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Lori A. Brown and Michael E. Roloff
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What is This?
EXTRA-ROLE TIME, BURNOUT, AND COMMITMENT: THE POWER OF PROMISES KEPT

Lori A. Brown  
California State University, Long Beach  
Michael E. Roloff  
Northwestern University

This study examines the relationships of extra-role time (ERT) behavior with burnout and occupational commitment among teachers through the lens of conservation of resources (COR) theory. Results reveal that teachers who invest in more ERT are also more likely to experience burnout and decreased commitment to teaching than those who invest less. However, results also indicate that the ethical practice of the employer fulfilling the psychological contract (keeping promises) entered into with the teacher offsets this negative spiral with implications for both teacher well-being and workplace outcomes.

Keywords: extra-role time; burnout; psychological contract; teachers; commitment; promises; ethics; debate; conservation of resources

A PROFESSIONAL COMMITMENT to teaching is defined as the belief that the benefits trump the disadvantages of teaching. It espouses the intent to continue to remain teaching for the rest of one’s career and includes an overall satisfaction with the decision to become a teacher and the opportunities to gain emotional awards and personal growth through the profession (Farber, 1984). Educational theorists have long recognized that many teachers enter the profession with a high level of commitment and a desire to affect the world through making an important difference in the lives of students (Lortie, 1975). Despite such high and noble expectations, long and...
odd work schedules and teacher burnout can threaten a teacher’s well-being and commitment to the profession. The high percentages of teacher burnout have long been considered a crisis in education (Farber, 1991). Building on the theoretical framework of conservation of resources (Hobfoll, 1989, 1998, 2001), we aim to explain how a teacher’s investment of extra-role time (ERT) resources to work can lead to burnout and how this interaction forms an indirect path to decreased professional commitment. Moreover, with the goal of determining how school officials can reduce the problems of burnout and diminished teacher commitment, we propose that the ethical practice of honoring psychological contracts (keeping promises) made or implied to teachers can serve as a moderating mechanism to offset the negative impact of ERT and burnout.

CONSERVATION OF RESOURCES THEORY, WORK HOURS, AND WELL-BEING

Conservation of resources (COR) theory states that individuals strive to obtain, retain, protect, and foster those things they value—“resources” (Hobfoll, 1989, 1998). The theory predicts that psychological distress will occur when an individual’s resources are threatened with loss, actually lost, or where individuals fail to gain sufficient resources following significant resource investment (Hobfoll, 2001). Key resources identified in COR literature revolve around time—time for adequate sleep, free time, and time with loved ones—and health (Hobfoll, 1998). Logically, investing time in work will exhaust one’s time resources that would otherwise be available to invest elsewhere. Reasonably, rewards received from work time can sometimes compensate for this loss, and time off can be used to replenish lost physical and psychological resources. However, consistent with COR theory, research indicates that when individuals invest work time inordinate to the job or work shifts that impinge on time necessary to invest in and replenish other valued resources (resource gain), they can suffer negative consequences to physical, social, and psychological well-being (Halbesleben, 2009; Schaufeli, Taris, & van Rhenen, 2008). For example, shift workers who work evenings, nights, prolonged day duty hours, or successive shifts report experiencing sleep and digestive disturbances, chronic fatigue,
anxiety, irritability, social marginalization, and work-life conflicts, in addition to reduced safety and productivity (Costa, 2003).

The straightforward number of hours people work is also linked to poor personal outcomes. In their meta-analytic review of the effects of work on health, Sparks, Cooper, and Shirom (1997) report a significant positive mean correlation between overall health symptoms, physiological and psychological health symptoms, and quantity of hours worked. Though the number of weekly work hours necessary to predict such symptoms varied, correlations to work hours began with as little as 44 hours per week. In his review of the literature of work hours and effects on health, Harrington (1994) concluded that working in excess of 48 to 56 hours a week is harmful. The university and college lecturers’ union in the United Kingdom found that of 1,000 college lecturers working an average of 46 to 55 hours per week, 80% reported unacceptable stress levels, complaining of exhaustion and insomnia (“Can Long Working Hours Kill?,” 1995). A study by Austin Knight London (1995) indicates that 57% of white-collar workers in a large British recruitment and communications organization reported their personal life had suffered because of long work hours, and 47% said their family suffered. Savery (1986) found that in addition to the length of the working week, hours worked per evening at home and the number of evenings worked per year were all significantly related to perceived stress levels.

TEACHERS, WORK HOURS, AND BURNOUT

Teachers invest long hours into their work. The most recent Organization for Economic Cooperation and Development data show that U.S. teachers are the most productive among major developed countries. The organization, which tracks 27 member nations, indicates that American secondary school teachers spend 1,080 hours per 36-week school year teaching and another 288 hours of required working time at school (Organization for Economic Co-operation and Development, 2009). After adding in hours spent on work at home and outside the classroom for general teaching assignments, teachers spend 1,913 hours on teaching work per year. To put this in context, an average full-time employee works 1,932 hours spread over 48 weeks (Fleck, 2009). Teachers
who take on extra-role activities well into their personal evening and weekend time, such as mentoring students, leading student organizations, and coaching teams, are investing their personal resources into what we term *extra-role time* behavior. Coupled with the already heavy work load, high levels of this extra investment of personal resources can encroach on the teacher’s time to replenish lost resources or invest in others such as time with family and friends, sleep, household chores, and exercise. This places teachers investing in ERT at risk to a host of health problems for three reasons: (a) hours of work, (b) placement of work hours, and (c) resulting resource depletion.

