Title: Gender, work-family conflict and depressive symptoms during the COVID-19 pandemic among Quebec graduate students

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Conflict of interests

The authors have no conflict of interest to declare

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Abstract

Objective: The increasing mental health inequalities between women and men resulting from the COVID-19 crisis represents a major public health concern. Public health measures to mitigate the pandemic could severely impact populations with high prevalence of mental health problems such as graduate students. This study aims to document the gendered experience of the lockdown and its association with depressive symptoms among graduate students in Quebec. We contrast two hypotheses: whether inequalities in depressive symptoms between women and men could be explained by their differential exposure or their differential vulnerability to work, family and study conditions, taking into account the mediating role of work interfering with family (WIF) and family interfering with work (FIW). Method: A path analysis was used to test our hypotheses using a sample of 1,790 graduate students from three universities in Quebec. Results: The results support more the exposure hypothesis. Women were more worried about COVID-19 and reported more stress regarding new teaching methods, which were themselves associated with more depressive symptoms. New teaching method methods were also indirectly associated with more depressive symptoms among women through more WIF. In turn, men experienced more FIW and reported less emotional support, both being associated with more depressive symptoms. Regarding the vulnerability hypothesis, the unique difference was that having children was associated with significantly more depressive symptoms among women compared to men through more FIW. Conclusion: The policy measures taken after the COVID-19 were not gender-neutral. This study demonstrates the importance of taking gendered effects of policies

into consideration, and points to mitigating actions that can forestall the exacerbation of gendered inequalities in mental health.

Résumé

Objectif: L'augmentation des inégalités de santé mentale entre les femmes et les hommes résultant de la crise de la COVID-19 représente un enjeu majeur de santé publique. Les mesures prises pour endiguer la pandémie ont un impact important sur les populations les plus à risques de présenter des problèmes de santé mentale dont les étudiants aux cycles supérieurs. Cette étude vise à documenter l'expérience du confinement sur les symptômes dépressifs parmi les étudiants universitaires diplômés du Québec. Il évalue comment les inégalités de symptômes dépressifs entre les femmes et les hommes pourraient s'expliquer par leur exposition et leur vulnérabilité différentielles aux conditions de travail, de famille et d'études, ainsi que par le rôle médiateur du travail interférant avec la famille (TIF) et de la famille interférant avec le travail (FIT). Méthode: Une analyse de cheminement a été utilisée pour tester les hypothèses d'exposition et de vulnérabilité à partir d'un échantillon de 1 790 étudiants diplômés de trois universités de la province de Québec. Résultats: Les résultats confirment davantage l'hypothèse d'exposition. Les femmes étaient plus préoccupées par le COVID-19 et ont signalé plus de stress concernant les nouvelles méthodes d'enseignement qui étaient directement associées à plus de symptômes dépressifs. Ces méthodes étaient aussi indirectement liées à plus de symptômes dépressifs parmi les femmes via plus de TIF. En revanche, les hommes éprouvent plus de FIT et ont moins de soutien émotionnel ce qui est associé à plus de symptômes dépressifs. Quant à l'hypothèse de vulnérabilité, l’association indirecte d’avoir des enfants avec plus de symptômes dépressifs à travers plus de FIT est

significativement plus élevé parmi les femmes que parmi les hommes. Conclusion: Les politiques publiques déployées en marge de la crise de la COVID-19 ne sont pas neutres face au genre. Cette étude suggère des leviers d'action potentiels afin de mieux rendre compte du genre et des inégalités de santé qui peuvent émerger dans un tel contexte.

Introduction

Since March 2020, the deleterious effects of the COVID-19 pandemic on mental health in the general population has emerged as a policy priority (Mental Health Commission of Canada 2020). Evidence from meta-analyses indeed points to a significant increase in mental health problems prevalence such as psychological distress, depression and anxiety (Luo et al. 2020; Vindegaard and Benros 2020). As such, some subpopulations with an already high prevalence of mental health problems, such as university students, may have been particularly affected by the pandemic (Evans et al. 2018; Sahu 2020).

