ORIGINAL ARTICLE

Gender differences in COVID-19-related behaviours: evidence from three ethnic minority groups

Joanna R. Maryniak (1) 1 · A,B,C,D,E,F, Katarzyna Lubiewska (1) 2 · C,D,E, Justyna Olko (1) · B,D,E,G

- 1: Center for Research and Practice in Cultural Continuity, Faculty of "Artes Liberales", University of Warsaw, Warsaw, Poland
- 2: Faculty of Psychology, University of Warsaw, Warsaw, Poland

BACKGROUND

The SARS-CoV-2 pandemic has hit minorities more profoundly than the majority society. We evaluated the interplay between ethnic minority identity, gender, and COVID-19-related attitudes and behaviours.

PARTICIPANTS AND PROCEDURE

Using data from a survey carried out among both members of ethnic minorities in Poland and Mexico and the majority outgroups, we assessed the perception of the pandemic as a grave threat to the self and to the world, as well as compliance with the protective measures to stop the spread of COVID-19. We tested the effects of gender and minority versus majority status on protective compliance, and of the pandemic as a threat to the self and the world.

RESULTS

A two-way ANOVA test with gender and ethnicity factors revealed significant effects of gender, ethnicity, and gen-

der × ethnicity interaction. The effect of gender was significant for compliance with protective behaviours, threat to the self, and threat to the world. Women had higher mean levels of protective behaviours, perceptions of threat to the self, and perceptions of threat to the world than men. The effect of Indigenous ethnicity was significant for protective behaviours and threat to the world. The mean level of protective behaviours and threat to the world was higher for ethnic minority groups than for non-minority groups.

CONCLUSIONS

Maladaptive gender differences in COVID-19-related attitudes and behaviour are less prominent among people self-identifying as ethnic minority members.

KEY WORDS

COVID-19; indigenous; ethnic minority; gender differences

CORRESPONDING AUTHOR – Joanna R. Maryniak, Center for Research and Practice in Cultural Continuity, Faculty of "Artes Liberales", University of Warsaw, 72 Dobra Str., 00-312 Warsaw, Poland, e-mail: joanna.maryniak@al.uw.edu.pl

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BACKGROUND

Male sex and male gender roles have been identified as "a risk factor for death and ITU [intensive therapy unit] admission" (Peckham et al., 2020); across 38 countries the average case fatality rate for males is 1.7 times higher than for females (Scully et al., 2020). Yet, despite this male vulnerability to COVID-19, compliance with public health measures and the perception of this disease as a threat reveal consistent differences across gender identifications. Even before the pandemic hit it had been known that men are less likely to adopt non-pharmaceutical behavioural interventions such as social distancing, handwashing, and mask wearing (Moran & Del Valle, 2016). Research during the pandemic further confirmed it (Capraro & Barcelo, 2020; Haischer et al., 2020; Okten et al., 2020). Men were also found to be more likely to endorse COVID-19-related conspiracy theories (Cassese et al., 2020; McCaffery et al., 2020) and to perceive mask wearing "as infringing on their independence" (Howard, 2021). Women tend to show more concern about COVID-19 (Broche-Pérez et al., 2022; Fitzpatrick et al., 2020; Galasso et al., 2020; Liu et al., 2020; Maslakçı & Sürücü, 2022; Prichard & Christman, 2020). While validating those findings using the data from a survey conducted during the pandemic in Poland and Mexico among different ethnic minority/Indigenous groups, we hypothesized that the Indigenous groups under study are more likely to perceive the pandemic as a threat and to follow the protective measures than members of the majority group surrounding them. We also assumed that the role of gender in reactions to COVID-19 may differ among the members of these groups when compared with the outgroups. This is corroborated by the fact that the Indigenous groups and their mental health during the COVID-19 pandemic have already been identified as highly vulnerable (Jùnior et al., 2020).

