

An Examination of Outcomes Predicted by the Model of Judicial Stress

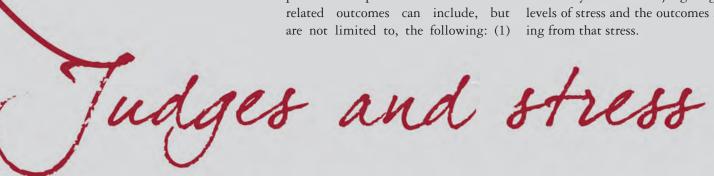
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udges are tasked with administering justice and upholding the rights of everyone in accordance with the Constitution. 1 The challenges associated with having to decide the fate of others, coupled with increases in violence and threats toward judges, increase the likelihood that judges might experience occupational stress.2 Judges might also experience occupational stress from exposure to gruesome evidence or graphic testimony. This latter type of stress, labeled secondary traumatic stress (STS), occurs in various occupations in which individuals aid others who have experienced trauma.3

These heightened stress levels can cause negative outcomes in judges' personal and professional lives. Stress-related outcomes can include, but are not limited to, the following: (1)

reduced physical and mental health; (2) reduced job satisfaction and performance; (3) reduced professional efficacy; and (4) perceptions of insecurity.⁴

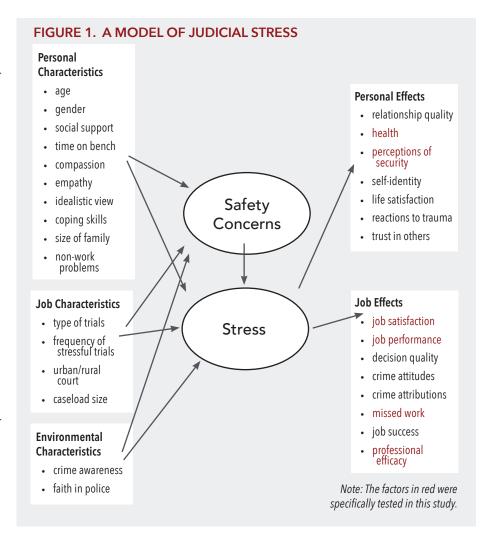
To better understand the causes and outcomes of judicial stress, Monica Miller and James Richardson⁵ proposed the Model of Judicial Stress, which describes many predictors and outcomes of judges' stress (see Figure 1). Although previous studies have examined causes of stress⁶ or *types* of stressors⁷ judges face because of their occupation, few studies have empirically investigated outcomes of stress. The purpose of this study is to address this gap and, specifically, to determine whether self-reported stress relates to outcomes predicted by the Model of Judicial Stress. More broadly, this study will assess judges' general levels of stress and the outcomes result-



MODEL OF JUDICIAL STRESS

The Model of Judicial Stress (hereinafter "the Model") is theory-based and proposes possible causes and outcomes of judicial stress.8 The Model uses previous research regarding secondary traumatic stress (STS), work-related burnout, compassion fatigue, and vicarious traumatization as a foundation. Secondary traumatic stress refers to stress experienced when working with or helping another person through a traumatic event.9 Work-related burnout occurs when job factors, such as overworking or workplace inequality, cause physical (e.g., headaches, nausea) and emotional (e.g., depression, anxiety) stress.¹⁰ Compassion fatigue refers to stress experienced by those who are repeatedly affected in the workplace by another person's distress or trauma.11 Lastly, related to compassion fatigue, vicarious traumatization refers to negative changes people like firefighters or counselors experience because of the empathy they have for those they aid. 12 Additionally, the Model applies the framework of constructivist self-development theory, which posits that stress and trauma can potentially interfere with a person's ability to feel safe and his or her capacity for self-esteem, intimacy, trust, and control.¹³

The Model asserts that three primary groups of characteristics — personal, job, and environmental — can lead to safety concerns and stress.14 Personal characteristics refer to physical traits (e.g., age, gender) and personality characteristics (e.g., levels of empathy, compassion). For judges, high levels of compassion or empathy for victims could lead to higher levels of stress. Job characteristics that could increase safety concerns and stress include hearing gruesome, emotional, or difficult cases, as well as having a heavy caseload. Lastly, the Model predicts that environmental characteristics (e.g., heightened



awareness of community violence, lack of faith in law enforcement) can cause safety concerns and stress.