Considering that COVID-19 containment and mitigation measures will likely be necessary for several months and perhaps even years to come, mental health approaches must also be refined to respond to the needs of this situation. In particular, early findings indicate that the mental health of women and men may be distinctively affected by the pandemic (Luo et al. 2020; Vindegaard and Benros 2020). In Canada, results from a national survey shows that women were more likely than men to report worse mental health since the onset of physical distancing measures; they were also more likely to report symptoms consistent with moderate/severe generalized anxiety disorder and were more concerned about COVID-19 than men (Moyser 2020).

While the issue of equality between women and men was at the forefront of policy priorities in several jurisdictions before the COVID-19 pandemic, the public health measures enacted to contain and mitigate the pandemic were not gender-neutral (Bilodeau & Quesnel-Vallée 2020; Weham, Smith & Morgan 2020). The G7 Advisory

Council on Gender Equality recently called for prioritizing the gender dimensions of the pandemic and preventing a deterioration of equality and women's rights (Women Deliver 2020). In order for public health authorities to efficiently prevent and mitigate inequalities associated with the COVID-19, there is a pressing need to better understand how the construction of gender resulting from the management of the pandemic could have contributed to mental health inequalities. Failing to do so would raise serious doubts about the ability of governments to limit population health inequalities between women and men during and after the COVID-19 pandemic. Considering this gap, this study examines the gendered experience of COVID-19 during the lockdown on depressive symptoms among graduate students in the province of Quebec.

Gender and mental health inequalities in the COVID-19 era

The COVID-19 pandemic shapes the construction of gender and health inequalities through multiple mechanisms (Bilodeau & Quesnel-Vallée 2020). Among others, gender is constructed through a differential exposure to risk (e.g., stressors) and differential access to protective factors (e.g., resources) between women and men. Government-mandated lockdowns have put tremendous pressure on Canadians' work-family conciliation capacity. Indeed, teleworking, home schooling, daycare and workplace closures shaped differently the constraints to which women and men were exposed daily. These could have increased domestic burden, financial difficulties, work-family conflict (WFC) or reduced the working hours more significantly among women, which are important determinants of mental health (Collins et al. 2020; Power 2020).

Gender could also intervene in the difference regarding the intensity of response to stressors and resources between women and men due to the different meaning and importance assigned to their social role. According to Thoits (1991), social roles such as work and family are ordered hierarchically in individuals' identity. She suggested that identity-relevant stressors (stressors that threaten people's important identities) are more detrimental regarding mental health than identity-irrelevant stressors. For example, women's mental health may be more adversely affected than men's when family issues such as problems with a child arise (Bilodeau, Marchand & Demers 2020a).

WFC is a significant gendered determinant of mental health (Bilodeau, Marchand & Demers 2020a; 2020b; Korabik, McElwain, & Chapbell 2008). WFC highlights inter-role conflicts where the pressures from work and family are mutually incompatible (Greenhaus & Beutell 1985). WFC is a bidirectional construct: work may interfere with family (WIF) and family may interfere with work (FIW). Understandably, given the potential gendered nature of stressors that arose out of containment and mitigation measures, many authors have called for the need to document its impact following COVID-19 (e.g., Bilodeau & Quesnel-Vallée 2020; Sinclair et al. 2020; Venkatesh 2020). Yet, as of mid-2020, empirical studies examining mental health consequences of WFC during COVID-19 are still scarce. The only peer-reviewed published empirical study we could identify was conducted in Italy, and found that WFC was a mediator between workload and stress (Molino et al., 2020). However, gender was not addressed in this study.