Congruent with COR theory and in alignment with work hours literature, we contend that high levels of resource depletion brought about through ERT (ERT work hours on evenings, weekends, and overall hours) without sufficient resource gains will lead to similar distress as those of more traditional shift and overtime workers. One potential outcome of such distress that has not been studied is employee burnout. The chronic psychological nature of burnout as a feeling that one’s emotional resources are used up quite reasonably aligns with the type of consequence that could be expected following a significant resource investment such as ERT.

Indeed, scholars describe burnout as a type of psychological distress—a chronic negative psychological condition that results as day-to-day work stressors take their toll on employees (Maslach, 1982b). Burnout is commonly characterized as a combination of three components: *emotional exhaustion* (feeling one’s emotional resources are used up), *depersonalization* (felt distance from others), and *diminished personal accomplishment* (decline in feelings of job competence and achievement), (Maslach, 1982a; Maslach & Jackson, 1981; Pines & Maslach, 1980). COR theory has served as a principal explanatory mechanism for understanding the process of stress and burnout in many work settings (Halbesleben, 2006; Lee & Ashforth, 1996; Shirom, 1989). Since ERT is a new measure of time investment measuring not just long hours, but hours beyond those required of the job, we extend these studies and those examining work hours when reasoning that, based on COR theory, the psychological distress created by ERT is likely to predict burnout (Hobfoll & Freedy, 1993; Leiter, 1993).
EXTRA-ROLE TIME, BURNOUT, AND COMMITMENT TO TEACHING

Although burnout has been linked to a number of negative workplace outcomes, including intention to turnover, decreased levels of employee commitment, and job dissatisfaction (Lee & Ashforth, 1996), there are few that examine a burnout-occupational commitment relationship (Miller, Ellis, Zook, & Lyles, 1990; Starnaman & Miller, 1992). Relations have yet to be established between the burnout-professional commitment relationship and investment of extra time to the job. Again, COR theory offers a framework for us to analyze such relationships. A corollary to COR theory (Hobfoll, 2001) suggests that as resource reserves become increasingly inadequate following ongoing loss, compensatory efforts are seen as having decreasing marginal utility. In other words, as costs of resource investment begin to outweigh benefits, accommodative coping occurs. This entails downgrading goals and reframing outcomes. Those who lack resources are likely to adopt a defensive posture to conserve their remaining resources. Schonpflug (1985) illustrated that resource-depleted individuals often choose a defensive strategy of simply not investing coping effort and resources to conserve their resource reserves.

Accommodative coping may be a symptom of the depersonalization component of burnout. The teacher is emotionally exhausted and just does not have the energy to invest fully in people any longer. It can be expected that the teacher then becomes less successful at goal achievement and accomplishes less (the third component of burnout). Based on this theoretical framework, we would expect that a burned out teacher, having invested heavily in ERT to the job, may find it difficult to see how the benefits of teaching trump the enormous disadvantages of burnout and lost time while feeling emotionally drained, disengaged from people, and ineffective in teaching. His or her once high expectations may become downgraded to survival, and leaving the profession may be considered to conserve remaining resources. For these reasons we advance the following hypothesis:

Hypothesis 1: There is a positive indirect path from extra-role activity to professional commitment that runs through burnout.
RESOURCE GAIN AND REPLENISHMENT

Critical to advancing the argument to why ERT would predict burnout is the “gain and replenishment” of resources corollary of COR theory. Burnout is thought to follow from the third stress condition of COR, such that there is a lack of resource gain (and sometimes exposure to chronic losses) following significant resource investment of time, energy, lost opportunities, and borrowing from family time and intimacy to support work (Hobfoll, 2001; Lee & Ashforth, 1996). “It is not the heavy emotional investment per se that drains the provider; rather it is an investment that has insufficient dividends” (Heifetz & Bersani, 1983, p. 58).

COR theory presents the notion of adaptation and replenishment. The generation of new resources (adaptation) can replenish people’s resource pools and offset the conditions that produce acute and chronic resource losses and the psychological distress that can follow. However, unsuccessful adaptation and replenishment results in negative functional and emotional outcomes and the diminishment of the resources invested (Hobfoll, 2001).

