

The influence of Loneliness, Occupational Stress and Social Support on Psychological Distress among working couples in different locations

Olabimitan, Benjamin Adegboyega; Adenaike, Fausat Abisoye & Lawal, Quadri Ayomide.

^{1,3}Department of Psychology, Faculty of Social Sciences, Lagos State University

²Department of Educational Management, School of Education, Faraba Banta Campus,
University of the Gambia

Abstract

In today's globalized workforce, many dual-career couples live apart due to occupational demands. This study examined the influence of loneliness, occupational stress, and social support on psychological distress among 250 married individuals working in separate locations across Nigeria and The Gambia. Using a cross-sectional survey and data gathered using the general health questionnaire (GHQ-12), Perceived Stress Scale (PSS-10), social support rating scale (SSRS) and UCLA loneliness scale. The authors reported a reliability coefficients ranging from 0.82–0.90(GHQ-12); 0.88, 0.89 and 0.87 respectively for (PSS-10); 0.74–0.91(SSRS);0.74–0.91(UCLA) the study revealed that the three variables jointly explained 12.1% of the variance in psychological distress. Occupational stress had the strongest influence, while loneliness and social support showed weaker individual influence. The findings suggest that loneliness, stress, and limited support networks combine to heighten distress among long-distance couples. Gender differences in overall distress were not statistically significant. This study reveals the psychological susceptibility of geographically separated couples. It advocates for flexible work policies, virtual support systems, and gender-sensitive mental health services that can mediate the impact of separation on distress. By highlighting the combined impact of multiple psycho-social stressors, this research advances a holistic understanding of psychological distress among dual-career couples and offers valuable implications for both clinical practice and organizational policy in an increasingly mobile world.

Keywords: Psychological Distress, Occupational Stress, Loneliness, Social Support, Dual-Career Couples

Introduction

Psychological distress is a multifaceted emotional state encompassing symptoms such as anxiety, depression, and somatic complaints, which negatively affect an individual's mental, emotional, and physical health (Drapeau et al., 2019). It reflects psychological suffering that impairs daily functioning, reduces quality of life, strains relationships, and increases vulnerability to physical illness. For married couples, especially dual-earner households, understanding the contributors to distress is crucial, as balancing work and family often adds to emotional strain. This challenge intensifies when partners are separated by geographical distance for work, where emotional and physical separation heighten isolation and stress.

The dynamics of long-distance relationships are shaped by physical absence, limited communication, and demanding professional

roles. These conditions often lead to emotional deprivation, as partners lose regular face-to-face interactions essential for closeness and mutual support. Consequently, feelings of loneliness, exhaustion, and stress rise, while the pressure to manage careers and relationships simultaneously compounds emotional strain. The lack of immediate support from one's spouse can further trigger anxiety, sadness, and isolation.

Understanding how loneliness, occupational stress, and social support interact is therefore vital in mitigating distress among long-distance couples. Loneliness may magnify the effects of work stress, while inadequate social support can worsen feelings of isolation. Exploring these interconnected factors provides deeper insight into the psychological distress experienced by married couples living and working apart.

Loneliness is the distressing experience that results from a gap between desired and actual social relationships (Cacioppo et al., 2018). Among married couples living apart for work, this discrepancy is often intensified, leading to emotional isolation and increased stress. Loneliness has been linked to poor mental health outcomes such as anxiety and depression (Loades et al., 2020). Studies show consistent associations between loneliness and psychological distress across populations. For instance, Sato et al. (2021) found that loneliness during the COVID-19 pandemic significantly raised odds of psychological distress, while Chen et al. (2023) revealed that loneliness indirectly heightened distress via mobile phone addiction among Chinese students. Similarly, Müller et al. (2023) showed that loneliness remained a key predictor of distress among German student's post-pandemic.

