Judicial stress: the roles of gender and social support

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Because judges experience a myriad of occupational stressors, they are at risk of experiencing secondary trauma, burnout, negative mental/physical health, poor job performance and low job satisfaction. These experiences might not be uniform, however, as gender and social support might mitigate such stress-related outcomes. Judges from two states in the United States completed a variety of stress and subjective performance measures. Social support was related to less perceived stress, less burnout, and more job satisfaction, but only for males. This suggests that males and females might receive qualitatively different types of social support. Different types of social support could differ in their ability to buffer judges from these stress-related outcomes. Further, among judges with high social support, females scored higher than males on subjective job performance; the opposite pattern occurred for judges with low social support. Thus, a lack of social support appears to have a negative effect on performance self-appraisals but only for females. Results have implications for the psychological study of stress and for programs designed to reduce judges' stress.

Key words: burnout; gender; judge; occupational stress; social support; trauma; well-being.

1. Introduction

Occupational stress can have many personal and employment outcomes. As a result of the stressors that judges experience, they are at high risk of experiencing secondary trauma, burnout, negative mental/physical health, poor job performance and low job satisfaction (Chamberlain & Miller, 2009; Chamberlain & Richardson, 2013; Miller & Richardson, 2006). Judges could experience stress due to presiding over controversial or gruesome criminal trials or could experience burnout due to conflicts with coworkers and busy schedules. Yet, stress might not be uniformly experienced among judges, as many factors

can affect a judge's level of stress (e.g. gender, workload). Protective factors (e.g. social support) can potentially mitigate these outcomes of stress (e.g. job dissatisfaction, impaired job performance). These factors are reflected in Miller and Richardson's (2006) model of judicial stress, which lists a number of personal, job and environmental characteristics that can lead to stress (see Figure 1).

The purpose of this study was to test part of Miller and Richardson's (2006) model of judicial stress by assessing how judges' demographic variables relate to three categories of stressors (i.e. perceived stress, burnout and secondary trauma), job satisfaction, job

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Figure 1. A model of judicial stress. Reprinted from Miller and Richardson (2006).

performance, and current mental and physical health. Finally, it focused on gender as a personal characteristic that can relate to the experience of stress and social support as a protective factor that might mitigate stress.

2. Occupational stress

In general, occupational stress has many causes, including perceptions of injustice in procedures (e.g. decision-making in promotions), interpersonal matters related to employment (e.g. feeling respected; Judge & Colquitt, 2004) or lack of variety in job tasks (Warr, 2007). Judges experience occupational stress (Chamberlain & Miller, 2008, 2009; Miller, Flores, & Pitcher, 2010), typically scoring at least moderately high on a variety of measures of depression (Flores et al., 2008–2009), stress and burnout (Tsai & Chan, 2010). Their stress scores are often even higher than those of scores of people who work in other high-stress

occupations like prison wardens and physicians (Lustig, Delucchi, Tennakoon, & Kaul, 2008). Common stressors include high case-loads; time limitations; social isolation; lack of privacy; the pressure of making legal decisions, including political pressure; publicity associated with trials; poorly prepared or disrespectful counsel; exercising judicial discretion; safety concerns; lack of resources; job security, especially for judges who face reelection or retention votes; long, boring trials and trials with frequent interruptions; and tension among colleagues and staff (Eells & Showalter, 1994; Flores et al., 2008–2009; Lustig et al., 2008; Resnick, Myatt, & Marotta, 2011). Many of these stressors are related to occupational burnout (Bakker, Le Blanc, & Schaufeli, 2005; Cerney, 1995; Figley, 2015; Maslach, Schaufeli, & Leiter, 2001).

Judges who witness the traumas of others (e.g. in child abuse or violent crime cases) might be even more susceptible to stress if

they feel it is necessary to act as caregivers (e.g. to a child or adult victim). Flores and colleagues (2008–2009) found that the most stressful aspects of judges' jobs included involvement in cases of crimes against children, sexual crimes and violent crimes. Judges in that study indicated that they frequently try to protect jurors who might experience stress because of the trial (Flores et al., 2008–2009). This experience of others' trauma, often called secondary traumatic stress or vicarious trauma, adds to judges' stress (Chamberlain & Miller, 2008, 2009; Jaffe, Crooks, Dunford-Jackson, & Town, 2003).

As this review suggests, judges are at risk of experiencing both burnout and secondary traumatic stress – the two components of compassion fatigue (Adams, Boscarino, & Figley, 2006; Figley, 2015; Joinson, 1992). Compassion fatigue (CF) is a work-related stressor that results from exposure to others who have experienced trauma; it is often called secondary traumatic stress disorder (Sprang, Clark, & Whitt-Woosley, 2007) or vicarious trauma (although the terms are sometimes differentiated in the literature; see Adams et al., 2006; Chamberlain & Richardson, 2013). CF occurs in social workers (Adams et al., 2006), Child Protection Services workers, and responders to terrorist attacks (e.g. the Oklahoma City bombing and 11 September attacks; see Sprang et al., 2007, for review).

