

What about the Effect of Work-Team Identification on Mental Health One Year after the Onset of the COVID-19 Health Crisis?

Audrey Babic, Louis Hotton, Jessica Simon, Marie Bourguignon

Département de Psychologie, Faculté de Psychologie, Logopédie et Sciences de l'éducation, Université de Liège, Liège, Belgium
Email: audrey.babic@uliege.be

How to cite this paper: Babic, A., Hotton, L., Simon, J., & Bourguignon, M. (2024). What about the Effect of Work-Team Identification on Mental Health One Year after the Onset of the COVID-19 Health Crisis? *Open Journal of Social Sciences*, 12, 260-273. <https://doi.org/10.4236/jss.2024.124018>

Received: February 24, 2024

Accepted: April 20, 2024

Published: April 23, 2024

Copyright © 2024 by author(s) and Scientific Research Publishing Inc. This work is licensed under the Creative Commons Attribution International License (CC BY 4.0). <http://creativecommons.org/licenses/by/4.0/>



Open Access

Abstract

The COVID-19 health crisis and its generalized lockdown have not spared the professional world. In this health crisis context characterized by uncertainty and threats, stress and burnout are consequences widely studied. Work-team identification has often been associated with reduced stress and burnout in a non-crisis context. However, to the best of our knowledge, only one study has addressed this issue shortly after the onset of the COVID-19 health crisis (i.e., six months). To expand our understanding of these relationships, the present study aims to investigate the effect of work-team identification on mental health (i.e., stress and burnout) one year after the onset of the COVID-19 pandemic. We performed hierarchical regressions on a sample of 110 Belgian employees. Data were collected from the end of January to the end of April 2021. We found that only disengagement was negatively predicted by work-team identification. No significant effect was found for stress and exhaustion. The research implications are discussed in relation with proximity managers, who have a specific role to play in the work-team identification, and more generally in the well-being of their employees.

Keywords

Work-Team Identification, Burnout, Stress, COVID-19

1. Introduction

The sudden onset of the COVID-19 pandemic and the widespread lockdown experienced in recent years have disrupted all areas of our lives, not sparing the world of work. Indeed, this period has challenged some long-established dimensions of work, notably in terms of the work environment, with the massive implementation of telecommuting (Allen et al., 2021); work relations, conducted

mainly remotely (Bolisani et al., 2020); or even more generally in terms of work organization (Spurk & Straub, 2020). Employees have been thrust into these new working conditions, sometimes with few tools to cope (Jamal et al., 2021). Under these conditions, it is not surprising to observe an increase in stress, anxiety and burnout among healthcare professionals (e.g., Al Maqbali et al., 2021) and more generally in the overall population (Salari et al., 2020). In view of this particular context, the objective of this study is to see if work-team identification, a concept associated with reduced professional stress and burnout in a non-crisis context, is also negatively associated with these health variables one year after the onset of the COVID-19 health crisis. Given that very few scholars have addressed this issue during a health crisis, the present study will enrich our knowledge of these relationships.

2. Literature Review

Professional stress refers to a change in the worker's physical or mental state, caused by a challenge or threat from the workplace (Zimbardo et al., 2003). Factors that contribute to professional stress include for example high workload, isolation, role conflict, difficult relationships with colleagues, and unfavorable organizational climate (Colligan & Higgins, 2006). Some of these factors were accentuated during the COVID-19 pandemic including consistent workload (e.g., Carillo et al., 2021; Jamal et al., 2021; Kumar et al., 2021), role overload (e.g., Kumar et al., 2021), professional isolation and loneliness (e.g., Carillo et al., 2021; Jamal et al., 2021; Wang et al., 2021), and family-work interference (e.g., Jamal et al., 2021; Wang et al., 2021). As the COVID-19 health crisis characterized by an uncertain and ongoing threat was prolonged over time, it inevitably contributed to a persisting professional stress (Franklin & Gkiouleka, 2021), which is a strong predictor of burnout (e.g., Maslach & Leiter, 2016). Several studies have investigated the impact of the COVID-19 health crisis on mental health. For example, through their study conducted in a healthcare service, Hoseinabadi et al. (2020) observed a higher level of burnout and stress among nurses in frontline services confronted with COVID-19 patients compared to nurses who had no direct contact with such patients.