Although gender is intimately linked to the WFC, there is paradoxically no empirical and theoretical consensus as to whether men or women are more exposed to WIF/FIW (Korabik, McElwain, & Chapbell, 2008; Shockley et al., 2017). Some studies have suggested that this lack of consensus stems from neglecting the gendered antecedents of WIF/FIW (Haines et al. 2019; Korabik, McElwain, & Chapbell 2008). This is particularly relevant in a context where many of these antecedents such as the number of hours worked, financial difficulties and the workload may have been profoundly and unequally disrupted following the pandemic. Thus, WFC could act as a mediator between these gendered stressors and mental health.

In search of work-family balance during COVID-19: The case of Canadian graduate students

The higher education and scientific research sectors were hard hit by lockdown measures in Canada due to COVID-19. Higher education institutions rapidly closed their doors and research activities trickled down to only the most essential for months. The human capital costs of these radical interventions have yet to be fully assessed for the student and scientific community, but some empirical research already points to clear concerns for equality between women and men (Malisch et al. 2020). Notably, the pandemic accelerated the processes of research granting and peer review, likely exacerbating cumulative (dis)advantage between researchers with and without family responsibilities (Molino, 2020). To wit, article submissions, a key metric of success in a research career, has declined markedly among women compared to men (Vincent-Lamarre, Sugimoto & Larivière 2020).

It is likely that graduate students aspiring to an academic career are at increased risks of WFC generally, as they are both seeking to establish research and publication records in a highly competitive environment while also often being in the early stages of family formation (Levecque et al. 2017; Sahu 2020). The unprecedented context created by the COVID-19 confinement and mitigation measures has the potential not only to exacerbate this WFC among graduate students, as well as inequalities between women and men regarding the impact of this stressor on students' mental health. Considering the already high level of mental health problems among university students, WFC during the pandemic could be a major vector of aggravation (Levecque et al. 2017; Robinson et al. 2016). Yet studies on this population during the pandemic remain sparse and rarely consider the implication of gender. This study uniquely contributes to the literature by documenting the influence of the gendered stressors and resources, including WFC, on depressive symptoms through the exposure and vulnerability hypothesis among graduate students from Quebec.

Accordingly, this study seeks to examine the gendered model of mental health presented in Figure 1, which posits that mental health inequalities between women and men result from differences in exposure and vulnerability. According to the *exposure hypothesis*, gender is a social structure that determines stressors and resources based on sex categories. In turn, these stressors and these resources deriving from the work, family and study spheres of life will be associated with the depressive symptoms both directly and indirectly through the WFC stressors. Worrying about COVID-19 seems a gendered

experience (Moyser, 2020). Thus, we postulate that women will report more depressive symptoms due to a greater worry of COVID-19. WFC is also indirectly linked to depressive symptoms by increasing the worry of COVID-19. The *vulnerability hypothesis* posits that women and men differ by the intensity of response to stressors and resources due to the different meaning and importance assigned to their social roles. While exposure tells us that with equal exposure there shouldn't be any difference in mental health between men and women, differential vulnerability tells us the opposite: similar levels of exposure lead to different reactions.

Figure 1 here

Method

The data are drawn from the cross-sectional COVID-19 International Student Well-being Study conducted by an international consortium of researchers studying mental health in lockdown among students from post-secondary institutions in 27 countries (Centre for Population Family and Health 2020). We are limiting this study to the province of Quebec, because it was the only region that fielded a questionnaire on WFC. The online questionnaire (administered through Qualtrics) was distributed by emails to 31,079 students from four participating post-secondary institutions in the province of Quebec (Université McGill, Université Laval, Université du Québec à Chicoutimi and Cégep de Jonquière) between May 7 and May 27, 2020, which is during the period of university closure and the government-declared stay-at-home order. A total of 4,817 students answered the questionnaire. For analytical purposes, we limited our sample to graduate students and postdoctoral researchers (n=2,045) as they are more likely to experience family responsibilities while being involved in research work. After listwise deletion of

missing data, our analytical sample covers 1,790 university graduate students. The project has been approved by the ethics committee of the Faculty of Medicine of McGill University (certificate: A04-B22-20B (20-04-065)).