The Model then proposes that safety concerns and increased stress will affect personal and job outcomes. ¹⁵ *Personal outcomes* include judges' health, relationships with friends and family, or perceptions of security in their personal life. *Job outcomes* include judges' job satisfaction, job performance, and decision quality. We are aware of no studies that specifically address the effect of stress on personal and job outcomes; the current study, therefore, examines how stress relates to these outcomes to assess the accuracy of the Model.

OUTCOMES OF OCCUPATIONAL STRESS

Stress can be generally defined as a relationship between a person and a situation in which the person believes he does not have the necessary resources to meet situational demands.16 Judges might experience stress from challenges that other people in the workforce face, such as issues with co-workers, time limitations, or schedule overload.¹⁷ However, judges might also experience stressors specific to their occupation, including STS, work-related burnout, compassion fatigue, and vicarious traumatization.¹⁸ Occupational stressors have a variety of effects on health, job performance, job satisfaction, job efficacy, and perceptions

of safety and security. These stressrelated outcomes are detailed in the sections below.

Physical and mental health

Occupational stress is related to both physical and mental health.¹⁹ Judges specifically report indicators such as sleep disturbances, intolerance of others, a sense of isolation, irritability, muscle tension, anger, loss of compassion, loss of objectivity, and feelings of guilt.20 A small minority of judges also report additional indicators, including eating problems, hypertension, loss of energy, and diabetes. Perhaps most concerning is the finding that judges report experiencing symptoms of depression and anxiety, with scores on a clinical measure of depression nearly double that of the general population.²¹ These reported health conditions might be stress-related and need to be empirically examined.

Job performance and satisfaction

Research shows a negative relationship between occupational stress and job performance.²² Two types of job-role stress — role ambiguity (not understanding what is expected or how to achieve expectations) and role conflict (feeling that competing occupational demands are incompatible) — are associated with poor job performance, with role ambiguity relating to the highest levels of measured stress.²³

Not all stressors are associated with negative occupational outcomes, so it is important to distinguish between two different types of stressors: challenge and hindrance stressors.²⁴ Challenge stressors refer to work-related demands that are stressful but can supply a person with potential gains (e.g., increased responsibility), whereas hindrance stressors refer to work-related demands that could interfere with a person's performance

(e.g., job insecurity).²⁵ Challenge stressors are correlated with improvements in performance; hindrance stressors are correlated with declining job performance. In the current study, we predict that hindrance stressors (e.g., burnout, STS) will show a negative correlation to how judges perceive the quality of their own job performance.

Tineke Hagen and Stefan Bogaerts' research found that, generally, workplace stressors negatively affect judges' work performance and satisfaction. The authors suggest workplace stressors like time pressure and task complexity directly and indirectly affect sickness absenteeism (a measure of job performance) in judges by increasing negative occupational outcomes, such as stress and burnout. The authors recommend more research on stress-related outcomes.26 Our study advances this line of inquiry by more broadly testing the relationships among stress, job satisfaction, and performance in judges.

Job efficacy

Research also suggests that occupational stress is negatively related to occupational self-efficacy.²⁷ Self-efficacy refers to a person's belief that she can achieve desired outcomes through her own actions.28 In the work context, occupational self-efficacy, or job efficacy, refers to the belief that job tasks can be completed by one's own actions.²⁹ In studies of teachers, those who reported higher levels of stress due to classroom issues or student behavior reported significantly lower job efficacy levels compared to teachers who reported lower levels of stress.³⁰ No studies could be found that examined the relationship between occupational stress and job efficacy in judges.

Perceptions of security and safety

Occupational stress also relates to safety and security concerns.³¹ Research

shows a significant negative relationship between safety concerns and occupational stress — that is, lower self-perceptions of job safety correlated with higher reported job-related stress.³² As with all correlational studies, it is difficult to tell whether stress causes safety concerns or vice versa, or if some other variable causes both; it is only clear that they co-exist.