Burnout is often considered as a tripartite syndrome (Maslach, Schaufeli, & Leiter, 2001) consisting of emotional exhaustion ("the depletion or draining of emotional resources caused by interpersonal demands", Schaufeli & Salanova, 2014: p. 296), feelings of depersonalization, also named disengagement ("the development of negative, callous and cynical attitudes towards the recipients of one's services", Schaufeli & Salanova, 2014: p. 296) and a diminished sense of personal accomplishment ("the tendency to evaluate one's work with recipients negatively", Schaufeli & Salanova, 2014: p. 296). However, this multidimensional nature has been vigorously debated. Indeed, as mentioned by Schaufeli and Salanova (2014: p. 297), "Schaufeli and Taris (2005) argued that exhaustion and depersonalization constitute the core of burnout and that rather than being a constituting dimension, reduced personal accomplishment should be a conse-

quence of exhaustion and depersonalization”. Therefore, throughout the present study, we focused on these two principal components of burnout, i.e. exhaustion and disengagement.

Work-team identification is a well-known variable for reducing stress and burnout in non-crisis periods (e.g., Haslam et al., 2009). This concept refers to “the extent to which a team member identifies with a specific team rather than with organizational groups in general” (Gundlach et al., 2006: p. 1608). Work-team identification was initially explained by the social identity theory developed by Tajfel et al. (1979). This theory describes the way in which individuals consider themselves part of a group through identification with it, adhering to its values and being emotionally attached to it (Tajfel et al., 1979; Tajfel & Turner, 1986). A few years later, Ashforth and Mael (1989) developed the concept of social identification. Through this identification, individuals define themselves as belonging to a specific group and they believe they have certain characteristics in common with the other members of the group. Members of a group with a strong sense of group belongingness are motivated to act in the collective’s best interest (Levine, Prosser, Evans, & Reicher, 2005). Indeed, according to Tajfel and Turner (1986), workers generally seek to foster the viability and success of the group they belong. In such a context, workers strongly identified with their group are particularly likely to experience an important social support from other members of this group, giving that helping a group member fosters the functioning and success of the group. In line with this, Van Dick and Haslam (2012) argued that social support plays a central role in the influence of social identification on mental health outcomes. Social support thus enhances workers’ ability and confidence to deal with future challenges and stressors (Underwood, 2000).

Work-team identification has been shown to have a series of positive consequences including increased commitment (Gautam et al., 2004) or reduced turnover (Edwards & Peccei, 2010). The more individuals identify with their work team, the less stress they feel (e.g., Steffens et al., 2014). These findings are also valid for burnout. Through a longitudinal study, Haslam, Jetten, and Waghorn (2009) found that work-team identification had a positive long-term impact on the well-being of individuals and ultimately protected them from burnout during challenging work group demands. Moreover, according to McKimmie et al. (2020), during “non-routine” stress (e.g., a workplace fire), the feeling of identification is all the more important to face this ordeal.

Although identification has often been associated with reduced stress and burnout, few authors have addressed this issue during a health crisis. To our knowledge, only one study addresses this topic at the beginning of the COVID-19 health crisis, from April to June 2020. Based on a sample composed of US frontline workers in an emergency department, Sangal et al. (2020) pointed out that work-team identification helped frontline workers to alleviate feelings of stress and burnout. The authors also confirmed these results through a prospective longitudinal perspective, with a group of frontline workers they followed over

time.

The study conducted by Sangal et al. examined the effect of identification on stress and burnout in the time of COVID. However, it took place shortly (i.e., 6 months) after the onset of the crisis. The current study looks at this same relationship but in a different time frame, i.e., one year after the onset of COVID-19. Therefore, in this context of prolonged COVID-19, work-team identification could further reduce the effect of stress and burnout. To contribute to the literature on this subject, this study aims to investigate the impact of work-team identification on stress and burnout one year after the onset of the COVID-19 pandemic.

Based on the aforementioned, we hypothesized that:

H1: Work-team identification decreases stress.

H2: Work-team identification decreases burnout.

3. Materials and Methods

Data were collected through an online survey disseminated via different platforms such as social and professional networks. The link to the online questionnaire was posted along with a description of the research explaining the purpose of the study and emphasizing the confidentiality of the responses (anonymous participation). Prior to launching the survey, the present study and its design were presented for approval to the researchers' university faculty of psychology ethics committee. The ethics committee's final decision was positive suggesting that the present study fulfilled all the ethical rules regarding the methodological design. This survey was shared from the end of January to the end of April 2021. The exclusion criteria for this study were being under the age of majority and not having a proximity manager/team leader. The sample of this study was composed of a population of Belgian adult workers who were supervised by a proximity manager or a team leader. One hundred and ten completed the questionnaire in full and were eligible (Table 1 and Table 2).

Table 1. Demographic characteristics of the respondents.

	Variable	N	%
Gender	Women	68	61.8
	Men	42	38.2
Age	18 - 29 years old	29	26.4
	30 - 49 years old	37	33.6
	50 years old and older	44	40.0
Education	Secondary school	28	25.5
	Bachelor's degree	43	39.1
	Master's degree	33	30.0
	Doctorate	0	0.0
	Others	6	5.5

Table 2. Characteristics of the respondents' work.