Social support—including emotional, instrumental, and informational help—acts as a crucial buffer against distress (Cohen & Wills, 1985). For long-distance couples, reduced physical contact weakens support systems. Research confirms that stronger social support networks reduce loneliness and psychological distress (Wang et al., 2018). Organizational and supervisor support also alleviate work-family conflict (WFC), a major stressor for dual-earner couples (Garraio et al., 2022). Workplace health support further protects against distress (Ikegami et al., 2023), while partner and family support enhance work-life balance and well-being (Adams & Golsch, 2021; Pavelea et al., 2024; Riski & Ticoalu, 2024). Community interventions and informal childcare provide additional buffers (Shimazu et al., 2023; Rakap & Vural-Batik, 2023).

Studies on long-distance relationships reveal that digital communication strengthens emotional bonds and mitigates isolation. Holtzman et al. (2021) found that frequent texting improved relationship satisfaction, while Holtzman et al. (2023) showed that joint health behaviors among separated partners promote resilience and reduce distress.

Occupational stress is another key factor in distress among geographically separated couples. The WHO (2020) links job stress to higher anxiety, depression, and burnout. Fallahchai et al. (2021) found that occupational stress reduced marital satisfaction and mental health among nurses, while Huffman et al. (2018) observed that open communication about work stress improved couples' mental well-being. Similarly, Wickrama et al. (2022) showed that one partner's work stress can harm the other's physical and marital health, underscoring the interdependence of partners' experiences.

When loneliness, stress, and low social support co-occur, their combined effect amplifies psychological distress. Liu et al. (2016) found that social support moderated the impact of stress, while Taylor et al. (2020) showed that strong support networks promoted resilience under pandemic stress. Workplace loneliness, intensified by job demands and emotional isolation, also predicts distress (Cortese et al., 2023).

Gender differences further shape distress outcomes. Anand et al. (2018) found men in long-distance marriages reported higher relational distress but better physical functioning, whereas Olabimitan (2021) noted higher distress among women traders. Behler et al. (2018) revealed women are more affected by partners' distress, regardless of partner gender, while Lee and Goldstein (2016) found that women benefit more from emotional support, which buffers loneliness and stress. Together, these findings highlight the complex, interrelated effects of loneliness, social support, occupational stress, and gender on psychological distress among couples living apart.

Love may know no bounds, but distance can test its limits. For married couples living apart due to work commitments, the emotional strain of physical separation is more than just a longing for togetherness, it is a psychological battlefield. Anxiety, depression, and emotional exhaustion creep in as loneliness deepens and occupational stress mounts. The daily absence of a spouse's

support leaves a void that amplifies distress, slowly chipping away at mental well-being and relationship satisfaction. While research confirms that loneliness fuels psychological distress, its intensified impact in long-distance marriages remains largely overlooked. Job-related pressures, compounded by geographical separation, push emotional resilience to the edge, yet the protective role of social support weakens when face-to-face interactions are scarce. Gender also plays a critical role, shaping how men and women experience and cope with this distress differently. Despite the growing prevalence of work-induced long-distance marriages, the intricate web of psycho-social factors driving distress in these relationships remains inadequately understood. Unravelling this complexity is vital—not only for preserving mental health but for fortifying the very bonds that distance threatens to erode.

This study aims to examine the influence of loneliness, occupational stress, social support, and gender in shaping psychological distress among married couples living apart due to work commitments. By identifying key psycho-social predictors of distress in long-distance marriages, the research seeks to provide empirical insights into how these factors influence mental well-being. The findings will contribute to developing targeted interventions and support strategies to enhance relationship stability and psychological resilience among geographically separated spouses. Based on the foregoing, these research questions were raised:

Research Questions

I. To what extent will loneliness, occupational stress, and social support jointly influence psychological distress among married couples working in different geographical locations?

II. Does gender significantly influence psychological distress among couples living apart for occupational reasons?

Research Hypotheses.

I. There will be significant joint and independent influence of loneliness, occupational stress and social support on psychological distress among couples working in different geographical locations.

