self-evaluations and work and family satisfaction: The mediating role of work-family conflict and facilitation. *Journal of Vocational Behavior*, 71, 265–281.
- Broadbridge, A., & Swanson, V. (2005). Earning and learning: How term-time employment impacts on students' adjustment to university life. *Journal of Education & Work*, 18, 235–249.
- Browne, M. W., & Cudeck, R. (1993). Alternative ways of assessing model fit. In K. A. Bollen & J. S. Long (Eds.), *Testing structural equation models* (pp. 136–162). Newbury Park, CA: Sage.
- Bruck, C. S., & Allen, T. D. (2003). The relationship between big five personality traits, negative affectivity, type A behavior, and work-family conflict. *Journal of Vocational Behavior*, 63, 457–472.
- Butler, A. B. (2007). Job characteristics and college performance and attitudes: A model of work-school conflict and facilitation. *Journal of Applied Psychology*, 92, 500–510.
- Butler, A. B., & Matthews, R. (2009, April). *A daily study of work-school conflict and enrichment*. Poster presented at the Society for Industrial Organizational Psychology Conference, New Orleans, LA.
- Carlson, D. S. (1999). Personality and role variables as predictors of three forms of work-family conflict. *Journal of Vocational Behavior*, 55, 236–253.
- Carlson, D. S., Kacmar, K. M., Wayne, J. H., & Grzywacz, J. G. (2006). Measuring the positive side of the work-family interface: Development and validation of a work-family enrichment scale. *Journal of Vocational Behavior*, 68, 131–164.
- Crant, J. (1995). The proactive personality scale and objective job performance among real estate agents. *Journal of Applied Psychology*, 80, 532–537.
- Cunningham, C., & De La Rosa, G. (2008). Proactive personality as a complex moderator in the stress process. *Journal of Occupational Health Psychology*, 13, 271–282.
- Di, X. (1996). Teaching real world students: A study of the relationship between students' academic achievement and daily-life interfering and remedial factors. *College Student Journal*, 30, 238–253.
- Diener, E., Larsen, R., & Emmons, R. (1984). Situation interactions: Choice of situations and congruence \times Person response models. *Journal of Personality and Social Psychology*, 47, 580–592.
- Dipboye, R. L. (1990). Laboratory vs. field research in industrial and organizational psychology. In C. L. Cooper & I. T. Robertson (Eds.), *International review of industrial and organizational psychology* (Vol. 5, pp. 1–34). New York: Wiley.
- Dundes, L., & Marx, J. (2006). Balancing work and academics in College: Why do students working 10–19 hours per week excel? *Journal of College Student Retention*, 8, 107–120.
- Eby, L. T., Casper, W. J., Lockwood, A., Bordeaux, C., & Brinley, A. (2005). Work and family research in IO/OB: Content analysis and review of the literature (1980–2002). *Journal of Vocational Behavior*, 66, 124–197.
- Elliott, R., & Strenta, A. C. (1988). Effects of improving the reliability of the GPA on prediction generally and on comparative predictions for gender and race particularly. *Journal of Educational Measurement*, 25, 333–347.
- Friede, A., & Ryan, A. M. (2005). The importance of the individual: How self-evaluations influence the work-family interface. In E. E. Kossek & S. Lambert (Eds.), *Work and life integration: Organizational, cultural, and individual perspectives*. New Jersey: Lawrence Erlbaum Associates.
- Frone, M. (2003). *Work-family balance*. *Handbook of occupational health psychology* (pp. 143–162). Washington, DC, US: American Psychological Association.
- Frone, M. R., Russell, M., & Cooper, M. L. (1992). Antecedents and outcomes of work-family conflict: Testing a model of the work-family interface. *Journal of Applied Psychology*, 77, 65–78.
- Furr, S. R., & Elling, T. W. (2000). The influence of work on college student development. *NASPA Journal*, 37, 454–470.
- Glod, M. (2009, June). *A changing student body*. Retrieved on September 1, 2009 from <http://www.washingtonpost.com/wp-dyn/content/article/2009/05/31/AR2009053102229.html?sid=ST2009060100036>.
- Greenhaus, J., & Beutell, N. (1985). Sources and conflict between work and family roles. *Academy of Management Review*, 10, 76–88.
- Greenhaus, J. H., & Powell, G. N. (2006). When work and family are allies: A theory of work family enrichment. *Academy of Management Review*, 31, 72–92.