	Variable	N	%
Contract	Fixed term contract	14	12.7
	Open-ended contract	86	78.2
	Interim	4	3.6
	Other	6	5.5
Job tenure	Less than 5 years	44	40.0
	Between 5 and 10 years	15	13.6
	Between 11 and 15 years	11	10.0
	Between 16 and 20 years	11	10.0
	Between 21 and 25 years	6	5.5
	Between 26 and 30 years	6	5.5
	More than 30 years	17	15.5
Work time	Part time	29	26.4
	Full time	77	70.0
	Other	4	3.6
Number of work-team members	Less than 3 members	9	8.2
	3 to 6 members	21	19.1
	7 to 9 members	17	15.5
	10 to 12 members	12	10.9
	13 to 15 members	9	8.2
	More than 15 members	42	38.2

3.1. Measures

The online questionnaire included several parts detailed below. For all questionnaires, we used original French versions (see Appendix for the overall questionnaire).

Sociodemographic variables. Sociodemographic variables were questioned, including gender, age, level of education, type of contract, status, working hours, job seniority, number of team members, and manager presence in the workplace.

Stress. This dimension was measured using the Negative Occupational State Inventory subscale (NOSI) developed by Barbier et al. (2012). This subscale comprises eleven items (e.g., "I feel demoralized by my work") assessed on a 4-point Likert scale, ranging from 1 (Never) to 4 (Always). Cronbach's alpha was 0.89.

Burnout. The Oldenburg Burnout Inventory (OLBI) is a 16-item questionnaire designed to assess burnout through its dimensions of disengagement (e.g., "I frequently talk about my work in a negative way") and exhaustion (e.g., "After

my work, I regularly feel worn out and weary”) (Demerouti et al., 2003). Responses to this questionnaire were provided using a 4-point Likert scale, ranging from 1 (Strongly Disagree) to 4 (Strongly Agree). Cronbach’s alpha was 0.78 for disengagement and 0.85 for exhaustion.

Work-team Identification. An adapted version of the “Six Item Measure of OID” questionnaire proposed by Mael and Ashforth (1992) was used. In particular, the word “organization” was replaced with the word “team” (e.g., “When someone criticizes my team, it feels like a personal insult”). Responses to this questionnaire were provided using a 5-point Likert scale, ranging from 1 (Totally disagree) to 5 (Totally agree). Cronbach’s alpha was 0.83.

3.2. Statistical Analysis

Statistical analyses were performed using SPSS26.0 software (SPSS Inc., 2019). The alpha threshold of 0.05 was used for all analyses.

Pearson correlations were performed between work-team identification, stress, disengagement and exhaustion. A correlation below .10 suggests a negligible association, between 0.10 and 0.30, the effect size is medium, while a value above 0.50 indicates a large effect size.

We conducted 3 hierarchical regressions to explain stress, disengagement and exhaustion. The first block included the sociodemographic variables of gender, age, and education. The second block included the professional sociodemographic variables, namely status, seniority, working time, type of contract, number of members on the work team and the presence of the manager in the workplace. Finally, the last block was composed by work-team identification.

4. Results

Table 3 displays the means, SDs and correlations for work-team identification, stress, disengagement, and exhaustion. On average, participants were identified with their work-team ($M = 3.81$, $SD = 0.77$, range = 1 - 5). They sometimes felt strained by their job ($M = 1.89$, $SD = 0.49$, range = 1 - 4). Participants showed mean levels of disengagement ($M = 2.19$, $SD = 0.55$, range = 1 - 4) and exhaustion ($M = 2.23$, $SD = 0.58$, range = 1 - 4).

Table 3. Means, SDs and intercorrelations among work-team identification, stress, disengagement and exhaustion.

Variable	M	SD	1	2	3	4
1. Work-team identification	3.81	0.77	(0.83)	0.02	-0.24*	-0.11
2. Stress	1.89	0.49		(0.89)	0.61**	0.77**
3. Disengagement	2.19	0.55			(0.78)	0.65**
4. Exhaustion	2.23	0.58				(0.85)

Note. $N = 110$. $M =$ mean, $SD =$ standard deviation. * $p < 0.05$. ** $p < 0.001$. Cronbach’s alphas are provided on the diagonal.

Work-team identification is negatively and moderately correlated with disengagement ($r = -0.24, p < 0.05$). Stress is positively and strongly correlated with disengagement ($r = 0.61, p < 0.001$) and with exhaustion ($r = 0.77, p < 0.001$). Disengagement is positively and strongly correlated with exhaustion ($r = 0.65, p < 0.001$). We found no significant correlation between work-team identification, stress and exhaustion (respectively, $r = 0.02, NS; r = -0.11, NS$).