Joinson (1992) and Figley (2015) were elemental in the early development of the concept of CF, which has most recently been measured by a scale with two components: burnout and secondary trauma (Adams et al., 2006). Although both components are related to psychological distress and are related to each other (Cieslak et al., 2014), they are different constructs as confirmed by factor analysis (Adams et al., 2006). Other research supports this; for example, social workers' involvement after the 11 September 2001 terrorist attacks on the World Trade Center was related to secondary trauma but not burnout (Adams et al., 2006). Thus, this section discusses burnout and secondary trauma separately, and as applied to judges.

2.1. Burnout

The first component of CF, burnout, is physical and emotional stress caused by an overload of responsibility, inequality in the workplace, lack of control over one's job and not being rewarded for work (e.g. raises or appreciation; Adams et al., 2006). Burnout results in a sense of having few emotional resources, cynical feelings, low sense of self-efficacy, and recurring thoughts and images related to trauma (Bakker et al., 2005; Cerney, 1995). It results in emotional exhaustion, reduced personal accomplishments, depersonalization, irritability, avoidance behavior, and occupational indifference (Figley, 2015; Maslach et al., 2001). Burnout is negatively related to job control (i.e. a sense that one can control the situation at work; Bakker et al., 2005).

Many judges experience signs of burnout, including difficulty making decisions, difficulty doing their jobs, negative feelings about their career (Eells & Showalter, 1994), overload of responsibility, workplace conflict and perceptions of inequality (Chamberlain & Miller, 2009; Resnick et al., 2011). Tsai and Chan (2010) found that judges in Taiwan had high scores on the Copenhagen Burnout Inventory. Although these studies measure burnout indirectly (e.g. through interviews or general survey questions) or through other measures independent of CF (e.g. Tsai & Chan, 2010), researchers have not yet studied burnout specifically using the CF scale developed by Adams and colleagues (2006), as done in the current study. This was also the first study to investigate how burnout in judges is related to job-related outcomes (e.g. satisfaction and performance) and might be mitigated by social support or related to gender.

2.2. Secondary trauma

The second component of CF, secondary trauma, refers to the emotional exhaustion that results from working with clients who have been traumatized (Adams et al., 2006).

This occurs when a caregiver (e.g. social worker, emergency responder, clinician or other person who works with clients who have experienced trauma) experiences reduced interest or ability to show empathy for others and/or experiences symptoms similar to those of the client who has experienced trauma. Thus, the caregiver experiences trauma vicariously by working with people who experienced the trauma first hand.

Several studies have suggested that judges do experience secondary trauma (see Chamberlain & Richardson, 2013, for review). Chamberlain and Miller (2009) interviewed nine judges in a single jurisdiction and found that, although judges did not specifically mention feeling traumatized by experiencing others' trauma, they did make comments that indicated they were at risk for secondary trauma. Specifically, judges described the emotional nature of the courtroom, the anxiety and trauma experienced by those in the courtroom, their attempts to keep their emotions in check, and their desire to alleviate the trauma experienced by those in their courtroom. Flores and colleagues (2008–2009) further report that judges feel responsible for the well-being of those in the courtroom. These studies indicate that many judges are acting as caregivers and are likely to experience secondary trauma. Similarly, Jaffe et al. (2003) found that 63% of judges had at least one symptom of vicarious trauma. Vicarious trauma is similar to secondary trauma but focuses less on outcome behaviors and more on emotions; it also does not focus on empathic engagement as the impetus for secondary trauma (see Chamberlain & Richardson, 2013, for review). These studies suggest that judges experience this component of CF, yet no studies have used the Adams and colleagues (2006) scale to measure secondary trauma explicitly. The current study filled this gap.

3. Social support as a mitigator of stress

Although some jobs are inherently stressful, negative outcomes are not inevitable. As

indicated in the model of judicial stress (Miller & Richardson, 2006), there are various factors that might alleviate some stressors so that they do not produce the negative outcomes just described. One such factor is perceived social support. Broadly, greater perceptions of social support are associated with various physical and mental health benefits. A review by Ozbay and colleagues (2007) demonstrated that social support moderates genetic and environmental vulnerabilities for mental illness, and suggested that social support provides resiliency to stress. High perceived social support is also related to physical and mental health benefits, including: fewer symptoms of depression (Santini, Koyanagi, Tyrovolas, Mason, & Haro, 2015), lower risk for cardiovascular disease and a variety of other physical diseases (Uchino, 2006), and faster recovery speeds from physical injuries (Kiecolt-Glaser et al., 2005). It is clear that social support is a protective factor for physical and mental illness that may result from general life stress.