PRIMACY OF RESOURCE LOSS

According to COR, resource loss is disproportionately more salient than resource gains. Hence, resource gains are seen as acquiring their saliency in light of loss. In a test of this notion, Hobfoll and Lilly (1993) found that when asking participants about resource gains and losses, losses were more strongly related to emotional distress than resource gains. Gains were, however, related to emotional distress after controlling for losses. Hobfoll (2001) argues this finding and suggests that gains become more important in the context of loss. In other research, a comparison was made of demand characteristics of work that would result in resource loss with supportive elements of work environments that would constitute resource gains. Results support COR theory’s saliency of loss in that five of eight loss correlates were found to be strongly related to greater burnout, whereas only a single indicator of resource gain was related to lower burnout (Lee & Ashforth, 1996). Logically, people who invest a great deal of time into work would find the gaining of resources more valuable than
those who invest less. In fact, because resource lack does not lead to depressive symptoms as does resource loss (Hobfoll, 2001), one who does not invest as much time will not miss replenishment to the same degree as one who invests greater amounts. Although resource gains are viewed by workers as less salient than resource loss, gains are not inconsequential (Hobfoll & Freedy, 1993). Although not all resource gains directly compensate for specific losses, gains such as social support and decision-making input can indirectly help workers cope with work demands (Jayaratne & Chess, 1986; Lee & Ashforth, 1996; Miller et al., 1990; Russell, Altmaier, & Van Velzen, 1987).

**SUBSTITUTION OF RESOURCES**

Similar to the indirect nature of some resource gains, the resource substitution correlate of COR theory states that lost resources may be substituted by a second resource of generally equivalent value from another resource domain to replenish the deficit. Accordingly, an employer may effectively compensate for an employee’s resource losses due to extra time investment with another domain of resources. For example, social support has been shown to affect the magnitude of burnout experienced across a number of different job demands (Halbesleben, 2006). One means by which an organization can substitute resources is to honor the psychological contract held with the employee.

**PSYCHOLOGICAL CONTRACT FULFILLMENT**

The psychological contract is a key concept for understanding people’s attitudes toward work and organizations, their behavior, and their psychological well-being. Guest and Conway (2002) define the psychological contract as “the perception of both parties to the employment relationship, organizational and individual, of the reciprocal promises and obligations implied in that relationship” (p. 22). There is a substantial research tradition surrounding the psychological contract, specifically, the fulfillment or breach thereof. Relationships have been found between the psychological contract and employees’ job satisfaction (Johnson & O’Leary-Kelly, 2003), organizational commitment (Coyle-Shapiro & Kessler, 2000), trust in the organization,
turnover intentions, actual turnover (Robinson, 1996; Robinson & Rousseau, 1994), job performance, organizational citizenship behavior (Turnley & Feldman, 2000), and emotional exhaustion (Gakovic & Tetrick, 2003). There is scant research focusing on the relationship of psychological contract fulfillment and the mental health of employees (Parzefall & Hakanen, 2010), and to our knowledge, this is the first study examining psychological contract fulfillment in relation to burnout and teaching commitment.

We agree with Coyle-Shapiro and Shore (2007) who recommend focusing psychological contract research on the positive effects of a well-functioning employee-employer relationship on employee health rather than simply viewing employee attitudes and behaviors as responses to employer inducements. Viewing psychological contract fulfillment through the lens of the employee-employer relationship (Guest, 2004; Parzefall & Hakanen, 2010) allows us to see its positive relational effects as a job resource gain that may offset the resource loss incurred by ERT.

As we have suggested, employee investment into ERT can deplete resources and lead to deleterious health effects such as burnout. According to the COR corollary of resource gains and substitutions, teachers need a significant resource gain to offset this negative spiral. Psychological contract fulfillment may be a resource that can modify these relationships. Often, teachers who invest personal resources into ERT are promised both transactional and relational support from their administrators. For example, administrators may promise teacher-coaches program funding, support staff, or paid transportation. They may also imply promises to care and support the teachers’ well-being by appreciating the effort invested, valuing contributions made, and considering teachers’ best interests when making decisions affecting them. Perceived fulfillment of these sorts of promises presents a form of economic and socioemotional resource that the employee expects the employer to provide. This expectation (and perhaps need) may be elevated when the teacher is suffering the saliency of distress brought about by ERT. We contend that fulfillment of these psychological contracts can play an important role as a substitute resource that may offset the impact of ERT on burnout for two main reasons: (a) fulfilling the psychological contract serves as a resource gain for the teacher.
and (b) this resource gain is salient and can effectively substitute lost resources from ERT because it sends a positive employer-employee relational message. It tells teachers they are valued in an ethical employer-employee relationship in which moral obligations such as promise keeping are respected. Parzefall and Hakanen (2010) concluded that “when employees feel cared for and safe in their employment relationship, it generates not only positive outcomes in the context of work, but also further positive effects for employee mental health” (p. 9). We believe this relational aspect is key to the ability of psychological contract fulfillment to influence ERT and burnout.

A passive attitude toward fulfilling promises made with teachers (or any employee) is not only dangerous for teachers investing in ERT but also unethical for employers. First, a promise is an agreement, whether made or implied, and constitutes an agreement-based moral obligation to do what we agree to do even if it does not reach the level of an enforceable contract, especially when others are counting on the fulfillment of the agreement (Josephson Institute Center for Business Ethics, 2011).