Measure

Mental health. Depressive symptoms were measured using the CESD-8 items (Van de Velde, Levecque & Bracke 2009). This scale identifies different depressive symptoms over the past two weeks (e.g., felt depressed). Continuous score was derived by summing height items (Alpha = 0.83). Responses were based on a Likert scale (1 = none or almost none of the time 4 = all or almost all the time). Worry about COVID-19 was obtained from summing 5 items (e.g., "How worried are you to get infected by COVID-19?" Alpha = 0.86). Responses are based on a scale from 0 to 10.

Stressors. The number of hours devoted to paid work per week (e.g., hours spent in paid jobs on a weekly basis) and of weekly hours devoted to studies (e.g., offline courses, online courses and personal study on a weekly basis) are continuous variables. Financial strain (e.g., "I had sufficient financial resources to cover my monthly costs"), workload ("My university workload has significantly increased since the COVID-19 outbreak"), stress with teaching methods ("The change in teaching methods resulting from the COVID-19 outbreak has caused me significant stress") were answered using a Likert scale (1= Strongly agree – 5 = Strongly disagree). *Resources.* Emotional support was obtained from the item: "Do you have anyone with whom you can discuss any intimate and personal matters?" (No = 0 – Yes = 1).

WIF and FIW are derived from ten items proposed by Netemeyer, Boles and McMurrian (1996). Five items are used to measure WIF ("The demands of my work interfere with my home and family life," Alpha = 0.92) and five for FIW ("The demands of my family or spouse / partner interferes with work-related activities," Alpha = 0.93). Responses were based on a scale from 0 to 10 (0 = Strongly disagree – 10 = Strongly agree).

Sociodemographic variables include sex categories (Men = 0 - women = 1), age, marital status (Alone = 0 – Couple = 1) and the presence of children living at home (No = 0 – Yes = 1).

Analysis

We performed a path analysis with Mplus 7.1 (Muthen & Muthen 1998-2012) to test the exposure and the vulnerability hypotheses, estimating direct and indirect relations simultaneously. The significance of the indirect relations was tested using the model constraints method, which produces standard errors and p-values computed from the z-distribution, allowing for the estimation of indirect relations with 95% confidence interval. All analyses were controlled for age. A significant indirect association of sex categories with depressive symptoms mediated by stressors or resources will support the exposure hypothesis. The weighted least squares parameter estimates (WLSMV) method of estimation was used to test the differential exposure hypothesis considering that some of the dependent variables are categorical (Muthen & Muthen 1998-2012).

In turn, the vulnerability hypothesis was tested by stratifying the model by sex categories. This hypothesis will be confirmed when the direct or indirect association differ significantly between women and men. A z-test was performed using the formula of Clogg, Petkova, and Haritou (1995) to test whether the direct and indirect relationships were significantly different between women and men. Since the number of women in the sample is higher than what is normally found in the university graduate student population, we created sample weights to reflect the institutions' sex and level of study reported enrolment.

Results

Descriptive statistics are presented in Table 1. There were no differences between women and men in terms of depressive symptoms. Women reported higher levels of worry for COVID-19, tended to be more frequently in couple, worked more paid hours, reported more stress regarding teaching methods, more emotional support and were younger than men. On the other hand, men reported more FIW than women.

Table 1 here

Table 2 presents results for the *exposure hypothesis*. The data replicate those observed in Table 1 for the differences in exposure except for hours of study, which were significantly higher among women. Regarding associations with depressive symptoms, having children, the hours devoted to study as well as emotional support were associated with less depressive symptoms. Worries about COVID-19, financial difficulties, stress

with teaching methods, WIF and FIW were linked to significantly more depressive symptoms.

Table 2 here

Gendered stressors and resources are also likely to modulate mental health through WFC. Having children, being in a relationship, workload, having financial difficulties and stress with the teaching method were linked to more WIF and FIW while this relationship is negative for emotional support. Moreover, the hours devoted to study was related to more WIF while working hours was associated with more WIF and less FIW.

