

Introduction

The onset of the pandemic has changed the global telework pattern. Overnight, a vast majority of knowledge-based jobs shifted from the onsite office to the online home office environment to abide by the mandated social distancing, lockdowns, and quarantines (OECD, 2020).

Subsequently, remote work has helped to implement health and safety measures to protect the lives of many. However, telework has also disrupted the well-being of many who now must simultaneously manage work and household responsibilities on their own in a remote setting (OECD, 2020).

When remote work is effectively practiced, it can result in benefits for both the employer and the employee (Abrams, 2019). However, even prior to the pandemic, there were questions about the general happiness of remote workers (Song & Gao, 2019). Teleworkers may experience higher levels of stress (Messenger, 2017), contend with feelings of isolation (Larson et al., 2020), and feel a need to be on all the time (Felstead & Henseke, 2017). The realities of the current times have only amplified these and other stressors, as employees are left to juggle work and home life simultaneously (OECD, 2020).

The spontaneity of the remote work mandate forced many organizations with little to no experience to implement and manage teleworking (Larson et al., 2020). Some organizations have embraced this movement and have prioritized employee well-being with a four-day work week (Stillman, 2020) and plan to continue remote work indefinitely (Chan, 2020). Meanwhile other employers have taken the big-brother approach, surveilling employee activity (Allyn, 2020). This brief study explores employee perceived stress as it relates to perceived support and age during the COVID-19 pandemic.

Literature Review

Stress

Even before the pandemic, stress was identified as a leading societal problem with findings showing that unmanaged stress can even be fatal (Quick & Henderson, 2016). Smith, Rosenberg, and Haight (2014) discuss stress in terms of an emotional arousal that can lead to a negative physical manifestation when excessively activated, impairing normal functioning. Cohen, Kamarck, and Mermelstein (1983) argue stress can be observed through individual's perceptions of feeling overloaded, out of control, and in an unpredictable circumstance. Such assessments are likely prompted in a global pandemic and intensified when suddenly thrust into a novel remote work environment. Prior to pandemic, occupational stress has been associated with various aspects that range from the physical work environment, organizational culture, role type, upward mobility within the company, and even work-home dynamics (Rout & Rout, 2002). Such stressors may impact employee job performance, commitment, job satisfaction and even trust (Robbins & Judge, 2013). Employee stress has only increased with the uncertainty that has come with the pandemic and individuals from various walks of life are experiencing an exacerbated need to juggle working, caring for the elderly and/or school-aged children, while maintaining their own self-care (OECD, 2020).

Perceived Support

Organizational support theory (Eisenberger et al., 1986) suggests that an employee's perceived organizational support (POS) mediates her/his actions based on the perceived degree of support the organization extends toward her/his well-being. Driven by the premise of social exchange (Kurtessis et al., 2017) POS characterizes an organization as a person rather than just an entity, whereby an employer's action directly impacts the employee's reaction and outputs (Eisenberger et al., 1986). Thus, an employee that perceives her/himself to be positively impacted by the concerns and actions the organization puts forth toward that employee's well-being (Eisenberger et al., 1986; Rhoades & Eisenberger, 2002), may be positively driven to reciprocate efforts (Kurtessis et al., 2017).

Consequently, employees may be more committed when they perceive their organization to be emotionally and relationally supportive toward managing the responsibilities of their role and their welfare in times of crisis (Rhoades & Eisenberger, 2002). Subsequently, employees that assess more POS from their employers, experience lower levels of stress (Eisenberger et al., 2016) and greater job satisfaction (Rhodes & Eisenberger, 2002). Thus, given the wide-spread stressors of COVID-19 and the implications to the regular workday (OECD, 2020), we pose the following hypothesis:

H1: There is an inverse relationship between POS and perceived stress amongst employees during the COVID-19 pandemic.

