Health Among Leaders: Positive and Negative Affect, Engagement and Burnout, Forgiveness and Revenge

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ABSTRACT The health of an organization’s leader has profound implications not only for the leader, but also for the organization itself and for its members. This study focused on three indicators (positive affect, engagement, forgiveness behaviours) of eustress, the positive stress response, and three indicators (negative affect, burnout, revenge behaviour) of distress, the negative stress response, in relation to the health of pastors, whose jobs closely parallel those of leaders in all types of organizations. Results indicated that both positive affect and revenge behaviour were significantly related to health. A post-hoc analysis indicated that work–family conflict was negatively related to revenge behaviour, while family–work conflict was positively related to revenge behaviour, and that engagement was negatively related to revenge behaviour. These results are discussed in terms of their implications for future studies of leader health, and their practical applications for promoting leader health while preventing distress.

INTRODUCTION

The health of the leader can have important consequences in organizations. When a leader is absent, makes faulty decisions, or leaves the organization, the costs can be far-reaching. Poor health of a key decision maker can greatly reduce the effectiveness of the organization as well as create anxiety in his/her followers. Conversely, if a leader is healthy and is able to perform his/her job and provide a positive example for his/her followers, the organization should benefit. Thus, it is of crucial importance to understand what factors lead to deleterious effects on health as well as positive effects on health for leaders of organizations.

To date, most studies looking at health in organizations have focused on deleterious effects on one’s health. Much research has focused on various job stressors and has found that many job stressors or demands are threats to health. Recently, however, research has shown that not all individuals experience harmful effects of demands and that demands can also lead to healthy, positive outcomes (Quick et al., 1997; Simmons and Nelson, 2001). Researchers have begun to demonstrate that individuals can have...
both positive and negative responses to demands, and it is these positive and negative responses that have differential effects on health. This study will fill the research gap by examining both positive and negative influences on the health of leaders. We will examine the negative influence of burnout, negative affect, and revenge behaviours and the positive influence of engagement, positive affect, and forgiveness behaviours on health.

The theoretical foundation for this approach to demands, responses, and outcomes is the cognitive appraisal approach, which posits that individuals have different responses to demands depending on whether they appraise a particular demand as negative or positive (Lazarus and Folkman, 1984; Seyle, 1974). If an individual appraises a demand as threatening or harmful, he or she experiences a degree of distress, the negative stress response. Conversely, if an individual appraises a demand as positive or preserving well-being, he or she experiences eustress, the positive stress response. Distress leads to negative health outcomes (Cooper and Marshall, 1976; Jenkins, 1971, 1978), whereas initial research on eustress suggests that it may lead to positive health outcomes (cf. Edwards and Cooper, 1988; Nelson and Simmons, 2004). Thus, eustress and distress (the response to stressors) are more accurate predictors of outcomes such as health than the presence or absence of stressors and, as such, eustress and distress are keys to our understanding of positive and negative health in organizations (Nelson and Simmons, 2004).

Little research had been done on the construct eustress. This can be partially attributed to the focus on the negative as distress has received ample attention (Edwards and Cooper, 1988). However, another possible reason for this neglect is the challenge of defining, operationalizing and measuring the construct. In fact, some researchers in the field have labelled eustress and distress as ‘vague and controversial’ because of this difficulty (Lazarus, 1999, p. 32). Edwards and Cooper (1988) addressed these issues by associating eustress with positive psychological states and distress with negative psychological states and suggested using these states in the measurement of eustress and distress. Following the suggestions of Edwards and Cooper (1988), Simmons and Nelson (2001) developed the operational definition of eustress as the ‘positive psychological response to a stressor, as indicated by the presence of positive psychological states’ and distress as the ‘negative psychological response to a stressor, as indicated by the presence of negative psychological states’. Their exploratory study used the positive psychological states hope, meaningfulness, and positive affect to represent eustress, while negative affect was used as the single indicator of distress. In this study of hospital nurses, the positive psychological state hope was the only significant predictor of health. They concluded that ‘eustress can be differentiated from distress, and that hope is a good indicator of the state of active engagement in work commonly associated with eustress’ (p. 14).