II. Gender will have a significant influence

on psychological distress among couples working in different geographical locations.

Methodology

Research Design

This study adopted a cross-sectional survey design to explore the influence of loneliness, occupational stress, social support on psychological distress among couples living and working in geographically separate locations. This methodological approach, recognized for its efficiency in capturing the characteristics of a population at a single point in time (Setia, 2016), was ideally suited to examine the interrelations of these psycho-social variables within a diverse sample. The study targeted a total of 250 married individuals who are currently living and working in locations geographically separate from their spouses due to job-related reasons. A purposive sampling technique was employed to ensure that only participants who met the specific inclusion criteria—namely, being legally married and living apart from their partner solely because of occupational commitments—were selected. Data were collected through a combination of online surveys and face-to-face interactions, yielding over 300 initial responses. After screening for eligibility, 250 valid responses were retained for analysis. Participants were drawn from Nigeria and The Gambia over a six-month period. These individuals were either residing in different regions within the same country or across national borders, depending on their job placements. The study explicitly excluded couples who cohabited. This targeted approach ensured that the final sample accurately represented the population of interest: married couples experiencing long-distance living arrangements due to occupational demands.

Instruments

The major instrument used for the study were standardized scales that extracted information from participants in addition to a section on socio-demographic information. The scales used were:

Psychological Distress: Consisted of 12-items of the general health questionnaire (GHQ-12) designed to detect current state mental disturbances developed by Goldberg (1970s). It is a 4-point likert scale ranging from 1 (better

than usual) to 4 (much less than usual). The GHQ-12 has been used in many different studies, among different populations, cultures, and settings, with reliability varying from 0.82 and 0.90 in series of studies (Goldberg, 1978), slightly depending on, who is taking the test, cultural adaptation and language translations and data collection conditions, with high scores indicating poor psychological well-being. For instance, in a cross country study (Chile, Ethiopia, Peru, Thailand and Nigeria) the individual country alpha coefficient values were: Chile 0.86, Ethiopia 0.83, Peru 0.85, Thailand and Nigeria 0.82 respectively.

Social Support: Consisted of 12-items of social support rating scale (SSRS) developed by Xiao (1991) to evaluate three dimensions of social support; subjective support (4 items), objective support (4 items) and support usage (4 items). Higher score indicates stronger social support. The three sub-scale has 4 items each with a 5-point likert scale from strongly disagree (1) to strongly agree (5) and have also established Cronbach alpha of 0.88, 0.89 and 0.87 respectively for each of the sub-scales.

Occupational Stress: Was measured with the Perceived Stress Scale (PSS-10), developed by Cohen et al. (1983), which measures an individual's perception of stress, focusing on how unpredictable, uncontrollable, and overwhelming life feels. It consists of 10 items rated on a 5-point Likert scale (0 = Never to 4 = Very often). Scoring involves summing all items after reverse-scoring Items 4, 5, 7, and 8.

Total scores range from 0 to 40, with higher scores indicating greater perceived stress and lower scores suggesting better coping. The PSS-10 has good internal consistency (Cronbach's alpha = 0.74–0.91) and strong construct validity, correlating with stress, anxiety, and depression. The reliability of the PSS-10 is reported as a range because its internal consistency varies slightly across different populations, languages, and administration contexts, reflecting strong psychometric practice and generalizability across diverse settings. For instance a studies conducted among undergraduate college students in United States of America, general adult population in Germany, University students in Saudi Arabia, dental patients at University of Benin Hospital, Nigeria, and nursing students at a South African university reported a coefficient reliability of 0.89, 0.84, 0.78, 0.85, and 0.93 respectively.

Loneliness: Comprised of 20-items of UCLA loneliness scale developed by Russell, D. et al. (1980), to assess one's subjective feelings of loneliness and social isolation. Items was answered on a 4-point likert scale ranging from 1 (never) to 4 (often). The measure has high internal consistency with a Cronbach alpha coefficient of 0.96.