Furthermore, there is a positive relationship between POS and perceived supervisory support (PSS), with the supervisor acting as a conduit between the employee and the organization, and thus mediating perceptions employees have of that organization (Eisenberger et al., 2002; Rhodes & Eisenberger, 2002). The supervisor-employee relationship; however, can vary, occasionally resulting in higher levels of PSS than POS (Tuzun & Kalemci, 2012). Even in such instances POS continues to prevail and thus bears significant implications on employee perceptions (Dawley et al., 2008; Tuzun & Kalemci, 2012). As such, this report predicts the following relationship between PSS and perceived stress during trying times:

H2: There is an inverse relationship between PSS and perceived stress amongst employees during the COVID-19 pandemic.

Age

Genuine supportive efforts on the part of the organization and the supervisor clearly play an important role on the experience of the employee (Eisenberger et al., 2016), and this is probably connected to employee stress assessments. However, these efforts do not exist in a vacuum flowing in one direction. There is a transactional nature to supportive efforts, how they are experienced and perceived. Employees might perceive such supportive efforts through perceptual filters developed over time. Age might play a role as a perceptual filter, not necessarily in a direct manner; but instead in a representative manner (Nilsson, 2018). Older employees might not have more accurate perceptual filters, but they might have more seasoned filters (Nilsson, 2018) as cultivated through a larger number of stressful experiences in life (Siu et al., 2001).

Overall, older employees tend to display lower levels of perceived occupational stress (Rožman et al., 2019). In fact, age and well-being are positively related, with older employees exhibiting less stress (Siu et al., 2001), and if facilitated effectively, older employees could be valuable agents in the organizational knowledge sharing process (Slagter, 2007). Age can be an

important factor when assessing support (Wang & Gruenewald, 2019) and should not be overlooked when investigating perceived stress during times of crisis. Thus, we pose the following hypothesis:

H3: There is an inverse relationship between age and perceived stress amongst employees during the COVID-19 pandemic.

As the coronavirus engulfs and uncertainty continues, many employees will likely be forced to be fluid and flexible with their work arrangements. The physical and emotional stressors will likely have implications in-the moment and post-pandemic. Thus, as employees and employers strive to co-exist in times of crisis, it is important to understand how perceived stress might be impacted by POS, PSS, and age during the pandemic. As such, we pose the following research questions:

RQ1: How well does POS, PSS, and age contribute to an alleviation of perceived stress amongst employees during the COVID-19 pandemic?

RQ2: Which is the best contributor to the alleviation of perceived stress amongst employees during the COVID-19 pandemic: POS, PSS, or age?

Methods

Procedure and Participants

Survey research was conducted using a non-probability networking sampling procedure. Perspective participants were solicited through general social media and professional association membership listservs. Using Qualtrics, participants were asked to respond to a questionnaire exploring perceived organizational support, perceived supervisory support, stress, and some other demographics. Participation was voluntary, and anonymity was granted by ensuring that no identifiable information such as names, emails, or any other identity revealing information was gathered during the data collection process.

The sampling procedure yielded 385 total employed respondents who were not students at a college or university; of which 348 (96.7%) were employed full time, and 353 (91.9%) reported working remotely five days a week since the 2020 social distancing recommendation. Prior to the social distancing recommendation 252 (65.5%) respondents reported not working remotely at all; and 81 (21%) respondents reported working remotely only one day a week. By race, the sample consisted of: 17 (4.7%) African Americans, 22 (6.1%) Asian Americans, 287 (79.5%) Caucasian Americans, 19 (5.3%) Hispanic Americans, and 16 (4.5%) indicating other. The average age of the sample was 44.67 years ($SD = 10.25$), with ages ranging from 76 to 22.

Instruments

Stress was measured through the Cohen, Kamarck, and Mermelstein (1983) Perceived Stress Scale. The scale offers a flexibility that is not driven by a specific context or population (Lee, 2012) and allows capturing stress related to the onset of the pandemic, without jeopardizing the overall intent to learn about the impact on stressors in the moment. This 10-item instrument uses a five-point Likert-type format ranging from 1 (strongly disagree) to 5 (strongly agree). The preface of each item was modified for this study from “In the last month” to “Since the WHO’s recommended social distancing”. For the current study, this instrument yielded a Cronbach coefficient alpha of .89 ($M = 26.05$, $SD = 6.78$).

