**A Sense of Meaning in Work Moderates Stress and Well-Being in Social Workers during COVID-19**

Abstract

Social workers are frontline responders to the COVID-19 pandemic, placing an enormous strain on their health and well-being. Using the theoretical framework of the job demands-resources model, the present study investigates the role of a sense of meaning and professional self-esteem in associations between job demands, resources, and well-being among social workers active during the COVID-19 pandemic. A sample of 478 Israeli social workers from a variety of social work fields completed an online questionnaire. The multiple regression model showed that 45.8% of the variance in well-being was accounted for by perceived stress, social support, professional self-esteem, and a sense of meaning. Lower levels of perceived stress and higher levels of social support, professional self-esteem, and sense of meaning significantly predicted increased well-being. A sense of meaning significantly moderates the association between perceived stress and well-being. Findings are discussed with respect to future research and social work practice.

Across the globe, nations find themselves in lockdown in order to fight the spread of the coronavirus (COVID-19), and social workers are at the front line of the pandemic response. It has become increasingly noted that if any one profession is most hurt by the pandemic, it is the profession of social work (Amadasun 2020; Golightley and Holloway 2020). The COVID-19 crisis has swept social workers into a difficult and painful reality that requires dealing with the crisis on a personal and professional level. In addition, the COVID-19 crisis has led to a break in personal and professional routines, where social workers are required to adapt and innovate to meet new needs and reprioritize the most urgent and important aspects of their roles (Banks et al. 2020). In the midst of the crisis, social workers and their clients experience a shared traumatic reality, and social workers face within it the multiple challenges of the epidemic.

The impact of COVID-19 may be as devastating for social workers as it is for their clients. As deliverers of essential services, many social workers are putting themselves—and their loved ones—at risk of infection by continuing to perform their work with clients and organizations (Abrams and Dettlaff 2020; Guerrero et al. 2020). Because social work is more vital than ever, social workers’ experiences on the front lines of the pandemic warrant deep attention.

The COVID-19 pandemic has placed enormous strain on health care workers, and its potential impact has implications for the physical and emotional well-being of the health care workforce (Ripp et al. 2020). Research on psychological outcomes among social workers, however, has received limited attention. Psychological strain and its association with the well-being of social workers who work during Covid-19 is therefore unclear, and this study aims to address this lacuna. Using the theoretical framework of the job demands-resources model, the present study focuses on how a sense of meaning and professional self-esteem play a role in the relationship between job demands and resources and well-being among social workers who have worked during the COVID-19 pandemic.

Well-being is a construct expressing general or specific life satisfaction across various domains, including standard of living, health, achievement in life, relationships, safety, community connectedness, and future security (Lau, Cummins, and McPherson 2005; Diener et al. 2009). Well-being is not only linked to personal stress, but is also responsive to existing social and economic resources (Cummins 2000, 2002, 2005) that may serve as moderating variables in the association between stress and well-being (Cummins 2012*a*, 2012*b*). To examine this association between stress and well-being in the context of social workers’ organizational and personal demands and resources, this study uses the job demands-resources model as its theoretical framework.

# *The Theoretical Framework of the Job Demands-Resources Model*

The theoretical framework of the job demands-resources model outlines the processes through which job demands and resources influence occupational health, organizational behavior, and job performance (Bakker and Demerouti 2018). At the heart of the job demands-resources model lies the assumption that while every occupation may have its own specific risk factors associated with job stress, these factors can be classified into two general categories—job demands and job resources (Bakker and Demerouti 2017)—which constitute an overarching model that may be applied to various occupational settings, irrespective of the particular demands and resources involved (Bakker and Demerouti 2007, 2014). Job demands refer to those physical, psychological, social, or organizational aspects of the job that require sustained physical or psychological (cognitive and emotional) effort or skills, and are therefore associated with certain physiological or psychological costs. Although job demands are not necessarily negative, they may turn into job stressors when meeting those demands requires the expenditure of high amounts of effort from which the employee does not adequately recover. Job resources refer to those physical, psychological, social, or organizational aspects of the job that are, in some combination: functional in achieving work goals; helpful in reducing job demands and the associated physiological and psychological costs; or stimulating to personal growth, learning, and development. Hence, resources are not only necessary in order to deal with job demands—they also are important in their own right (Bakker and Demerouti 2007, 2018; Demerouti et al. 2001).

A second premise of the job demands-resources model is that two different underlying psychological processes play a role in the development of job strain and motivation. The first is a health impairment process, whereby poorly designed jobs or chronic job demands (e.g., work overload, emotional demands) exhaust employees’ mental and physical resources, and may lead to an overall depletion of energy (i.e., a state of exhaustion or burnout). The second process proposed by the job demands-resources model is motivational in nature. According to the motivational process, the availability of job resources leads to organizational commitment and work engagement (Bakker et al. 2004; Bakker and Demerouti 2007, 2018; Demerouti et al. 2001; Tims et al. 2013).

Although extensive research has been conducted on the impact of work engagement, there are few studies on how social workers find meaning in their workplace, or on the workplace factors that influence social workers’ perceptions of meaningfulness (Tan, Lew, and Sim 2020). It is for these reasons that scholars such as Michael Steger (2017) have advocated that organizations should move “beyond engagement and commitment and strive for meaningful work” (60).

Studying the concept of the meaning of work among social workers goes along with the notion that the role performed by social workers carries special meaning (Tan, Lew, and Sim 2020). This is the notion that the importance of work in people’s lives goes beyond its being a financial means to survival, and is instead integral to a person’s identity, serving as a source of belonging and meaning (Hu and Hirsh 2017; Shea-van Fossen and Vredenburgh 2014).

## The Role of Professional Self-Esteem and a Sense of Meaning

There is a shortage of research examining the role of personal resources, which means there is a need to better understand the role of personal resources in the job demands-resources model (Tremblay and Messervey 2011). In this study, we focus on professional self-esteem and a sense of meaning as buffers against the negative consequences of stress in social workers during times of national crisis.