Several indirect associations presented in Table 3 were significant. First, women reported less FIW and more emotional support, which contributes to fewer depressive symptoms. On the other hand, they had more depressive symptoms since they reported greater worries about COVID-19 and more stress with the teaching methods. Women were also more in couple which was indirectly related to more depressive symptoms through FIW. These significant associations are presented in Figure 2.

Table 3 here

Figure 2 here

Table 4 presents the results of the vulnerability hypothesis. Among both women and men, having children and emotional support were linked to fewer depressive symptoms, but reported more depressive symptoms in relation to financial difficulties, stress relating to teaching methods, WIF and worries about COVID-19. Among women only, being in a couple and the number of hours worked were associated with fewer depressive symptoms, while FIW was associated with more depressive symptoms. However, testing the difference in the magnitude of the relations with depressive symptoms show that no direct relationship differed significantly between sex categories.

Table 4 here

Table 5 illustrates the indirect associations of stressors and resources through WFC. Only one indirect association was significantly different between sex categories: among women, having a child living at home was linked to significantly more depressive symptoms than among men through more FIW.

Table 5 here

Discussion

The main objective of this study was to examine the gendered experience of WFC during the COVID-19 pandemic on depressive symptoms among graduate students from the province of Quebec. We carried out path analysis to test for the exposure and vulnerability hypotheses. Our analyses give more credence to the exposure hypothesis.

Surprisingly, the descriptive statistics do not show a difference in depressive symptoms between women and men. This contrasts with an abundant literature observing a higher prevalence of depressive symptoms among women (Cavannagh et al. 2017). However, our preliminary analyses (not shown) indicated that WFC may have a suppressor effect, as the relationship between being a woman and depressive symptoms becomes significant when controlling for WIF and FIW. Thus, the positive direct association between being a woman and depressive symptoms could be cancelled by a negative indirect association with depressive symptoms through WFC. This has important implication for public policy. Since gender is a social structure, we must avoid the trap of thinking that no statistical difference at first sight means that there are no gender differences, and hence, no gender inequalities (Connell, 2012).

This study makes several contributions to the literature. First, it provides a unique snapshot on how COVID-19 confinement and mitigation measures in Quebec could have contributed to gendered mental health inequalities. Of importance to university administrators planning the upcoming semesters, women reported more stress related to adapting to new remote teaching methods. This was associated with more depressive symptoms, not only in a direct association, but also indirectly through WIF. New remote teaching methods thus appear to be perceived as creating more conflict with family responsibilities among women (Malish et al. 2020). In addition, the fact that women were proportionately more in a couple was indirectly associated with more depressive symptoms by increasing the FIW. Women also worry more about COVID-19, which is directly associated with greater depressive symptoms.

Second, women report less FIW and more emotional support than men, both of which were associated with lower depressive symptoms. Furthermore, the higher emotional support among women was indirectly linked to less depressive symptoms through *both* less WIF and FIW. The higher emotional support among women was a valuable gendered resource that may have mitigated the deleterious effect of the lockdown on mental health. The fact that these gendered stressors and resources operate in different directions may lead us to overlook how they can contribute to (re)produce mental health inequalities; while stressors and resources indeed appear in this sample to balance each other out (as highly educated women tend to be in homogamous unions and highly educated couples tend to have a more equal division of labour), it may not be the case in other groups.

It also invites us to think of mental health through the lens of greatest exposure of specific stressors and lack of resources among men. The higher predominance of FIW and lower support among men have already been reported in a previous study in Quebec (e.g., Bilodeau et al. 2020b). It highlights the consequences of isolation on men's mental health. Moreover, despite the increasing implication of fathers in the familial responsibilities in Quebec, this is consistent with the sensitization hypothesis suggesting that men would report more FWI than WFI as family interferes with a more central sphere of life (Shockley et al. 2017). Another possible explanation derives from evidence supporting that women and men could manage the boundary between roles differently (Shockley et al. 2017; Sinclair et al. 2020). Men could see the boundary between roles as

more segmented, which could exacerbate difficulties in the context of the severe lockdown that was in effect in Quebec during the data collection period.