Organizational support and supervisory support were measured through the Eisenberger et al. (1986) POS scale and Eisenberger et al., (2002) PSS scale, respectively. Considering Cronbach's (1951) criteria, the POS and PSS scales have frequently demonstrated excellent levels of internal consistency and are regularly utilized when applying Organizational Support Theory in various research contexts. The 8-item POS instrument uses a five-point Likert-type format ranging from 1 (strongly disagree) to 5 (strongly agree). For the current study, this instrument yielded a Cronbach coefficient alpha of .93 ($M = 27.45$, $SD = 6.83$). The 8-item PSS instrument also uses a five-point Likert-type format ranging from 1 (strongly disagree) to 5 (strongly agree). For the current study, this instrument yielded a Cronbach coefficient alpha of .94 ($M = 30.96$, $SD = 6.58$).

Results

Results were analyzed using both bivariate correlation and multiple regression. All Pearson correlations appear in Table 1. The bivariate correlations revealed three predictor variables that were significantly related to perceived stress. Hypothesis 1 predicted an inverse relationship between POS and perceived stress amongst employees working during the pandemic and this hypothesis was supported ($r = -.26$, $p < .001$). Hypothesis 2 predicted an inverse relationship between PSS and perceived stress amongst employees working during the pandemic and this hypothesis was not supported ($r = -.08$, $p > .05$). Hypothesis 3 predicted an inverse relationship between age and perceived stress amongst employees working during the pandemic and this hypothesis was supported ($r = -.33$, $p < .001$).

The first research question asked how well POS, PSS, and age contribute to the alleviation of perceived stress amongst employees working during the pandemic. To investigate this question, perceived stress was regressed on the linear combination of POS, PSS, and age. The equation containing these three variables accounted for 16% of the variance in perceived stress, $F(3, 330) = 21.35$, $p < .001$, adjusted $R^2 = .16$.

The second research question asked if each of these variables individually contribute to the alleviation of perceived stress amongst employees working during the pandemic. The regression model revealed that age makes the largest unique contribution ($\beta = -.30$, $p < .001$), although POS also made a statistically significant contribution ($\beta = -.25$, $p < .001$). PSS did not uniquely contribute ($\beta = .04$, $p > .05$).

Table 1: Correlation Matrix

Variable		Age	Organization Support	Supervisor Support	Stress
Age	Pearson Correlation	1.000	.109*	-.084	-.334**
	Sig. (2-tailed)		.045	.124	.000
Organization Support	Pearson Correlation	.109*	1.000	.585**	-.258**
	Sig. (2-tailed)	.045		.000	.000
Supervisor Support	Pearson Correlation	-.084	.585**	1.000	-.080
	Sig. (2-tailed)	.124	.000		.136
Stress	Pearson Correlation	-.334**	-.258**	-.080	1.000
	Sig. (2-tailed)	.000	.000	.136	

Discussion

The purpose of this study was to explore factors that might play a role in alleviating the stress levels of employees, most of which were immediately thrust into a remote situation at the onset of a global pandemic. More specifically, POS and PSS of Organizational Support Theory (Eisenberger et al., 1986) as well as the argued composure and perspective taking that comes with age (Nilsson, 2018) were examined to determine any potential impact they may have on employees perceived stress during such a unique point in time. To begin with, employees indicated that there was a major immediate shift from working entirely onsite to working almost entirely in a remote capacity across sectors. Overall, these employees showed varied levels of perceived stress in relation to POS, PSS, and age. The results revealed age to have the largest impact on perceived stress while in crisis, with older individuals reporting lower levels of stress in this atmosphere. These findings are consistent with previous research exploring stress and age in organizational contexts, outside of the current pandemic (Rožman et al., 2019). Older employees have been found to exhibit more composure and tact as seasoned role models for the younger generation of workers (Nilsson, 2018). Age and the general well-being of employees have also been demonstrated to be positively related, with older employees exhibiting less stress (Siu et al., 2001). If facilitated effectively, older employees can be the catalyst in the organizational knowledge sharing process (Slagter, 2007).