Results of the hierarchical multiple regression indicate that work-team identification explains negatively disengagement ($\beta = -0.26, p = 0.008$) beyond the variability explained by the sociodemographic and professional variables. No significant effects were observed for stress and exhaustion (Table 4 and Table 5).

5. Discussion

The purpose of this study was to see the extent to which work-team identification had an impact on stress and burnout one year after the onset of the COVID-19 health crisis. Only one of our hypotheses was partially confirmed in our study (H2). Indeed, our findings indicate that the more individual identifies with his/her work team, the less he/she will be disengaged in his/her work. These results are consistent with some previous research (e.g., Sangal et al., 2020). Contrary to what was expected, no significant relationship was found between work-team identification and exhaustion, or stress.

Table 4. Hierarchical regression on stress, disengagement and exhaustion.

	Block	R ²	ΔR ²	F	<i>p</i>
Stress	1. sociodemographic variable	0.02	0.02	F (3, 106) = 0.64	0.59
	2. professional variable	0.11	0.09	F (5, 101) = 2.12	0.07
	3. work-team identification	0.11	0.00	F (1, 100) = 0.14	0.71
Disengagement	1. sociodemographic variable	0.01	0.01	F (3, 106) = 0.43	0.73
	2. professional variables	0.10	0.09	F (5, 101) = 2.00	0.08
	3. work-team identification*	0.16	0.06	F (1, 100) = 7.42	0.008
Exhaustion	1. sociodemographic variable	0.03	0.03	F (3, 106) = 0.92	0.44
	2. professional variables	0.09	0.07	F (5, 101) = 1.45	0.21
	3. work-team identification	0.10	0.01	F (1, 100) = 0.55	0.46

Note. * $p < 0.001$.

Table 5. Regression on disengagement.

Variables	Standardized Coefficients	Sig.
Gender	-0.15	0.13
Age	-0.04	0.76
Education	0.06	0.51
Contract	0.03	0.76
Job tenure	-0.01	0.98
Work time	-0.12	0.25
Number of work-team members	-0.06	0.53
Work-team identification*	-0.26	0.008

Note. * $p < 0.001$.

Concerning our first hypothesis, work-team identification has no significant effect on stress, a result opposed to those revealed by [Sangal et al. \(2020\)](#). In attempting to explain this unexpected result, it is essential to resituate this present study in time. It was conducted in early 2021, more than one year after the onset of the COVID-19 pandemic and the resulting restrictions. This delay may in part explain that individuals are no longer in an acute stress phase and have by this point deployed effective coping strategies to deal with the threat ([Dewe et al., 2010](#)). Indeed, during organizational changes, an acute effect on mental health is observed in the short term and tends to disappear or normalize over time ([Dahl, 2011](#)). In addition, the nature and number of COVID-19 stressors have changed over time, with a marked decrease in the number of stressors ([Landau et al., 2022](#)). Another possible explanation could be that, by identifying with their team, workers can count on the social support of other team members, leading them to perceive that they are better able to cope successfully with challenges and stressors because they can count on and mobilize collective action ([Lorenzo, Schuh, Fraccaroli, & van Dick, 2015](#)). In the long term, this collective effectiveness may limit the stressful impact of life's challenges.

Concerning our second hypothesis, work-team identification reveals an effect only on the disengagement dimension of burnout, whereas it is non-significant on the exhaustion dimension. Some authors have highlighted that there may be a longitudinal causal relationship between the different components of burnout ([Rogala et al., 2016](#)). [Leiter and Maslach \(1988\)](#) and [Lee and Ashforth \(1993\)](#) agree that burnout begins with emotional exhaustion and ends with disengagement, results replicated by [Rogala et al. \(2016\)](#). A high level of emotional exhaustion leads to a decrease in self-esteem and leads to disengagement approximately 6 months later ([Rogala et al., 2016](#)). Therefore, the hypothesis partially confirmed in the present study could be explained by this observed shift in the components of burnout. Following the logic of the results obtained in the literature, the individuals in our sample could be in the disengagement stage and have gone through a prior exhaustion phase. A study conducted by [Meyer et al. \(2021\)](#) indicates that strict lockdown conditions further affect the exhaustion of women, who must telecommute and take on an additional domestic burden. Because our study took place several months after the lockdown, this could explain the fact that we found significant effect of identification on work disengagement rather than on exhaustion.