Third, our paper reiterates the importance of considering WFC on mental health and mental health inequalities, especially during a pandemic where severe confinement and mitigation strategies were rolled out. FIW was indeed the only stressor to intervene in both exposure and vulnerability hypotheses. In addition to supporting the necessity to distinguish WIF and FIW, this study shows that omitting WFC may overlook the gendered stressor contributing to mental health inequalities between women and men.

Some limitations need to be addressed. First, the cross-sectional nature of the data does not allow establishing a causal relationship between the variables. However, we can assume that the sex categories precede the other variables. Second, it is also possible that people who felt more severely affected by the pandemic were more inclined to respond to the survey. Although the study was conducted on a large sample, the response rate is slightly lower than what we find with this method of data collection (Shih & Fan 2009). However, our survey came on the heels of a Statistics Canada pan-Canadian crowdsourcing survey among university students, which raises the possibility of survey fatigue. It is also impossible to generalize the results to all graduate students in Quebec as the result are derived from only three universities. Nevertheless, the universities are very distinct on several points including culture, size, region, programs and language of instruction. Finally, since the Montreal metropolitan area suffered a distinctly more severe COVID-19 first wave than the rest of Quebec (with a different timeline for these

regions in the easing of lockdown), the results of the models could differ for the respondents from the Montreal universities and the respondents from other universities in Québec. However, the size of the sample did not allow the models to be stratified for women and men outside Montreal.

Despite these limitations, this study offers several contributions to the literature on the influence of gender on mental health inequalities. It identifies action levers aimed at containing the inequalities during the pandemic such as adapting and extending support for distance education methods that consider familial obligation, proactive and generalized mental health support approaches, and also refined policies for reconciling work and family. To our knowledge, this is the first study to document in such detail the mechanisms linking gendered stressors and resources, WFC and mental health in the context of a pandemic. In addition to demonstrating the importance of such an approach for subsequent studies, it highlights that the response to the pandemic is not gender-neutral. Universities and governments should consider these results to reduce the risk of depression and mental health inequality during a pandemic.

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Table 1. Descriptive statistic

	Women (n = 1185)		Men (n = 605)	
	Mean/%	SD	Mean/%	SD
Mental health				
Depressive symptoms	9.05	0.14	9.05	0.20
Worry about COVID-19	28.17	0.34	24.92**	0.50
Stressors and resources				
Couple	60.5%		55.2%*	
Child at home	13.5%		13.2%	
Financial difficulty	2.13	0.03	2.24	0.05
Hours of study (week)	23.79	0.52	25.32	0.74
Working hours (week)	6.30	0.34	5.13*	0.48
Workload	2.65	0.03	2.61	0.04
Stress teaching method	3.06	0.04	2.84**	0.05
Emotional support	91.8%		82.2%**	
Work-family conflict				
Work-to-family conflict	17.84	0.39	18.37	0.55
Family-to-work conflict	12.33	0.38	14.11**	0.56
Individual				
Age	28.55	0.20	29.27*	0.31
Sex categories (women)	100%		0%	

Note: *$p \leq 0.05$ **$p \leq 0.01$.

Table 2. Path analysis results for the exposure hypothesis

	Depressive symptoms	WFC	FWC	Worry about COVID-19	Effect of sex category (women) on
Worry about COVID-19	0.06**				3.64**
Couple	-0.34	1.86**	3.01**		0.16*
Child at home	-0.82*	4.55**	5.80**		0.12
Financial difficulty	0.54**	1.72**	1.29**		-0.10
Hours of study (week)	-0.02**	0.12**	0.04		-1.89*
Working hours (week)	-0.02	0.12**	-0.04		1.25*
Workload	-0.18	2.55**	1.14		0.04
Stress teaching method	0.73**	1.61**	0.79**		0.22**
Emotional support	-0.98**	-1.31*	-1.60**		0.47**
Work-to-family conflict	0.06**			0.24**	-0.71
Family-to-work conflict	0.06**			0.14**	-1.85*
Sex (women)	0.34	-0.71	-1.85*	3.68**	
Goodness-of-fit					
χ^2 (dl)			74.206(12)*		
CFI			0.977		
RMSEA			0.054		

Note: $^{*}p \leq 0.05$ $^{**}p \leq 0.01$.