PARTICIPANTS AND PROCEDURE

PARTICIPANTS

Members of Indigenous (n=3179; 51.5% female) and non-Indigenous (n=957; 53.9% female) groups were sampled. The Indigenous group consisted of Silesians (n=906; 39% female) and Kashubs (n=1184; 60% female) in Poland, and persons identifying as Indigenous (based on explicit self-identification and a subsequent clarification of the particular ethnic group, with the most numerous being Nahuas, Ben 'Zaa/Zapotecs, Ñuù Savi/Mixtecs and Zapotecs – for more details see Olko & Maryniak, 2021) in Mexico (n=1089; 52.8% female). The non-Indigenous group was sampled in Poland in the regions of Silesia

(n = 260; 41.2% female) and Kashubia (n = 522; 58.8%)female), and in Mexico (n = 175; 58.3% female). We recognise that even according to the Office of the United Nations High Commissioner for Human Rights "[t]here is no singularly authoritative definition of Indigenous peoples under international law and policy". Yet the choice to label Silesians and Kashubs as Indigenous in our analysis was based on the fact that they fit in with common facets of criteria set out in the same document: a minoritized status of both of these distinctive groups who have long inhabited their historical territory and seek to preserve their uniqueness (United Nations Human Rights Office of the High Commissioner, 2013). Thus they form a cohesive group for the needs of our analysis.

MEASURES

Individual perceptions of the pandemic were measured by asking to what extent the respondent perceived the COVID-19 pandemic as a grave threat (1) to their life, and (2) to the world order. Compliance with the protective measures (3) was assessed using a 4-item scale (Cronbach's α for the Indigenous group in Mexico = .89, for Silesians = .86, and for Kashubs = .87). Respondents used a 7-point Likert response format for answers where: in the items regarding the threat (to oneself and to the world), a value of 1 corresponded to *I strongly disagree* and 7 to *I strongly agree*; in the items regarding behaviours, the value of 1 corresponded to *absolutely no* and 7 to *absolutely yes*. The latter items were as follows:

Due to the epidemic, I would wash my hands more often and for longer than usual.

I tried to keep a distance of several metres from other people.

To avoid a coronavirus infection, I significantly limited contacts with my relatives and friends.

I tried not to leave the house unless it was strictly necessary.

PROCEDURE

The ethical standards of the project were approved by the Ethical Committee of the Faculty of "Artes Liberales" of the University of Warsaw on June 21st 2018. Most of the respondents to the survey included in the present study were targeted via paid Facebook advertisements and their informed consent was assured via the inclusion at the beginning of the survey of an easily understandable clause which also assured them of formal compliance with the European Union's General Data Protection Regulation.

RESULTS

Results of a two-way ANOVA test with gender and ethnicity factors revealed significant effects of gender, ethnicity, and gender × ethnicity interaction. Results of gender × ethnicity effects were significant for threat-to-self and threat-to-world (partial η^2 of: .002, p < .05; .003, p < .005, respectively). The level of threat-to-world was higher for women than for men and this difference was smaller in the ethnic minority groups (mean differences between men and women of .09 for the Silesian group; .14 for the Kashubian group; and .26 for the Mexican group) than among the non-minority respondents (mean differences of .58 for the Silesian group; .58 for the Kashubian group; and 1.16 for the Mexican group).

The effect of gender was significant for protective behaviours, threat to the self, and threat to the world (partial η^2 of .009, p < .001; .002, p < .05; and .007, p < .001, respectively). In particular, women had higher mean levels of protective behaviours, perceptions of threat to the self, and perceptions of threat to the world than men (mean differences between men and women of: .33 for protective behaviours; .05 for threat to the self; and .20 for threat to the world).

The effect of minority groups was found to be significant for protective behaviours and threat to the world (partial η^2 of: .009, p < .001 for protective behaviours; .007, p < .001 for threat to the world). The mean level of protective behaviours was higher for ethnic minority groups than for non-minority groups (mean

difference of .38). The mean level of threat to the world was higher for ethnic minority groups than for non-minority groups (mean difference of .25).

Detailed results for every group of respondents, i.e. all possible permutations of Indigenous identity, gender identity and studied region, can be found in Table 1.

