

## Linking team resources to work–family enrichment and satisfaction

Emily M. Hunter<sup>a,\*</sup>, Sara Jansen Perry<sup>b</sup>, Dawn S. Carlson<sup>c</sup>, Steven A. Smith<sup>d</sup>

<sup>a</sup> Department of Management and Entrepreneurship, Hankamer School of Business, Baylor University, One Bear Place #98006, Waco, TX 76798-8006, United States

<sup>b</sup> University of Houston-Downtown, Houston, TX, United States

<sup>c</sup> Baylor University, Waco, TX, United States

<sup>d</sup> University of New Orleans, New Orleans, LA, United States

### ARTICLE INFO

#### Article history:

Received 27 April 2010

Available online 4 June 2010

#### Keywords:

Work–family enrichment

Work–family interface

Resource–Gain–Development model

Team resources

Satisfaction

### ABSTRACT

Work–family scholars now recognize the potential positive effects of participation in one life domain (i.e., work or family) on performance in other life domains. We examined how employees might benefit from team resources, which are highly relevant to the modern workplace, in both work and nonwork domains via work–family enrichment. Using the Resource–Gain–Development model (Wayne, Grzywacz, Carlson, & Kacmar, 2007), we explored how team resources contribute to enrichment and resulting project and family satisfaction. Using multilevel structural equation modeling (ML-SEM) to analyze student data ( $N=344$ ) across multiple class projects, we demonstrated that individuals with team resources were more likely to experience both work-to-family and family-to-work enrichment. Further, enrichment mediated the relationship between team resources and satisfaction with the originating domain.

© 2010 Elsevier Inc. All rights reserved.

Work–family enrichment describes the process by which experiences in one role of an individual's life improve their performance in other roles (Greenhaus & Powell, 2006). Enrichment between work and family roles can occur in both directions—family-to-work and work-to-family. Employees who experience enrichment between work and family tend to demonstrate improved physical health, lower absenteeism, and higher job performance (Van Steenbergen & Ellemers, 2009). Furthermore, enrichment is positively related to job, family, and life satisfaction and lower intentions to turnover (Aryee, Srinivas, & Tan, 2005; Carlson, Grzywacz, & Zivnuska, 2009; Hill, 2005; McNall, Masuda, & Nicklin, 2010; Wayne, Musisca, & Fleeson, 2004). Despite these positive outcomes, scholars have only begun to explore the many aspects of the work domain that contribute to the experience of enrichment.

The purpose of this study is to examine the role of team-based resources in contributing to work–family enrichment and subsequent domain satisfaction. As organizations increasingly rely on teams (Tekleab, Quigley, & Tesluk, 2009), it is critical to understand the role of this dimension of the work domain in developing work–family enrichment. Using the Resource–Gain–Development model (Wayne, Grzywacz, Carlson, & Kacmar, 2007) as a theoretical foundation, we suggest that teams may offer resources at work that contribute to the experience of work–family enrichment and subsequent satisfaction. Therefore, we develop a model that posits work-to-family and family-to-work enrichment as mediators between team resources (i.e., cohesion, familiarity, and similarity) and satisfaction with both the team project and with family.

This study contributes to the understanding of work–family enrichment in a number of ways. First, this is the first study to our knowledge that examines the work–family interface in relation to a set of social resources particularly relevant for modern workers—resources garnered from involvement in teamwork. As organizations increasingly rely on teams (Tekleab et al., 2009), examining this set of resources holds practical implications for managers who wish to help their employees experience greater work–family enrichment, especially in light of the positive outcomes that can result. Second, we utilize a unique sample because many of our team members participate in multiple teams with differing team members and differing experiences of resources, allowing us to test this

\* Corresponding author. Fax: +1 254 710 1093.

E-mail address: [Emily\\_M\\_Hunter@baylor.edu](mailto:Emily_M_Hunter@baylor.edu) (E.M. Hunter).

phenomenon across multiple situations for each of these participants. Finally, whereas a resource-based framework has been widely applied to the study of work–family conflict (Geurts, Beckers, Taris, Kompier, & Smulders, 2009; Grandey & Cropanzano, 1999; Halbesleben, Harvey, & Bolino, 2009), Wayne et al. (2007) proposed that such a framework can also contribute to our understanding of work–family enrichment. Thus, we provide an empirical test of the Resource–Gain–Development model, which has not yet been empirically tested. In doing so, we incorporate both antecedents and consequences of work–family enrichment.

## 1. Theoretical foundation

Resource-based models have been widely applied to many areas of management research, but in the last decade, work–family scholars have found these theories useful for explaining work–family conflict (Geurts et al., 2009; Grandey & Cropanzano, 1999; Halbesleben et al., 2009; Wayne et al., 2007). Applying resource-based models to work–family enrichment is a natural extension of this research. As Greenhaus and Powell (2006) explain, participation in multiple roles can benefit the actor because experiences from one role can carry over to improve experiences in another role. For instance, if an individual gains resources at work, such as social support and self-efficacy, the individual can then reinvest those resources in nonwork roles to garner positive outcomes (Sieber, 1974).