Professional self-esteem is the workers’ personal definition of their professional efficacy, worth, and functioning on a spectrum from positive to negative (Carmel 1997). Research has indicated the potential power of professional self-esteem as a resource that gives helping-professionals the strength to deal with stressful events (Finzi-Dottan and Kormosh 2016), and that is associated with life satisfaction and well-being (Carmel 1997). In addition, professional self-esteem is found to be a moderator in the association between organizational climate and emotional exhaustion and mental distress (Mäkikangas and Kinnunen 2003).

## Conceptualizing the Meaning of Work

The concept of the meaning of work structures a variety of definitions, making it a complex and multidimensional construct (Steger et al. 2012; Lips-Wiersma and Wright 2012). Common to all the definitions is the idea that the meaning of work refers to a subjective experience that has personal meaning for the individual ([Rosso et al. 2010](https://www.frontiersin.org/articles/10.3389/fpsyg.2016.00704/full#B52)). Within the various definitions, reference is also made to people’s subjective experience of their work as purposeful and significant, synergistic with the meaning and purpose in their broader context of life, being aligned with their own personal values and beliefs, and having personal and social importance (Hu and Hirsh 2017; Nawrin 2018; Schnell, Höge, and Pollet 2013; Steger 2017). Tracing the origin of research on meaningful work leads to the existentialist view of Viktor Frankl (2006). Since Frankl’s efforts, researchers have worked to further explore the impact of meaning on different aspects of a person’s life. Within these studies, the examination of meaning in work has gained popularity in recent years (Both-Nwabuwe, Dijkstra, and Beersma 2017; Tan, Lew, and Sim 2020; Van Wingerden and Van der Stoep 2018). Yet, to the best of our knowledge, no study has traced the sense of meaning in work during a period of ongoing threat, such as in the present time.

The concept of “meaning in work” is used interchangeably with “meaningful work,” “meaningfulness of work,” “meaning of work,” and “work meaningfulness/values.” This leads to theoretical ambiguity (Lee 2015).

## Meaning in Work and Work Outcomes

Previous studies have revealed that meaningful work demonstrates positive corollaries in both personal and work outcomes, such as higher job satisfaction (Allan et al. 2018), enhanced well-being and overall life satisfaction (Allan et al. 2016; Hu and Hirsh 2017), a better sense of self-esteem, and an improved sense of self-efficacy (Allan et al. 2018; Steger et al. 2013; Yildrim and Naktiyok 2017). Increased perceptions of meaningful work were also strongly negatively related to stress (Hu and Hirsh 2017).

## This Study’s Aim

In line with job demands-resources theory, and with increasing interest in the potential benefits of perceiving work as meaningful, the aim of this study is to apply the job demands-resources model to subjective well-being among social workers who worked during the COVID-19 pandemic. Demands and resources considered in this study include perceived stress, social support, job insecurity, organizational support, job stress, role ambiguity, and job satisfaction.

More specifically, in this study, we examine whether a sense of meaning and professional self-esteem moderate the association between demands and resources and well-being. Based on our conceptual model, we hypothesize that demands and resources will interact with a sense of meaning and professional self-esteem to predict well-being—that is, we predict that the association between demands and resources and well-being is dependent on the level of the individual’s sense of meaning and their professional self-esteem.

# **Method**

## Participants

Purposive sampling was used to select the research participants. The participant criteria for this study was social workers who were working during the COVID-19 pandemic. A convenience sample of 478 social workers who were working during the pandemic participated in the study. Convenience sampling is a type of non-random sampling where members of the target population that meet certain practical criteria—such as availability at a given time or the willingness to participate—are included (Etikan et al. 2016). In addition, snowball sampling was used.

The participants’ mean age was 39.53 (SD=8.73), ranging from 25 to 68 years of age. The majority were women (81.1%). The large proportion of females in the cohort is compatible with gender differences in the social work profession in Israel (Knesset Information and Research Center 2015). The majority (78.70%) were Jewish, and the rest were Muslim (13.40%), Christian (4.40%), and Druze (0.60%).

Participants’ education levels ranged from B.A. (38.90%) to M.A. (53.10%) and PhD (0.60%). About half of the sample (51.50%) were working less than full time, 28% were working full time, and 20.50% were working more than full time. Seniorityat workranged from 1 to 35 years with a mean score of 8.60 (SD=6.94). Experience in social work as a profession ranged between 1 and 42 years, with a mean score of 12 years of experience (*SD*=7.95). Table 1 shows the social work fields represented in the sample.

<<INSERT TABLE 1 ABOUT HERE>>

## Measures

*Well-being.*—Well-being was assessed using the Mental Health Continuum-Short Form (Keyes et al. 2008), which conceptualizes well-being as including the presence of positive feelings (emotional well-being) and positive functioning in individual life (psychological well-being) and community life (social well-being; Lamers et al. 2011). The scale comprises 14 items representing various feelings of well-being. Respondents rate the frequency of every feeling in the past month on a 5-point Likert scale. Items were translated into Hebrew by Shrira and colleagues (2016). The scale has shown good psychometric properties (Lamers et al. 2011). In the current study, the scale showed excellent internal reliability (Cronbach’s *α* = .85).

*Perceived stress.*—Perceived stress was assessed using three items from the Perceived Stress Scale, which is the most widely used psychological instrument for measuring the perception of stress. It is a measure of the degree to which situations in one’s life are appraised as stressful (Cohen et al. 1983, 1994). This questionnaire consists of 10 items on a 5-point Likert scale ranging from 0 (“never”) to 4 (“very often”). This scale was chosen because it is an easy-to-use questionnaire with established and acceptable psychometric properties (Lee 2012), which extends to the Hebrew version (Ganz et al. 2019). In the current study, the scale showed excellent internal reliability (Cronbach’s *α* = .83).

*Workload.*—Workload was assessed using two items from the Questionnaire on the Experience and Evaluation of Work (Veldhoven et al. 2002). Respondents are asked to choose the most appropriate response on a 5-point scale (“very strongly disagree” to “very strongly agree”). The scale demonstrated good internal consistency (Harmsen et al. 2019). In the current study, the scale showed adequate internal reliability (Cronbach’s *α* = .74).