- Hammes, J. F., & Heller, E. J. (1983). Making ends meet: Some of the consequences of part-time work for college students. *Journal of College Student Personnel*, 24, 529–535.
- Hendrix, S. (2008, October). *Costs of higher education heading up*. Retrieved July 15, 2009 from <http://www.washingtonpost.com/wp-yn/content/article/2008/10/29/AR2008102901642.html>.
- Hobfoll, S. E. (2002). Social and psychological resources and adaptation. *Review of General Psychology*, 6, 307–324.
- James, L. R., Muliak, S. S., & Brett, J. M. (1982). Mediators, moderators, and tests for mediation. *Journal of Applied Psychology*, 69, 307–321.
- Jöreskog, K. G., & Sörbom, D. (1993). *LISREL 8: Analysis of linear structural relationships by maximum likelihood, instrumental*

- variables and least squares methods* (8th ed.). Mooresville, IN: Scientific Software.
- Judge, T., Bono, J., Erez, A., & Locke, E. (2005). Core self-evaluations and job and life satisfaction: The role of self-concordance and goal attainment. *Journal of Applied Psychology, 90*, 257–268.
- Judge, T. A., Bono, J. E., & Locke, E. A. (2000). Personality and job satisfaction: The mediating role of job characteristics. *Journal of Applied Psychology, 85*, 237–249.
- Judge, T. A., Erez, A., Bono, J. E., & Thoresen, C. J. (2002). Are measures of self-esteem, neuroticism, locus of control, and generalized self-efficacy indicators of a common core construct? *Journal of Personality and Social Psychology, 83*, 693–710.
- Judge, T. A., Erez, A., Bono, J. E., & Thoresen, C. J. (2003). The core self-evaluations scale: Development of a measure. *Personnel Psychology, 56*, 303–331.
- Judge, T. A., & Hurst, C. (2007). Capitalizing on one's advantages: Role of core self-evaluations. *Journal of Applied Psychology, 92*, 1212–1227.
- Judge, T. A., Locke, E., & Durham, C. (1997). The dispositional causes of job satisfaction: A core evaluation approach. *Research in Organizational Behavior, 19*, 151–188.
- Katz, D., & Kahn, R. (1978). *The social psychology of organizations*. New York: Wiley.
- King, J. E. (2006, May). *Working their way through college: Student employment and its impact on the college experience*. Retrieved on May 25, 2009, from <http://www.acenet.edu/AM/Template.cfm?template=/CM/ContentDisplay.cfm&ContentFileID=1618>.
- Kirby, E. G., Kirby, S. L., & Lewis, M. A. (2002). A study of the effectiveness of training proactive thinking. *Journal of Applied Social Psychology, 32*, 1538–1549.
- Lammers, W., Onweugbuzie, A., & Slate, J. (2001). Academic success as a function of gender, class, age, study habits, and employment of college students. *Research in the Schools, 8*, 71–81.
- Lazarus, R. S., & Folkman, S. (1984). *Stress, appraisal, and coping*. New York: Springer.
- Macan, T. H., Shahani, C., Dipboye, R. L., & Phillips, A. P. (1990). College students' time management: Correlations with academic performance and stress. *Journal of Educational Psychology, 82*, 760–768.
- Markel, K. S., & Frone, M. R. (1998). Job characteristics, work-school conflict, and school outcomes among adolescents: Testing a structural model. *Journal of Applied Psychology, 83*, 277–287.
- Marks, S. (1977). Multiple roles and role strain: Some notes on human energy, time and commitment. *American Sociological Review, 42*, 921–936.
- Masuda, A.D., McNall, L.A., & Nicklin, J. (2009, May). *The interaction effects of core self-evaluations and perceived organizational support on work-to-family enrichment*. Poster presented at the European Association of Work and Organizational Psychology, Santiago de Compostela, Spain.
- McNall, L.A., Nicklin, J.M., & Masuda, A.D. (in press). A meta-analytic review of the consequences associated with work-family enrichment. Accepted in *Journal of Business & Psychology*.
- Michel, J. S., & Hargis, M. B. (2008). Linking mechanisms of work-family conflict and segmentation. *Journal of Vocational Behavior, 73*, 509–522.
- Michel, J. S., Mitchelson, J. K., Kotrba, L. M., LeBreton, J. M., & Baltes, B. B. (2009). A comparative test of work-family conflict models and critical examination of work-family linkages. *Journal of Vocational Behavior, 74*, 199–218.