Extending the work of Greenhaus and Powell (2006), Wayne et al. (2007) proposed the Resource–Gain–Development perspective of work–family enrichment based on the conservation of resources theory (Hobfoll, 1989). Resources are defined as characteristics of the environment that fulfill three major functions (Bakker & Demerouti, 2007): (1) they help individuals achieve goals, (2) they address demands (i.e., aspects of the job that require sustained effort, such as high work pressure), and/or (3) they encourage personal growth and development. The Resource–Gain–Development perspective of enrichment is grounded on the basic premise that individuals strive to grow and achieve in all domains in which they participate, which drives individuals to actively seek resources in each domain to enable growth (Wayne et al., 2007). Furthermore, these resources may spill over to enhance other domains. According to this model, work–family enrichment acts as a mediator between resources and work–family outcomes. Thus, resources may increase enrichment between work and family domains, which then may improve satisfaction at work and at home.

Researchers have only begun to explore the impact of the vast array of resources generated in the work domain on the experience of enrichment. For instance, some evidence suggests that flexible work arrangements (McNall et al., 2010), job characteristics (e.g., autonomy; Voydanoff, 2004), work support (Karatepe & Bekteshi, 2008), and job involvement (Aryee et al., 2005) are related to enrichment. However, to our knowledge, the role of team resources in this process has not yet been examined.

### 1.1. Team resources

Teams may offer critical social resources at work that help individuals to grow and develop, thereby enabling positive spillover between the work and family domains (Wayne et al., 2007). Although organizations increasingly depend on teams to accomplish goals (Tekleab et al., 2009), team processes and characteristics have rarely been explicitly studied in conjunction with work–family outcomes. However, because of frequent interactions with team members at work, teams can provide a valuable support network, and over time, a team might even start to represent a “family” unit at work.

Key team characteristics that may act as social resources include similarity, cohesion, and familiarity. First, team similarity is the extent to which team members are alike in terms of visible characteristics (surface-level traits such as ethnicity and gender) and nonvisible characteristics (informational traits such as personality, professional experience, and education; Hobman, Bordia, & Gallois, 2003). The similarity–attraction paradigm predicts that similar individuals are attracted to one another, forming in-groups that engage in frequent communication, effective conflict resolution, and efficient problem solving (Chiaburu & Harrison, 2008; Tsui, Egan, & O'Reilly, 1992). Individuals who are similar also tend to engage in less conflict overall than dissimilar individuals, instead engaging in friendly, productive, and satisfactory interactions (Tsui et al., 1992). Second, team cohesion describes the strength of the bond that pulls team members together (Beal, Cohen, Burke, & McLendon, 2003; Tekleab et al., 2009). Cohesive teams are generally united in working toward team goals, but team members also tend to experience friendships and mutual trust. Research demonstrates that team cohesion relates positively to general team effectiveness (Barrick, Stewart, Neubert, & Mount, 1998). Third, team familiarity refers to the extent to which team members know each other (Espinosa, Slaughter, Kraut, & Herbsleb, 2007). Following popular models of team development, familiarity develops over time and with collaboration experience (Guzzo & Dickson, 1996). In the early stages of team development, team members may expend significant time and energy to increase familiarity. Once familiarity is high, however, team members may anticipate and understand the unique working styles and experiences of other teammates, understand everyone's role, effectively engage all teammates in the task, and rely less on explicit communication (Balkundi & Harrison, 2006; Espinosa et al., 2007).

We suggest these three characteristics of teams act as resources by fulfilling all three functions of resources (i.e., achieving goals, reducing demands, and encouraging personal growth; Bakker & Demerouti, 2007). For example, team similarity can act as a resource because similar teammates engage in more efficient and effective team interactions that contribute to achieving work goals and addressing work demands. As such, it may also aid in developing the skills and confidence of team members. A cohesive team is also better equipped (than less cohesive teams) to address demands such as high workload or time pressure (Hobfoll & Spielberger, 1992; Tekleab et al., 2009). For instance, cohesive team members may notice a peer is overloaded with tasks and offer support in completing them (Hobfoll & Spielberger, 1992). Furthermore, belonging to a cohesive team can help each member grow personally and professionally, because cohesive teammates tend to learn from each other's working styles, knowledge bases, and

coping strategies (Hobfoll & Spielberger, 1992; Tekleab et al., 2009). Finally, team familiarity may also act as a resource that helps the team to achieve work goals more efficiently and address work demands more effectively, because familiar team members better understand each other's working styles and roles, and communicate more efficiently (Guzzo & Dickson, 1996). Furthermore, familiarity among team members may contribute to each member's personal development because more familiar team members are more likely than unfamiliar team members to support and encourage each other to perform well and provide developmental feedback.

### 1.2. Team resources and work–family enrichment

According to the Resource–Gain–Development model (Wayne et al., 2007), social resources (e.g., social support from others at work) facilitate work–family enrichment by fostering a positive work environment that equips employees with sufficient resources to apply toward successful and satisfactory functioning in nonwork domains. Team resources may function as social support resources in this way by stimulating positive experiences at work, leading to a general feeling of positive affect and confidence and surplus personal energy, which may enhance both work and family domains.