*Sense of meaning in work.*—Sense of meaning in work was measured using two items from a scale developed by Oren (2005) to measure the sense of meaning in work. Responses are rated on a 5-point Likert scale (“very strongly disagree” to “very strongly agree”). Oren (2005) reported a good internal consistency, with a Cronbach’s *α* of .82*.* In the current study, the scale showed adequate internal reliability (Cronbach’s *α* = .68).

*Professional self-esteem.*—Professional self-esteem was assessed using three items from the Professional Self-Esteem Scale (Carmel 1997). The questionnaire includes eight items assessing professional self-esteem (e.g., “Generally, I’m sure that my professional knowledge and skills are on a very high level”). Each item is rated on a 5-point scale ranging between 1 (“not true”) to 5 (“very true”). The higher the item average, the higher the worker’s self-esteem. A previous study using the scale reported an alpha coefficient reliability of .88 (Finzi-Dottan and Kormosh 2016). In the current study, the scale showed good internal reliability (Cronbach’s *α* = .80).

*Role ambiguity.*—Role ambiguity was measured using three items from the Role Ambiguity Scale (Rizzo et al. 1970), which is the most widely used measure of role stressors (Bowling et al. 2017). Participants were asked to indicate their agreement with the three items that measured the degree of role ambiguity on the job. Responses were made along a 6-point Likert scale. A composite role ambiguity score was calculated by averaging the responses. High scores indicate higher levels of role ambiguity. In the current study, the scale showed good internal reliability (Cronbach’s *α* = .80).

*Job insecurity.*—Job insecurity is conceptualized as the subjectively perceived and undesired possibility of losing one’s present job in the future, including fears or worries related to the possibility of such job loss (Elst et al. 2014). Job insecurity was measured using two items from the Job Insecurity Scale, a scale originally developed by De Witte (2000). Respondents were asked to rate these items on a 5-point Likert type scale, ranging from 1 (“strongly disagree”) to 5 (“strongly agree”). The Job Insecurity Scale is considered a valid and reliable instrument for measuring job insecurity (Elst et al. 2014). In the current study, the scale showed adequate internal reliability (Cronbach’s *α* = .65).

*Perceived organizational support.*—A three-item shortened version of the Survey of Perceived Organizational Support (Eisenberger et al. 1986) was used to measure perceived organizational support. Response options ranged from 1 (“strongly disagree”) to 5 (“strongly agree”). Worley and colleagues (2009) reported the scale’s excellent reliability, and in the current study, the scale showed also good internal reliability (Cronbach’s *α* = .81).

*Perceived social support.*—Perceived social support was measured using the four items from the Multidimensional Scale of Perceived Social Support (Zimet et al. 1988). It measures perceived social support from family, friends, and a significant other. The scale is a subjectively completed brief instrument consisting of a total of 12 items rated on a 5-point Likert scale (“very strongly disagree” to “very strongly agree”), with higher scores reflective of greater perceived social support. The scale showed good internal reliability, and the factor analysis confirmed the subscale structure of the measure (Dahlem et al. 1991). In the current study, the scale showed excellent internal reliability (Cronbach’s *α* = .94).

*Job satisfaction.*—Job satisfaction was measured using the three items from the Michigan Organizational Assessment Questionnaire Job Satisfaction Subscale (Cammann et al. 1979). Scores were computed using the average of the following three items: “All in all I am satisfied with my job,” “In general, I don’t like my job” (reverse-scored), and “In general, I like working here.” Responses were rated on a 7-point agree–disagree scale. A meta-analytic examination of the construct validity of the Job Satisfaction Subscale indicated that it was a reliable and construct-valid measure of job satisfaction (Bowling and Hammond 2008). In the current study, the scale showed an internal reliability of .77 (Cronbach’s *α*).

## Background Characteristics

Both socio-demographic characteristics and work-related characteristics were assessed. Socio-demographic characteristics included gender, age, religion, religiosity level (secular, traditional, religious), and education level. Work-related characteristics included seniority at work and employment level (part time, full time, and more than full time).

## Procedure

All measures were completed through an online survey using Qualtrics software. The study was approved by the institutional review board of the School of Social Work at Bar-Ilan University. Participants were recruited through social media and through professional instant messaging groups. Due to this recruitment method, the response rate is unavailable.

Participants were given important information on the nature of the study. It was emphasized that participation was voluntary and that participants had the right to withdraw from the study without penalty at any stage. Participants were assured that all efforts would be made to protect their anonymity and confidentiality. All the participants signed informed consent forms online. No compensation was given for participation in the study.

## Statistical Analysis

Descriptive statistics were used to illustrate the participants’ demographic characteristics and analyze the research variables. Pearson correlations were used to assess the associations between the following research variables: well-being, perceived stress, social support, sense of meaning, professional self-esteem, job insecurity, organizational support, workload, role ambiguity, and job satisfaction. Multiple regression analysis was conducted to explain well-being based on job demands and resources, sense of meaning, and professional self-esteem. These analyses were performed using SPSS software (25th version). A regression-based path analysis was employed to directly test the proposed moderation model using PROCESS software (Hayes 2012). Model 1 in PROCESS was estimated with 1,000 bootstrap samples and 95% bias-corrected bootstrap confidence intervals for all indirect effects. To address missing data, a Little’s MCAR test was employed, and results indicated that approximately 1% of the data was missing and that the data may be assumed to be missing completely at random. Consequently, pairwise deletion was used. Researchers have traditionally used deletion methods to deal with missing elements (Enders 2010). In datasets with multiple variables, it appears that pairwise deletions may lead to much smaller amounts of data loss than listwise deletions (Kock 2014), ensuring that the statistical power and integrity of the dataset is maintained (Croninger and Douglas 2005). Finally, the pairwise deletion approach performs well when the data are missing completely at random (Asparouhov and Muthén 2010).