In other words, one’s word is binding, unless and until there is a dramatic shift in the situation. Second, fulfilling contracts signals the other party (teachers) that one honors him or her and his or her work efforts sufficiently as to follow through on commitments made. Third, when individuals feel that such honor is absent, they can become alienated from the contract partner and the activity or profession. This alienation may result directly from feeling betrayed or from the increased stress associated with expending significant extra time on the job.

The implication is that honoring psychological contracts is an ethical duty that can have implications for workers and the workplace. We put forward that fulfillment of such psychological contracts speaks well of the employee-employer relationship. It suggests an employer’s commitment and willingness to continue the exchange relationship. It also suggests the teacher is being treated ethically, and his or her investment of resources is valued. When the employer fulfills such promises, we propose that, even though a teacher is investing considerable time, the teacher trusts and likes the employer and feels safe and cared for. The psychological contract fulfillment,
then, serves as a resource that can substitute for the depletion due to ERT services. Conversely, a lack of fulfillment of a psychological contract can leave the teacher feeling betrayed and undervalued. Working while feeling betrayed can directly deplete additional resources, rather than replenish those lost, and exacerbate the negative effects of ERT. Using COR theory as an explanatory mechanism for the relationships between ERT, burnout, and psychological contract fulfillment and the reasoning process situated in business ethics and available literature, we advance this second hypothesis:

**Hypothesis 2:** The magnitude of the indirect path from extra-role activity to professional commitment through burnout will decrease as psychological contract fulfillment increases.

**METHOD**

**Sample and Procedures**

Participants for this study were high school teachers who also coach the speech and debate team for the high school at which they work. In total, a purposive sample of 461 participants from 46 states and the District of Columbia completed the online questionnaire. Of the 461 respondents, 208 were completed by men (45%) and 253 were completed by women (55%). The participants reported teaching at both public (89%) and private (11%) high schools in urban (23%), suburban (56%), and rural (21%) locations.

Participants were recruited for the study via their affiliation with coaching high school speech and debate. Potential participants were notified by means of an advertisement in the National Forensic League’s (NFL) journal, the *Rostrum*. With permission of the NFL, a mass email letter was sent out to coaches who had email addresses posted online. Additionally, a link to the study’s website was posted on the NFL’s official website. In an effort to reach coaches who did not see the ad in the *Rostrum*, or who did not receive the informational email, a snowball technique was also used. Participation in the study was strictly voluntary, and participants had the option of exiting the survey at any time without penalty.

A website was created and customized specifically for this study instrument. The website address was part of the recruitment flyers.
and email available to participants. The website was designed to randomize the order of the survey measures according to the birth month of the participant in order to reduce participant fatigue or negative emotions experienced from responding to measures more negative in tone one after the other. The object of this was to preclude fatigue or emotions from influencing responses in a systematic way.

**Measures**

*Extra-role time.* To measure the amount of ERT participants were contributing, a 3-item scale was constructed from ERT behaviors for our particular sample population ($M = 3.41$, $SD = 0.96$). Participants were asked to make 5-point ratings of the time they committed to coaching activities. Specifically, they were asked to report the amount of time devoted to (a) weekends per school year spent on coaching activities, (b) evenings spent on coaching activities for more than 1 hour during the school week, (c) total ERT hours spent coaching per week (hours beyond his or her regular teaching position).

*Burnout.* To obtain participants’ level of burnout, participants were asked to make 7-point ratings to describe their feelings and experiences based on the three dimensions of burnout: emotional exhaustion, depersonalization, and reduced personal accomplishment. Specifically, respondents indicated the frequency of agreement with each statement (0 = never, 6 = every day) using a scale adapted for this study from Maslach and Jackson (1986) titled *The Maslach Burnout Inventory* (MBI) *Manual* (2nd ed.). Twenty-two items from the MBI were augmented with six additional items from the Teacher Attitude Survey (TAS; Farber, 1984) to create the adapted burnout scale. Items in the measure included the following: “I feel emotionally drained from my work,” “I experience a sense of futility about coaching speech and debate,” “I feel I treat some recipients as if they were impersonal objects.”

*Psychological contract fulfillment.* Respondents were asked to indicate the extent of perceived *fulfillment* for each item of relational (those promises of a perceived relational or support nature) and transactional (promises of a tangible and measurable nature) support.
promised by the organization on a 5-point Likert-type scale (1 = *Not at all fulfilled*, 5 = *Very well fulfilled*). The scale had excellent internal reliability, α = .94. The sum of the items was divided by 16 so that scores in this sample ranged from 1 to 5, with a higher number indicative of a greater perceived fulfillment of employer promises to the employee participant (M = 3.03, SD = 0.97).

*Commitment to teaching.* To measure participants’ commitment to teaching, the 6-item Commitment to Teaching scale was used (Farber, 1984). Respondents indicated the frequency that they felt commitment to various aspects of teaching on a 4-point Likert-type scale (1 = *Never*, 4 = *Frequently*; M = 3.37, SD = 0.53; α = 79).