For example, a cohesive team involves teammates who like and trust each other (Hobfoll & Spielberger, 1992; Tekleab et al., 2009). The experience of enjoyment, trust, and social support can then generate positive affect and energy and inspire confidence among team members; an individual with membership in a less cohesive team or no team at all would lack these benefits. Individuals who are energized and inspired by their teammates at work are then likely to continue to enjoy the benefits of those resources after returning home from work, exhibiting more enthusiasm, confidence, and happiness in interactions with their spouse and children. Likewise, individuals who are very familiar with teammates and perceive themselves to be highly similar to their teammates also gain resources from the positive communication and interactions with their team that increase their positive affect, energy, and confidence, thereby increasing enrichment from work to family.

These team resources may be relevant to the family-to-work direction of enrichment as well. When individuals participate in cohesive, familiar, and similar teams at work, they may be more comfortable bringing family issues to the workplace than when coworkers are distant, unfamiliar, or dissimilar. For instance, these individuals may discuss family-related topics with their team members and even obtain support from teammates to face challenges at home. Or these individuals may notice parallels between interactions with close family members and interactions with their close team members, thereby applying successful strategies from home to the workplace. Therefore, based on predictions from the Resource–Gain–Development model (Wayne et al., 2007), we hypothesized that individuals who experience greater team resources will also experience more work-to-family and family-to-work enrichment.

**Hypothesis 1.** Team resources are positively associated with work-to-family enrichment.

**Hypothesis 2.** Team resources are positively associated with family-to-work enrichment.

For many of the same reasons, team resources may also have a direct effect on satisfaction with team project work. For instance, in a team where members are similar, cohesive, and familiar to one another, we predicted that these social resources facilitate positive affect, confidence, and surplus energy to apply to team tasks. These positive encounters likely lead to satisfactory collaborations in completing projects. Therefore, working with similar others that one knows and likes, and with whom one experiences mutual trust and efficient, enjoyable collaboration likely leads to work-related satisfaction and, in particular, project-related satisfaction. Empirical research also supports this notion (Tekleab et al., 2009; West, Patera, & Carsten, 2009), leading us to hypothesize the following.

**Hypothesis 3.** Team resources are positively associated with project satisfaction.

### 1.3. Mediating role of enrichment with satisfaction outcomes

One mechanism by which team resources may enhance project and family satisfaction is work–family enrichment. The social support and enhanced effectiveness gained through involvement with cohesive, familiar, and similar teams likely energize and elevate individuals in their performance of both work and family roles, thereby enhancing their satisfaction with both roles (Wayne et al., 2004, 2007). We assert that team resources may specifically result in enhanced satisfaction via work–family enrichment because they are social resources. That is, they originate from social interactions at work and appeal to our inherent social nature. It is widely accepted that we have a natural need for belongingness, which represents our need to engage in positive interactions and relationships with others (Baumeister & Leary, 1995). Because the common linkages between work and family may be primarily social (i.e., social relationships in work and family settings), it stands to reason that social resources are likely to be the most salient resources that spillover to relationships across domains. Research shows that individuals experience intrinsically positive states when they perceive a sense of secure interrelatedness with those around them (Ryan & Deci, 2000). Team resources may facilitate these perceptions. For instance, when team resources socially enhance functioning in family life, an individual may engage in more stimulating and productive interactions at home. Moreover, when team resources socially enhance functioning at work by applying family principles to team member interactions, an individual may engage in more successful

interactions in terms of tasks and relationships at work. By enhancing these social elements in both domains, we expect that social resources such as team cohesion, team familiarity, and team similarity may enhance satisfaction in both domains as well.

Research supports the notion that enrichment in both directions (i.e., work-to-family and family-to-work) is positively related to job, family, and life satisfaction (Aryee et al., 2005; Carlson et al., 2009; Hill, 2005; McNall et al., 2010; Wayne et al., 2004). Therefore, we predict satisfaction will increase in both domains as enrichment increases. If team resources allow work to enhance the quality of family life, then the individual should perceive satisfaction with both the source and recipient of enhancement. Likewise, if gains from team resources allow family to enrich work life, then the individual is likely to be satisfied with the family circumstances that brought about enhanced satisfaction in addition to their enriched work life. We predicted a partially mediated effect of team resources on project-related satisfaction but a fully mediated effect on family-related satisfaction. This is because work-related resources are directly relevant to work-related satisfaction (as hypothesized above). In contrast, the effect of work-related resources on satisfaction in nonwork domains may only occur through a relevant boundary process (i.e., work–family enrichment), rather than directly.

**Hypothesis 4a.** Work-to-family enrichment partially mediates the relationship between team resources and project satisfaction.

**Hypothesis 4b.** Family-to-work enrichment partially mediates the relationship between team resources and project satisfaction.

**Hypothesis 5a.** Work-to-family enrichment fully mediates the relationship between team resources and family satisfaction.

**Hypothesis 5b.** Family-to-work enrichment fully mediates the relationship between team resources and family satisfaction.