# **Results**

## Associations between Demand, Resources, and Well-Being

Table 2 presents the associations between demands, resources, sense of meaning, professional self-esteem, and well-being. Well-being correlated with sense of meaning, professional self-esteem, and with all demands and resources except for job stress. Increased well-being was associated with decreases in perceived stress, job insecurity, and role ambiguity; and with increases in social support, job satisfaction, organizational support, professional self-esteem, and sense of meaning. The strongest associations were between increased well-being and higher levels of social support, professional self-esteem, and sense of meaning. Job stress was associated with perceived stress, but not with other demands or resources or with well-being. Interestingly, modest positive associations were found between job stress and professional self-esteem and sense of meaning.

<<INSERT TABLE 2 ABOUT HERE>>

## A Multiple Regression Model to Explain Well-Being

The multiple regression model results are summarized in Table 3. Independent variables accounted for 45.8% of the variance [F(8, 472) = 49.07, p < .001], with perceived stress, social support, professional self-esteem, and sense of meaning being the only significantly contributing individual predictors. Lower levels of perceived stress and higher levels of social support, professional self-esteem, and sense of meaning were associated with increased well-being. The strongest predictor of well-being was social support, followed by sense of meaning and professional self-esteem, and perceived stress.

<<INSERT TABLE 3 ABOUT HERE>>

## Moderation Effects of Professional Self-Esteem and Sense of Meaning

The interaction between stress and sense of meaning was significant in predicting well-being (β=0.13, *p* < 0.01). Examination of the interaction plot, presented in figure 1, reveals an enhancing effect: when social workers have a low or medium sense of meaning in their work, well-being decreases as stress increases. Moreover, among social workers with a high sense of meaning in their work, social workers who report high stress demonstrate greater well-being than those who report low or medium stress.

 <<INSERT FIGURE 1 ABOUT HERE>>

Professional self-esteem failed to moderate the association between stress and subjective well-being. In addition, no significant interaction was found between social support and the moderators in predicting well-being.

# **Discussion**

Social workers are at the forefront of the fight against the psychosocial effects of the COVID-19 pandemic, which raises the need to examine how work-related damage to their well-being can be reduced. The aim of this study was to apply the job demands-resources model to analyzing well-being among social workers who were working during the COVID-19 pandemic. We used the job demands-resources model as the theoretical framework for this study because it offers descriptions of the ways in which demands, resources, psychological states, and outcomes are associated (Schaufeli and Taris 2014).To the best of our knowledge, the application of such a well-established theory for assessing the well-being of workers based on resources and demands has not previously been used in studies involving situations of national or international crisis.

In this study, demands examined included perceived stress, job insecurity, job stress and role ambiguity. Resources included social support, sense of meaning in work, professional self-esteem, organizational support, and job satisfaction. More specifically, we examined whether a sense of meaning in work and professional self-esteem moderated the association between demands and resources and well-being. We chose these variables because they are seldom researched in this theoretical context but are very relevant to the social work profession. We found that increased well-being was associated with decreased perceived stress, job insecurity, role ambiguity (demands in our study) and with increased social support, job satisfaction, organizational support, professional self-esteem, and sense of meaning in work (resources in our study).

Our main findings show that well-being correlated with all demands and resources except for job stress. As noted, increased well-being was associated with lower levels of perceived stress, job insecurity, role ambiguity. In addition, enhanced well-being was connected with higher levels of social support, job satisfaction, organizational support, professional self-esteem, and sense of meaning. Our finding supports the assumption of the job demands-resources model: that every occupation has its unique demands and resources that affect employee well-being (Bakker and Demerouti 2017; Demerouti and Bakker 2011; Upadyaya et al. 2016).

The strongest predictor of well-being was social support, followed by sense of meaning and professional self-esteem, and perceived stress. Well-being is a construct expressing general or specific life satisfaction across various domains (Lau, Cummins, and Mcpherson 2005; Diener et al. 2009). We could therefore say, that our study found social workers’ well-being to be expressed by social support, job satisfaction, organizational support, professional self-esteem, and sense of meaning in work. These findings reinforce the great importance that work has in our lives as an activity that contributes to subjective well-being.

An explanation for the lack of correlation between job stress and well-being may be the fact that, among social workers, job stress is a normal and familiar condition that has little noticeable effect on well-being. Another explanation could be generated from the interesting finding of modest positive associations between job stress and professional self-esteem and sense of meaning.It is possible that job stress at a certain level produces a sense of professional self-esteem that stems from the ability to meet challenges, which at the same time produces a sense of meaning in work. Research has indicated the potential power of professional self-esteem as a resource that gives helping-professionals the strength to deal with stressful events (Finzi-Dottan and Kormosh 2016).

The strongest predictor of well-being was social support, followed by sense of meaning in work, professional self-esteem, and perceived stress. Lower levels of perceived stress and higher levels of social support, professional self-esteem, and sense of meaning in work were associated with increased well-being.

The finding that social support predicts well-being is congruent with the argument found in the literature that well-being is a response to existing social resources (Cummins 2000; 2002; 2005). Professional self-esteem and sense of meaning in work could also be considered social resources, since the practice of social work has a special social meaning and is an integral part of the social worker’s identity and sense of commitment to acting for the benefit of society (Hu and Hirsh 2017; Shea-van Fossen and Vredenburgh 2014; Tan, Lew, and Sim 2019).

To explain our finding that higher levels of professional self-esteem predict an increase in well-being, research has indicated the potential power of professional self-esteem to act as a resource for helping-professionals looking for the strength to deal with stressful events (Finzi-Dottan and Kormosh 2016). Professional self-esteem is also associated with life satisfaction and well-being (Carmel 1997). Sense of meaning in work as a positive predictor of well-being could be explained by its synergy with a sense of meaning and purpose in the broader context of life (Hu and Hirsh 2017; Nawrin 2018; Schnell, Höge, and Pollet 2013; Steger 2017). In addition, previous studies revealed that meaningful work enhanced well-being and overall life satisfaction (Allan et al. 2016; Hu and Hirsh 2017).