Results.

Hypothesis I: There will be significant joint and independent influence of loneliness, occupational stress and social support on psychological distress among couples working in different geographical locations.

Table 1: Summary table of multiple regression analysis showing the joint and independent influence of loneliness, occupational stress, social support and psychological distress among couples working in different geographical locations.

Model	R	R ²	F	P	β	T	P
	.348	.121	11.282	<.01			
Loneliness					-.118	-1.691	<.05
occupational stress					-.325	-4.938	<.01
Social Support					.192	2.788	<.05

The result on the above table shows a moderate positive correlation between the independent variables and psychological distress ($R = 0.348$), explaining 12.1% of the variance ($R^2 = 0.121$). The table show is statistically significant joint influence of the independent variables ($F = 11.282$, $p < .01$), suggesting that loneliness, occupational stress, and social support collectively contribute to explaining psychological distress among couples working in different geographical locations. Independently, loneliness has a weak negative effect on psychological distress ($\beta = -0.118$, $p <$

.05), while occupational stress shows a strong negative effect ($\beta = -0.325$, $p < .01$), indicating higher stress is associated with greater distress. Social support, however, has a positive weak effect on psychological distress ($\beta = 0.192$, $p < .05$), meaning that stronger social support is associated with lower distress levels. Therefore, our stated hypothesis is partially accepted.

Hypothesis II: Gender will have a significant influence on psychological distress among couples working in different geographical locations

Table 2: Summary table of independent t-test examining male and female scores on psychological distress among couples working in different geographical locations.

	Gender	N	Mean	Std D.	Df	t-value	Sig
Psychological Distress	Male	180	24.3889	4.93691	248	1.194	>.05
	Female	70	23.5714	4.65808			

The result of the independent t-test above revealed a slight difference in psychological distress between males ($M = 24.39$) and females ($M = 23.57$), with males reporting slightly higher distress. However, the difference was not statistically significant ($t = 1.194$, $p > .05$), indicating that gender does not have a significant influence on psychological distress among couples working in different geographical locations. Therefore, the stated hypothesis is thereby rejected.

Discussion.

The findings of this study provide substantial evidence for the joint and independent influence of loneliness, occupational stress, and social support on psychological distress among couples working in different geographical locations. The current study revealed a joint influence of loneliness, occupational stress, and social support on psychological distress. This result affirms the psychological burden experienced by individuals in long-distance relationships and underscores the intricate interactions among key psycho-social determinants of mental health among geographically separated couples.

The relationships among loneliness, occupational stress, and social support appear to be complex and mutually reinforcing.

Loneliness, characterized by a perceived deficiency in meaningful interpersonal connections, can exacerbate occupational stress by diminishing individuals' emotional capacity to cope with work-related pressures. Conversely, high occupational stress may heighten feelings of loneliness by consuming time and emotional energy that could otherwise be invested in maintaining personal relationships. The absence or inadequacy of social support further intensifies this dynamic, as it limits opportunities for emotional regulation, problem-solving, and validation, creating a feedback loop that amplifies psychological distress. Thus, these variables do not operate in isolation but interact synergistically to elevate the overall risk of psychological distress.

The findings are consistent with previous research emphasizing the compounded effects of psycho-social stressors on mental health. Liu et al. (2016) reported that while stress independently predicts psychological distress, its impact is significantly magnified in the presence of loneliness and mitigated by social support. Similarly, Taylor et al. (2020) found during the COVID-19 pandemic that loneliness and stress were strong predictors of distress, though social support played a crucial buffering

role. This aligns with the stress-buffering hypothesis proposed by Cohen and Wills (1985), which posits that social support moderates the negative psychological effects of stress and loneliness. Cortese et al. (2023) further supported this framework, noting that workplace loneliness often intensified by high job demands and low emotional support leads to greater psychological distress, particularly among employees separated from their spouses.