Nelson and Simmons (2004) have also attempted to use the positive psychological state manageability as an indicator of eustress, and the negative states alienation, anger, and anxiety as indicators of distress. Because these variables produced mixed results, they suggested that additional positive and negative psychological states should be investigated as indicators of eustress and distress. And although they defined eustress and distress in terms of psychological states, they further suggested that positive and negative behaviours might also be potential indicators of eustress and distress.
This study extends these previous studies of eustress by examining the positive psychological state engagement, the negative psychological state burnout, the positive behaviour forgiveness, and the negative behaviour revenge and their influence on health (see Figure 1) beyond that of two important demands. Engagement and burnout were chosen because, although eustress was suggested to represent a state of engagement (Simmons and Nelson, 2001), it has never been examined in this theoretic framework and burnout is a commonly used indicator of distress (Singh et al., 1994), but it too has never been examined in a study of eustress.

Forgiveness and revenge behaviours were chosen as positive and negative behaviours respectively, and they may be uniquely qualified positive and negative behaviours in a stress theoretic framework. One of the most traditional conceptualizations of stress is the ‘fight or flight syndrome’, which posits that when individuals are confronted with demands or threats, they are motivated to either avoid the threats or confront them. McCullough (2001) classified the response of forgiveness as an avoidance system and the response of revenge as a system that retaliates against the source of threat.

Revenge behaviour (also called vengeance) has been described as ‘the infliction of harm or injury in return for a perceived wrong’ (Stuckless and Goranson, 1992, p. 1). This conceptualization of revenge is clearly retaliatory in nature. Conversely, forgiveness behaviour is regarded as ‘a morally superior response to a perceived wrong’ and is preceded by the forgiver releasing negative affect and replacing it with positive affect such as feelings of compassion, benevolence and love (Bradfield and Aquino, 1999, p. 610). We reasoned that this preceding release of negative affect was the initial phase of the avoidance system. This step would be necessary but not sufficient for real forgiveness when faced with a perceived wrong, for one could avoid revenge but not exhibit a morally superior response. The avoidance system only qualifies as forgiveness, and thus positive, if positive affect replaces any negative affect in response to a perceived wrong. A valid measure of forgiveness must therefore capture these clearly positive behaviours and feelings.

Predictors of Perceptions of Health: Indicators of Eustress and Distress

The core of our hypothesized model examines how state and behavioural indicators of eustress and distress affect perceptions of health. One of the main contributions of this

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study is that four of the six variables we use as indicators of eustress and distress – engagement, burnout, forgiveness behaviour, and revenge behaviour – have not previously been used in this stress theoretic framework.

Positive and negative states. Positive Affect (PA) is a state that reflects the extent to which a person feels enthusiastic, active and alert (Watson et al., 1988). PA can be measured as both a state and a trait; state affect captures how a person feels at any given time while trait affect is the tendency of a person to experience a particular affective state over time (Watson and Pennebaker, 1989). Many studies have found a link between state PA and health. State PA has been shown to have effect on subjective health (Benyamini et al., 2000) and reported pain (Gil et al., 2003). State PA has also been linked to more objective health measures. Studies that have tracked changes in mood, physical symptoms, and immune system functioning have found correlations between state PA and immune system functioning (Stone et al., 1987, 1994) and state PA has been linked to less frequent health-care use (Gil et al., 2003).

Negative Affect (NA) is a dimension of subjective distress that includes a variety of adverse mood states, including anger, contempt, disgust, fear, and nervousness (Watson et al., 1988). NA, like PA, can be measured as both a state and a trait and has been linked to both subjective and objective health indicators. State NA has been linked to increased same-day pain (Gil et al., 2003) and decreases in self-reported health (Benyamini et al., 2000). Evans and Egerton (1992) found that state NA led to a higher incident of colds.

Burnout is a negative affective state caused by recurring distress (Shirom, 1989). Burnout, like state PA and NA, has been linked with health. Kahill (1988) found burnout related to fatigue, insomnia, headaches, and gastrointestinal disturbances. Burke and Deszca (1986) found that psychosomatic symptoms such as poor appetite, headaches and chest pains were positively related to burnout. And various studies have found links between burnout and drug, alcohol and tobacco use (Burke and Deszca, 1986; Burke et al., 1984; Jackson and Maslach, 1982). There is thus evidence to suggest a relationship between burnout and a disease/dysfunction operationalization of health.

Engagement is the level of perceived responsibility and commitment one feels for one’s job (Britt et al., 2001). Although far fewer studies have examined the effects of engagement on health, there exists some support for this link. Britt et al. (2001) found that soldiers who were more engaged in their work were more likely to perceive benefits of a stressful event. Additionally, many studies have investigated engagement’s relationship with negative health outcomes such as depression and other health complaints and found significant negative relationships (Demerouti et al., 2001; Schaufeli and Bakker, 2004; Treadgold, 1997).

Thus, the following are hypothesized:

Hypothesis 1: State PA and engagement will have a positive relationship with health when controlling for the demands work–family conflict and family–work conflict.