DISCUSSION

The analysis of the data has fully confirmed our initial hypotheses that minorities are more likely to care deeply about the health emergency and that gender differences regarding protective behaviours in these groups are smaller than in the outgroup. These results complement our understanding of the multifaceted effects of the pandemic and their unequal distribution among different ethnic groups and with regard to gender. We propose a twofold explanation of the smaller gender differences in COVID-19 attitudes and behaviour in minority communities.

The first explanation touches upon the difference between reactions to realistic and symbolic threats posed by the COVID-19 pandemic. Kachanoff et al. (2020), discussing this topic, stated that the former predict greater and the latter lesser adherence to behaviours which do not benefit the group in terms of helping to prevent COVID-19. This corresponds with the difference between the attitudes of minoritized and majority groups. The Indigenous communities

Table 1 All quantitative indicators (means and standard deviations) for every group of respondents

	Indigenous				Non-Indigenous			
	Female		Male		Female		Male	
	М	SD	М	SD	М	SD	М	SD
Protective behaviours								
Kashubia	5.21	1.61	4.88	1.77	5.00	1.68	4.51	2.00
Silesia	5.61	1.48	5.21	1.58	5.45	1.36	4.48	2.10
Mexico	6.19	1.05	5.91	1.25	5.85	1.25	5.43	1.61
Threat to the self								
Kashubia	3.52	1.87	3.55	1.99	3.43	1.84	3.10	1.74
Silesia	4.14	1.94	4.11	1.95	4.10	1.66	3.47	2.20
Mexico	5.17	1.63	5.01	1.75	5.67	1.37	4.75	1.87
Threat to the world								
Kashubia	5.33	1.80	5.19	1.92	5.13	1.74	4.55	2.02
Silesia	5.52	1.58	5.43	1.71	5.38	1.66	4.80	2.16
Mexico	5.62	1.53	5.36	1.72	6.09	1.03	4.93	1.84

and their mental health in the COVID-19 pandemic have been identified as highly vulnerable (e.g. Jùnior et al., 2020). Therefore, these communities are the most likely to see the threat as first and foremost a realistic one whereas the majority society, and especially its more authoritarian members - as analysed by Deason and Dunn (2022) - is less likely to do so. However, it should also be noted that the threat is also symbolic for the minority groups in that it contributes to the replication and perpetration of historical traumatization, marginalization and ethnic discrimination, as well as injustice (such as worse access to health services - as described by Chromik et al., 2022; Olko et al., 2022, 2023). The symbolic threat inherent in the COVID-19 pandemic can also strengthen public health support through group identification - a huge study of this point conducted in 67 nations by Van Bavel et al. (2022) proved that such a mechanism exists.

Ethnic minorities are not the only group for whom the perceived threat of COVID-19 is higher than for the majority population surrounding them: for people of colour in the US, COVID-19 was a "greater threat to mental well-being" (Williams et al., 2022, p. 1) and sexual minorities also perceived the pandemic as a greater threat than did the majority population (Potter et al., 2021).

Our research evidenced that the minority groups showed a higher level of threat perception and protective behaviours than the majority group. This can be partly explained by their disadvantaged position, including their experiences of historical traumatization, marginalization, and discrimination (e.g. worse access to health services). However, we also propose, as our second explanation of the smaller gender differences in COVID-19 attitudes and behaviour in minority communities, that, in general, minoritized groups are less likely to replicate the so-called traditional or toxic masculinity - the one defined by the American Psychological Association (2018, p. 11) as being marked by "emotional stoicism, homophobia, not showing vulnerability, self-reliance, and competitiveness". They appear to have other mechanisms of community-level integration, internal cooperation networks, and resilience that their members can rely on in threat situations. Accordingly, based on the results of our study, we suggest that toxic masculinity is tempered by traditional bonds, as well as by cooperation and support mechanisms, in communities which have to rely on their own resources in situations such as the COVID-19 pandemic. This assumption is further supported by additional insights, such as the findings of the 2015 multi-author volume Indigenous men and masculinities (Innes & Anderson, 2015), focused on North American Indigenous groups, which can be generalized as follows: "colonial masculinity arose in the Americas from within relations between Europeans and Indigenous peoples, as both an answer to changing European gender and sexual regimes and as a means to establish white settler law" (Morgensen, 2015, para. 3), vying to supplant prior "gender complementarity". The insidious impositions of colonial toxic masculinity are seen, for example, in the need of an Indigenous radio show ("Beyond Bows and Arrows" – broadcast in Dallas, Texas) to admonish its listeners as follows: "Don't be too big of a man to social distance and to not wear a face mask and stay safe, because your life is more important in the Native community as a Native male" (as quoted by Moylan, 2022).