## 2. Method

### 2.1. Participants and procedure

We tested our hypotheses using data collected from MBA and undergraduate students at four universities in the United States. In total, 351 students participated; of these, 53% were graduate students ( $n = 185$ ). Students were enrolled in nine business courses with four different instructors utilizing team-based projects throughout the semester. Because these courses varied in content and structure, 34% of the participants engaged in multiple projects across the semester (from two to five projects), while the remaining participants completed one project. All participants completed a baseline survey at the beginning of the semester (for demographics and individual differences information) as well as a 15-minute online survey after they completed each project (no more than 1 week after assignment submission). On all surveys, individuals provided their student identification number and selected the course and instructor with which they were affiliated.

Participation was voluntary in all classes except one, and most instructors offered extra credit in return for completion of the surveys. As a result, more than 95% of the students in the classes participated. After line-deleting missing data on pertinent scales, 537 complete responses were collected from 344 students (average 1.56 projects per student). All scale items featured a 7-point response scale anchored from 1 = “strongly disagree” to 7 = “strongly agree.”

### 2.2. Measures

#### 2.2.1. Team resources

We used five items to measure team member similarity (Hobman et al., 2003;  $\alpha = .85$ ; e.g., “I feel I am professionally and/or educationally dissimilar to other group members”). We also reverse-coded the items such that high scores indicated high perceived similarity to one’s fellow team members. For team cohesion, we used one item from Zaccaro (1991; e.g., “I generally did not get along with my fellow team members,” reverse-coded) to assess the interpersonal attraction dimension of cohesion. For team familiarity, we developed three items ( $\alpha = .92$ ; e.g., “I was familiar with my team members”) to assess familiarity among team members from the perspective of each individual.

#### 2.2.2. Work-to-family and family-to-work enrichment

We assessed work-to-family and family-to-work enrichment using nine items each ( $\alpha = .98$  and  $.97$ , respectively) from Carlson, Kacmar, Wayne, and Grzywacz (2006) that were adapted to the team context (e.g., “My involvement in this team helps me to understand different viewpoints and this helps me be a better family member” and “My involvement in my family helps me acquire skills and this helps me perform better as a member of this team”).

#### 2.2.3. Satisfaction

Given our objective to capture global satisfaction regarding the team project and family domains, we chose to use single item measures of satisfaction, which has been supported by previous research (Gardner, Cummings, Dunham, & Pierce, 1998). For satisfaction with the class project, we included one item (“Overall, how satisfied are you with the process of completing this assignment?”). For satisfaction with family at the time of project submission, we used one item (“In general how satisfied are you with your family life at this time?”).

### 2.2.4. Controls

We included demographic variables that are commonly controlled in work–family research and that may influence an individual's experience of work–family enrichment (Aryee et al., 2005): gender (1 = male, 2 = female) and marital status (1 = married, 2 = committed relationship, 3 = single, 4 = other). We also controlled for class instructor, since team resources and project satisfaction (and possibly other study variables) might vary in accordance with the teaching style of the instructor and structure of the course.

## 3. Results

Before testing our hypotheses, we first assessed the factor structure of our team resources measures. Because the data were multilevel (i.e., multiple surveys per participant), we simplified the data for CFA analyses by randomly selecting one survey per participant. To replicate the CFA results, we also created another data set with one survey randomly selected per participant (with replacement). Specifically, we tested a CFA that included items for all three team resource scales to confirm a one-factor structure for each scale and a three-factor structure for the second-order team resources latent factor. The CFA that included a second-order team resources latent factor fit reasonably well in both data sets (replication 1:  $\chi^2$  [25,  $N=344$ ] = 102.87,  $p < .01$ , CFI = .94, TLI = .91, RMSEA = .11, SRMR = .05; replication 2:  $\chi^2$  [25,  $N=344$ ] = 116.70,  $p < .01$ , CFI = .92, TLI = .89, RMSEA = .12, SRMR = .06), and it fit significantly better than a CFA with a one-factor structure for the team resources latent factor (replication 1:  $\chi^2_{\text{Diff}}$  [2,  $N=344$ ] = 522.02,  $p < .01$ ; replication 2:  $\chi^2_{\text{Diff}}$  [2,  $N=344$ ] = 510.15,  $p < .01$ ). All factor loadings for items onto scales and scales onto the team resources factor were significant, and factor loadings were consistent across data sets.

We also tested for the discriminant validity of the three team resource scales following procedures recommended by Fornell and Larcker (1981). We demonstrated that the variance extracted estimates (similarity = .51, cohesion = .67, familiarity = .77) were greater than the square of the correlations between similarity and familiarity ( $r^2 = .04$ ), between cohesion and familiarity ( $r^2 = .02$ ), and between cohesion and similarity ( $r^2 = .40$ ) providing support for discriminant validity of these measures. Therefore, based on these tests and the CFA results, our measurement model of team resources was supported, because all three resources loaded onto one latent variable and the three scales were distinct from each other.

Descriptive statistics and intercorrelations for study measures are presented in Table 1. The current study used a repeated measures survey design, but because 66% of our participants were in classes that only completed one class project, we first ran null models at the within- and between-person levels to verify that there was sufficient variance at both levels across our data. We found that a substantial portion of the total variance for each scale was within person (ranging from 37% to 86%). Thus, because there was both within and between person variance to explain, we determined multilevel modeling was appropriate.