*Covariates.* We selected to include several covariates in our analysis to determine possible confounding variables that would need to be controlled for. We selected three for their possible relationships to ERT, burnout, and commitment to teaching: annual salary for coaching, number of years coaching, and gender.

**RESULTS**

**Preliminary Analyses**

Table 1 contains the descriptive statistics, scale reliabilities, and correlations among all the variables we used in our main analysis. Several patterns are noteworthy. First, all but one of the scale reliabilities exceeds .80; only ERT shows moderate reliability, α = .67. Because this is a new scale, somewhat lower reliability is not entirely unexpected or unacceptable.

Second, as noted in the Method section, the measures of psychological contract fulfillment and burnout are multidimensional. Although we did not hypothesize subscale differences, we felt it was prudent to see if any might exist. Hence, we report each subscale along with the total scale in the correlation matrix. For both psychological contract fulfillment and burnout, the scale and subscales show relatively uniform patterns of correlations. Although in a few cases the bivariate correlations between scales/subscales and other variables differed in magnitude and significance, in no case did they reverse in direction (e.g., from positive to negative). Consequently,
Table 1. Descriptive Statistics, Scale Reliabilities, and Correlations Among Measured Variables

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NOTE: N = 461. Coefficient alpha for all multi-item scales are in the diagonal. Gender coded 0 = woman, 1 = man.

*p < .05. **p < .01. ***p < .001.
we feel it is appropriate to analyze the total scale rather than each subscale. Because of the correlational nature of our design, we needed to control for possible confounding variables. We used three, and their bivariate correlations with the variables in our model are in Table 1. We felt that the coaches’ annual salary might be related to ERT; reporting that the psychological contract was fulfilled might protect against burnout and reduced commitment. Although not all the correlations were statistically significant, the correlations confirmed our suspicions. We felt that years coaching might signal a long-term investment that would reflect more extra-role hours and greater psychological contract fulfillment, which would reduce burnout and increase commitment. The pattern of correlations is consistent with our expectations. We also wanted to control for gender differences. Because of possible gender discrimination, women as opposed to men might feel pressured to put in longer hours and feel less supported, which would make them more vulnerable to burnout and reduced commitment. We found no support for this concern, with most correlations being quite small and not statistically significant. There was clear evidence that we needed to control for annual salary and years coaching, and although only one correlation involving gender was statistically significant, we decided to control for it as well.

Analytic Overview

We hypothesized that an indirect relationship would flow from ERT to burnout to teaching commitment but that this relationship would become stronger as the fulfillment of the psychological contract decreases. This prediction reflects moderated mediation (i.e., the relationship between ERT and teaching commitment is mediated by burnout but that the mediated relationship is moderated by psychological fulfillment). Consequently, we conducted a moderated mediation analysis using statistical procedures created by Preacher, Rucker, and Hayes (2007). This involved analyzing the data with their SPSS macro, Modmed. Modmed conducts a regression analysis that includes covariates, predictors, moderators, and mediators. Moderator variables are centered by subtracting the sample mean from each individual score, which sets the mean value at 0. Subsequently, one standard deviation is subtracted from (or added to) each centered
score, and the resulting scores can be used to determine high values of moderator (one standard deviation above the mean) or low values of the moderator (one standard deviation below the mean). One can then compare the magnitude of the parameter associated with the indirect relationship at low, average, and high values of the moderator. Because the distribution of indirect parameters is frequently not normal, standard statistical tables often yield biased results (MacKinnon, 2008). Bootstrapping is an alternative and superior way of evaluating the statistical significance of indirect parameters (Preacher et al., 2007). Using Modmed, a researcher can create a specified number of new samples from his or her data set. We created 5,000 data sets to estimate the overall parameter estimate and construct 95% confidence intervals around it. If the interval does not contain 0, then the parameter is statistically significant.

**Hypothesis Tests**

Table 2 contains the first part of our analysis. The upper part of the table contains the results of regressing burnout against our three covariates (annual salary, gender, and years coaching), ERT, psychological contract fulfillment, and the interaction of the ERT and psychological contract fulfillment. As expected, the interaction term is statistically significant. We analyzed the form of the interaction using procedures described by Aiken and West (1991). Consistent with our reasoning, the relationship between ERT and burnout was statistically significant and positive at low levels of contract fulfillment, \( b = .33, p < .001 \), but fell in magnitude at average levels, \( b = .21, p < .001 \), and was of insufficient magnitude to reach statistical significance at high levels, \( b = .09, p < .16 \).