Table 3. Indirect effects of sex categories on depressive symptoms for exposure hypothesis

Sex categories (women)	Coefficient	SE
Worry about COVID-19	0.271**	0.055
Study hours (week)	0.044	0.026
Stress teaching method	0.157**	0.049
Emotional support	-0.457**	0.124
FIW	-0.105*	0.053
Couple - WIF	0.016	0.009
Study hours (week) - WIF	-0.015	0.008
Working hours (week) - WIF	0.008	0.005
Stress teaching method - WIF	0.019*	0.008
Emotional support - WIF	-0.034	0.017
Couple - FIW	0.027*	0.009
Stress teaching method - FIW	0.010	0.005
Emotional support - FIW	-0.043*	0.020
FIW- Worry about COVID-19	-0.265*	0.123

Note: $^{*}p \leq 0.05$ $^{**}p \leq 0.01$.

Table 4. Path analysis model results for women and men for the vulnerability hypothesis

	Depressive symptoms		Worry about Covid19		WFC		FWC	
	Men	Women	Men	Women	Men	Women	Men	Women
Worry about COVID-19	0.064^{**}	0.09^{**}						
Couple	-0.28	-0.90^{**}			1.901	2.31^{**}	5.00^{**}	$1.41^{*\,\dagger\dagger}$
Child at home	-1.48^{**}	-1.51^{**}			4.49^{*}	$9.64^{**\,\dagger}$	10.23^{**}	$16.33^{**\dagger}$
Financial difficulty	0.64^{**}	0.64^{**}			1.99^{**}	1.59^{**}	0.99^{*}	1.41^{**}
Hours of study (week)	-0.01	-0.01			0.07^{*}	0.07^{**}	-0.03	-0.02
Working hours (week)	-0.01	-0.03^{**}			0.11^{*}	0.11^{**}	-0.11^{*}	-0.06^{*}
Workload	-0.21	0.01			2.29^{**}	2.46^{**}	1.38^{*}	0.78^{*}
Stress teaching method	0.90^{**}	0.65^{**}			2.14^{**}	1.56^{**}	1.26^{*}	0.98^{**}
Emotional support	-2.39^{**}	-1.51^{**}			-1.24	-0.28	-0.66	-2.25
Work-to-family conflict	0.06^{**}	0.03^{*}	0.249^{**}	0.174^{**}				
Family-to-work conflict	0.03	0.05^{**}	0.073	0.077^{*}				
Goodness-of-fit				Men			Women	
χ^2 (dl)				$37.736(8)^{**}$			$27.674(8)^{**}$	
CFI				0.958			0.982	
RMSEA				0.078			0.046	
SRMSR				0.025			0.014	