In addition to the general benefits of social connection, supportive working environments buffer against occupational stress. The demand–control–support model of occupational stress (Karasek, 1979; Van der Doef & Maes, 1999) has found negative health effects for those who perceive that they have little control at work and high psychological demand resulting from their job. However, workplace social support (i.e. support from supervisors and coworkers) can buffer these effects (Karasek & Theorell, 1990; Van der Doef & Maes, 1999). Furthermore, workplace social support can provide coping mechanisms that allow employees to better deal with stress (Karasek & Theorell, 1990). Workplace social support is related to burn-out (Brown & O'Brien, 1998), perceived favorableness of job conditions (Eisenberger, Cummings, Aemeli, & Lynch, 1997), job performance, satisfaction with one's job and intentions to quit one's job (Gerstner & Day, 1997). For example, workplace stress symptoms were negatively related to

workplace support in a group of therapists (Kassam-Adams, 1995). Perceived social support from one's supervisor and perceived social support from family and friends were both also negatively related to emotional exhaustion and depersonalization (indices of burnout on the Maslach & Jackson, 1986, scale). Further, a meta-analysis revealed that both work support and social support were negatively related to secondary traumatic stress in people who work with trauma victims (Hensel, Ruiz, Finney, & Dewa, 2015). While judges are not technically trauma workers, they do often feel responsibility for those in their courts who have been traumatized (Flores et al., 2008–2009).

There is limited research on how social support affects judges. Only one study that we know of has studied the relationship between social support and stress in judges: Tsai and Chan (2010) found that workplace social support was negatively related to burnout in a sample of 211 judicial officers in Taiwan. Lambert, Hogan, and Altheimer (2010) demonstrated that relationships outside of work may also influence occupational burnout (see also Baruch-Feldman, Brondolo, Ben-Dayana, & Schwartz, 2002), but it is unknown how nonworkplace support would relate to the emotional experiences of judges. The current study aimed to examine workplace and nonworkplace support in a U.S. sample.

4. Gender, stress and social support

As suggested by the model of judicial stress (Miller & Richardson, 2006), gender could be related to the amount of stress that a judge experiences. Considering the relation between social support and stress, it is also important to consider whether there are gender effects in these two constructs.

4.1. Gender differences in stress

Research has repeatedly demonstrated the notion of gender effects for various mental

illnesses. Women, compared to men, tend to be diagnosed more frequently with mood disorders, and the burden of illness is greater for women (e.g. Kessler, 2003; McLean & Anderson, 2009; McLean, Asnaani, Litz, & Hofmann, 2011). Although this finding is consistent and well documented, it is unclear why women tend to experience more frequent clinical disorders. A number of explanations exist, many of which involve differential vulnerability to stress.

From a biopsychosocial theoretical perspective, stressors in one's environment may exacerbate symptoms of anxiety (e.g. excessive worry about work, avoidance of anxiety-provoking stimuli) and depression (e.g. low mood, tearfulness). It seems that many variables contribute to the gender effects of these disorders, some of which include biological factors (e.g. genetics, hormones), vulnerability factors (e.g. trait anxiety) and gender role socialization (McLean & Anderson, 2009). Gender role socialization refers to acceptable behaviors of the traditional binary construct of gender (e.g. men are not supposed to cry in public).

Gender effects are also present in various expressions of stress (e.g. CF, secondary trauma, burnout) in various helping professions. Women, compared to men, reported higher levels of CF and burnout in a sample of mental health providers who work with trauma victims (Sprang et al., 2007). In a sample of physicians, Gleichgerricht and Decety (2013) demonstrated that women tended to endorse more CF, burnout and secondary traumatic symptoms, but these effects were small. Overall, it seems that gender effects are present, though rather small, among healthcare professionals.

As applied to the judicial profession, female judges were more likely than males to suffer from psychological and health issues (Lustig et al., 2009), secondary traumatic stress and burnout (Lustig et al., 2008), compassion fatigue/vicarious trauma (Jaffe et al., 2003), concern for personal safety, general and trial-related stress, depression, and

posttraumatic stress disorder (PTSD)-type symptoms (Flores et al., 2008–2009). There might also be gender differences in how stress affects job performance. Flores and colleagues (2008–2009) demonstrated that females were more likely to report that their responsibilities had been compromised by stress than were male judges. Finally, gender might relate to how stress affects job satisfaction. A study of Australian judges found that females and males were both highly satisfied by their jobs overall, but that females had more work–life balance dissatisfaction (Anleu & Mack, 2014). Specifically, women were more dissatisfied with parts of their jobs that related to autonomy, feeling rushed and interfering with their family life – all factors that related to job satisfaction. The authors conclude that the effect of gender is not a direct effect, but indirectly related to job satisfaction. The current study built on this body of research on gender differences in stress.