The lower half of Table 2 contains the results of regressing commitment to teaching against our three covariates (annual salary, gender, and years coaching), ERT, psychological contract fulfillment, burnout, and the interaction of the ERT and psychological contract fulfillment. As anticipated, a significant negative relationship was found between burnout and commitment to teaching. Because of the significant relationship between burnout and the interaction of ERT and psychological contract fulfillment, it is not surprising that the interaction was not significantly related to teaching.
Table 2. Moderation Mediation Results

<table>
<thead>
<tr>
<th>Predictor</th>
<th>Unstandardized Coefficient</th>
<th>Standard Error</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Burnout</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Constant</td>
<td>.08</td>
<td>.20</td>
</tr>
<tr>
<td>Years of Coaching</td>
<td>-.10***</td>
<td>.03</td>
</tr>
<tr>
<td>Yearly Salary</td>
<td>.02</td>
<td>.05</td>
</tr>
<tr>
<td>Gender</td>
<td>-.09</td>
<td>.08</td>
</tr>
<tr>
<td>Extra Role Time</td>
<td>.20***</td>
<td>.04</td>
</tr>
<tr>
<td>Psychological Contract Fulfillment</td>
<td>-.28***</td>
<td>.04</td>
</tr>
<tr>
<td>Extra Role Time × Psychological Contract Fulfillment</td>
<td>-.12**</td>
<td>.04</td>
</tr>
<tr>
<td><strong>Teaching commitment</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Constant</td>
<td>-.06</td>
<td>.09</td>
</tr>
<tr>
<td>Years of Coaching</td>
<td>.05***</td>
<td>.01</td>
</tr>
<tr>
<td>Yearly Salary</td>
<td>-.01</td>
<td>.02</td>
</tr>
<tr>
<td>Gender</td>
<td>.05</td>
<td>.04</td>
</tr>
<tr>
<td>Burnout</td>
<td>-.32***</td>
<td>.02</td>
</tr>
<tr>
<td>Extra Role Time</td>
<td>.04</td>
<td>.02</td>
</tr>
<tr>
<td>Psychological Contract Fulfillment</td>
<td>.08***</td>
<td>.02</td>
</tr>
<tr>
<td>Extra Role Time × Psychological Contract Fulfillment</td>
<td>.02</td>
<td>.02</td>
</tr>
</tbody>
</table>

NOTE: N = 461. Gender coded 0 = woman, 1 = man. 
*p < .05. **p < .01. ***p < .001.

commitment. Instead, only psychological contract fulfillment was significantly related to teaching commitment.

Table 3 provides the direct tests of the hypotheses. It contains the parameters of the indirect relationship between ERT to burnout to teaching commitment at low, average, and high levels of psychological contract fulfillment. The results support the hypotheses. Consistent with Hypothesis 1, there is a negative indirect relationship between ERT and teaching commitment that is mediated by burnout, but consistent with Hypothesis 2, the magnitude of this relationship is moderated by psychological contract fulfillment. The relationship is only significant at low and average levels of fulfillment.

**DISCUSSION**

**Theoretical Implications**

This study builds on the COR theoretical framework to predict and explain the consequences of teachers investing resources into ERT
Table 3. Conditional Indirect Effect From Extra Role Time to Teaching Commitment Through Burnout at Specific Values of Psychological Contract Fulfillment

<table>
<thead>
<tr>
<th>Unstandardized Coefficient</th>
<th>Standard Error</th>
<th>95% Confidence Intervals</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Lower</td>
</tr>
<tr>
<td>Indirect effect at one standard deviation below mean of psychological contract fulfillment</td>
<td>-.11***</td>
<td>.02</td>
</tr>
<tr>
<td>Indirect effect at mean of psychological contract fulfillment</td>
<td>-.07***</td>
<td>.02</td>
</tr>
<tr>
<td>Indirect effect at one standard deviation above mean of psychological contract fulfillment</td>
<td>-.03</td>
<td>.02</td>
</tr>
</tbody>
</table>

NOTE: \(N = 461\). Gender coded 0 = woman, 1 = man. All statistics are bootstrapped values using 5,000 samples. Confidence intervals are bias corrected and accelerated. 
*\(p < .05\). **\(p < .01\). ***\(p < .001\).

work behaviors. The results showcase the detriment of ERT—burnout and decreased commitment to teaching—when it is not coupled with strong fulfillment of the psychological contract by the employer. To accomplish this, the study extends the explanatory properties of COR to explain important aspects of employee well-being and the complex employer-employee relationship.

The introduction of ERT as a new scale allowed measurement of a specific type of resource investment in work—time—in a more nuanced way: time invested above and beyond a typical work week, such as working evenings, weekends, and overall extra hours. Because respondents were full-time teachers asked to indicate the time spent on work-specific activities (coaching debate) beyond those required of their teaching job, the measure was strictly measuring time spent beyond the required work week. This is unique in that the measure captures three elements of work time research: quantity of hours of worked, placement of hours worked, and the “above and beyond” nature of the work. Though studies have previously examined quantity and placement of work hours, they have not included the significance of the work hours being “extra” to the required work of the job, thus infringing on the ability for teachers to invest in other valued resources such as family and rest, and to replenish the resources lost.
Results show this unique time investment takes a toll on teachers in the form of burnout, the three components of which are emotional exhaustion, depersonalization, and reduced personal accomplishment. Study results confirm that participating in ERT activities for work has a direct positive relationship to burnout. Though previous research has linked work time to various health maladies, the present results display distinct socioemotional and psychological associations with ERT. This is important for several reasons. First, socioemotional and psychological struggles may be overlooked and not addressed as would physical symptoms of distress, allowing the behavior to deplete further resources. Second, this sort of suffering may link to other manifestations of distress and workplace consequences. Indeed, results confirm this. Distress from ERT without effective intervention is connected to increased levels of burnout, which in turn is associated with a decrease in occupational commitment to teaching. Hence, our model highlights the deleterious effects of ERT both on employee well-being and workplace outcomes. This finding makes a unique contribution to organizational scholarship.