From a practical point of view, our study shows that it is important for employees to feel identified with their work team to reduce disengagement. The proximity manager has an important role to play in this identification process, especially during times of organizational change ([Buick et al., 2018](#)). Indeed, due to their central position within organizations, they are agents of communication, connection, and change ([Callari et al., 2019](#)), as well as essential references for the management of daily organizational life ([He & Brown, 2013](#)). From then on, behaviors of these managers have an impact on how employees identify with

their organization (He & Brown, 2013). The link between leadership and work-team identification has been widely validated in the past (e.g., Haslam & Ellemers, 2011; He & Brown, 2013), pointing to transformational leadership as the most suitable. This leadership style is characterized by individual recognition, intellectual stimulation, and charisma and motivation through inspiration (Bass & Avolio, 1994). A proximity manager who allows a certain amount of autonomy and who allows his/her collaborators to make decisive actions increases work-team identification (Edwards & Peccei, 2010). A study conducted during the health crisis on a sample of University Professors in Jakarta (Indonesia) indicated that transformational leadership had a positive and significant impact on job satisfaction, while transactional leadership did not reveal a significant effect (Azizaha et al., 2020). Given these elements, it is necessary to make managers aware of their role in supporting and regulating the team, which are essential skills in the process of motivating, involving and identifying a team. This means that these managers must listen, be attentive to fairness and keep regular contact with their employees. In that sense, Yarker et al. (2008) have established a reference framework of competences that managers should apply to promote the well-being of their employees such as, being present to ensure regulation within the team, communicating on collective work and on individual aspects, supporting organizational changes or developing autonomy within the team (Yarker et al., 2008). According to several authors (e.g., Fuller, Hester, Barnett, Frey, Reylea, & Beu, 2006; Tyler & Blader, 2000, 2003), another way to increase work-team identification is to foster factors catering individuals' need to belong and factors that make them proud to belong to the group. It therefore involves, for example, to promote respectful treatment within the group; promote trust within the group, notably through transparent and open communication; to encourage support from group members; or to reinforce the group's prestigious image.

The interpretation of the results of this study must take certain limitations into account. First, we used self-reported measures that are therefore subject to the subjectivity of each participant, with a potential desirability effect that may have caused respondents not to answer completely honestly. Second, our results come from a relatively small sample size, which does not allow generalizable conclusions to be drawn. Then, since this survey was open to the general population, we have no information concerning the sector of activity or the environment in which participants work, which makes the results not very specific and not generalizable. Finally, the cross-sectional design of this study does not allow us to have long-term information and to compare the situation before, during and after the COVID-19 pandemic. Nevertheless, results of the Harman single-factor test indicated that the common method bias was not a major threat.

Future research could replicate this study through longitudinal measures as well as with samples of workers from identifiable distinct sectors. This would make it possible to compare the different samples with each other and to propose targeted interventions according to the course of the crisis. Although COVID-19 seems to be behind us at this point, there is a need to learn from it and transfer

the learning to the professional world to come.

Conflicts of Interest

The authors declare no conflicts of interest regarding the publication of this paper.

References

- Al Maqbali, M., Al Sinani, M., & Al-Lenjawi, B. (2021). Prevalence of Stress, Depression, Anxiety and Sleep Disturbance among Nurses during the COVID-19 Pandemic: A Systematic Review and Meta-Analysis. *Journal of Psychosomatic Research*, *141*, Article ID: 110343. <https://doi.org/10.1016/j.jpsychores.2020.110343>
- Allen, T. D., Merlo, K., Lawrence, R. C., Slutsky, J., & Gray, C. E. (2021). Boundary Management and Work Nonwork Balance While Working from Home. *Applied Psychology*, *70*, 60-84. <https://doi.org/10.1111/apps.12300>
- Ashforth, B. E., & Mael, F. (1989). Social Identity Theory and the Organization. *Academy of Management Review*, *14*, 20-39. <https://doi.org/10.5465/amr.1989.4278999>
- Azizaha, Y. N., Rijalb, M. K., Romainurc, U. N. R., Pranajayae, S. A., Ngiuf, Z., Mufidg, A., & Maui, D. H. (2020). Transformational or Transactional Leadership Style: Which Affects Work Satisfaction and Performance of Islamic University Lecturers during COVID-19 Pandemic. *Systematic Reviews in Pharmacy*, *11*, 577-588. <https://doi:10.31838/srp.2020.7.82>
- Barbier, M., Monseur, C., Bertrand, F., & Hansez, I. (2012). Measuring Positive and Negative Occupational States at Work: A Structural and Differential Item Functioning Analysis. *Psychologica Belgica*, *52*, 3-17. <https://doi.org/10.5334/pb-52-1-3>
- Bass, B. M., & Avolio, B. J. (1994). Transformational Leadership and Organizational Culture. *The International Journal of Public Administration*, *17*, 541-554.
- Bolisani, E., Scarso, E., Ipsen, C., Kirchner, K., & Hansen, J. P. (2020). Working from Home during COVID-19 Pandemic: Lessons Learned and Issues. *Management & Marketing. Challenges for the Knowledge Society*, *15*, 458-476. <https://doi.org/10.2478/mmcks-2020-0027>
- Buick, F., Blackman, D., & Johnson, S. (2018). Enabling Middle Managers as Change Agents: Why Organisational Support Needs to Change. *Australian Journal of Public Administration*, *77*, 222-235. <https://doi.org/10.1111/1467-8500.12293>
- Callari, T. C., Bieder, C., & Kirwan, B. (2019). What Is It like for a Middle Manager to Take Safety into Account? Practices and Challenges. *Safety Science*, *113*, 19-29. <https://doi.org/10.1016/j.ssci.2018.10.025>
- Carillo, K., Cachat-Rosset, G., Marsan, J., Saba, T., & Klarsfeld, A. (2021). Adjusting to Epidemic-Induced Telework: Empirical Insights from Teleworkers in France. *European Journal of Information Systems*, *30*, 69-88. <https://doi.org/10.1080/0960085X.2020.1829512>
- Colligan, T. W., & Higgins, E. M. (2006). Workplace Stress: Etiology and Consequences. *Journal of Workplace Behavioral Health*, *21*, 89-97. https://doi.org/10.1300/J490v21n02_07
- Dahl, M. S. (2011). Organizational Change and Employee Stress. *Management Science*, *57*, 240-256. <https://doi.org/10.1287/mnsc.1100.1273>
- Demerouti, E., Bakker, A. B., Vardakou, I., & Kantas, A. (2003). The Convergent Validity of Two Burnout Instruments: A Multitrait-Multimethod Analysis. *European Journal of*