4.2. Gender differences in social support

Considering the various health benefits of social support and the increased vulnerability to mental illness for women, there is a possibility that gender differences might exist in the experience of social support. The tend-and-befriend model (Taylor et al., 2000) suggests that women have evolutionarily adapted to providing care for children and offspring instead of a fight-or-flight model of stressors because of the demands of pregnancy and child-rearing. In Taylor et al. (2000) model, they presented a vast amount of research suggesting that women tend to seek social support in times of stress, whereas men do not as frequently. They support their evidence with neuroendocrine and behavioral responses to stress in human and animal studies.

The tend-and-befriend model may suggest that social support is more important for women than for men. It would be expected that a woman in social isolation would experience more distress than a man in an equal amount of social isolation. Men tend to be

more isolated than women, but there are no differences in perceptions of isolation (Vandervoort, 2000). Men might experience less distress in social isolation because of the fight-or-flight response being a direct challenge or avoidance of a distressing situation. That is, the immediate stressor may be resolved quickly by using problem-focused coping strategies as opposed to social-focused coping strategies. It is known that men tend to use more problem-focused strategies than women (Hobfoll, Cameron, Chapman, & Gallagher, 1996). A tend-and-befriend response may take more time and resources to engage in positive coping, which may prolong distress. Additionally, studies show that women tend to coruminate with close friends more frequently than men (e.g. Calmes & Roberts, 2008; Spindelov, Simonds, & Avery, 2016). Although a social activity, corumination is associated with increased depressive and anxiety symptoms (Spindelov, Simonds, & Avery, 2016). In the workplace environment, corumination is related to harmful effects for women in stressful circumstances (e.g. Haggard, Robert, & Rose, 2011) and reduced benefits of social support (Boren, 2014).

We are aware of no studies that investigate how social support might mitigate stress-related outcomes specifically in judges. According to the tend-and-befriend model, we would expect social support to affect female judges' stress levels more than male judges' stress levels.

5. Study overview

Judges from two different states¹ who were attending judicial training meetings responded to a series of survey questions designed to answer the following research questions (where IV = independent variable; DV = dependent variable):

Research Question 1: What is judges' stress level?

Research Question 2: Do social support, gender, and other demographics (IVs) relate to stress, health-related outcomes, and job-related outcome variables (DV)?

Research Question 3: Does gender moderate the relationship between social support (IV) and stress, health-related and job-related outcomes (DV)?

6. Method

Participants were 221 judges who attended one of two state judicial education seminars as part of their continuing education. The first author was asked to be a guest speaker for both seminars. The survey was conducted by using 'clickers'. Clickers are devices that resemble television remote controls. After viewing a survey item on an overhead projector, judges used their clicker to indicate their response. The computer then saved the responses so they could be downloaded into a database after the seminar. The use of clickers allowed all the judges to take the survey at one time. It also allowed the presenter to show the audience the aggregated responses in a graph. This allowed each judge to see how their (anonymous) response compared to that of the whole audience.

During the guest speaking engagement, the first author presented the judges with a scale (e.g. the CF scale), allowing the judges time to read the scale item and use their clickers to respond to the item before moving on to the next one. After judges had completed a scale, the author then educated the judges about the stressor that the scale measured and discussed how the judges might be affected by that stressor. Then, the next scale was presented and the pattern repeated until all the measures had been presented, responded to and discussed.

Of the judges who indicated their gender ($n = 184$), 61.3% were male. Nearly half (43.5%) were 60 years old or older. Most were general jurisdiction judges who heard both civil and criminal cases. Most had been

a judge for five or more years. Table 1 details the demographics of the sample, presented by gender.

After indicating their demographics, judges completed a number of measures. *Perceived general stress* was measured by asking 'How much stress have you experienced over the past year?' on a 9-point Likert-style scale from 1 (no stress) to 9 (extreme stress). *Subjective physical health* was measured by a Likert-style item: 'Please rate your current overall physical health' on a 7-point scale from 1 (poor) to 7 (excellent). *Subjective mental health* was measured by a Likert-style item: 'Please rate your current overall mental health' on a 7-point scale from 1 (poor) to 7 (excellent).