This study raises questions about the inherent value of investing more time than required in work. When resource reserves become inadequate following such ongoing investment, the cost of investment may outweigh any benefits and begin the downward spiral of accommodative coping. The defensive strategies and downgraded goals of accommodative coping could make the investment of ERT not only harmful to the teacher but also less valuable to the beneficiaries of the time. Ultimately, an intervening mechanism may be necessary to keep ERT from deteriorating the teacher through burnout to a loss of commitment to the very occupation in which he or she is so heavily invested. Diminished commitment to teaching is a clear indicator that the teacher feels the benefits of teaching no longer trump the disadvantages and intent to continue teaching is at risk.

Building on the COR corollaries of resource gain and substitution, we proposed that a substitution of resources may be useful to restore depleted teachers’ resources and spur an overall resource gain that could offset the loss spiral. We predicted that one means by which an organization can substitute resources is to honor the psychological contract held with the employee. Honoring both transactional
and relational promises made or implied to teachers would serve as a form of psychological and socioemotional resource gain for the teacher. We hypothesized this resource gain could effectively substitute for the resources lost due to ERT and offset burnout and diminished commitment to teaching. Results confirmed this reasoning. As fulfillment increased, the \( \text{ERT} \rightarrow \text{burnout} \rightarrow \text{teaching commitment} \) relationships diminished to the point that at high levels of fulfillment, the relationships were no longer significant. These results suggest, as reasoned, that the level of fulfillment of such psychological contracts speaks to the employee-employer relationship. Fulfillment signals an employer’s commitment and willingness to continue the exchange relationship and suggests ethical treatment of the teacher. Perhaps most important, it sends a message that the teacher’s commitment and investment of personal resources is valued. These affirming messages may build the teacher’s trust of the employer. Thus, psychological contract fulfillment serves as a resource that can substitute for resource depletion attributed to a significant investment of extra-role services.

The reverse of the positive impact of promise fulfillment was also confirmed in this study. At mean and low levels of fulfillment the \( \text{ERT} \rightarrow \text{burnout} \rightarrow \text{commitment to teaching} \) relationships grew stronger. Perhaps a lack of fulfillment of a psychological contract sends a message of disrespect for the teacher’s time and effort, a feeling that more is never enough. It may indicate an act of betrayal by the school and diminish the teacher’s sense of value. Working under these conditions may deplete additional resources, rather than replenish those lost, and exacerbate the negative effects of ERT.

Regardless of the level of fulfillment, it seems psychological contract fulfillment speaks loudly and clearly to high-investment teachers; fulfillment affects their ability to defend against the harmful effects of such high investment. This is significant for expanding the resource substitution corollary of COR. This study takes a positive step toward understanding the positive effects psychological contract fulfillment generates for its receivers. It sheds light on the psychological contract as part of the employer-employee relationship with socioemotional and psychological outcomes for the employee in addition to significant organizational outcomes for the employer.
Limitations and Future Research Directions

Although we believe these findings are important and encouraging, we acknowledge several limitations arising from the methods and sample. The study is cross-sectional in design, which prevents us from inferring causality. Certainly, future research would benefit from a longitudinal design that could measure ERT and its relationship to burnout, occupational commitment, and psychological contract fulfillment as they progress over time. Additionally, our population was a purposive sample of teachers, a population already reputed for ERT and burnout. The results of a similar study may not show such robust findings in or generalize to other samples. Moreover, our sample shows a predominant midlevel burnout. Perhaps those who are the most burned out are too exhausted to be in the sample or have quit teaching or coaching. Their absence could have an influence on our results. Furthermore, the driving force behind ERT may be important to understanding what influence may alter its relationship to burnout. More micro- and mezzo-level processes prompting ERT should be investigated. Finally, by no means do our results suggest that honoring promises in exchange for long hours worked is a panacea for burnout, nor do they suggest they be used to induce ERT activity. There is significant room for further investigation of other defenses to burnout for high ERT employees. The results also do not suggest that organizations can or should “appease” high ERT teachers with social niceties or promises for future reward. Indeed, our results indicate that an enduring supportive environment that honors the time and work these employees contribute—which results in aggregate good for the organization—is one way organizations can keep these employees well and functioning.