Psychological Assessment, 19, 12-23.

- Dewe, P. J., O'Driscoll, M. P., & Cooper, C. L. (2010). *Coping with Work Stress: A Review and Critique*. Wiley-Blackwell. <https://doi.org/10.1002/9780470711712>
- Edwards, M. R., & Pececi, R. (2010). Perceived Organizational Support, Organizational Identification, and Employee Outcomes. *Journal of Personnel Psychology*, 9, 17-26. <https://doi.org/10.1027/1866-5888/a000007>
- Franklin, P., & Gkiouleka, A. (2021). A Scoping Review of Psychosocial Risks to Health Workers during the Covid-19 Pandemic. *International Journal of Environmental Research and Public Health*, 18, Article No. 2453. <https://doi.org/10.3390/ijerph18052453>
- Fuller, J. B., Hester, K., Barnett, T., Frey, L., Relyea, C., & Beu, D. (2006). Perceived External Prestige and Internal Respect: New Insights into the Organizational Identification Process. *Human Relations*, 59, 815-846. <https://doi.org/10.1177/0018726706067148>
- Gautam, T., Van Dick, R., & Wagner, U. (2004). Organizational Identification and Organizational Commitment: Distinct Aspects of Two Related Concepts. *Asian Journal of Social Psychology*, 7, 301-315. <https://doi.org/10.1111/j.1467-839X.2004.00150.x>
- Gundlach, M., Zivnuska, S., & Stoner, J. (2006). Understanding the Relationship between Individualism-Collectivism and Team Performance through an Integration of Social Identity Theory and the Social Relations Model. *Human Relations*, 59, 1603-1632. <https://doi.org/10.1177/0018726706073193>
- Haslam, S. A., & Ellemers, N. (2011). Identity Processes in Organizations. In *Handbook of Identity Theory and Research* (pp. 715-744). Springer. https://doi.org/10.1007/978-1-4419-7988-9_30
- Haslam, S. A., Jetten, J., & Waghorn, C. (2009). Social Identification, Stress and Citizenship in Teams: A Five Phase Longitudinal Study. *Stress and Health: Journal of the International Society for the Investigation of Stress*, 25, 21-30. <https://doi.org/10.1002/smi.1221>
- He, H., & Brown, A. D. (2013). Organisational Identity and Organisational Identification: A Review of the Literature and Suggestions for Future Research. *Group and Organisation Management*, 38, 3-35. <https://doi.org/10.1177/1059601112473815>
- Hoseinabadi, T. S., Kakhki, S., Teimori, G., & Nayyeri, S. (2020). Burnout and Its Influencing Factors between Frontline Nurses and Nurses from Other Wards during the Outbreak of Coronavirus Disease-COVID-19-in Iran. *Investigacion y Educacion en Enfermeria*, 38, e3. <https://doi.org/10.17533/udea.iee.v38n2e03>
- Jamal, M. T., Anwar, I., Khan, N. A., & Saleem, I. (2021). Work during COVID-19: Assessing the Influence of Job Demands and Resources on Practical and Psychological Outcomes for Employees. *Asia-Pacific Journal of Business Administration*, 13, 293-319. <https://doi.org/10.1108/APJBA-05-2020-0149>
- Kumar, P., Kumar, N., Aggarwal, P., & Yeap, J. A. (2021). Working in Lockdown: The Relationship between COVID-19 Induced Work Stressors, Job Performance, Distress, and Life Satisfaction. *Current Psychology*, 40, 6308-6323. <https://doi.org/10.1007/s12144-021-01567-0>
- Landau, S. I., Mavroudis, C., Brooks, E., Bergmark, R., Berlin, N. L., Lancaster, E., Waljee, J., Wick, E., Yeo, H., Wirtalla, C., & Kelz, R. R. (2022). Longitudinal Evaluation of the Surgical Workforce Experience during the COVID-19 Pandemic. *American Journal of Surgery*, 224, 1199-1206. <https://doi.org/10.1016/j.amjsurg.2022.04.015>
- Lee, R. T., & Ashforth, B. E. (1993). A Longitudinal Study of Burnout among Supervisors and Managers: Comparisons between the Leiter and Maslach (1988) and Golembiewski et al. (1986) Models. *Organizational Behavior and Human Decision Processes*, 54,