Compassion fatigue (i.e. secondary trauma and burnout) was measured using the 13 items on the Compassion Fatigue Scale (Adams et al., 2006). Items are answered on a 1 (rarely/never) to 10 (very often) Likert-type scale. The scale asks 'How often do you experience the following experiences?' and then offers prompts. The Burnout subscale included 8 items such as 'Felt trapped by my work', and the Secondary Trauma subscale included 5 items such as 'Flashbacks connected to work'. The original scale used items like 'Intrusive thoughts after working with difficult clients', but because our sample were judges, we changed the word 'client' to 'cases' or 'people at work (e.g. victims of crime)'. Responses to each of these items were converted to a scale between 1 and 100 and were then averaged to obtain one score for the Burnout ($\alpha = .779$) subscale and one score for the Secondary Trauma ($\alpha = .733$) subscale.

Job satisfaction was assessed using the item: 'How much of the time do you feel satisfied with your job?' with responses from 1 (never) to 5 (all of the time). *Subjective job performance* was assessed with one item: 'In the past year, do you feel like you have performed your job to the best of your abilities?' scored from 1 (absolutely not) to 7 (very much).

Table 1. Demographics.

		Gender				Total
		Missing	Male	Female	Other	
<i>What is your age?</i>	Missing	5	0	2	0	7
	30–39 years	0	1	0	0	1
	40–49 years	2	14	15	0	31
	50–59 years	16	40	34	2	92
	60+ years	10	59	21	0	90
	Total	33	114	72	2	221
<i>How many years have you been a judge?</i>	Missing	5	2	4	0	11
	<5 years	4	31	17	0	52
	5–9 years	4	26	19	0	49
	10–14 years	6	11	14	1	32
	15–19 years	9	22	9	1	41
	20+ years	5	22	9	0	36
	Total	33	114	72	2	221
<i>Approximately how many trials did you preside over in the past year?</i>	Missing	7	7	6	0	20
	<10	9	45	18	0	72
	10–19	4	15	15	1	35
	20–29	7	17	10	0	34
	30–39	1	8	9	0	18
	40+	5	22	14	1	42
	Total	33	114	72	2	221
<i>What types of trials do you normally hear?</i>	Missing	4	32	11	0	47
	Civil	4	16	13	1	34
	Criminal	2	9	4	1	16
	Both civil and criminal	22	52	42	0	116
	Other	1	5	2	0	8
	Total	33	114	72	2	221
<i>What type of judge are you?</i>	Missing	8	9	9	0	26
	Family court	2	16	9	0	27
	General jurisdiction	23	64	48	2	137
	Appellate court	0	12	1	0	13
	Federal court	0	9	3	0	12
	State supreme court	0	3	1	0	4
	Other	0	1	1	0	2
	Total	33	114	72	2	221

(continued)

Table 1. (Continued)

		Gender				Total
		Missing	Male	Female	Other	
<i>How many days of work have you missed in the last year due to feeling stressed or unable to perform as well as you'd like?</i>	Missing	10	8	8	0	26
	None	18	59	46	2	125
	1–4	2	3	4	0	9
	5–9	0	3	1	0	4
	10–14	2	29	10	0	41
	15–19	1	12	3	0	16
Total		33	114	72	2	221

Social support was measured using Dahlem, Zimet, and Walker’s (1991) 12-item scale, which included items such as ‘My friends really try to help me’. Responses were recorded on a 1 (very strongly disagree) to 7 (very strongly agree) Likert-type scale ($\alpha = .909$).

Workdays missed due to stress was measured by one item ‘How many missed days of work have you experienced in the last year due to feeling stressed or unable to perform as well as you would like?’ with options of none, 1–4, 5–9, 10–14, 15–19, 20+. Ultimately, responses were coded as ‘no missed workdays’ or ‘missed workdays’.

7. Results

Chi-square analyses revealed that gender and age were not statistically independent ($p < .05$); examination of cells showed that male judges were significantly older than female judges. There was no statistically significant difference in the number of years men and women had spent on the bench or the number of trials they oversaw per year ($ps > .05$). Gender and type of judge were statistically independent ($p > .05$). All further analyses examining gender differences controlled for age.

7.1. Judges’ stress level

Research Question 1 addressed judges’ experiences of stress over the past year. On the Perceived General Stress scale, judges

reported experiencing an average rating of 4.22 (on a 9-point scale), indicating moderate stress overall.

7.2. Predictors of stress, health-related outcomes and job-related outcomes

Research Question 2 asked whether social support, gender and other demographics [i.e. age, years as a judge (fewer than 9 or 10+), number of trials in the past year (fewer than 10 or 10+), judge type] relate to stress variables, health-related outcomes, and job-related outcomes. Research Question 3 asked whether gender moderates the relationships between social support and these DVs. In order to address these questions, eight separate stepwise regression analyses were conducted, one for each dependent variables: perceived general stress, burnout, secondary trauma, job satisfaction, subjective job performance, subjective physical health, subjective mental health or missed workdays. Gender and social support were entered as predictors in the first step; an interaction between gender and social support was added in the second step; all other demographics were entered in the third step. This interaction in the second step allows us to test for the moderating effect of social support.