When examined independently, loneliness showed a weak negative effect on psychological distress, contrary to the robust associations reported in earlier studies (Cacioppo et al., 2018; Loades et al., 2020). This weaker effect may be due to coping strategies developed by long-distance couples, such as maintaining frequent communication, planning visits, or seeking emotional support from peers. Occupational stress, however, demonstrated a strong negative effect, indicating that work-related pressures are a significant contributor to emotional strain. This finding corroborates previous studies (Fallahchai et al., 2021; Cortese et al., 2023; World Health Organization, 2020), which have linked job demands, role conflict, and workload with anxiety, burnout, and reduced well-being. For long-distance couples, balancing demanding careers with relationship maintenance across physical distances exacerbates emotional exhaustion and frustration, heightening psychological distress.

Social support displayed a weak positive effect on psychological distress, suggesting that higher support levels are associated with lower distress, albeit modestly. This aligns with findings from Wang et al. (2018) and Holtzman et al. (2021, 2023), who observed that strong social networks reduce isolation but are less effective in long-distance relationships due to the lack of physical proximity. Although virtual communication can sustain connection, it does not fully replace the emotional benefits of in-person contact, such as hugging, shared meals, or eye contact which provide deeper emotional fulfilment. Consequently, social support in long-distance relationships may function more as a moderator than a direct protective factor (Nguyen et al., 2024).

The study further revealed no statistical difference between the psychological distress reported by both male and female. This finding is

consistent with previous research (Anand et al., 2018; Lee & Goldstein, 2016) that found minimal gender differences in distress among long-distance couples. However, qualitative differences in coping styles were observed. Men tended to externalize distress through behaviours such as smoking, while women were more likely to internalize emotions and seek social or emotional support. Research by Behler et al. (2018) and Nolen-Hoeksema (2012) supports these findings, indicating that women often bear greater emotional labor in maintaining relational harmony, while men experience additional stress related to financial responsibilities and travel demands.

Conclusion.

In view of the growing concern about the psychological well-being of couples living apart due to occupational demands, this study examined the interplay of loneliness, occupational stress, and social support in influencing psychological distress among couples working in different geographical locations. Based on the findings, the following conclusions can be drawn. The results revealed that these psychosocial factors interact in complex ways, with occupational stress emerging as the most prominent influence on psychological distress. Loneliness contributed to distress but appeared more influential when experienced alongside other stressors. Furthermore, social support showed a limited buffering effect. Gender differences in distress were minimal. The study reveals the importance of an integrated approach to understanding psychological distress among geographically separated couples and calls for interventions that address emotional, occupational, and relational challenges in promoting psychological well-being.

Recommendation:

Based on the findings of this study, the following recommendations are proposed to mitigate psychological distress among couples in long-distance relationships due to work commitments:

Promote Flexible Work Arrangements: Offer flexible schedules or remote options to reduce occupational stress and enable more frequent in-person interactions between separated partners.

Strengthen Digital and Social Support Systems: Use virtual tools and online support groups to enhance emotional connection and minimize isolation in long-distance relationships.

Provide Tailored Mental Health Services: Develop counselling and stress management programs targeting the emotional challenges of couples living apart for work.

Encourage Open and Effective Communication: Support regular, honest dialogue through communication training and relationship-building initiatives to manage emotional needs.

Support Gender-Sensitive Interventions: Create coping and support programs that reflect gender differences in stress response and emotional expression.

Promote Community and Peer Support: Facilitate peer networks and community activities that strengthen social ties and emotional support beyond the partner relationship.

Encourage Research and Skill-Building on Coping Mechanisms: Invest in research and training on resilience, emotional regulation, and relationship maintenance to improve well-being.