Hypothesis 2: State NA and burnout will have negative relationship with health when controlling for the demands work–family conflict and family–work conflict.

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**Revenge and forgiveness behaviours.** Revenge behaviour has been described as ‘the infliction of harm in return for a perceived wrong’ (Bradfield and Aquino, 1999). Revenge is generally criticized as having a negative impact on not only the offender but also the victim (Cloke, 1993). Revenge is usually accompanied by the states, anger and hostility which lead to unhealthy outcomes. These states have been associated with increases in premature death, coronary heart disease and allostatic load – the wear and tear the body experiences due to repeated cycles of adjusting to resting and active states (Affleck et al., 1987; Miller et al., 1996; Tennen and Affleck, 1990; Thoresen et al., 2000). Studies have also indicated that revenge erodes health through activation of intense cardiovascular problems and immune system compromise (Witvliet et al., 2002). Although some writers have indicated that revenge can be constructive in relation to performance as in when a vengeful employee finds a way to get rid of a troublesome subordinate (Bies et al., 1997), these benefits have not been shown in relation to health. Thus, revenge is considered a form of negative reciprocity that has been shown to have negative effects on health.

Interestingly, forgiveness is seldom included in studies or organizational life. Forgiveness behaviour is regarded as ‘a morally superior response to a perceived wrong’ and is preceded by the forgiver releasing negative emotions and replacing them with positive emotions such as feelings of compassion, benevolence and love (Bradfield and Aquino, 1999). Forgiveness has been linked with health-related outcomes such as social adjustment, physical health and mental health (Berry et al., 2001; Coyle and Enright, 1997; Freedman and Enright, 1996; Thoresen et al., 2000; Williams, 1989). Witvliet et al. (2002) studied emotional and physiological responses when subjects imagined nursed grudges and when they granted forgiveness, and concluded that when subjects adopted forgiving responses, they experienced psychophysiological benefits. Forgiveness has also been linked to lower blood pressure and heart rate levels (Lawler et al., 2003). Witvliet (2001) concluded that the published literature suggests that as forgiveness increases, so do indicators of mental health; and as unforgiveness increases, so do indicators of physiological stress and coronary heart disease (and vice versa).

Research on eustress and distress has commonly used positive and negative states as indicators, which although informative, may not be telling the whole story. Thus, the following are hypothesized:

**Hypothesis 3:** Forgiveness behaviour will be positively related to health when controlling for the demands work–family conflict and family–work conflict.

**Hypothesis 4:** Revenge behaviour will be negatively related to health when controlling for the demands work–family conflict and family–work conflict.

**Control Variables: Demands**

**Work–family conflict and family–work conflict.** Work–family and family–work conflict is a contemporary demand in many occupations. Although little research has been done on the demands of our sample, interviews with our sponsoring organization suggested that the interface between work and family was an important one. Work–family conflict has been defined as a stressor experienced when ‘general demands of, time devoted to, and
strain created by the job interfere with performing family-related responsibilities’ (Netemeyer et al., 1996, p. 401). Similarly, family–work conflict has been defined as a stressor that is experienced when family interferes with performing work-related responsibilities (Netemeyer et al., 1996). Like many stressors, work–family conflict and family–work conflict have been linked to health outcomes. Grzywacz and Bass (2003) found work–family conflict and family–work conflict positively and significantly related to depression, problem drinking and anxiety disorder. Work impact on family has been found to be a predictor of psychosomatic symptoms such as alcohol consumption, coffee consumption, cigarettes smoked, days of illness and currently taking medications (Burke, 1994). Thus, we controlled for these demands to understand the impact of the indicators of eustress and distress on health beyond the impact of these demands.

**METHOD OF STUDY**

**Sample and Design**

Our sample consisted of pastors of churches of a large denomination. The pastors in this study can best be thought of as helping professionals. Many pastors have been found to have difficulties dealing with the complexity and stressfulness of their jobs (Henry et al., 1991). As leaders and often senior leaders in their organizations, their work involves planning, organizing, controlling, budgeting, staffing, motivating and even disciplining in order to adequately deliver caring services to their constituents. This denomination was pursuing an approach in which empowering leadership was the number one characteristic of healthy, growing churches (Schwarz, 1998). In order to grow their congregations, these pastors were advised to build spiritual momentum, set qualitative goals, identify obstacles, exercise strengths, and monitor effectiveness.