We utilized multilevel structural equation modeling (ML-SEM) with MPlus 5.21 (Muthen & Muthen, 2007) to estimate a random-intercepts model. ML-SEM applies traditional hierarchical linear modeling theory using an SEM analytical framework (Mehta & Neale, 2005). This methodology allows researchers to analyze causal relationships among variables with data collected at multiple time points while simultaneously estimating within and between person effects. Because stability rather than growth was expected across time points (i.e., we did not hypothesize that relationships between variables would change across time), a random-intercepts model was estimated rather than a random-coefficients model or latent growth curve analysis.

In this case, the individual-level of analysis (level 1) was each class project, while the grouping variable (level 2) was the person. We used ML-SEM to model causal processes at the person level (level 2) while controlling for the null model (i.e., all variables covary) at the project level (level 1). We estimated a null model at the within-person (project) level primarily because

**Table 1**  
Multilevel descriptive statistics and correlations.

Scale	1	2	3	4	5	6	7	8	9	10
1. Instructor	–	.01	.16**	–.18**	–.54**	–.24**	–.23**	–.22**	–.03	–.09*
2. Gender		–	.04	–.01	.01	.12**	–.05	.19**	–.06	.03
3. Marital Status			–	.16**	–.18**	.05	.13**	.09*	.06	–.15**
4. Team cohesion				–	.52**	.54**	.61**	.51**	.66**	.43**
5. Team familiarity					(.95)	.56**	.74**	.43**	.55**	.29**
6. Team similarity						(.85)	.29**	.33**	.61**	.24**
7. Work-to-family enrichment							(.98)	.71**	.74**	.43**
8. Family-to-work enrichment								(.97)	.51**	.65**
9. Project satisfaction									–	.40**
10. Family satisfaction										–
Grand mean	2.30	1.50	2.20	6.07	3.98	4.47	4.64	5.30	5.70	5.93
Between-persons SD	1.21	.50	.90	.72	.83	1.01	.88	.82	.87	1.00
Within-person SD				.98	1.95	.78	1.00	.76	1.00	.77

$N = 537$  class projects by 344 students (average 1.56 projects per person). Within-person correlations are given below the diagonal; between-persons correlations are given above the diagonal. Scale reliabilities are shown in parentheses along the diagonal.

\*  $p \leq .05$ .

\*\*  $p \leq .01$ .



many of our participants only had data for one project and because we were interested in testing our hypotheses across multiple projects rather than specific to one project. Between-person effects reflect the consistency of relationships in the theoretical model across class projects controlling for within-person effects.

The hypothesized between and within model demonstrated acceptable fit ( $\chi^2 [15, N = 537] = 21.53$ , ns, CFI = .99, TLI = .94, RMSEA = .03, SRMR for the within model = .02, SRMR for the between model = .08). An alternative model of full mediation (i.e., removing the direct path from team resources to project satisfaction) was also tested and fit slightly worse ( $\chi^2 [16, N = 537] = 25.58$ , ns, CFI = .98, TLI = .92, RMSEA = .03, SRMR for the within model = .02, SRMR for the between model = .09). Therefore, the hypothesized partially mediating model with a direct path from team resources to project satisfaction was empirically and theoretically supported, thus described below.

### 3.1. Hypothesis tests

The model estimated at the between-person level with standardized regression coefficients is presented in Fig. 1. Unstandardized regression coefficients (including controls) are presented in Table 2. Results suggested that the theoretical model was mostly supported.

In support of Hypotheses 1 and 2, we found that team resources were associated with work-to-family enrichment ( $\beta = .64$ ,  $p < .01$ ) and family-to-work enrichment ( $\beta = .53$ ,  $p < .01$ ). Thus, individuals who experienced more team resources through team cohesion, familiarity, and similarity on student projects reported more enrichment in both directions between work and family domains. In total, team resources and the control variables explained 44% of the variance in work-to-family and 35% of the variance in family-to-work enrichment.

We also found support for Hypothesis 3 as team resources were directly associated with project satisfaction ( $\beta = .69$ ,  $p < .01$ ). For Hypotheses 4a and 4b, we expected enrichment to partially mediate the relationship between team resources and project satisfaction. In support of Hypothesis 4a, we discovered a significant direct and indirect effect for work-to-family enrichment. Team resources were associated directly with project satisfaction ( $\beta = .69$ ,  $p < .01$ ), and team resources were also associated with work-to-family enrichment ( $\beta = .64$ ,  $p < .01$ ), and work-to-family enrichment was associated with project satisfaction ( $\beta = .54$ ,  $p < .01$ ). The indirect effect of team resources on project satisfaction via work-to-family enrichment was significant ( $\beta = .34$ ,  $p < .05$ ). However, family-to-work enrichment was not significantly associated with project satisfaction ( $\beta = -.16$ , ns); thus, Hypothesis 4b was not supported.

Hypotheses 5a and 5b predicted full mediation for family satisfaction as an outcome. Supporting Hypothesis 5b, team resources were associated with family-to-work enrichment ( $\beta = .53$ ,  $p < .01$ ), and family-to-work enrichment was associated with family satisfaction ( $\beta = .73$ ,  $p < .01$ ). However, Hypothesis 5a was not supported as work-to-family enrichment was not significantly related to family satisfaction ( $\beta = .02$ , ns). In total, 89% of the variance in project satisfaction and 52% of the variance in family satisfaction was explained by the model.