References

- Adams, A., & Golsch, K. (2021). Gender-specific patterns and determinants of spillover between work and family: The role of partner support in dual-earner couples. *Journal of Family Research*, 33(1), 72–98.
- Akhter, M., & Mahmud, S. (2025). Family support—a critical factor to reduce work stress and facilitate work life balance for female employees of banking sectors in Bangladesh. *International Journal of Latest Technology in Engineering Management & Applied Science*, 13(12), 96–105.
- Anand, P., Hunter, G., & Smith, R. (2018). Long-distance relationships and subjective well-being: Evidence from a population survey. *Journal of Happiness Studies*, 19(3), 639–658.
- Behler, R. L., Donnelly, R., & Umberson, D. (2018). Psychological distress transmission in same-sex and different-sex marriages. *Journal of Health and Social Behavior*, 59(2), 203–219.
- Cacioppo, J. T., Cacioppo, S., Capitanio, J. P., & Cole, S. W. (2018). The neuroendocrinology of social isolation. *Annual Review of Psychology*, 69, 733–767.
- Chen, I. H., Yu, S., & Chen, C. Y. (2023). Loneliness and psychological distress among Chinese college students: The roles of mobile phone addiction and core self-evaluation. *Journal of Affective Disorders*, 319, 540–547.
- Cohen, S., & Wills, T. A. (1985). Stress, social support, and the buffering hypothesis. *Psychological Bulletin*, 98(2), 310–357.
- Cohen, S., Kamarck, T., & Mermelstein, R. (1983). A global measure of perceived stress. *Journal of Health and Social Behavior*, 24(4), 385–396.
- Cortese, C. G., Ghislieri, C., & Molino, M. (2023). Workplace loneliness and mental health: A systematic review. *Occupational Medicine*, 73(1), 5–12.
- Drapeau, A., Marchand, A., & Beaulieu-Prévost, D. (2019). *Epidemiology of psychological distress*. In L. L'Abate (Ed.), *Mental illnesses: Understanding, prediction and control* (pp. 105–134).
- Fallahchai, R., Fallahi, M., & Pouraboli, B. (2021). The relationship between occupational stress and marital satisfaction with mental health among nurses. *Journal of Education and Health Promotion*, 10, 81.
- Garraio, C., Barradas, M. I., & Matias, M. (2022). Organisational and supervisor support links to psychological detachment from work: Mediating effect of work-family conflict on dual-earner couples. *Applied Research in Quality of Life*, 18(2), 957–974.
- Goldberg, D. P. (1978). *Manual of the General Health Questionnaire*. NFER Publishing.
- Holtzman, M., Ewell, P., & Farkas, C. (2021). Texting your way to satisfaction: The role of digital communication in long-distance relationships. *Cyberpsychology, Behavior, and Social Networking*, 24(5), 328–333.
- Holtzman, M., Ewell, P., Farkas, C., & Walters, K. (2023). Health behaviors and relational