Concerns about safety and security also exist among judges.³³ One study asked judges about their experiences with inappropriate communications, threatening communications, inappropriate approaches, and physical assault. More severe threats were associated with changes in judges' work-related behavior, such as moving hearings to buildings with extra security or getting a guard dog. In total, more than one-third of surveyed judges responded that they changed their behavior "somewhat" or "a great deal" because of work-related safety concerns.³⁴

These are only a few examples of research demonstrating the relationship between stress and safety concerns. An analysis of the existing literature indicates safety concerns predict stress, but there is a lack of research regarding whether stress predicts safety concerns. Although these unidirectional findings support the Model, which predicts safety concerns will affect stress, the Model also predicts stress will affect judges' perceptions of security. The current study aims to address this gap in the literature.

OVERVIEW AND METHODS

Research has indicated the existence of a relationship between occupational stress and outcomes in various occupations, ³⁵ but few studies have examined this relationship among judges. Indeed, most studies have only predicted stress — not the *outcomes* of stress. Because of

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the unique stressors judges face (e.g., sentencing people to prison, separating children from their parents, dealing with violent criminals and their victims), it is important to examine the specific relationship between occupational stress and outcomes among judges. The current study examined the extent to which judges experience general stress and negative health-related, job-related, and safety-related outcomes; it then assessed whether stress measures predict these negative outcomes. Through this two-step analysis, this study tested parts of the Model (see Figure 1, highlighted areas).

Participants

The study's participants included 221 judges who attended a state judicial education seminar in one of two states (one midwestern and one western state) to fulfill continuing education requirements. The participants' demographics were as follows: 61.3 percent were male; 38.7 percent were female; 49.3 percent

had been a judge at least 10 years; 58.4 percent had presided over at least 10 trials in the past year; 52.5 percent normally presided over both criminal and civil trials; 15.5 percent presided over exclusively civil trials; 7.2 percent presided over exclusively criminal trials; and 62 percent considered themselves general jurisdiction judges.

Materials

The study used a survey that required judges to self-report levels of stress, job satisfaction, job performance, and perceptions of safety and security. (The survey also included other variables, not reported here, that are outside the scope of this study.)

Stress. The survey measured overall stress experienced in the past year with one item: "How much stress have you experienced over the past year?" on a 9-point scale from 1 (no stress) to 9 (extreme stress).

Health. Participants assessed their current physical and mental health in answers to two questions — "Please rate your current overall physical health" and "Please rate your current overall mental health" — with ratings on a 7-point scale from 1 (poor) to 7 (excellent).

Job satisfaction and job efficacy. We assessed job satisfaction using four separate items, ³⁶ including the following:

- (1) overall satisfaction: "How much of the time do you feel satisfied with your job?" with endpoints from 1 (never) to 5 (all of the time);
- (2) feelings about the job: "Which one of the following statements best describes how you feel about your job?" measured from 1 (*I hate it*) to 5 (*I love it*);
- (3) likelihood of changing jobs: "Which one of the following statements best describes how you feel about changing your current job?" measured from 1 (*I would quit this job at once if I could*) to 5 (*I would not exchange my job for any other*); and
- (4) how much they like their job compared to others: "Which one of the following statements best describes how you think you compare with other people?" measured from 1 (No one dislikes his/her job more than I dislike mine) to 5 (No one likes his/her job more than I like mine).

Researchers assessed job efficacy using two items, including the following:

- (1) feeling of failure: how often a judge may "feel like a 'failure' in my work" measured from 1 (*never*) to 9 (*very often*); and
- (2) fear of not achieving goals: how often a judge may have "thoughts about not achieving my goals" measured from 1 (*never*) to 9 (*very often*).

These were adapted from a larger scale³⁷ that measured occupational stressors, including burnout, STS, and compassion fatigue; these are generally understood as *types* of stress, rather than *outcomes* of stress. However, these questions were the best available options to measure job efficacy as an outcome resulting from stress.

Another efficacy measure was the degree to which judges have been "unsuccessful at separating work from personal life" measured from 1 (*never*) to 9 (*very often*),³⁸ an item modified from a scale measuring multiple types of stress.