## 4. Discussion

We utilized a resource-based framework to explain how team resources are associated with project and family satisfaction via work-family enrichment. Consistent with the Resource-Gain-Development model (Wayne et al., 2007), we demonstrated that resources gained from participation in resource-rich teams (i.e., cohesion, familiarity, similarity) enhanced enrichment in both directions between work and family. Furthermore, results demonstrated that work-to-family enrichment partially mediated the relationship between team resources and project satisfaction, while family-to-work enrichment fully mediated the relationship between team resources and family satisfaction. Thus, team resources have both a direct and indirect effect on satisfaction in the work domain, while team resources have only an indirect effect on satisfaction in the family domain through family-to-work enrichment.

Regarding satisfaction, we found that enrichment was only related to satisfaction with the originating role (e.g., work-to-family enrichment originates at work and affects work-related satisfaction). This is consistent with two previous studies (Carlson et al., 2009; Wayne et al., 2004), suggesting that work-to-family enrichment may only be associated with satisfaction in the work (or

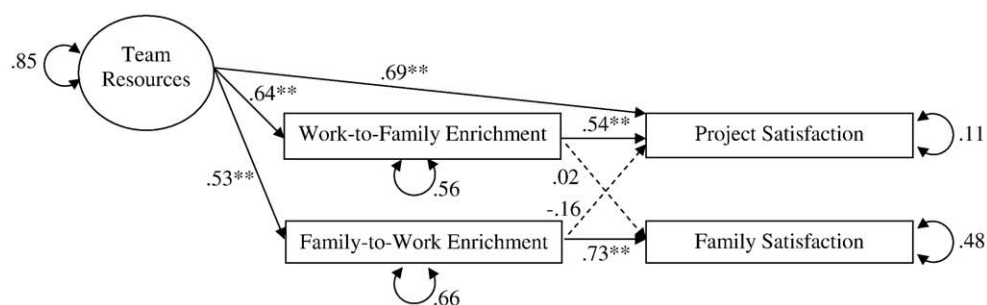


Fig. 1. Between-persons model with standardized regression coefficients.

**Table 2**  
Unstandardized regression weights for the ML-SEM between-persons model.

Dependent variable	Resources latent variable		Work-to-family enrichment		Family-to-work enrichment		Project satisfaction		Family satisfaction	
	<i>b</i>	SE	<i>b</i>	SE	<i>b</i>	SE	<i>b</i>	SE	<i>b</i>	SE
Instructor	-.34**	.10	-.02	.08	-.03	.07	.25**	.07	.10	.08
Gender	.22	.25	-.18	.17	.24	.15	-.11	.19	-.22	.22
Marital status	.13	.14	.11	.10	.05	.08	-.08	.10	-.25*	.11
Resources latent variable			.48**	.15	.40**	.11	.56**	.17		
Work-to-family enrichment							.58*	.34	.03	.38
Family-to-work enrichment							-.17	.46	.88**	.32
<i>r</i> <sup>2</sup>	.15*	.07	.44*	.18	.35**	.12	.89**	.14	.52**	.15

\*  $p \leq .05$ .

\*\*  $p \leq .01$ .

team) domain and family-to-work enrichment may only be associated with satisfaction in the family domain. Thus, individuals appear to attribute the benefits of enrichment to the source of that enrichment. We encourage researchers to further explore how employees cognitively and affectively process work–family boundaries.

#### 4.1. Research implications

The results of this study contribute to the literature in at least two ways. First, we contribute to the work–family literature by exploring the characteristics of teams that act as resources to influence work–family outcomes. Team resources have not yet been extensively explored, especially in conjunction with work–family enrichment. Therefore, our study may shed some preliminary light on the team-oriented, resource-based processes involved in both work-to-family and family-to-work enrichment.

Second, we provide empirical evidence for the validity of the Resource–Gain–Development perspective for explaining the development and outcomes of work–family enrichment (Wayne et al., 2007). Although resource-based theoretical frameworks have been extended to work–family conflict research (e.g., Geurts et al., 2009; Grandey & Cropanzano, 1999; Halbesleben et al., 2009; Wayne et al., 2007), they have rarely been applied to the positive aspects of work–family research. By showing that team resources affect both work-to-family and family-to-work enrichment, we provide support for the assertions put forth in the Resource–Gain–Development model. Consistent with the propositions surrounding support resources in that model, the results of our study suggest that team-based resources are important in enhancing at least one positive indicator of a healthy work-life interface–enrichment.

#### 4.2. Practical implications

Managers may benefit from the results of this study as well. First, our results suggest that teams may provide valuable resources to individual members, particularly if members are cohesive, familiar, and similar to one another. Although it may be a challenge to achieve all of these characteristics in every team, managers may significantly enhance employee work–family enrichment and satisfaction outcomes if they focus on building such teams. For instance, managers might provide ongoing team-building support, invest time to help teams develop cohesion and familiarity early in the life of the team, or assign teams based on similarity among members. Moreover, in efforts to gain benefits of diversity in conjunction with the benefits of similarity (Hobman et al., 2003; Tsui et al., 1992), managers might conduct individual difference assessments and training to help dissimilar members achieve a comparable level of communication and camaraderie as similar members naturally enjoy.