Practical Implications

This study may well serve as a tale of caution and empowerment for both teachers and school administrators. Teachers who are inclined to invest more time to work activities than their teaching job requires may benefit by taking the results of this study into consideration when planning their time investments and interacting with administrators. Although the ERT teachers contribute is surely valuable to students and schools, according to these study results, it is associated
with serious resource depletion, burnout, and a diminished commitment to teaching. These are serious conditions that threaten one’s health and outlook and can be devastating to the individual’s family and career. Although these authors do not advocate for refusing future opportunities to serve above and beyond the call of duty, perhaps some practical implications of this research involve practical steps that align with the research and may help keep the most invested teachers healthy and teaching with passion for their entire careers.

Balance is key to the story of this study: balance of resources invested to resources gained, balance of promises made to promises kept, and balance of high and noble expectations and the capacity of one’s body and mind to meet them. Teachers may well relate to an acronym that summarizes some empowering possibilities for preserving balance that can be gleaned from this study. Be proactive and set limits and rules for investment in work and interaction with administrators. Advocate for clear communication with administrators regarding investments and expectations for reciprocal gains. Do not assume that one interpretation fits all. Listen to your body and mind and emotional states. Astutely invest personal resources in ways that facilitate resource gains from similar or other life domains. Necessarily be willing to pull back or walk away from ERT if physical limits are being exceeded or psychological contracts are not being met. Continually beware of excessive altruism that can drive one to overinvest and deplete. Equip yourself with plenty of time to devote to resource replenishment and other valued resources, such as sleep, family, and friendships. B-A-L-A-N-C-E. This straightforward approach, it would seem, is empowering to teachers.

Several practical implications for schools can be derived from this study. Teachers’ commitment to teaching is a critical factor in the success and future of education. It has influence on teachers’ work performance and intention to continue teaching. Therefore, it is surely in the best interest of schools to keep high the commitment of those teachers giving the most valuable personal resources to the school to a degree beyond the requirements of the job. Diminished or weak commitment typically results in one of two negative outcomes: (a) having the intent to leave the profession but continuing to stay and (b) leaving the profession (Farber, 1984). Neither of these outcomes is good for education. The cost of turnover is
weighty. The cost of disengaged, burned out teachers is even more costly, for they continue to teach at a diminished level of involvement (Haberman, 2004). Accordingly, keeping teachers committed to staying in the profession is critical for the outlook on future educational success.

This study revealed that school administrators can assist in this process in a basic and profound way—by honoring the promises (psychological contracts) made with these teachers. In addition to this being smart for education, there exists an ethical obligation to do so. One’s word may not be a legally binding contract, but it is an ethically binding one. A promise is an agreement that creates a moral obligation to honor it.

Honoring promises with teachers can have far-reaching implications. According to the results of this study, the positive relational effects garnered by fulfilling psychological contracts with high ERT teachers serves as a protective agent that may keep them from the ravaging fallout of burnout. Teachers can withstand a great deal of stress when they feel their efforts are appreciated and they are valued. Honoring psychological contracts sends that message. It signals a teacher that he or she is respected enough in the employer-employee relationship to warrant follow through on promises made. This straightforward approach, it would seem, is empowering to school administrators.

These results may justify creating workplace interventions that target areas of the school organization where relational support could enhance the propensity for stronger employer-employee relationships. Given that fulfilled social contracts are salient in reducing burnout in high performance workers, schools might consider creating workplace conditions that enhance levels of organizational commitment to employee well-being by (a) maintaining a healthy organizational environment where workers perceive being supported and valued and (b) increasing organizational trust by keeping promises made to employees through social contracts.

Schools and teachers may benefit by creating a workplace where supportive organizational messages are at the forefront of minimizing burnout potential. The type of perceived support this study examined as a part of psychological contract fulfillment included the
perception that the organization valued the employee’s contributions, appreciated extra effort, strongly considered his or her goals and values, and regarded his or her best interest when making decisions that affected him or her. Clearly, these are not perceptions that can be created with written policy, but rather through relationship. Notably, this type of perceived support is not something a budget can or needs to create. Recall that, in this study, economic types of formal exchange in terms of salary were not required to produce the buffer effects on burnout. It revolves around organizations taking seriously the ethical obligation they have to communicate basic supportive messages to their employees by honoring psychological contracts that can replenish the lost resources of ERT workers. Perhaps some level of management and supervisor training may assist with establishing ways an individual school could manifest this kind of positive employer-employee relationship. Likely, the prioritization of honoring promises may help relationships at all levels of the organization.

References


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Lori A. Brown is an assistant professor in the College of Business Administration at California State University, Long Beach. She received her doctorate in communication from Northwestern University. Her primary research interests are social, organizational, and psychological factors influencing personal well-being within organizations and the manifestations of well-being in organizational and personal outcomes.

Michael E. Roloff is a professor of communication studies at Northwestern University. He received his doctorate in communication from Michigan State University in 1975. His primary research area is influence processes including negotiation, conflict management, and persuasion. He is currently coeditor of *Communication Research*. 

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