Job performance. Job performance was assessed with two questions. The first asked, "In the past year, do you feel like you have performed your job to the best of your abilities?" and measured from 1 (absolutely not) to 8 (very much). The second question measured workdays missed due to stress, asking, "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+. For analysis purposes, responses were dichotomized and coded as "no missed workdays" or "missed workdays."

Safety and security. Perceptions of safety and security were measured using 11 questions. Questions included concern for personal safety ("How concerned are you for your personal safety?") and concern for family's safety ("How concerned are you for the safety of your family?), both measured from 1 (no concern) to 9 (extreme concern). The other nine questions measured concern over hypothetical scenarios. Items

TABLE 1: AVERAGES ON ALL	MEASURES
Variable Name	Average (out of 100)
Stress Experienced in the Past Year	47.86
Current Mental Health	81.98
Current Physical Health	75.64
Separate Work from Personal Life	33.94
Feel Like Failure	23.94
Not Achieving Goals	33.71
Perform to Best Abilities	58.38
Like Job Compared to Others	56.26
Job Satisfaction	79.45
Feel About Job	85.79
Would Change Job	23.11
Concern for Family Safety	30.44
Concern for Personal Safety	33.72
Concern over Threatening Letters	21.90
Concern over Threatening Phone Calls	14.99
Concern over Being Followed	35.16
Concern over Physical Assault	22.29
Concern About Being Injured by Defendant	22.58
Concern over Random Injury	11.69
Concern over having Knife/Gun Pulled	18.85
Concern over Bomb Threat	13.00
Concern over Bomb Threat in Courthouse	25.00

began with "How concerned are you with..." and included receiving threatening letters, phone calls, a bomb in the mail, a bomb in the courthouse, being inappropriately followed, physically assaulted, randomly injured, seriously injured by a defendant or stranger, or having a knife or gun pulled on them, all rated from 1 (*no concern*) to 9 (*extreme concern*). These items were adapted from a previous study.³⁹

Procedure

All participants were judges who attended one of two seminars at which Dr. Monica K. Miller gave a presentation in her capacity as a guest speaker. The survey was conducted during the presentation, with participants viewing survey questions on an overhead projector and responding to questions using a "clicker" — a television remote-like device with buttons corresponding to answer options. Participants' responses were electronically saved for analysis. Using clickers allowed all participants to take the survey simultaneously.

RESULTS

Stress likely affects judges in many ways, so it is necessary to examine multiple outcomes of stress at once. Because many of the outcome measures are highly correlated, multivariate analyses were inappropriate. Correlation analyses revealed four distinct groups of related outcome measures that accounted for the most variance in experienced stress: health; job efficacy and satisfaction; job performance; and perceptions of safety/security. This allowed for fewer analyses and more concise results. These preliminary analyses indicated that the outcome variables related to each other as

expected (e.g., physical and mental health grouped together).⁴⁰

We then used multivariate regression analyses to predict each outcome of stress using stress experienced in the past year (hereinafter "stress") as the independent variable.

Scores for each variable were collected on different scales (i.e., 1 to 5, 1 to 7, or 1 to 9) based upon the manner in which each scale was originally designed.

For consistent analyses, variables were converted to a score ranging from 0 to 100. Reported values and means were all based on a 100-point scale.

The sample size varied slightly per analysis due to nonresponse. Listwise deletion was used for all analyses, meaning cases missing at least one value for a variable of interest were dropped from an analysis (e.g., only participants who completed all questions regarding stress and mental health were included in the analysis for mental health). There were no remarkable sample differences, so the two samples (from two states) were combined.