In addition to the positive and negative psychological states and behaviours used in this study, we also investigate two job stressors, work–family conflict and family–work conflict, and controlled for their direct affect on our dependent variable, perceptions of health. Pastors are particularly appropriate for a study of work–family conflict and family–work conflict because pastors are leaders of their congregations, families, and in their communities. Parallels between the jobs of pastors and leaders in all types of organizations have been drawn because both experience family stress and expectations of perfection from others (Meek et al., 2003). Additionally, both are often socially isolated while they have multifaceted roles in their followers’ lives. Pastors are also a good sample to study forgiveness and revenge as positive and negative variables, because they explicitly and unequivocally see forgiveness as a positive response and encouraged and unequivocally see revenge as negative response to demands.

The sponsor for our study was the CEO of a regional headquarters for this denomination. This regional headquarters describes itself as a community of 268 churches from a four-state region. The churches in this denomination see themselves as operationally independent; therefore, the denominational headquarters has no hierarchical authority. The denomination headquarters serves primarily as a resource for its member churches (e.g. to organize conferences, provide a retirement plan, assist in recruiting new pastors, and to assist in specific ministries).
From our sponsor we obtained the mailing addresses of 450 pastors in a five-state region. All of the 450 pastors identified to us were male, which was a characteristic of this denomination. Before we mailed our surveys, our sponsor contacted all of the pastors via e-mail to endorse the study. A letter of endorsement from our sponsor was also included in each mailing package. Anonymity was preserved by not asking the pastors for their name, and complete surveys were returned via mail directly to one of the authors of this study. A total of 117 usable surveys were returned for a response rate of 26 per cent. This response rate was lower than we had hoped; however, this is a fairly typical response rate for mail surveys sent to leaders of organizations (Echambadi et al., 2006; Baruch, 1999; Henderson, 1990).

Of these 117 usable returned surveys, 94 had complete data for all of the variables included in the study; consequently, at the 0.05 significance level, the power to detect a medium effect size ($r = 0.30$) will be approximately 0.83 (Cohen and Cohen, 1975). Our ratio of observations to independent variables was almost 15 to 1, which minimizes concerns about over fitting the variate to the sample (Hair et al., 2005). The sample was mostly upper level leaders in their congregations, with the majority of 117 respondents identifying themselves as senior pastors (38.5 per cent), pastors (27.4 per cent), or executive pastors (2 per cent). The next highest levels of respondents were associate pastors (11.2 per cent) and youth pastors (8.5 per cent). The remaining respondents identified themselves as pastors of a specific ministry in the church (e.g. worship, students, and men’s ministries). Thirty per cent of the pastors were aged 45–54, 24.1 per cent were 55–64, 19.7 per cent were 35–44, 12.9 per cent were 25–34, 9.5 per cent were over 65 and less than 3 per cent were under 25. In terms of tenure, 27.4 per cent had been with their congregations 6–10 years, 18.8 per cent 3–5 years, 13.7 per cent 11–15 years, 12.8 per cent 15–20 years, 12 per cent 1–2 years, 10.3 per cent more than 20 years, and 4.3 per cent less than 1 year. Ninety-seven per cent were married, and 3 per cent were single, with 53.4 per cent reporting at least one child living at home with the family. The work hours reported per week were 39.3 per cent 41–50 hours, 39.3 per cent 51–60 hours, 12.8 per cent greater than 60 hours, 2.6 per cent 31–40 hours, and 5.2 per cent less than 30 hours.

Measures

*Family–work conflict (FWC) and work–family conflict (WFC)*. Each of these stressors was measured with the respective five-item scales provided by Netemeyer et al. (1996). Representative items of FWC are: ‘I have to put off doing things at work because of demands on my time at home’, and ‘The demands of my family or spouse/partner interfere with work-related activities’. Representative items of WFC are: ‘Things I want to do at home do not get done because of the demands my job puts on me’, and ‘Due to work-related duties, I have to make changes to my plans for family activities’. Scales were five-point Likert-type in which 1 indicated strong disagreement and 5 indicated strong agreement with the statement.

*Negative affect*. Negative affect (NA) is a general dimension of subjective distress and unpleasurable mood states (Watson et al., 1988). NA is a common variable in studies, not
just as an indicator of distress, but also because of the possibility that NA may affect the measurement of and substantive relationships between stressors and strains in general (Hurrell et al., 1998). State NA was measured with the ten NA items from five-point Likert-type Positive and Negative Affect Schedule (PANAS) (Watson et al., 1988) in which respondents were asked to indicate if they felt various emotions from ‘very slightly or not at all’ (1) to ‘extremely’ (5).