Second, the results of this study suggest that managers might enhance satisfaction among employees by enabling enrichment. Satisfaction is affiliated with other important and costly outcomes, including burnout, turnover, and performance (Halbesleben & Buckley, 2004; Judge, Thoresen, Bono, & Patton, 2001; Lee & Ashforth, 1996), so it may behoove managers to help employees increase individual enrichment across work and family domains. Our study suggests that both work-to-family and family-to-work enrichment influence employee satisfaction with the domain from which the enrichment originated.

#### 4.3. Limitations and future directions

Our study had several limitations worthy of note. First, all variables were measured using self-report. However, Greenhaus and Powell (2006) note the value of using self-report measures in work–family enrichment research because it is the perception of the individual experiencing the enrichment that may be most valid in determining its level. Moreover, perceptions of one's own cohesion, familiarity, and similarity with other team members may be the most accurate source of these constructs as we defined them. As opposed to measuring them at the team-level, we assessed individual-level perceptions and hypothesized that those perceptions would enable individuals to work efficiently with teammates, resulting in individual-level enrichment. As always, however, replication using other sources may be valuable, such as supervisor reports of team constructs or spouse reports of work–family issues.

Second, we used student data that may not readily generalize to employees, although it has been argued that student samples can be valuable when studying underlying processes of work-related experiences (Greenberg, 1987). To increase generalizability to the business world, however, our sample was comprised of only business majors and just over half MBA students ( $n = 185$ ). In addition, we have some evidence to suggest many participants had a moderate level of professional work experience ( $M = 5$  years), suggesting that many were real-world employees in addition to being students. An advantage of this study design is that many students, particularly graduate students, may perceive a significant sense of ownership and investment in their personal educational experience. Therefore, the processes that occur in class projects may impact them at least as much as the processes impact employees in organizations. Indeed, the latter group may experience greater variance in their sense of ownership and investment in a particular job or organization. Still, an important next step is to analyze the same research question in an organizational setting.

Finally, although we collected data across multiple projects per person, all study scales were collected at the same point in time for each project. Therefore, cross-sectional data are a limitation of this research. Thus, it is plausible that satisfaction was a cause rather than an effect of work–family enrichment. We encourage future researchers to assess perceptions of resources, enrichment, and satisfaction at different time points whenever possible.

We also urge scholars to continue to build an empirical body of research on the Resource–Gain–Development perspective (Wayne et al., 2007) by exploring other forms of resources in addition to team resources. Individual differences likely affect the impact of the utilization of resources (e.g., Halbesleben et al., 2009), so efforts to distinguish moderators, including emotional stability and conscientiousness, in conjunction with resources and enrichment would also be valuable. Finally, organizations and managers are clearly interested in financial outcomes. Therefore, it is important to pursue similar research questions with other outcomes of enrichment (in addition to satisfaction), including employee performance, team productivity, and overall organizational effectiveness.

In conclusion, this research provides early insight into the development of work–family enrichment and satisfaction in conjunction with team-based resources. We found that team resources are a valuable resource for both directions of enrichment and that enrichment contributes to both project and family satisfaction. We urge scholars to pursue additional research on this important topic as organizations increase their emphasis on team-based work and employees strive to balance and enhance their work and family domains.