Moreover, we also found that a lower level of perceived stress and higher levels of professional self-esteem and sense of meaning in work were associated with increased well-being. This is in line with previous research that has found that meaningful work brings about a better sense of self-esteem and an improved sense of self-efficacy (Allan et al. 2018; Yildrim and Naktiyok 2017; Steger et al. 2013).

The interaction between perceived stress and sense of meaning was significant in predicting well-being, and the association between perceived stress and well-being was significantly moderated by sense of meaning. This matches a previous study’s finding that increased perceptions of meaningful work were strongly negatively related to stress (Hu and Hirsh 2017). We can also assume that the need for social workers in the present crisis increases the sense of meaning social workers find in their work, and therefore mediates between their perceived stress and well-being.

Professional self-esteem failed to moderate the association between stress and well-being. This finding can be explained by the fact that high professional self-esteem (as found in our study), which may be difficult for social workers to express in situations of high perceived stress, could cause a decrease in well-being. Studies show that high self-efficacy also has a negative effect on motivation (Vancouver and Kendall 2006). In addition, the COVID-19 crisis required social workers to adapt and innovate skills to meet new needs and reprioritize the most urgent and important aspects of their roles (Banks et al. 2020). These challenges could also act to reduce well-being.

The present study has several theoretical implications. The job demands-resources model incorporates many possible working conditions and emphasizes both negative and positive indicators of employee well-being. However, the theory focuses on organizational factors and lacks elaboration of personal resources (Demerouti and Bakker 2011). In this regard, our findings on sense of meaning and professional self-esteem—as personal resources—contribute to the wider theoretical context. Although these two variables are strongly correlated, they act differently upon the association between stress and employee’s well-being. In addition, there is scarce research on job demands-resources theory in the context of national and international crises.

This study and the insights that emerge from it point to directions of action that can contribute to the well-being of social workers in times of crisis. At the academic level, raising awareness of the importance of the social work profession in general, and its role in times of national or international crises in particular, can promote research and knowledge building that can be useful to professionals in similar situations in the future. On the national level, immediate recognition of the vital importance of social workers as part of the national emergency system is required, especially emphasizing their critical role in reducing the negative psychosocial consequences of the pandemic. On the professional level, it is necessary to make interventions that reduce social workers’ perceived pressure and increase their personal well-being.

On the public level, it is important to heighten positive images of the social work profession, which will contribute to an increase in social workers’ sense of meaning in their work. This could be a consequential intervention, because our findings show that a sense of meaning moderates the association between perceived stress and well-being. Waters and colleagues (2021) have identified several positive psychological factors—for example, meaning in life and high-quality connections with friends, family, and colleagues—that could be incorporated into such interventions.

Some limitations of our study should be taken into consideration when interpreting its results. These include the disclosure of sensitive personal information by participants about their feelings and perceptions of their workplace. Such revelations may involve social desirability bias—that is, the tendency to under-report socially undesirable behaviors or information and to over-report more desirable attributes (Kelly et al. 2017). In addition, because the participants were recruited via an online survey link, the sample was not randomly selected, and thus there is a sampling bias risk. Other limitations arise from the cross-sectional approach and the use of shortened versions of measurement instruments. The shortened versions were valuable, however, because they allowed us to collect rich and meaningful data in a time of international crisis. Moreover, all the measurements yielded adequate internal consistency coefficients.

Future studies can examine factors that promote or hinder a sense of meaning in work among social workers, at both the public level and the organizational level, as our findings show that a sense of meaning is crucial for increasing well-being in stressful situations. It would also be important to examine in longitudinal studies the behavior and impact of the variables related to well-being emphasized in the present study.

# References

Abrams, Laura S., and Alan J. Dettlaff. 2020. “Voices from the Frontlines: Social Workers Confront the COVID-19 Pandemic.” *Social Work* 65 (3): 302–305.

Allan, Blake A., Richard P. Douglass, Ryan D. Duffy, and Ryan J. McCarty. 2016. “Meaningful Work as a Moderator of the Relation between Work Stress and Meaning in Life.” *Journal of Career Assessment* 24 (3): 429–440.

Allan, Blake A., Chelsea Dexter, Rebecca Kinsey, and Shelby Parker. 2018. “Meaningful Work and Mental Health: Job Satisfaction as a Moderator.” *Journal of Mental Health* 27 (1): 38–44.

Amadasun, Solomon. 2020. “Social Work and COVID-19 Pandemic: An Action Call. *International Social Work* 63 (6): 753–756.‏

Asparouhov, Tihomir, and Bengt Muthén. 2010. *Weighted Least Squares Estimation with Missing Data.* Mplus Technical Appendix. August 14, 2010.

Bakker, Arnold B., and Evangelia Demerouti. 2007. “The Job Demands-Resources Model: State of the Art.” *Journal of Managerial Psychology* 22 (3): 309–328.

Bakker, Arnold B., and Evangelia Demerouti. 2014. “Job Demands-Resources Theory.” 37–64 in *Wellbeing: A Complete Reference Guide*, vol. 3, *Work and Wellbeing*,edited by Peter Y. Chen and Cary L. Cooper. Chichester, UK: Wiley Blackwell.

Bakker, Arnold B., and Evangelia Demerouti. 2017. “Job Demands–Resources Theory: Taking Stock and Looking Forward.” *Journal of Occupational Health Psychology* 22 (3): 273–285.

Bakker, Arnold B., and Evangelia Demerouti. 2018. “Multiple Levels in Job Demands-Resources Theory: Implications for Employee Well-Being and Performance.” In *Handbook of Well-Being*, edited by Ed Diener, Shigehiro Oishi, and Louis Tay. Salt Lake City, UT: DEF Publishers. https://research.tue.nl/en/publications/multiple-levels-in-job-demands-resources-theory-implications-for-.

Bakker, Arnold B., Evangelia Demerouti, and Willem Verbeke. 2004. “Using the Job Demands-Resources Model to Predict Burnout and Performance.” *Human Resource Management* 43 (1): 83–104.