Positive affect. Positive affect (PA) reflects the extent to which a person feels enthusiastic, active and alert (Watson et al., 1988). PA can be measured as a state or trait, with state PA capturing how one feels at given points in time, whereas the trait represents stable individual differences in the level of affect generally experienced (George and Brief, 1992; Watson and Pennebaker, 1989). State and trait PA are both conceptually and empirically distinct, and state PA is also a separate factor from negative affect (George and Brief, 1992). The ten PA items from the PANAS are included in this study to measure state PA (Watson et al., 1988). Again, respondents were asked to indicate if they felt various emotions from ‘very slightly or not at all’ (1) to ‘extremely’ (5).

Burnout. This six-item, five-point Likert-type measure of general burnout was developed to represent the end result of a process in which motivated and committed individuals lose their spirit (Erickson and Ritter, 2001). In the study of dual-earner married couples for which this measure was developed, burnout was affected positively by agitation at work and negatively by positive emotions. Representative items include: ‘I feel emotionally drained from work’, ‘I feel used up at the end of the day’, ‘I dread getting up in the morning and having to face another day on the job’, and ‘I feel burned out from my work’. Respondents were asked to indicate if they agreed with these statements ‘never’ (1) to ‘very frequently’ (5).

Engagement. We used four items from a measure developed by Britt et al. (2001), in which engagement was operationally defined as the degree to which doing well on the job matters and the level of felt responsibility and commitment to the job. Representative items were measured using a five-point Likert-type scale and include: ‘How I do my job influences how I feel’, and ‘I feel obligated to perform my job well’. Respondents were asked to what extent they agreed with these statements from ‘strongly disagree’ (1) to ‘strongly agree’ (5).

Revenge behaviour. Three of the five items from Bradfield and Aquino’s (1999) revenge behaviour scale were used in which revenge behaviour was operationally defined as the infliction of harm for perceived wrong (Bradfield and Aquino, 1999). Respondents were asked to think back over the last six months as a pastor in their current position to a time when another person offended them. They were then asked to write a few sentences describing the offence before answering a series of questions for the scales revenge and forgiveness. These items were measured on a five-point scale in which respondents were asked to indicate how accurate each statement was, from ‘not at all accurate’ (1) to ‘very
accurate’ (5). For revenge behaviour, these statements were: ‘I told them something was wrong with them’, ‘I tried to make something bad happen to them’, and ‘I did something to make them get what they deserved’.

**Forgiveness behaviour.** This is a complex affective, cognitive, and behavioural phenomenon in which negative affect and judgment toward an offender are diminished by viewing the offender with compassion, benevolence, and love (Bradfield and Aquino, 1999). Forgiveness involves the forswearing or resentment and anger on moral grounds. Bradfield and Aquino’s (1999) six-item scale was used to measure forgiveness behaviour. Again, respondents thought of an instance of an individual offending them in the last six months, wrote a few sentences describing the offence and then indicated how accurate the six scale statements were. Representative items were: ‘I gave them back a new start, a renewed relationship’, and ‘I made an effort to be more friendly and concerned’. These items were measured on a five-point scale in which respondents were asked to indicate how accurate each statement was, from ‘not at all accurate’ (1) to ‘very accurate’ (5).

**Perception of health.** A pastor’s current perception of his health was measured with four items from a ten-item subscale of the Health Perceptions Questionnaire (Ware et al., 1978). They report that general health ratings are valid measures of health status as they significantly correlated with a variety of other health measures (e.g. physician’s assessment). An example of an item from this scale is: ‘According to the doctors I’ve seen, my health is now excellent’. Respondents were asked to indicate if these statements were ‘definitely false’ (1) to ‘definitely true’ (5). See Appendix for all scale items.

**RESULTS**

Table I includes the correlation matrix for the study variables along with the means, standard deviations, and reliability coefficients for each measure. All of the scales used in this study displayed acceptable psychometric properties, with the lowest reliability estimate (Cronbach’s alpha) being 0.69 for engagement. The strongest correlation was between burnout and work–family conflict (0.60); however, all of the tolerance values for each variable were well above the common cut-off value of 0.10, so multicolinearity was not a concern (Hair et al., 2005). All of the relationships were in the expected directions, with the possible exception of the non-significant, positive relationship between burnout and engagement. There was a lower response rate ($N = 94$) for the variables forgiveness and revenge, which could be due to the sensitivity of the variables, but some of the pastors that did not complete this part of the survey explained that they simply had not felt offended by anyone in the past six months.

We performed a two step hierarchical regression by entering the control variables and then the remaining study variables.