The results of this study show POS to be negatively related to perceived stress; indicating that the perceived support of an organization can potentially help in reducing stress. This finding is in line with organizational support theory (Eisenberger et al., 1986), contributing added support to the premise of social exchange by indicating that the negative relationship between stress and POS is withstanding even during the pandemic crisis of COVID-19. As a result, during times of global crisis, employees across sectors may need more organizational support to help deal with the varied external stressors. If organizational support is lacking or insufficient in general, stress is only prone to increase during times of uncertainty.

Contrary to Organizational Support Theory and the proposed hypothesis, PSS was not found to be inversely related, or related at all to perceived stress. Perhaps this is due to the unique nature of the pandemic and the resulting widespread uncertainty it has produced. In such dynamic and novel instances there may be a greater need from employees for support to come from a central figure in upper management. A post hoc analysis revealed a small significant negative correlation between PSS and the number of days working remotely after social distancing measures were implemented ($r = -.11$; $p < .05$). Even if front-line supervisors genuinely support their employees with their words, these words and actions may still need the perceived support of the organization to have a desired impact on the employees perceived stress. If so, such a need would explain the lack of effect PSS had on perceived stress.

In order to garner more perceived organizational support, employers across sectors may benefit from leveraging more seasoned employees. These veteran employees may hold greater perspective to foster sympathetic environments in times of crisis. When employees across sectors were mandated to telework, age and POS played a significant role in lessening perceived stress, whereas PSS was not a factor. Furthermore, employers would benefit from reviewing and evaluating policies to ensure that employee well-being is not overlooked. An employee's POS can have implication for the immediate now and the post-pandemic organizational survival. If an employee does not perceive to feel supported in times of crisis, he/she will likely carry the perceived lack of support with them in the recovery and aftermath of the crisis. This in turn may negatively impact how the employee reciprocates efforts in their job role or their overall long-

term perception of the organization, with potential implications to commitment. Evaluating and enhancing organizational-wide telework policies and procedures during societal highs and lows is a good starting point.

Limitations of this study include a lack of global workforce diversity and a lack of organizational sector representation in the sample. Furthermore, there are other mechanisms that employees find support from and potentially look to for stress relief during times of crisis. Future studies could benefit from a more globally diverse workforce sample. Additionally, future studies could attempt to explore what organizations could do to make their supervisors more supportively credible during times of crisis. Finally, future studies should explore the impact and utility of other support systems and stress relief options during times of pandemic. The social exchange premise of POS can have dire implication on employee stress and in turn on the organization effective and efficient operations. The pre-pandemic world will likely be a way of the past. Organizations across sectors now have a need to ensure that POS is not neglected during the pandemic to ensure that these employers are poised to manage the aftermath.

References

- Abrams, Z. (2019). The future of remote work. *Monitor on Psychology*, 50(9), 54-60.
- Allyn, B. (2020, May 13). Your boss is watching you: Work-from-home boom leads to more surveillance. *NPR*. Retrieved from <https://www.npr.org/2020/05/13/854014403/your-boss-is-watching-you-work-from-home-boom-leads-to-more-surveillance>
- Chan, R. (2020, August 7). Atlassian just told employee they can work from home permanently, following Twitter and Facebook. *Business Insider*. Retrieved from <https://www.businessinsider.com/atlassian-says-employees-they-can-work-from-home-permanently-2020-8>
- Cohen, S., Kamarck, T., & Mermelstein, R. (1983). A global measure of perceived stress. *Journal of health and social behavior*, 385-396.
- Cronbach L (1951) Coefficient alpha and the internal structure of tests. *Psychometrika*, 16(3): 297-334.
- Dawley, D. D., Andrews, M. C., & Bucklew, N. S. (2008), Mentoring, supervisor support, and perceived organizational support: what matters most?, *Leadership & Organization Development Journal*, 29(3), 235-247. <https://doi.org/10.1108/01437730810861290>
- Eisenberger, R., Huntington, R., Hutchison, S., & Sowa, D. (1986). Perceived organizational support. *Journal of Applied psychology*, 71(3), 500-507.
- Eisenberger, R., Stinglhamber, F., Vandenberghe, C., Sucharski, I. L., & Rhoades, L. (2002). Perceived supervisor support: contributions to perceived organizational support and employee retention. *Journal of Applied Psychology*, 87(3), 565-573.
- Eisenberger, R., Malone, G. P., & Presson, W. D. (2016). Optimizing perceived organizational support to enhance employee engagement. *Society for Human Resource Management and Society for Industrial and Organizational Psychology*, 2, 22.