Banks, Sarah, Tian Cai, Ed de Jonge, Jane Shears, Michelle Shum, Ana M. Sobočan, Kim Strom, Rory Truell, María Jesús Úriz, and Merlinda Weinberg. 2020. “Practising Ethically during COVID-19: Social Work Challenges and Responses.” *International Social Work* 63 (5): 569–583.

Both-Nwabuwe, Jitske M. C., Maria T. M. Dijkstra, and Bianca Beersma. 2017. “Sweeping the Floor or Putting a Man on the Moon: How to Define and Measure Meaningful Work.” *Frontiers in Psychology* 8: 1658.

Bowling, Nathan A., and Gregory D. Hammond. 2008. “A Meta-Analytic Examination of the Construct Validity of the Michigan Organizational Assessment Questionnaire Job Satisfaction Subscale.” *Journal of Vocational Behavior* 73 (1): 63–77.

Bowling, Nathan A., Steven Khazon, Gene M. Alarcon, Caitlin E. Blackmore, Caleb B. Bragg, Michael R. Hoepf, Alex Barelka, Kellie Kennedy, Qiang Wang, and Haiyan Li. 2017. “Building Better Measures of Role Ambiguity and Role Conflict: The Validation of New Role Stressor Scales.” *Work and Stress* 31 (1): 1–23. https://doi.org/10.1080/02678373.2017.1292563

Cammann, C., M. Fichman, G. D. Jenkins, and J. Klesh. 1979. “The Michigan Organizational Assessment Questionnaire.” Unpublished manuscript, University of Michigan, Ann Arbor.

Carmel, Sara. 1997. “The Professional Self-Esteem of Physicians Scale, Structure, Properties, and the Relationship to Work Outcomes and Life Satisfaction.” *Psychological Reports* 80 (2): 591–602.‏

Cohen, Sheldon, Tom Kamarck, and Robin Mermelstein. 1983. “A Global Measure of Perceived Stress Scale.” *Journal of Health and Social Behavior* 24: 385–396.‏

Cohen, Sheldon, Tom Kamarck, and Robin Mermelstein. 1994. “Perceived Stress Scale.” *Measuring Stress: A Guide for Health and Social Scientists* 10: 1–2.‏

Croninger, Robert G., and Karen M. Douglas. 2005. “Missing Data and Institutional Research.” 33–50 in *Survey Research: Emerging Issues*, edited by Paul D. Umbach. San Francisco: Jossey-Bass.

Cummins, Robert A. 2000. “Personal Income and Subjective Well-Being: A Review.” *Journal of Happiness Studies* 1 (2): 133–158.

Cummins, Robert A. 2001. “The Subjective Well-Being of People Caring for a Family Member with a Severe Disability at Home: A Review.” *Journal of Intellectual and Developmental Disability* 26 (1): 83–100. https://doi.org/10.1080/13668250020032787.

Cummins, Robert A. 2002. “Subjective Well-Being from Rich and Poor.” 137–156 in *Rich and Poor: Disparities, Perceptions, Concomitants*, edited by Wolfgang Glatzer. Dordrecht: Springer Netherlands. https://doi.org/10.1007/978-94-010-0257-8\_10.

Cummins, Robert A. 2005. “Moving from the Quality of Life Concept to a Theory.” *Journal of Intellectual Disability Research* 49 (10): 699–706.‏

Cummins, Robert A. 2012*a*. “Positive Psychology and Subjective Well-Being Homeostasis: A Critical Examination of Congruence.” 67–86 in *A Positive Psychology Perspective on Quality of Life*, edited by Anastasia Efklides and Despina Moraitou. Dordrecht, Netherlands: Springer.

Cummins, Robert A. 2012*b*. “Safety and Subjective Well-Being: A Perspective from the Australian Unity Wellbeing Index.” 13–29 in *Subjective Well-Being and Security*, edited by Dave Webb and Eduardo Wills-Herrera. Dordrecht, Netherlands: Springer.

Cummins, Robert A., Richard Eckersley, Julie Pallant, Jackie van Vugt, and RoseAnne Misajon. 2003. “Developing a National Index of Subjective Wellbeing: The Australian Unity Wellbeing Index.” *Social Indicators Research* 64 (2): 159–190.

Dahlem, Nancy W., Gregory D. Zimet, and Robin R. Walker. 1991. “The Multidimensional Scale of Perceived Social Support: A Confirmation Study.” *Journal of Clinical Psychology* 47 (6): 756–761.

De Witte, Hans. 2000. “Arbeidsethos en jobonzekerheid: Meting en gevolgen voor welzijn, tevredenheid en inzet op het werk.” 325–350 in *Van groep naar gemeenschap: Liber amicorum Prof. Dr. Leo Lagrou*. Leuven, Netherlands: Garant.

Demerouti, Evangelia, Arnold B. Bakker, Friedhelm Nachreiner, and Wilmar B. Schaufeli. 2001. “The Job Demands-Resources Model of Burnout.” *Journal of Applied Psychology* 86 (3): 499–512.

Demerouti, Evangelia, and Arnold B. Bakker. 2011. “The Job Demands-Resources Model: Challenges for Future Research.” *Journal of Industrial Psychology* 37 (2): 1–9.‏

Diener, Ed, Richard E. Lucas, and Shigehiro Oishi. 2009. “Subjective Well-Being: The Science of Happiness and Life Satisfaction.” 63–73 in *Handbook of Positive Psychology*, edited by C. R. Snyder and Shane J. Lopez. Oxford: Oxford University Press.

Eisenberger, Robert, Robin Huntington, Steven Hutchison, and Debora Sowa. 1986. “Perceived Organizational Support.” *Journal of Applied Psychology* 71 (3): 500–507.

Elst, Tinne Vander, Hans DeWitte, and Nele De Cuyper. 2014. “The Job Insecurity Scale: A Psychometric Evaluation across Five European Countries.” *European Journal of Work and Organizational Psychology* 23 (3): 364–380. https://doi.org/10.1080/1359432X.2012.745989.