As can be seen in Table II, in step 1, neither of the demands family–work conflict nor work–family conflict was significantly related to health. In step 2, revenge behaviour emerged as significantly and negatively related to health, and positive affect was the only other variable in the equation that remained significant. These two equations showed that health is positively related to positive affect and negatively related to revenge behaviour.
Table I. Correlations, means, standard deviations, and reliability (alpha in parentheses)

<table>
<thead>
<tr>
<th>Variable</th>
<th>N</th>
<th>Mean</th>
<th>Standard deviation</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
<th>8</th>
<th>9</th>
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<tr>
<td>1. Health</td>
<td>117</td>
<td>3.44</td>
<td>1.01</td>
<td></td>
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<td></td>
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<td>2. Forgiveness behaviour</td>
<td>94</td>
<td>3.88</td>
<td>0.70</td>
<td>0.19</td>
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<tr>
<td>3. Revenge behaviour</td>
<td>94</td>
<td>1.11</td>
<td>0.36</td>
<td>-0.29**</td>
<td>-0.43**</td>
<td></td>
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<td>4. Positive affect</td>
<td>117</td>
<td>3.87</td>
<td>0.54</td>
<td>0.47**</td>
<td>0.20</td>
<td>-0.11</td>
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<td></td>
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<tr>
<td>5. Negative affect</td>
<td>117</td>
<td>1.49</td>
<td>0.45</td>
<td>-0.45**</td>
<td>-0.30**</td>
<td>0.26**</td>
<td>-0.46**</td>
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<td>6. Burnout</td>
<td>117</td>
<td>2.48</td>
<td>0.63</td>
<td>-0.42**</td>
<td>-0.07</td>
<td>0.09</td>
<td>-0.38**</td>
<td>0.52**</td>
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<td>7. Engagement</td>
<td>117</td>
<td>4.25</td>
<td>0.60</td>
<td>0.06</td>
<td>0.27**</td>
<td>-0.37**</td>
<td>0.07</td>
<td>-0.13</td>
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<td>8. Family–work Conflict</td>
<td>117</td>
<td>1.99</td>
<td>0.74</td>
<td>-0.20*</td>
<td>-0.25*</td>
<td>0.25*</td>
<td>-0.14</td>
<td>0.31**</td>
<td>0.23*</td>
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<td>9. Work–family Conflict</td>
<td>117</td>
<td>2.48</td>
<td>0.90</td>
<td>-0.30**</td>
<td>-0.05</td>
<td>0.03</td>
<td>-0.22*</td>
<td>0.40**</td>
<td>0.60**</td>
<td>0.06</td>
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</table>

*p < 0.05, ** p < 0.01.
Because revenge behaviour was a new variable in the analysis of eustress and distress on health, we wanted to learn more about what might affect this behaviour. We conducted a post-hoc analysis in which we regressed all the independent variables from our initial analysis on revenge behaviour (see Table III). The significant negative predictors of revenge behaviour were engagement and work–family conflict, and the significant positive predictor of revenge behaviour was family–work conflict.

**DISCUSSION**

Because pastors are leaders of their congregations, families, and in their communities, their health is extremely important. The parallels between the jobs of pastors and leaders in all types of organizations are striking. Both experience family stress and expectations of perfection from others (Meek et al., 2003). Both are often socially isolated, although their roles in people’s lives are multifaceted. They are expected to remain calm and strong in the face of distress, never complain, and to be consistently supportive of others, regardless of their own distress. Our results, therefore, are quite generalizable to many types of leaders.
The contribution of the study lies in its simultaneous examination of both the positive and negative mechanisms (eustress and distress) that affect leader health. In addition, we examined some influences on health that are supported in previous research (burnout, NA, PA) and proposed several novel influences (engagement, revenge, forgiveness). Of the six variables that we hypothesized to predict health, only two, positive affect and revenge behaviour, were significant. Neither of the work demands was significantly related to health. This finding is consistent with prior theory and research suggesting that eustress and distress, as stress responses, intervene between demands and outcomes (cf. Nelson and Simmons, 2003). Consistent with our hypotheses, there were both positive and negative state and behavioural variables related to health. The positive variable related to health in this group of pastors was the very state of enthusiasm and pleasure that they derived from their general work environment and responsibilities (positive affect). Interestingly, even though this group was highly engaged in their work, it was not the engagement in their specific work that was related to health. We were also surprised that our other positive construct, forgiveness behaviour, was not significantly related to health. This is in contrast to previous findings (cf. Cameron and Caza, 2002) that have demonstrated the benefits of forgiveness for physical and emotional health. One potential explanation within our group of respondents is that for pastors, forgiveness may be so ingrained within their identity that it lacks the power it might have over those for whom forgiveness is a less frequent experience.