7.2.1. Perceived general stress

There was no significant main effect for gender or social support in the first step

($ps < .05$); however, there was a significant interaction between gender and social support in the second step, such that increased social support led to less perceived general stress, but only for male judges [full model, $R^2 = .07$, $F(3, 136) = 3.45$, $p < .05$; interaction term, $B = -0.480$, $p < .05$; see Figure 2]. In the third step, only the interaction term was significant ($B = -0.403$, $p < .05$), though with the addition of the demographic variables, the full model was not, $R^2 = .13$, $F(11, 136) = 1.62$, $p > .05$.

7.2.2. Burnout

There was no main effect for gender, but there was a main effect indicating a negative relationship between social support and burnout ($B = -0.176$, $p < .001$). There was again an interaction between gender and social support, such that increased social support led to lower burnout, but only for male judges: full model, $R^2 = .16$, $F(3, 146) = 9.362$, $p < .001$; interaction term, $B = -0.224$, $p < .01$. This interaction is similar to the interaction for perceived general stress in Figure 2. In the third step, the interaction term ($B = -0.182$, $p < .05$) and years as a judge were

significant predictors of burnout. Participants who had been judges for a minimum of 10 years experienced significantly more burnout than those who had been a judge for 9 or fewer years: $B = 6.3$, $p < .05$; full model $R^2 = .28$, $F(11, 146) = 4.659$, $p < .05$.

7.2.3. Secondary trauma

There were no significant main effects for gender or social support and no interaction effect on the secondary trauma measure. In the third step, only judge type was a significant predictor, such that general jurisdiction judges experienced significantly less trauma than others: $B = -9.8$, $p < .05$; full model $R^2 = .147$, $F(11, 146) = 2.11$, $p < .05$.

7.2.4. Job satisfaction

There was a main effect for social support, such that social support was positively associated with job satisfaction ($B = 0.151$, $p < .01$). There was an interaction between gender and social support, such that increased social support related to greater job satisfaction, but only for male judges: full model, $R^2 = .08$, $F(3, 137) = 4.30$, $p < .05$;

Figure 2. Interaction between social support and gender on perceived general stress. To view this figure in color, please visit the online version of this Journal.

interaction term, $B = 0.31$, $p < .05$. This interaction is similar (though in the opposite direction) to the interactions for perceived general stress in Figure 2. In the third step, only the interaction term was significant: $B = 0.283$, $p < .05$; full model $R^2 = .19$, $F(11, 137) = 2.67$, $p < .05$.

7.2.5. Subjective job performance

There was a main effect for gender in the first and second steps, such that female judges scored higher than male judges on the subjective job performance measure ($B = -20.218$, $p < .05$). There was no main effect for social support or an interaction effect between gender and social support ($ps > .05$). In the third step, the interaction term, the number of trials they heard over the past year and judge type predicted subjective job performance: full model $R^2 = .58$, $F(11, 124) = 13.919$, $p < .05$. Female judges scored higher than male judges on subjective job performance, but only for those with high social support. For judges with low social support, male judges scored higher than female judges ($B = -0.662$, $p < .05$; see Figure 3). Judges who heard more than 10 trials over the past year

scored higher on subjective job performance than those who heard fewer than 10 trials ($B = 12.19$, $p < .05$), and general jurisdiction judges scored higher than all other types on subjective job performance ($B = 49.38$, $p < .05$).

7.2.6. Subjective physical health

There was a significant effect for gender in all three steps, such that male judges reported significantly worse physical health than female judges: $Bs = -9.45$, -9.56 , and -10.74 , respectively, $ps < .05$; full model $R^2 = .10$, $F(11, 136) = 1.27$, $p > .05$. There were no other significant predictors.

7.2.7. Subjective mental health

There were no significant predictors of subjective mental health ($ps > .05$).

7.2.8. Missed workdays

A logistic regression predicting missed workdays revealed a significant effect for gender in the first step, such that male judges were more likely to have missed workdays

Figure 3. Interaction between social support and gender on subjective job performance. To view this figure in color, please visit the online version of this Journal.

(Wald = 6.002; $p < .05$) than females. There was no effect for social support in the first step, and no significant interaction ($ps > .05$). In the third step, only judge type predicted whether judges had missed workdays, such that general jurisdiction judges were more likely to have missed workdays due to stress than other judge types (Wald = 15.79, $p < .05$; full model $R^2 = .44$; $-2 \log\text{-likelihood} = 103.14$).