- Felstead, A., & Henseke, G. (2017). Assessing the growth of remote working and its consequences for effort, well-being and work-life balance. *New Technology, Work and Employment*, 32(3), 195-212.
- Kurtessis, J. N., Eisenberger, R., Ford, M. T., Buffardi, L. C., Stewart, K. A., & Adis, C. S. (2017). Perceived organizational support: A meta-analytic evaluation of organizational support theory. *Journal of Management*, 43(6), 1854-1884.
- Larson, B. Z., Vroman, S. R., & Makarius, E. E. (2020). A guide to managing your (newly) remote workers. *Harvard Business Review*, 18.
- Lee EH (2012) Review of the psychometric evidence of the perceived stress scale. *Asian Nursing Research* 6: 121-127.
- Messenger, J. C. (2017). Working anytime, anywhere: The evolution of Telework and its effects on the world of work. *IUSLabor*.
- Nilsson, K. (2018). Managers' attitudes to their older employees: A cross-sectional study. *Work*, 59(1), 49-58.
- OECD (2020, March 31). *COVID-19: Protecting people and societies*. OECD Publishing, Paris. Retrieved from <https://www.oecd.org/coronavirus/policy-responses/covid-19-protecting-people-and-societies-e5c9de1a/>
- Quick, J. C., & Henderson, D. F. (2016). Occupational stress: Preventing suffering, enhancing wellbeing. *International Journal of Environmental Research and Public Health*, 13(5), 459-470.
- Rein, L. (2020, January 12). As remote work rises at U.S. companies, Trump is calling federal employees back to the office. *The Washington Post*. Retrieved from https://www.washingtonpost.com/politics/as-remote-work-rises-at-us-companies-trump-is-calling-federal-employees-back-to-the-office/2020/01/12/37aad040-2d80-11ea-9b60-817cc18cf173_story.html
- Rhoades, L., & Eisenberger, R. (2002). Perceived organizational support: a review of the literature. *Journal of Applied Psychology*, 87(4), 698-714.
- Robbins, S. P., & Judge, T. A. (2013). *Organizational behavior*. Prentice Hall.
- Rout, U. R., & Rout, J. K. (2002). Occupational stress. *Stress Management for Primary Health Care Professionals*, 25-39.
- Rožman, M., Grinkevich, A., & Tominc, P. (2019). Occupational stress, symptoms of burnout in the workplace and work satisfaction of the age-diverse employees. *Organizacija*, 52(1), 46-52.
- Siu, O. L., Spector, P. E., Cooper, C. L., & Donald, I. (2001). Age differences in coping and locus of control: A study of managerial stress in Hong Kong. *Psychology and Aging*, 16(4), 707-710.
- Slagter, F. (2007). Knowledge management among the older workforce. *Journal of Knowledge Management*, 11(4), 82-96.

Smith, K. J., Rosenberg, D. L., & Haight G. T. (2014). An assessment of the psychometric properties of the perceived stress scale-10 (pss10) with business and accounting students. *Accounting Perspectives, 13*, 29-59.

Song, Y., & Gao, J. (2019). Does telework stress employees out? A study on working at home and subjective well-being for wage/salary workers. *Journal of Happiness Studies, 1-20*.

Stillman, J. (2020, July 21). Why more companies are offering a four-day workweek. *Inc.com*. Retrieved from <https://www.inc.com/jessica-stillman/why-more-companies-are-offering-a-four-day-workweek.html>

Tunzun, I., K., & Kalemci, A., R. (2012). Organizational and supervisory support in relation to employee turnover intentions, *Journal of Managerial Psychology, 27*(5), 518-534. <https://doi.org/10.1108/02683941211235418>

Wang, D., & Gruenewald, T. (2019). The psychological costs of social support imbalance: Variation across relationship context and age. *Journal of Health Psychology, 24*(12), 1615-1625.