We consider it a noteworthy finding that the revenge behaviour was the only negative variable we studied that was significantly and negatively related to health. The negative consequences of burnout (cf. Burke and Deszca, 1986) and NA (cf. Benyamini et al., 2000) are well established, so we were surprised that they lost their significance in the presence of the other variables in this study. These pastors engaged in very little revenge behaviour; in fact, the level of forgiveness behaviour reported was three times that of revenge behaviour. Yet it was revenge that was significantly and negatively related to health. This suggests that when distress manifests itself in even a small degree of revenge behaviour, it can be detrimental to a leader’s health. The finding is also consistent with Bradfield and Aquino’s (1999) recognition that revenge is characterized by substantial

<table>
<thead>
<tr>
<th>Family–work conflict</th>
<th>Work–family conflict</th>
<th>Negative affect</th>
<th>Positive affect</th>
<th>Burnout</th>
<th>Engagement</th>
</tr>
</thead>
<tbody>
<tr>
<td>0.27</td>
<td>-0.30</td>
<td>0.22</td>
<td>0.02</td>
<td>0.07</td>
<td>-0.27</td>
</tr>
<tr>
<td>(2.34)*</td>
<td>(-2.21)*</td>
<td>(1.73)</td>
<td>(0.19)</td>
<td>(0.56)</td>
<td>(-2.68)**</td>
</tr>
<tr>
<td>ΔR²</td>
<td>0.06</td>
<td>0.04</td>
<td>0.07</td>
<td>0.00</td>
<td>0.00</td>
</tr>
<tr>
<td>ΔF</td>
<td>5.97</td>
<td>3.59</td>
<td>7.62</td>
<td>0.00</td>
<td>0.30</td>
</tr>
<tr>
<td>Overall adjusted R²</td>
<td>0.05</td>
<td>0.08</td>
<td>0.14</td>
<td>0.13</td>
<td>0.12</td>
</tr>
<tr>
<td>Durbin–Watson</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>2.23</td>
</tr>
</tbody>
</table>

Notes: Variables are displayed in order of entry into the regression equations. Standardized coefficients are reported with t-values in parentheses.
* p < 0.05, ** p < 0.01.
emotional and behavioural intensity. It is possible that the impact of revenge is more intense in pastors than other leaders; further research should be pursued to determine whether or not this is the case.

Our post-hoc analysis of revenge behaviour gave us some interesting insight. Whereas the demands did not have a direct relationship with health, both family–work conflict and work–family conflict were significant predictors of revenge behaviour. The demands from the pastors’ family responsibilities that conflicted with their work responsibilities were positively related to revenge behaviour. Yet the demands from the pastors’ work that conflicted with their family responsibilities were negatively related to revenge behaviour. A deeper look at the construct of revenge provides a potential explanation for this paradoxical finding. Revenge is often accompanied by suppressed anger, and its expression is an intense personal action (Bradfield and Aquino, 1999). It is usually carried out against another individual. The sources of a pastor’s work–family conflict are often groups (e.g. evening meetings with groups of elders, being called at night to meet with bereaved families), and therefore revenge may not be seen as an option, particularly because it may also be viewed as socially inappropriate. Further, these interruptions may be viewed by pastors as simply part of the job, and therefore not accompanied by intense negative behaviours such as revenge.

In contrast, pastors may feel that they face unrealistic expectations of having a ‘perfect’ family; one that does not interfere with their work. When family obligations interfere with work, they are often brought about by an individual – one with whom the pastor is very close, and those closest to us are often the targets of revenge. Pastors may expect family members to understand and appreciate the emotional labour they engage in at work, and to avoid placing additional demands on them that conflict with work; thus they may respond with great emotional intensity (i.e. revenge) in response to family demands that affect work. For example, when a pastor’s child complains about the pastor’s absence from soccer games, the pastor may expect the child to understand the 24-hour, 7 day-a-week nature of the pastor’s job. The pastor may respond vengefully towards the child (e.g. ‘There is nothing I can do about this – don’t you understand?’).

The variable with the strongest significance to revenge behaviour was engagement. Although engagement did not have a direct relationship with health, it may have an indirect relationship with health through its negative relationship with revenge behaviour. Having a strong felt responsibility and commitment to one’s job may buffer one from committing revenge behaviours. The pleasurable state of engagement in work is absorbing, and may act as an antidote to committing vengeful acts against others in the face of stressors.