- 369-398. <https://doi.org/10.1006/obhd.1993.1016>
- Leiter, M. P., & Maslach, C. (1988). The Impact of Interpersonal Environment on Burnout and Organizational Commitment. *Journal of Organizational Behavior*, 9, 297-308. <https://doi.org/10.1002/job.4030090402>
- Levine, R. M., Prosser, A., Evans, D., & Reicher, S. D. (2005). Identity and Emergency Intervention: How Social Group Membership and Inclusiveness of Group Boundaries Shape Helping Behavior. *Personality and Social Psychology Bulletin*, 31, 443-453. <https://doi.org/10.1177/0146167204271651>
- Lorenzo A., Schuh, S., Fraccaroli, F., & van Dick, R. (2015). Why Does Organizational Identification Relate to Reduced Employee Burnout? The Mediating Influence of Social Support and Collective Efficacy. *Work & Stress*, 29, 1-10, <https://doi.org/10.1080/02678373.2015.1004225>
- Mael, F., & Ashforth, B. E. (1992). Alumni and Their Alma Mater: A Partial Test of the Reformulated Model of Organizational Identification. *Journal of Organizational Behavior*, 13, 103-123. <https://doi.org/10.1002/job.4030130202>
- Maslach, C., & Leiter, M. P. (2016). Understanding the Burnout Experience: Recent Research and Its Implications for Psychiatry. *World Psychiatry*, 15, 103-111. <https://doi.org/10.1002/wps.20311>
- Maslach, C., Schaufeli, W. B., & Leiter, M. P. (2001). Job Burnout. *Annual Review of Psychology*, 52, 397-422. <https://doi.org/10.1146/annurev.psych.52.1.397>
- McKimmie, B. M., Butler, T., Chan, E., Rogers, A., & Jimmieson, N. L. (2020). Reducing Stress: Social Support and Group Identification. *Group Processes & Intergroup Relations*, 23, 241-261. <https://doi.org/10.1177/1368430218818733>
- Meyer, B., Zill, A., Dilba, D., Gerlach, R., & Schumann, S. (2021). Employee Psychological Well Being during the COVID 19 Pandemic in Germany: A Longitudinal Study of Demands, Resources, and Exhaustion. *International Journal of Psychology*, 56, 532-550. <https://doi.org/10.1002/ijop.12743>
- Rogala, A., Shoji, K., Luszczynska, A., Kuna, A., Yeager, C., Benight, C. C., & Cieslak, R. (2016). From Exhaustion to Disengagement via Self-Efficacy Change: Findings from Two Longitudinal Studies among Human Services Workers. *Frontiers in Psychology*, 6, Article No. 2032. <https://doi.org/10.3389/fpsyg.2015.02032>
- Salari, N., Hosseinian-Far, A., Jalali, R., Vaisi-Raygani, A., Rasoulpoor, S., Mohammadi, M., & Khaledi-Paveh, B. (2020). Prevalence of Stress, Anxiety, Depression among the General Population during the COVID-19 Pandemic: A Systematic Review and Meta-Analysis. *Globalization and Health*, 16, Article No. 57. <https://doi.org/10.1186/s12992-020-00589-w>
- Sangal, R. B., Wrzesniewski, A., DiBenigno, J., Reid, E., Ulrich, A., Liebhardt, B., & King, M. (2020). Work Team Identification Associated with Less Stress and Burnout among Frontline Emergency Department Staff amid the COVID-19 Pandemic. *BMJ Leader*, 5, 51-54. <https://doi.org/10.1136/leader-2020-000331>
- Schaufeli, W., & Salanova, M. (2014). Burnout, Boredom and Engagement at the Workplace. In M. Peeters, J. de Jonge, & T. Taris (Eds.), *People at Work: An Introduction to Contemporary Work Psychology* (pp. 293-320). Wiley-Blackwell.
- Spurk, D., & Straub, C. (2020). Flexible Employment Relationships and Careers in Times of the COVID-19 Pandemic. *Journal of Vocational Behavior*, 119, Article ID: 103435. <https://doi.org/10.1016/j.jvb.2020.103435>
- Steffens, N. K., Haslam, S. A., & Reicher, S. D. (2014). Up Close and Personal: Evidence that Shared Social Identity Is a Basis for the “Special” Relationship That Binds Followers to Leaders. *The Leadership Quarterly*, 25, 296-313.