The complementary side of this explanation – seen in a discussion of the COVID-19 pandemic – is that the majority outgroup is characterized by what Blume (2022) terms "colonial privilege" and sees as "discouraging prosocial behavior and promoting [...] a narcissistic orientation that significantly hindered pandemic preparation and response". The association of toxic masculinity with the maladaptive behaviours discussed previously has been widely described in the academic literature on COVID-19 (Cassino & Besen-Cassino, 2020; Howard, 2021; Palmer & Peterson, 2020; Reny, 2020).

The results of the comparison of ethnic minority and majority participants in the gender dimension are based on three varied groups; the Mexican case may be further seen as a heterogeneous supergroup encompassing many specific Indigenous groups. Yet the interplay of gender discrimination and ethnic minoritization, as well as the internal resistance against such practices, is a constant in the experience of those groups, who nevertheless strive to achieve an intersectionally egalitarian human experience. Thus, in the historical perspective, the everyday work roles of Silesian women have been complementary to those of men (Bukowska & Iwińska, 2018) and current research indicates that women reach a status comparable to that of men (Swadźba, 2017). Iwińska and Bukowska (2021) also point out that "[b]readwinning' as the heteronormative family ideal linked to ideas of biological essentialism, came to ascendancy in [...] in Silesia, with capitalist coal-based industrialization in the nineteenth century" (p. 196). Accordingly, the ideals of hegemonic masculinity can in some measure be seen in Europe. The research on the situation of Kashubian women by Kuniewski (2008, 2012) revealed a similar empowerment stemming from the complementarity of everyday work roles. Overall, previous studies imply the existence of a difference between the attitudes of the majority population (less perceived threat, less protective behaviours) and the minoritized groups (more perceived threat, more protective behaviours) with regard to the issue of gender roles. Moreover, the perceived threat of COVID-19 can also grow because the majority society promotes and perpetuates institutional gender inequality.

CONCLUSIONS

The results under discussion concern different groups which are geographically as well as culturally diverse. Yet our results are consistent across these groups: the minoritized communities are more likely to care deeply about the danger posed by COVID-19 and thus to take the recommended precautionary actions. The gender differences with regard to such actions among those groups are also smaller than in the majority outgroup.

Summing up, we propose the following preliminary explanation of our finding that gender differences in COVID-19 attitudes and behaviour are smaller in minoritized groups as compared to the outgroup: (1) an overall higher concern for the ethnic survival and wellbeing of more vulnerable groups; (2) different internal support and resilience mechanisms in minority communities under threat; (3) a more balanced perception of COVID-19 as both a realistic and a symbolic threat; (4) a more positive gender role balance and cross-gender cooperation in those communities. All these points serve to highlight their difference from the majority outgroup, where hegemonic masculinity is the norm and negatively impacts our pandemic preparedness both in terms of the current pandemic and those to come. It becomes readily apparent that the relational approaches to such crises, which are more prevalent in the minoritized communities described, are more adaptive and protective then the majority ones. They also serve as a compensatory means of their adaptation to their more vulnerable position (as the minoritized group). These findings point towards the need to see societal relationality as an important factor in resilience and so to hone it - not least via the care taken to safeguard the distinctiveness of minorities.

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DISCLOSURES

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The study was approved by the Ethical Committee of the Faculty of "Artes Liberales" of the University of Warsaw on June 21st 2018.

The authors declare no conflict of interest.

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