- maintenance in long-distance romantic relationships. *Journal of Social and Personal Relationships*, 40(2), 562–580.
- Huffman, A. H., Culbertson, S. S., Henning, J. B., & Goh, A. (2018). Work-family conflict and health outcomes: A dyadic analysis of working couples. *Journal of Occupational Health Psychology*, 23(2), 261–272.
- Hutten, E., Jongen, E. M. M., Vancleef, L. M. G., & Engelhard, I. M. (2021). The associations between loneliness, social support, and psychological symptoms during the COVID-19 pandemic: A longitudinal study. *International Journal of Environmental Research and Public Health*, 18(22), 12065.
- Ikegami, K., Ando, H., Kurogi, K., & Ogami, A. (2023). Perceived workplace health support and severe psychological distress among Japanese workers. *Journal of Occupational & Environmental Medicine*, 65(12), 992–997.
- Lee, M. Y., & Goldstein, S. E. (2016). Loneliness, stress, and social support in young adulthood: Does the source of support matter? *Journal of Youth and Adolescence*, 45(3), 568–580.
- Liu, L., Gou, Z., & Zuo, J. (2016). Social support mediates loneliness and depression in college students. *Journal of Health Psychology*, 21(5), 677–683.
- Loades, M. E., Chatburn, E., Higson-Sweeney, N., Reynolds, S., Shafran, R., Brigden, A., ... & Crawley, E. (2020). Rapid systematic review: The impact of social isolation and loneliness on the mental health of children and adolescents in the context of COVID-19. *Journal of the American Academy of Child and Adolescent Psychiatry*, 59(11), 1218–1239.e3.
- Müller, M., Heinschink, C., & Egger, J. W. (2023). Loneliness and psychological distress among university students after the COVID-19 pandemic in Germany. *Frontiers in Public Health*, 11, 1173812.
- Nolen-Hoeksema, S. (2012). *Emotion regulation and psychopathology: The role of gender*. *Annual Review of Clinical Psychology*, 8, 161–187.
- Olabimitan, B.A. (2021). Financial Distress, Sexual Satisfaction and Gender as predictors of Marital Distress Among Married Traders in Lagos State.” *African Journal for Psychological Study of Social Issues*. 4(2): 61-76.
- Pavelea, A. M., Matysiak, A., & Kurowska, A. (2024). *Presence of Supportive Social Networks, Demanding Working Time Schedules and Work-Life Balance*. <https://doi.org/10.31235/osf.io/s3wum>
- Rakap, S., & Vural-Batik, M. (2023). Mitigating the impact of family burden on psychological health in parents of children with special needs: Buffering effects of resilience and Social Support. *Journal of Applied Research in Intellectual Disabilities*, 37(1).
- Riski, N., & Ticoalu, Y. B. (2024). Work-family conflict, social support, psychological well-being, Dan Emotional Fatigue Pada Wanita Pekerja. *Academy of Education Journal*, 15(1), 886–894.
- Russell, D., Peplau, L. A., & Cutrona, C. E. (1980). The revised UCLA Loneliness Scale: Concurrent and discriminant validity evidence. *Journal of Personality and Social Psychology*, 39(3), 472–480. <https://doi.org/10.1037/0022-3514.39.3.472>
- Sato, K., Fushimi, M., & Saito, T. (2021). The relationship between loneliness and psychological distress among the general population in Japan during the COVID-19 pandemic: A cross-sectional analysis. *BMC Psychiatry*, 21, 356.
- Setia, M. S. (2016). Methodology series module 3: Cross-sectional studies. *Indian Journal of Dermatology*, 61(3), 261–264.
- Shimazu, A., Fujiwara, T., Iwata, N., Kato, Y., Kawakami, N., Maegawa, N., Nakao, M., Nomiyama, T., Takahashi, M., Tayama, J., Watai, I., Arima, M., Hasegawa, T., Matsudaira, K., Matsuyama, Y., Miyazawa, Y., Shimada, K., Takahashi, M., Watanabe, M., ... Tokita, M. (2023). Effects of work–family life support program on the work–family interface and mental health among Japanese dual-earner couples with a preschool child: A randomized controlled trial. *Journal of Occupational Health*, 65(1).
- Taylor, S., Landry, C. A., Paluszec, M. M., Fergus, T. A., McKay, D., & Asmundson, G. J. G. (2020). Development and initial

validation of the COVID Stress Scales. *Journal of Anxiety Disorders*, 72, 102232.

Wang, J., Mann, F., Lloyd-Evans, B., Ma, R., & Johnson, S. (2018). Associations between loneliness and perceived social support and outcomes of mental health problems: A systematic review. *BMC Psychiatry*, 18, 156.

Wickrama, K. A. S., O'Neal, C. W., & Lee, T. K.

(2022). Work stress and health among middle-aged couples: A dyadic analysis of spousal influence processes. *Journal of Family Psychology*, 36(1), 59–70.

Xiao, S. Y. (1991). The theoretical basis and research application of the Social Support Rating Scale. *Journal of Clinical Psychiatry*, 4(2), 98–100.