- Miller, K., Danner, F., & Staten, R. (2008). Relationship of work hours with selected health behaviors and academic progress among a college student cohort. *Journal of American College Health, 56*, 675–679.
- Morrison, E. W. (1993). Longitudinal study of the effects of information seeking on newcomer socialization. *Journal of Applied Psychology, 78*, 173–183.
- Podsakoff, P. M., MacKenzie, S. B., Lee, J. Y., & Podsakoff, N. P. (2003). Common method biases in behavioral research: A critical review of the literature and recommended remedies. *Journal of Applied Psychology, 88*, 879–903.
- Ramist, L., Lewis, C., & McCamley, L. (1990). Implications of using freshman GPA as the criterion for the predictive validity of the SAT. In W. W. Willingham, C. Lewis, R. Morgan, & L. Ramist (Eds.), *Predicting college grades: An analysis of institutional trends over two decades* (pp. 253–288). Princeton, NJ: Educational Testing Service.
- Riggert, S. C., Boyle, M., Petrosko, J. M., Ash, D., & Rude-Parkins, C. (2006). Student employment and higher education: Empiricism and contradiction. *Review of Educational Research, 76*, 63–92.
- Schunk, D. H. (1991). Self-efficacy and academic motivation. *Educational Psychologist, 26*, 207–232.
- Seibert, S. E., Crant, J. M., & Kraimer, M. L. (1999). Proactive personality and career success. *Journal of Applied Psychology, 84*, 416–427.
- Shin, H. B. (2005, May). *School enrollment—Social and economic characteristics of students: October 2003*. Retrieved on August 31, 2009 from <http://www.census.gov/prod/2005pubs/p20-554.pdf>.
- Sinclair, R. R., Martin, J. E., & Michel, R. P. (1999). Full-time and part-time subgroup differences in job attitudes and demographic characteristics. *Journal of Vocational Behavior, 55*, 337–357.
- Spector, P. E., et al. (2007). Cross-national differences in relationships of work demands, job satisfaction, and turnover intentions with work-family conflict. *Personnel Psychology, 60*, 805–835.
- Sumer, H. C., & Knight, P. A. (2001). How do people with different attachment styles balance work and family? A personality perspective on work-family linkage. *Journal of Applied Psychology, 86*, 653–663.
- Swanson, V., Broadbridge, A., & Karatzias, A. (2006). Earning and learning: Role congruence, state/trait factors, and adjustment to university life. *British Journal of Educational Psychology, 76*, 895–914.
- Tanaka, J. S., & Huba, G. J. (1989). A general coefficient of determination for covariance structure models under arbitrary GLS estimation. *British Journal of Mathematical and Statistical Psychology, 42*, 233–239.
- Terborg, J. R. (1981). Interactional psychology and research on human behavior in organizations. *Academy of Management Review, 6*, 569–576.
- The Project on Student Debt (2008, October). *Student debt and the class of 2007*. Retrieved on August 31, 2009 from <http://projectonstudentdebt.org/files/pub/classof2007.pdf>.
- Trockel, M. T., Barnes, M. D., & Egget, D. L. (2000). Health-related variables and academic performance among first-year college students: Implications for sleep and other behaviors. *Journal of American College Health, 49*, 125–131.
- U.S. Government Accountability Office. (2004). *College textbooks: Enhanced offerings appear to drive recent price increase* (GAO Publication No. 05-806). Washington, DC: Author.
- Van Dyne, L., & LePine, J. (1998). Helping and voice extra-role behaviors: Evidence of construct and predictive validity. *Academy of Management Journal, 41*, 108–119.
- Volkwein, J. F., Schmonksy, R. J., & Im, Y. S. (1989). *The impact of employment on the academic achievement of full-time community college students*. Paper presented at the Association of Institutional Research 1989 Annual Forum, Baltimore.
- Wayne, J. H., Musisca, N., & Fleeson, W. (2004). Considering the role of personality in the work-family experience: Relationships

- of the big five to work-family conflict and facilitation. *Journal of Vocational Behavior*, *64*, 108–130.
- Wayne, J. H., Randel, A. E., & Stevens, J. (2006). The role of identity and work-family support in work-family enrichment and its work-related consequences. *Journal of Vocational Behavior*, *69*, 445–461.
- Williams, L., & Anderson, S. (1991). Job satisfaction and organizational commitment as predictors of organizational citizenship and in-role behaviors. *Journal of Management*, *17*, 601–617.