Overall responses

Our broad purpose was to assess judges' stress levels and associated outcomes. Averages for each variable are in Table 1. Responses to the missed work question are in Table 2. Multivariate regression analyses are in Table 3. Overall, judges reported moderate stress levels, as scores were just under the mid-point (M=47.86). Judges had generally good health (Ms ranged from 75.64 to 81.98) and moderate job satisfaction (Ms ranged from 56.26 to 85.79). Interestingly, judges reported being only moderately able to perform their jobs to the best of their abilities (M=58.38), despite experiencing relatively little fear of failure (M=23.94) and just a moderate sense of inability to achieve goals (M=33.71) or inability to separate work and personal life (M=33.94). Notably, a substantial minority (25.8 percent) indicated they had missed either 10-14 (18.6 percent) or 15-19 (7.2 percent) days of work in the past year specifically because of stress. Respondents indicated a moderate level of concern for their safety (M=33.72) and the safety of their family (M=30.44), with the highest stress levels associated with concern over being followed (M=35.16).

TABLE 2: MISSED DAYS OF WORK				
Missed Work Days Due to Stress	% of responses			
None	56.60%			
1-4	4.1%			
5-9	1.8%			
10-14	18.6%			
15-19	7.2%			
20+	0.0%			

Health

Preliminary analyses indicated that patterns of results relating to current physical health and mental health were very similar. Thus, these two variables were combined in analyses that investigated whether stress predicted these outcomes. Stress significantly predicted current mental health but not current physical health. These results suggest that, as judges' stress increases, only mental health is predicted to decrease (although physical health is also predicted to decrease, this decrease was not statistically significant).

Satisfaction and efficacy

A second set of analyses examined whether stress predicted measures of job satisfaction and job efficacy. Results indicated that stress significantly predicted the following: job satisfaction; feelings about the job; likelihood of changing jobs; liking the job compared to how much other people like their jobs; fear of not achieving goals; and ability to separate work and personal life. However, the results did not predict feelings of failure. These results suggest that as judges' stress increases, job satisfaction and job efficacy both generally decrease.

Job performance

Analyses examining whether stress predicted job performance were non-significant.

Perception of safety and security

The final set of analyses examined whether stress predicted current perceptions of security, including concern for personal safety, concern for family safety, and concern over nine other hypothetical scenarios (receiving threatening letters, receiving threatening phone calls, receiving a bomb in the mail, receiving a bomb in the courthouse, being inappropriately followed, being physically assaulted, being randomly injured, being seriously injured by a defendant or stranger, or having a knife or gun pulled on them). Results indicated that stress significantly predicted higher levels of concern for both personal and family safety. It also predicted greater concern in all nine scenarios. These results suggest that as judges' stress increases, their concern for safety and security increases as well.

DISCUSSION

The purpose of this study was to determine to what extent judges experience stress and negative healthrelated, job-related, and safety-related outcomes, as well as whether stress predicts those negative outcomes. In doing so, we tested part of the Model of Judicial Stress. In general, judges experienced moderate levels of stress, despite experiencing relatively little difficulty separating work from personal life or feeling like they are not performing to the best of their abilities. Although judges generally were in good health and satisfied with their jobs, they experienced concern over a variety of safety issues. Over 25 percent of judges missed ten or more days of work due to stress. Overall, these results provide support

for the Model's predicted relationship between judicial stress and certain outcomes: judical stress significantly predicted judges' mental health, job satisfaction, two job efficacy measures, and perceptions of safety and security, while judicial stress did not predict physical health, job performance, or the other efficacy measure.

Physical and mental health

Stress over the past year was significantly related to judges' perceptions of their mental health, which supports previous research. 41 Surprisingly, stress did not significantly predict judges' perceptions of their physical health. This finding is in contrast with an extensive body of literature, as well as judges' self-reported physical ailments that they attribute to occupational stress.42 Still, judges' acknowledgements that they have experienced negative mental health outcomes that significantly relate to job stressors is concerning. This is especially troublesome because of the power and importance placed on judges' legal decisions, which could be impaired by poor mental (or physical) health. These findings regarding stress-related health outcomes provide partial support for the Model.

Job satisfaction and job efficacy

Results regarding job satisfaction and efficacy were mostly supportive of the Model. Increased stress predicted lower levels of job satisfaction and lower levels of job efficacy (on two of three questions pertaining to job efficacy). The study also expanded the literature on occupational stress by supporting the notion that stress is negatively related to job satisfaction and mostly supporting the notion that stress impacts judges's perceptions of self-efficacy. Although these findings might have been assumed

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based on similar findings in other professional domains, ⁴³ empirical confirmation of this relationship was needed, especially given the unique stressors that judges experience.