## References

- Aryee, S., Srinivas, E. S., & Tan, H. H. (2005). Rhythms of life: Antecedents and outcomes of work–family balance in employed parents. *The Journal of Applied Psychology, 90*, 132–146.
- Bakker, A. B., & Demerouti, E. (2007). The Job Demands–Resources model: State of the art. *Journal of Managerial Psychology, 22*, 309–328.
- Balkundi, P., & Harrison, D. A. (2006). Ties, leaders, and time in teams: Strong inference about network structure's effects on team viability and performance. *Academy of Management Journal, 49*, 49–68.
- Barrick, M. R., Stewart, G. L., Neubert, M. J., & Mount, M. K. (1998). Relating member ability and personality to work–team processes and team effectiveness. *The Journal of Applied Psychology, 83*, 377–391.
- Baumeister, R. F., & Leary, M. R. (1995). The need to belong: Desire for interpersonal attachments as a fundamental human motivation. *Psychological Bulletin, 117*, 497–529.
- Beal, D. J., Cohen, R. R., Burke, M. J., & McLendon, C. L. (2003). Cohesion and performance in groups: A meta-analytic clarification of construct relations. *The Journal of Applied Psychology, 88*, 989–1004.
- Carlson, D. S., Grzywacz, J. G., & Zivnuska, S. (2009). Is work–family balance more than conflict and enrichment? *Human Relations, 62*, 1459–1486.
- Carlson, D. S., Kacmar, K. M., Wayne, J. H., & Grzywacz, J. (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.
- Chiaburu, D. S., & Harrison, D. A. (2008). Do peers make the place? Conceptual synthesis and meta-analysis of coworkers effects on perceptions, attitudes, OCBs, and performance. *The Journal of Applied Psychology, 93*, 1082–1103.
- Espinosa, J. A., Slaughter, S. A., Kraut, R. E., & Herbsleb, J. D. (2007). Familiarity, complexity, and team performance in geographically distributed software development. *Organization Science, 18*, 613–630.
- Fornell, C., & Larcker, D. F. (1981). Evaluating structural equation models with unobservable variables and measurement error. *Journal of Marketing Research, 18*, 39–50.
- Gardner, D. G., Cummings, L. L., Dunham, R. B., & Pierce, J. L. (1998). Single-item versus multiple-item measurement scales: An empirical comparison. *Educational and Psychological Measurement, 58*, 898–915.
- Geurts, S. A. E., Beckers, D. G. J., Taris, T. W., Kompier, M. A. J., & Smulders, P. G. W. (2009). Worktime demands and work–family interference: Does worktime control buffer the adverse effects of high demands? *Journal of Business Ethics, 84*, 229–241.
- Grandey, A. A., & Cropanzano, R. (1999). The conservation of resources model applied to work–family conflict and strain. *Journal of Vocational Behavior, 54*, 350–370.
- Greenberg, J. (1987). The college sophomore as guinea pig: Setting the record straight. *Academy of Management Review, 12*, 157–159.
- 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.
- Guzzo, R. A., & Dickson, M. W. (1996). Teams in organizations: Recent research on performance and effectiveness. *Annual Review of Psychology, 47*, 307–339.
- Halbesleben, J. R. B., & Buckley, M. R. (2004). Burnout in organizational life. *Journal of Management, 30*, 859–879.
- Halbesleben, J. R. B., Harvey, J., & Bolino, M. C. (2009). Too engaged? A conservation of resources view of the relationship between work engagement and work interference with family. *The Journal of Applied Psychology, 94*, 1452–1465.
- Hill, E. J. (2005). Work–family facilitation and conflict, working fathers and mothers, work–family stressors and support. *Journal of Family Issues, 26*, 793–819.
- Hobfoll, S. E. (1989). Conservation of resources: A new attempt at conceptualizing stress. *The American Psychologist, 44*, 513–524.
- Hobfoll, S. E., & Spielberger, C. D. (1992). Family stress: Integrating theory and measurement. *Journal of Family Psychology, 6*, 99–112.
- Hobman, E. V., Bordia, P., & Gallois, C. (2003). Consequences of feeling dissimilar from others in a work team. *Journal of Business and Psychology, 17*, 301–325.
- Judge, T. A., Thoresen, C. J., Bono, J. E., & Patton, G. K. (2001). The job satisfaction–job performance relationship: A qualitative and quantitative review. *Psychological Bulletin, 127*, 376–407.
- Karatepe, O. M., & Bekteshi, L. (2008). Antecedents and outcomes of work–family facilitation and family–work facilitation among frontline hotel employees. *International Journal of Hospitality Management, 27*, 517–528.
- Lee, R. T., & Ashforth, B. E. (1996). A meta-analytic examination of the correlates of the three dimensions of job burnout. *The Journal of Applied Psychology, 81*, 123–133.



- McNall, L. A., Masuda, A. D., & Nicklin, J. M. (2010). Flexible work arrangements, job satisfaction, and turnover intentions: The mediating role of work-to-family enrichment. *The Journal of Psychology, 144*, 61–81.
- Mehta, P. D., & Neale, M. C. (2005). People are variables too: Multilevel structural equations modeling. *Psychological Methods, 10*, 259–284.
- Muthen, L. K., & Muthen, B. O. (2007). *MPlus user's guide*, 4th ed. Los Angeles, CA: Muthen and Muthen.
- Ryan, R. M., & Deci, E. L. (2000). Self-determination theory and the facilitation of intrinsic motivation, social development, and well-being. *The American Psychologist, 55*, 68–78.
- Sieber, S. D. (1974). Toward a theory of role accumulation. *American Sociological Review, 39*, 567–578.
- Tekleab, A. G., Quigley, N. R., & Tesluk, P. E. (2009). A longitudinal study of team conflict, conflict management, cohesion, and team effectiveness. *Group and Organization Management, 34*, 170–205.
- Tsui, A. S., Egan, T. D., & O'Reilly, C. A. (1992). Being different: Relational demography and organizational attachment. *Administrative Science Quarterly, 37*, 549–579.
- Van Steenbergen, E. F., & Ellemers, N. (2009). Is managing the work–family interface worthwhile? Benefits for employee health and performance. *Journal of Organizational Behavior, 30*, 617–642.
- Voydanoff, P. (2004). The effects of work demands and resources on work-to-family conflict and facilitation. *Journal of Marriage and Family, 66*, 398–412.
- Wayne, J. H., Grzywacz, J. G., Carlson, D. S., & Kacmar, K. M. (2007). Work–family facilitation: A theoretical explanation and model of primary antecedents and consequences. *Human Resource Management Review, 17*, 63–76.
- 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.
- West, B. J., Patera, J. L., & Carsten, M. K. (2009). Team level positivity: Investigating positive psychological capacities and team level outcomes. *Journal of Organizational Behavior, 30*, 249–267.
- Zaccaro, S. J. (1991). Nonequivalent associations between forms of cohesiveness and group-related outcomes: Evidence for multidimensionality. *The Journal of Social Psychology, 131*, 387–399.