Enders, Craig K. 2010. *Applied Missing Data Analysis*. New York: Guilford Press.‏

Etikan, Ilker, Sulaiman Abubakar Musa, and Rukayya Sunusi Alkassim. 2016. “Comparison of Convenience Sampling and Purposive Sampling.” *American Journal of Theoretical and Applied Statistics* 5 (1): 1–4.‏

Finzi-Dottan, Ricky, and Michal Berckovitch Kormosh. 2016. “Social Workers in Israel: Compassion, Fatigue, and Spillover into Married Life.” *Journal of Social Service Research* 42 (5): 703–717.‏

Frankl, Viktor Emil. 2006. *Man’s Search for Meaning*. 5th ed. Boston: Beacon Press.

Ganz, Freda DeKeyser, Gilat Yihye, and Nicole Beckman. 2019. “Family-Centered Communication and Acute Stress in Israeli Intensive Care Units.” *American Journal of Critical Care* 28 (4): 274–280.‏

Golightley, Malcolm, and Margaret Holloway. 2020. “Social Work in the Time of the COVID-19 Pandemic: All in This Together?” *British Journal of Social Work*50 (3): 637–641.

Guerrero, Lourdes R., Ariel C. Avgar, Erica Phillips, and Madeline R. Sterling. 2020. “They Are Essential Workers Now, and Should Continue to Be: Social Workers and Home Health Care Workers during COVID-19 and Beyond.” *Journal of Gerontological Social Work* 63 (6–7): 1–3.

Harmsen, Ruth, Michelle Helms-Lorenz, Ridwan Maulana, Klaas van Veen, and Marc van Veldhoven. 2019. “Measuring General and Specific Stress Causes and Stress Responses among Beginning Secondary School Teachers in the Netherlands.” *International Journal of Research and Method in Education* 42 (1): 91–108.

Hayes, Andrew F. 2012. *PROCESS: A Versatile Computational Tool for Observed Variable Mediation, Moderation, and Conditional Process Modeling (Version* 2*.*0*)* [Software].

Hu, Jing, and Jacob Hirsh. 2017. “The Benefits of Meaningful Work: A Meta-Analysis.” *Academy of Management Proceedings* 2017 (1): 13866.

Kelly, Nicole, Tammy Harpel, Angela Fontes, Connor Walters, and Jan Murphy. 2017. “An Examination of Social Desirability Bias in Measures of College Students’ Financial Behavior.” *College Student Journal* 51(1)*:* 115–128.‏

Knesset Information and Research Center. 2015. *Conditions of Employment of Social Workers in Local Authorities.* Knesset.

Kock, Ned. 2014. *Single Missing Data Imputation in PLS-SEM.* ScriptWarp Systems.

Lamers, Sanne M. A., Gerben J. Westerhof, Ernst T. Bohlmeijer, Peter M. ten Klooster, and Corey L. M. Keyes. 2011. “Evaluating the Psychometric Properties of the Mental Health Continuum‐Short Form (MHC‐SF).” *Journal of Clinical Psychology* 67 (1): 99–110.‏

Lau, Anna L. D., Robert A. Cummins, and Wenda McPherson. 2005. “An Investigation into the Cross-Cultural Equivalence of the Personal Wellbeing Index.” *Social Indicators Research* 72 (3): 403–430.‏

Lee, Eun-Hyun. 2012. “Review of the Psychometric Evidence of the Perceived Stress Scale.” *Asian Nursing Research* 6 (4): 121–127.‏

Lee, Soohee. 2015. “A Concept Analysis of ‘Meaning in Work’ and Its Implications for Nursing.” *Journal of Advanced Nursing* 71 (10): 2258–2267.

Lips-Wiersma, Marjolein, and Sarah Wright. 2012. “Measuring the Meaning of Meaningful Work: Development and Validation of the Comprehensive Meaningful Work Scale (CMWS).” *Group and Organization Management* 37 (5): 655–685.

Mäkikangas, Anne, and Ulla Kinnunen. 2003. “Psychosocial Work Stressors and Well-Being: Self-Esteem and Optimism as Moderators in a One-Year Longitudinal Sample.” *Personality and Individual Differences* 35 (3): 537–557.‏

Nawrin, Rubaba. 2018. “Mediating Role of Meaningful Work between Resources and Work Engagement in Bangladesh’s Private Banks.” *Management and Marketing: Challenges for the Knowledge Society* 13 (1): 777–795.

Oren, Lior. 2005. “Self-Employed and Organization Employed Workers: Self Regulatory Focus, Preferred Job Characteristics, Stress, Burnout and Coping*.*” Ben-Gurion University of the Negev.

Ripp, Jonathan, Lauren Peccoralo, and Dennis Charney. 2020. “Attending to the Emotional Well-Being of the Health Care Workforce in a New York City Health System during the COVID-19 Pandemic.” *Academic Medicine* 95 (8): 1136–1139. https://dx.doi.org/10.1097/ACM.0000000000003414.

Rizzo, John R., Robert J. House, and Sidney I. Lirtzman. 1970. “Role Conflict and Ambiguity in Complex Organizations.” *Administrative Science Quarterly* 15 (2): 150–163.

Rosso, Brent D., Kathryn H. Dekas, and Amy Wrzesniewski. 2010. “On the Meaning of Work: A Theoretical Integration and Review.” *Research in Organizational Behavior* 30: 91–127.

Schnell, Tatjana, Thomas Höge, and Edith Pollet. 2013. “Predicting Meaning in Work: Theory, Data, Implications.” *Journal of Positive Psychology* 8 (6): 543–554.

Schaufeli, Wilmar B., and Toon W. Taris. 2014. “A Critical Review of the Job Demands-Resources Model: Implications for Improving Work and Health.” 43–68 in *Bridging Occupational, Organizational and Public Health: A Transdisciplinary Approach*, edited by Georg F. Bauer and Oliver Hämmig. Dordrecht, Netherlands: Springer.