Perceptions of security and safety

One of the strongest relationships to emerge from the current research was the relationship between stress and perceptions of security and safety. Stress predicted responses to every question and scenario regarding safety and security, providing overwhelming support for the Model's assertion that stress relates to perceptions of security and safety. Additionally, because the estimated likelihood that a judge will be physically assaulted increases the longer the judge has been hearing trials, and because experiences of threat and assault increase stress,44 this finding suggests that perceptions of safety and security will only worsen over the course of a judge's tenure.

Job performance

Interestingly, although the Model predicts that stress affects judges' job performance and previous research⁴⁵ suggests that stress negatively

correlates with job performance, no significant relationships between stress and job performance measure arose from this study. This would suggest that, regardless of how much stress judges experience, there is no resulting effect on their perceived ability to perform their professional duties. However, this finding could potentially be misleading, as the questions themselves might have influenced judges' responses. Research suggests selfreported questionnaires, specifically regarding job performance assessments, might elicit biased answers. To avoid this potential for bias, future research could use peer or supervisor ratings, which potentially are less biased.46 Therefore, a more objective measure of job performance might be necessary to determine whether occupational stress affects judges' actual (not perceived) job performance.

These findings generally suggest that stress significantly relates to negative, undesirable outcomes for judges. Results are mostly supportive of the Model, even though some predicted, stress-related outcomes were not substantiated by data. These results provide a clear indication that stress and potential stress.

reduction need to be addressed by the courts to improve judges' well-being.

LIMITATIONS

Some features of the present study might limit the generalizability of its findings. Although the researchers took precautions to keep responses anonymous, the self-reported nature of the study still allows for the possibility that social desirability influenced judges' responses. For example, job performance measures were not significantly related to stress, which could have been caused by judges not wanting to appear as though their performance was lacking in any way. Even if such social desirability did not affect responses, self-reported measures rely on participants' abilities to self-reflect accurately. In this study, some judges might not have accurately reflected how stress affects their personal and professional lives.

Additionally, participants were drawn from the pool of judges who attended a continuing education seminar, and all were from one of two U.S. states. This sample might not be representative of judges across the country. As such, a self-selection bias could factor into the study's findings.

IMPLICATIONS

These findings provide a foundation for study of the potential effects of stress on judges' personal and professional lives. Additionally, the findings have implications for judges and the court system as well as the potential to provide a framework for future research.

Reducing judicial stress

As with other judicial stress studies,⁴⁷ the current findings in which stress predicted negative personal and professional outcomes support the notion that a concerted effort to reduce judicial stress is necessary. A multitude of

Model 1 - Health (Wilk's λ = .863, F(2, 114) = 9.04*)								
	Dependent Variable	М	ß	F	ηp ²			
	Mental Health	81.98	-0.272	17.56*	0.133			
	Physical Health	75.64	-0.137	2.93	0.025			
Model 2 - Satisfa	action and Efficacy (Wilk's $\lambda = .817$,	F(7, 156) =	= 4.98*)					
	Dependent Variable	М	ß	F	ηp ²			
	Job satisfaction	79.45	-0.194	13.89*	0.079			
	Feelings about job	85.79	-0.119	4.49*	0.027			
	Likelihood of changing jobs	23.11	-0.273	15.16*	0.086			
	Liking compared to others	56.26	-0.216	10.24*	0.059			
	Fear of not achieving goals	33.71	0.135	7.84*	0.046			
	Ability to separate work and personal life	33.94	0.154	10.53*	0.061			
	Feelings of failure	23.94	0.035	1.103	0.007			
Model 3 - Job Pe	erformance (Wilk's $\lambda = .948$, F(3, 15	4) = 2.82)						
	Dependent Variable	M	ß	F	ηp ²			
	Performed to best abilities over past year	58.38	-0.032	0.065	.000			
	Days missed	na	0.032	0.126	.000			
Model 4 - Perce	otion of Safety and Security (Wilk's A	= .640, F	(11, 88) = 4.	50*)				
Concern over	Dependent Variable	M	ß	F	ηp ²			
	personal safety	33.72	0.453	26.456*	0.212			
	safety of family	30.44	0.323	10.22*	0.094			
	receiving inappropriate or threatening letters	21.9	0.471	30.35*	0.237			
	receiving inappropriate or threatening phone calls	14.99	0.319	18.101*	0.156			
	receiving a bomb or anthrax in the mail	13	0.149	4.55*	0.044			
	having a bomb or anthrax scare in the courthouse	25	0.303	10.397*	0.096			
	being followed	35.16	0.573	42.392*	0.302			
	being physically assaulted	22.29	0.375	17.303*	0.15			
	being injured by a random person	11.69	0.157	6.837*	0.065			
	being seriously injured by a defendant or stranger	22.58	0.385	18.073*	0.156			
	deteriaunt of stranger							