<https://doi.org/10.1016/j.leaqua.2013.08.008>

- Tajfel, H., & Turner, J. C. (1986). The Social Identity Theory of Intergroup Behavior. In S. Worchel, & W. G. Austin (Eds.), *Psychology of Intergroup Relations* (pp. 7-24). Nelson-Hall.
- Tajfel, H., Turner, J. C., Austin, W. G., & Worchel, S. (1979). An Integrative Theory of Intergroup Conflict. In W. G. Austin, & S. Worchel (Eds.), *The Social Psychology of Intergroup Relations* (pp. 33-37). Brooks/Cole.
- Tyler, T. R., & Blader, S. L. (2000). *Cooperation in Groups: Procedural Justice, Social Identity and Behavioral Engagement*. Psychology Press.
- Tyler, T. R., & Blader, S. L. (2003). The Group Engagement Model: Procedural Justice, Social Identity, and Cooperative Behavior. *Personality and Social Psychology Review*, 7, 349-361. https://doi.org/10.1207/S15327957PSPR0704_07
- Underwood, P. W. (2000). Social Support: The Promise and Reality. In B. H. Rice (Ed.), *Handbook of Stress, Coping, and Health: Implications for Nursing Research, Theory, and Practice* (pp. 367-391). Sage.
- Van Dick, R., & Haslam, S. A. (2012). Stress and Well-Being in the Workplace: Support for Key Propositions from the Social Identity Approach. In J. Jetten, C. Haslam, & S. A. Haslam (Eds.), *The Social Cure: Identity, Health, and Well-Being* (pp. 175-194). Psychology Press.
- Wang, B., Liu, Y., Qian, J., & Parker, S. K. (2021). Achieving Effective Remote Working during the COVID 19 Pandemic: A Work Design Perspective. *Applied Psychology*, 70, 16-59. <https://doi.org/10.1111/apps.12290>
- Yarker, J., Lewis, R., & Donaldson-Feilder, E. (2008). *Management Competencies for Preventing and Reducing Stress at Work: Identifying the Management Behaviours Necessary to Implement the Management Standards: Phase Two*. Health and Safety Executive. <https://www.hse.gov.uk/research/rrpdf/rr553.pdf>
- Zimbardo, P. G., Johnson, R. L., McCann, V., & Carter, C. (2003). *Psychology: Core Concepts*. Allyn and Bacon.

Appendix

Items used to in this study.

- *Work-team Identification* (Mael & Ashforth, 1992)

-
1. When someone criticizes my team, it feels like a personal insult.
 2. I am very interested in what others think about my team.
 3. When I talk about my team, I usually say “we” rather than “they”.
 4. This team’s successes are my successes.
 5. When someone praises my team, it feels like a personal compliment.
 6. If a story in the media criticized my team, I would feel embarrassed.
-

- *Stress* (Barbier et al., 2012)

-
1. I feel I can’t cope with everything I have to do at work.
 2. I feel demoralised by my work.
 3. I work in a rush.
 4. I have insomnia because of my working life.
 5. My work stresses me.
 6. I find my work mentally exhausting.
 7. I suffer from nausea when I’m at work.
 8. I’m tired at work.
 9. I’m nervous at work.
 10. I get easily irritated at work.
 11. I’m worried by my working life.
-

- *Burnout* (Demerouti et al., 2003)

-
1. I always find new and interesting aspects in my work.
 2. There are days when I feel tired before arrive at work.
 3. It happens more and more often than I talk about my work in a negative way.
 4. After work, I tend to need more time than in the past in order to relax and feel better.
 5. I can tolerate the pressure of my work very well.
 6. Lately, I tend to think less at work and do my job almost mechanically.
 7. I find my work to be a positive challenge.
 8. During my work, I often feel emotionally drained.
 9. Over time, one can become disconnected from this type of work.
 10. After working, I have enough energy for my leisure activities.
 11. Sometimes, I feel sickened by my work tasks.
 12. After my work, I usually feel worn out and weary.
 13. This is the only type of work that I can imagine myself doing.
 14. Usually, I can manage the amount of my work well.
 15. I feel more and more engaged in my work.
 16. When I work, I usually feel energized.
-