The results of our study must be interpreted with acknowledgement of the study’s limitations, which include self-report data, cross-sectional design, and the question of generalizability to other settings. However, we have made attempts to mitigate these limitations. The health measure we use, self-report, has been shown to be highly correlated with other health measures, including physician assessments. Despite these limitations, the practical message for leaders from this study is clear. To ensure a leader’s health, he or she should recognize the health benefits of a positive mindset and enthusiastic, active engagement at work. Conversely, leaders must be cautioned that revenge,
particularly as a response to family demands that conflict with work, is a response that has deleterious influences on health.

For researchers, our message is that leader health is worthy of investigation, and complex to study. We need to include both positive and negative states, as indicators of eustress and distress, to construct a more complete picture of a leader’s experience of stress. There is utility in investigating both states and behaviours as influences on leader health. Although forgiveness and revenge are seldom part of studies aimed at understanding work stress, we believe they are worthy of our future research efforts. In particular, revenge appears to be a health risk for leaders, even among those like our pastors who engaged in revenge to a very limited degree. Despite the fact that among the pastors in our study, forgiveness was not positively linked with health, the relationship is worthy of future study among leaders in other types of organizations. We might speculate that pastors are more acquainted with forgiveness than revenge, but is this the case with executives in corporate organizations? Or, are corporate executives more acquainted with revenge than forgiveness? The lack of significance between burnout and health in this sample is also intriguing. These and many other issues await further exploration.

**APPENDIX**

The following contains the items for each of the measures used.

**Work–Family Conflict (WFC), Family–Work Conflict (FWC)**

*(Netemeyer et al., 1996)*

Participants indicate the extent to which they agree with the following statements.

**WFC**

1. The demands of my work interfere with my home and family life.
2. The amount of my time my job takes up makes it difficult to fulfil family responsibilities.
3. Things I want to do at home do not get done because of the demands my job puts on me.
4. My job produces strain that makes it difficult to fulfil family duties.
5. Due to work-related duties, I have to make changes to my plans for family activities.

**FWC**

1. The demands of my family or spouse/partner interfere with work-related activities.
2. I have to put off doing things at work because of demands on my time at home.
3. Things I want to do at work don’t get done because of the demands of my family or spouse/partner.
4. My home life interferes with my responsibilities at work such as getting to work on time, accomplishing daily tasks, and working overtime.
5. Family-related strain interferes with my ability to perform job-related duties.
**Engagement (Britt et al., 2001)**

Participants indicate the extent to which they agree with the following statements.

1. I feel responsible for my job performance.
2. How I do in my job influences how I feel.
3. How I do in my job matters a great deal to me.
4. I feel obligated to perform well in my job.

**Positive and Negative State Affect (Watson et al., 1988)**

Participants indicate to what extent (very slightly to extremely) they feel this way right now: Interested; Excited; Strong; Enthusiastic; Proud; Alert; Inspired; Determined; Attentive; Active; Distressed; Upset; Guilty; Scared; Hostile; Irritable; Ashamed; Nervous; Jittery; Afraid.

**Burnout (Erickson and Ritter, 2001)**

Participants indicate the extent to which they agree with the following statements.

1. I feel emotionally drained from work.
2. I feel used up at the end of the day.
3. I dread getting up in the morning and having to face another day on the job.
4. I feel I’m working too hard on my job.
5. My work really puts a lot of stress on me.
6. I feel burned out from my work.

**Forgiveness Behaviour (Bradfield and Aquino, 1999)**

Participants indicate the extent to which the following statements are accurate or inaccurate.

1. I gave them back a new start, a renewed relationship.
2. I accepted their humanness, flaws, and failures.
3. I did my best to put aside the mistrust.
4. I accepted them.
5. I made an effort to be more friendly and concerned.
6. I prayed for God to bless them.

**Revenge Behaviour (Bradfield and Aquino, 1999)**

Participants indicate the extent to which the following statements are accurate.

1. I told them something was wrong with them.
2. I tried to make something bad happen to them.
3. I did something to make them get what they deserved.
4. I got even with them.
5. I prayed for God to deal severely with them.

**Current Perception of Health (Ware et al., 1978)**

Participants indicate the extent to which they agree with the following statements.

1. According to the doctors I’ve seen, my health is now excellent.
2. I feel better now than I ever have before.
3. I’m as healthy as anybody I know.
4. My health is excellent.

**REFERENCES**


Hurrell, J. J., Nelson, D. L. and Simmons, B. L. (1998). ‘Measuring job stressor and strains: where we have been, where we are, and where we need to go’. Journal of Occupational Health Psychology, 2, 368–89.