stress-reducing recommendations have been made in previous work. ⁴⁸ For example, judges should be educated about the causes of stress and the effects stress might have on their ability to perform their jobs. Additionally, stress-relieving measures could be implemented by the courts, such as providing counseling for judges, creating peer support groups, or allowing judges to go on sabbatical. ⁴⁹ Lastly, because of increases in courthouse violence, it would behoove courthouse officials to make courthouse safety and security a primary concern. ⁵⁰

Notably, the data reflect that many judges have only moderate feelings of failure or inability to achieve their goals, but, for a minority, these fears are quite measurable. Furthermore, the average score for the question measuring inability to "perform to the best of your ability" was higher than the mid-point of the scale. These are somewhat concerning findings. Court administrators — and researchers — could develop and implement programs to help judges set goals. They could survey judges to determine what is preventing them from meeting their goals and performing to the best of their abilities. Changes in court procedures and policies should be made accordingly to address this issue.

Another concerning finding is that more than 25 percent of judges reported missing ten or more days of work due to stress. This suggests that court administrators should take note of sick days — while preserving confidentiality and not singling out judges — to identify judges who might be experiencing stress-related outcomes that prompt sick days. Interventions should be offered in such situations to prevent escalation.

Finally, judges expressed moderate concern for their safety. Although it is impossible to relieve all fears, it is possible to reduce them through changes in the courtroom. For instance,

the question eliciting the most concern was about "being followed." This suggests that court administrators could implement programs to calm these fears, such as providing judges with police escorts from the courthouse to judges' cars. Each courthouse — and each judge — is different, so it is essential for court administrators to conduct research on the concerns of their particular judges.

Future directions

The results of this study have implications for future studies. The study's results are generally supportive of the Model, but additional testing is necessary to verify accuracy and corroborate the presented findings. Specifically, questions in this study pertained only to certain predicted outcomes of judicial stress (e.g., job performance, professional efficacy). Additional research should examine whether other stress-related outcomes predicted by the Model produce similar results.

Once all aspects of the Model have been tested and verified, it is important to examine the Model as a whole rather than as the sum of its parts. This study, along



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with previous studies that examined the causes and outcomes of judicial stress,⁵¹ only included portions of the Model. Future research should incorporate all aspects of the cause-and-effect nature of judicial stress. This could include longitudinal studies examining judicial stress levels or experiments that apply an intervention to decrease judicial stress.

CONCLUSION

Judges face various situations that might cause stress. From stressful day-to-day interactions and workplace conflict to stressors that are unique to judges, judges are constantly exposed to stress. These stressors can affect individual judges as well as the entire judicial system. As a result, anyone in the system (defendants, victims, etc.) could be adversely affected by a stressed-out judge.

In the present study, stress significantly predicted judges' self-reported scores on mental health, job satisfaction, perceptions of safety and security, and certain job efficacy measures, but it did not predict physical health, job performance, or additional job efficacy measures. These findings largely provide support for Miller and Richardson's Model of Judicial Stress,⁵² though more research is required to investigate outcomes related to judges' professional and personal lives, which are not included in this study. This study's findings can inform the courts and legal professionals about some of the detrimental outcomes associated with occupational stress in the courtroom and help guide policy to reduce judges' experiences of stress.

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