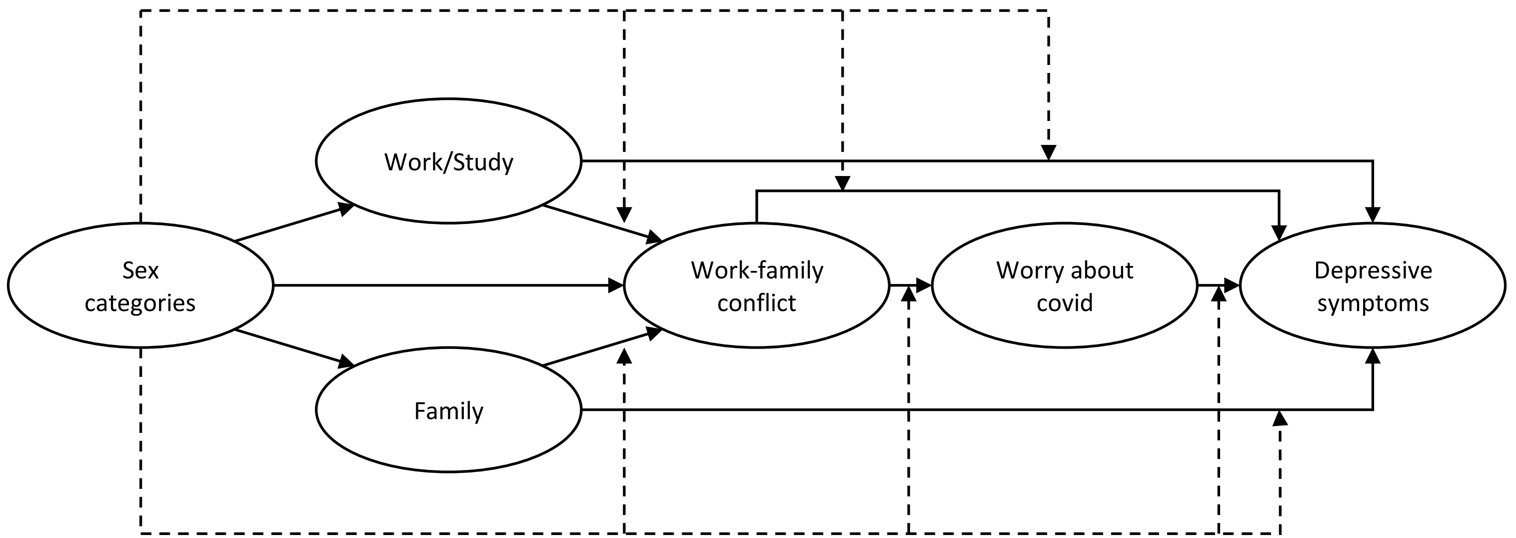
Note: Within group significance $^{*}p < 0.05$; $^{**}p < 0.01$. Between groups difference significance (men vs women) † p < 0.05; †† p < 0.01.

Table 5. Indirect effects of work stressors and personal resources on depressive symptoms for the vulnerability hypothesis

	Women		Men		Men/women
	b	SE	*b*	SE	diff.
Couple- WIF	0.072	0.038	0.129	0.076	
Child at home - WIF	0.302*	0.129	0.284*	0.145	
Financial difficulty - WIF	0.050*	0.023	0.126**	0.047	
Working hours (week) - WIF	0.003	0.002	0.007*	0.003	
Workload - WIF	0.077*	0.034	0.145**	0.053	
Stress teaching method - WIF	0.049*	0.023	0.135**	0.047	
Hours of study - WIF	0.002	0.001	0.005	0.002	
Couple - FIW	0.076	0.001	0.158	0.090	
Child at home - FIW	0.877**	0.217	0.323	0.178	†
Working hours (week) - FIW	-0.003	0.002	-0.004	0.002	
Workload - FIW	0.042*	0.021	0.044	0.028	
Hours of study - FIW	-0.001	0.001	-0.001	0.001	
Financial difficulty - FIW	0.076**	0.027	0.031	0.023	
Stress teaching method - FIW	0.052**	0.020	0.026	0.001	
WIF – Worry about COVID-19	0.016**	0.003	0.016**	0.005	
FIW – Worry about COVID-19	0.007*	0.003	0.005	0.003	

Note: Within group significance $^{*}p < 0.05$; $^{**}p < 0.01$. Between groups difference significance (men vs women) † $p < 0.05$; †† $p < 0.01$.

Figure 1. Conceptual model



= Exposure hypothesis
= Vulnerability hypothesis

Figure 2. Standardized effects of gendered pathways to depressive symptoms. Only statistically significant coefficients are displayed ($p < 0.05$).