8. Discussion

The purpose of the study was to investigate the relationships among judges' stress, health-related outcomes, job-related outcomes, gender and social support. Research Question 1 was: What is the stress level of the sample of judges? We found that judges had a moderate level of stress. This comports with previous studies finding moderate levels of stress (e.g. Flores et al., 2008–2009), but using different measures. Most judges indicated some level of symptoms on at least one stress measure, which supports past research (Jaffe et al., 2003).

Research Question 2 was: Do social support, gender and other demographics (IVs) relate to stress, health-related outcome and job-related outcome variables (DV)? And Research Question 3 was: Does gender moderate the relationships between social support and these DVs? Few demographics related to stress. Of note, general jurisdiction judges missed more workdays due to stress, despite reporting higher subjective job performance and less trauma than any other type of judge. Judges who had been on the bench for 10+ years reported more burnout than those who had been judges for fewer years. Judges who heard 10 or more trials in a year had higher subjective job performance.

Except for a finding that males reported poorer physical health and more missed workdays, gender was not directly related to the stress, health-related outcomes or job-related outcome variables. Instead, gender was a moderator for the relationship between

social support and the outcome variables. Specifically, social support related to less perceived stress, less burnout and more job satisfaction, but only for males. These relationships held even when controlling for demographic variables.

One interaction between social support and gender differed from the others. Social support was a moderator for the relationship between gender and job performance. Among judges with high social support, females scored higher than males on subjective job performance; the opposite pattern was true for judges with low social support. Thus, a lack of social support appears to have a negative effect on performance, but only for females. The combination of being female and having low social support is a double whammy – further indicating the importance of social support to mitigate one's stress. It is especially important for women who, if receiving a high amount of social support, actually have the highest level of subjective job performance.

Findings support the finding from previous studies that gender is indirectly, but not directly, related to job satisfaction. Anleu and Mack (2014) found that women were more dissatisfied with parts of their jobs that related to autonomy, feeling rushed and interfering with their family life – all factors that related to satisfaction. In the current research, social support might be the factor that explains why gender is not related to satisfaction.

We also found that social support was not related to secondary trauma, physical health or mental health. Other research (Hensel et al., 2015) found only weak relationships between social support and secondary traumatic stress; perhaps our measures were not as sensitive and found no relationship at all.

9. Implications and future directions

The results have implications and suggest directions for future research on the relationship between social support and stress. The study also has implications for judges and courts interested in reducing judges' stress.

9.1. Social support

The results have implications for the study of social support and stress. The most important finding was that social support led to less perceived stress, less burnout and more job satisfaction, but only for males. Research on social support has found that not all types of social support are helpful. Corumination or negative dialogue can actually make stress worse (Boren, 2014). Thus, it would be essential for future research to determine what types of social support male and female judges were experiencing. Perhaps females are not receiving the benefit of social support because the types of support they receive are negative. The good news is that when the women in our study received high levels of social support, they had high perceptions of their job performance. These findings indicate that both quality and quantity of social support are important. Future research is needed regarding gender differences in the types of social support that people (and judges more specifically) seek out and receive.

9.2. Reducing judges' stress

Results of this study have several implications for courts and judges. First, we suggest that steps should be taken to reduce judges' stress. We found that most judges had measurable stress on at least one indicator of stress, and that overall judges had a moderate level of stress. Stress-prevention measures are thus essential. Theory suggests that planning for adverse events makes one more able to cope when that event actually happens (Gollwitzer, 1999). As such, coping mechanisms should be taught and developed long before attorneys become judges. As most judges start as lawyers, stress-prevention measures should begin when they are law students or lawyers. Indeed, stress levels are high even during legal training (Reed, Bornstein, Jeon, & Wylie, 2016), and thus trainings in law school would have a broad benefit

beyond future judges. In addition, lawyers' exposure to trauma-exposed clients was related to PTSD, depression and functional impairment (Levin et al., 2011; Levin, Besser, Albert, Smith, & Neria, 2012), suggesting that lawyers too would benefit, whether or not they ever become judges.