Shea-Van Fossen, Rita J., and Donald J. Vredenburgh. 2014. “Exploring Differences in Work’s Meaning: An Investigation of Individual Attributes Associated with Work Orientations.” *Journal of Behavioral and Applied Management* 15 (2): 101–120.

Steger, Michael F., Bryan J. Dik, and Ryan D. Duffy. 2012. “Measuring Meaningful Work: The Work and Meaning Inventory (WAMI).” *Journal of Career Assessment* 20 (3): 322–337.

Steger, Michael F., Hadassah Littman-Ovadia, Michal Miller, Lauren Menger, and Sebastiaan Rothmann. 2013. “Engaging in Work Even When It Is Meaningless: Positive Affective Disposition and Meaningful Work Interact in Relation to Work Engagement.” *Journal of Career Assessment* 21 (2): 348–361.

Steger, Michael F. 2017. “Creating Meaning and Purpose at Work.” 60–81 in *The Wiley Blackwell Handbook of the Psychology of Positivity and Strengths‐Based Approaches at Work*, edited by Lindsay G. Oades, Michael F. Steger, Antonella Delle Fave, and Jonathan Passmore. Chichester, UK: Wiley Blackwell.

Tan, Kim-Lim, Tek-Yew Lew, and Adriel K. S. Sim. 2020. “Effect of Work Engagement on Meaningful Work and Psychological Capital: Perspectives from Social Workers in New Zealand.” *Employee Relations: The International Journal*. Published ahead of print, December 14, 2020. https://doi.org/10.1108/ER-11-2019-0433.

Tims, Maria, Arnold B. Bakker, and Daantje Derks. 2013. “The Impact of Job Crafting on Job Demands, Job Resources, and Well-Being.” *Journal of Occupational Health Psychology* 18 (2): 230–240.

Tremblay, Maxime A., and Deanna Messervey. 2011. “The Job Demands-Resources Model: Further Evidence for the Buffering Effect of Personal Resources.” *SA Journal of Industrial Psychology* 37 (2): 10–19.‏

Upadyaya, Katja, Matti Vartiainen, and Katariina Salmela-Aro. 2016. “From Job Demands and Resources to Work Engagement, Burnout, Life Satisfaction, Depressive Symptoms, and Occupational Health.” *Burnout Research* 3 (4): 101–108.

Van Wingerden, Jessica, and Joost Van der Stoep. 2018. “The Motivational Potential of Meaningful Work: Relationships with Strengths Use, Work Engagement, and Performance.” *PloS One* 13 (6): e0197599.

Veldhoven, Marc van, Jan de Jonge, Sjaak Broersen, Michiel Kompier, and Theo Meijman. 2002. “Specific Relationships between Psychosocial Job Conditions and Job-Related Stress: A Three-Level Analytic Approach.” *Work and Stress* 16 (3): 207–228.

Vancouver, Jeffrey B., and Laura N. Kendall. 2006. “When Self-Efficacy Negatively Relates to Motivation and Performance in a Learning Context.” *Journal of Applied Psychology* 91 (5): 1146.

Waters, Lea, Sara B. Algoe, Jane Dutton, Robert Emmons, Barbara L. Fredrickson, Emily Heaphy, Judith T. Moskowitz, et al. 2021. “Positive Psychology in a Pandemic: Buffering, Bolstering, and Building Mental Health.” *Journal of Positive Psychology*. Published ahead of print, February 9, 2021. https://doi.org/10.1080/17439760.2021.1871945.

Worley, Jody A., Dale R. Fuqua, and Chan M. Hellman. 2009. “The Survey of Perceived Organisational Support: Which Measure Should We Use?” *SA Journal of Industrial Psychology* 35 (1): 112–116.

Yildrim, F., and S. Naktiyok. 2017. “The Mediating Role of Organizational Support in the Effect of Transformational Leadership on Employee Empowerment.” *Polish Journal of Management Studies* 16 (1): 292–303.

Zimet, Gregory D., Nancy W. Dahlem, Sara G. Zimet, and Gordon K. Farley. 1988. “The Multidimensional Scale of Perceived Social Support.” *Journal of Personality Assessment* 52 (1): 30–41.

Table 1.Social work fields distribution

|  |  |  |
| --- | --- | --- |
| *(%)* | *n* | Social work fields |
| 8.60 | 40 | Social services departments |
| 3.70 | 17 | Community  |
| 13.10 | 85 | Children and youth |
| 10.30 | 48 | Disabilities |
| 4.70 | 22 | Aging |
| 12.50 | 58 | Mental health |
| 13.10 | 61 | Correction |
| 6.5 | 30 | Addictions |
| 16.4 | 76 | Domestic violence |
| 2.80 | 13 | Health |
| 3.00 | 14 | Trauma and loss |

Table 3. Summary of regression analysis for demands and resources predicting SWB (N = 478)

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| Demands and resources | *B* | Beta 95% CI | *SE B* | Beta | *t* | Sig. *(p)* |
| Perceived stress | -.11 | -0.16, -0.07 | .02 | -.19\*\*\* | -4.75 | .000 |
| Social support | .28 | 0.23, 0.34 | .03 | .37\*\*\* | 9.92 | .000 |
| Job insecurity | -.01 | -0.06, 0.04 | .03 | -.02 | -.55 | .585 |
| Role ambiguity | -.06 | -0.12, 0.01 | .03 | -.07 | -1.80 | .072 |
| Job satisfaction | .04 | -0.02, 0.10 | .03 | .06 | 1.29 | .194 |
| Organizational support | -.01 | -0.05, 0.05 | .03 | -.01 | -.03 | .976 |
| Professional self-esteem | .18 | 0.10, 0.25 | .04 | .22\*\*\* | 4.70 | .000 |
| Sense of meaning | .17 | 0.09, 0.24 | .04 | .24\*\*\* | 4.47 | .000 |
|  |  |  |  |  |  |  |
| *R2* | .458\*\*\* |  |  |  |  |  |

*\* p<.*05*, \*\* p<.*01*, \*\*\* p<.*001

Figure 1. Simple slopes showing interactions between stress and sense of meanings and their relationship to SWB