Bar associations and judges' associations should provide informal support groups, debriefings, counseling and educational training for judges (see generally Chamberlain & Richardson, 2013; Morgillo, 2015). Informal support groups likely would be beneficial – but only if they were the right type of support (e.g. avoiding corumination). Support groups could be particularly important for female judges, as the tend-and-befriend model of coping with stress suggests that women rely more on social support than men (Taylor et al., 2000). Judges recognize the importance of social support (Jaffe et al., 2003), but the reality is that judges work in isolation and rarely can consult with others about cases that might put them at risk for secondary trauma (Zimmerman, 2002, as reported in Jaffe et al., 2003). For example, a conference presentation by Zimmerman in 2002 quoted a judge in the study as saying 'I wasn't prepared for the isolation of this position. It slowly overtakes you, and then you realize how alone you are, despite your friends and family'. Even if they want to have social support, it might be difficult to find. Scholars have suggested that informal networks of judges provide social support (e.g. Resnick et al., 2011). However, the results of the current study and others (Boren, 2014) indicate that there might be limitations to this strategy. As Boren (2014) suggests, it has to be the right type of social support. And, as the current study suggests, there might be different experiences for male and female judges. Perhaps a moderator could prevent corumination and negative talk that would actually exacerbate stress.

Because social support did not relate to some ailments (i.e. physical health, mental health, secondary trauma), more substantial

interventions might be needed. Judges might benefit from counseling after highly stressful trials, or a series of moderately stressful trials. Posttrial debriefings, possibly led by a professional trauma counselor, could also minimize negative effects of trauma. In the Psychologist Advocate Program (Resnick et al., 2011), licensed psychologists are teamed with judges and meet once a month for 90 minutes. The program focuses on stress management, strategies for solving problems, managing cognitive overload and addressing secondary trauma and balancing life stressors. Programs should also stress the importance of monitoring one's physical health as well, especially for men, who in our study reported reduced physical health and more missed workdays due to stress.

More broadly, education is needed and could be part of continued education training. Such training could educate judges as to the best type of social support to seek. Further, an emerging literature suggests ways in which judges can manage their emotional responses (Maroney, 2011; Maroney & Gross, 2014), which could be adopted by such trainings. Specialized trauma training enhances satisfaction and reduces compassion fatigue and occupational burnout among mental health providers (Ortlepp & Friedman, 2002; Sprang et al., 2007). Training might likewise protect judges against the effects of being exposed to secondary trauma, but research is needed to determine whether the benefits experienced by mental health providers generalize to judges.

A second recommendation is that courts should consider giving judges sabbaticals (Resnick et al., 2011). Judges should be allowed extended time away from the bench. This would allow judges to relax, reflect and escape temporarily the stressors of the job. We found that judges who had been on the bench for 10+ years reported more burnout than judges who had been on the bench for less than 10 years. Perhaps having time off would help prevent this burnout that builds up over time. We also found that general

jurisdiction judges tend to take more sick days than other judges – perhaps these sick days act as ‘mini-sabbaticals’, which is why they report higher job performance than other judges. Further research is needed to determine whether sabbaticals would reduce judicial stress.

Third, courts should consider ways to make the job less stressful. We found that judges who heard 10 or more trials in a year reported better job performance. Perhaps trials provide a needed break from other more routine tasks such as paperwork and hearing motions for continuances, change of venue, and so on. Judges must reassess their roles occasionally, especially at the critical seven-year mark when it seems that stressors start having a more detrimental impact judges can consider doing a different kind of judging (Jaffe et al., 2003).

10. Conclusion

Judges face challenges not only from the factors discussed here but from the large number of judicial vacancies and the many judges leaving the job for alternative, and often better paying, careers in private legal practice or alternative dispute resolution (e.g. Weston, 2014). These forces have implications not only for the judges themselves but also for the justice system as a whole. Understanding the role of gender and social support in judicial stress is also important as it offers more detail about who experiences what stress and how it might be mitigated.

In the present study, social support was related to less perceived stress, less burnout and more job satisfaction, but only for males. This suggests that males and females might receive different types of social support. These types of support could differ in their ability to buffer judges from these stress-related outcomes. Further, among judges with high social support, females scored higher than males on subjective job performance; the opposite pattern occurred for judges with low social support. Thus, a lack of social

support appears to have a negative effect on performance, but only for females.

Working as a judge is an inherently stressful experience, at least for some judges. This study highlights the importance of considering both gender and social support in the investigation of judge stress. This information will be useful to judges and academics who study occupational stress. Programs designed to address judicial stress should take into account factors such as gender differences and social support.

Note

1. Pursuant to a request made by the organizers of one of the training, we do not disclose the locations, beyond saying that they were in different regions of the United States.

Study with human participants

Ethical standards

Declaration of conflicts of interest

Monica K. Miller has declared no conflicts of interest.

Brian Bornstein has declared no conflicts of interest.

Jenny Reichert has declared no conflicts of interest.

Grant Shulman has declared no conflicts of interest.

Ethical approval

All procedures performed in studies involving human participants were in accordance with the ethical standards of the Institutional Review Board of the University of Nevada, Reno and with the 1964 Helsinki declaration and its later amendments or comparable ethical standards.

Informed consent

Informed consent was obtained from all individual participants included in the study.

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