

and individual levels are required as well as reducing prevalence of risk factors across the whole population.

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# **SUPPORT THAT COMES FROM CULTURE: A RASCH ANALYSIS OF THE SOCIAL SUPPORT SCALE (SSS) IN AN ABORIGINAL POPULATION**

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**Background** Due to a history of colonization, Aboriginal and Torres Strait Islander became one of the most disadvantaged groups in Australia. The decades of assimilation policies, which culminated in the removal of Aboriginal children from their parents, disarranged the social support derived from their kinship system. In non-Indigenous populations, social support has been reported as a protective factor against stress (i.e. buffering hypothesis) and coronary heart disease; providing also better outcomes for breast cancer and type-2 diabetes. There are no psychological instruments validated to measure social support in Aboriginal Australians. The aim of the current study was to evaluate the validity and reliability of the Social Support Scale in an Aboriginal population.

**Methods** The Social Support Scale (SSS) is a 4-item measure developed to evaluate the emotional, appraisal, instrumental and informational domains of social support. Data was collected from two different samples: participants of the (1) Teeth Talk Study (n=317), an oral-health randomized controlled trial (RCT) conducted among Aboriginal adults; and (2) the Baby Teeth Talk Study (n=367), an RCT conducted among pregnant Aboriginal women. The psychometric properties of the SSS were evaluated with Graphical Loglinear Rasch Models (GLLRM), which consist of recent methodological advances that extend the Rasch Model to incorporate local dependence (LD) and differential item functioning (DIF).

**Results** Overall fit to a GLLRM was found ( $X^2(96)_{\text{sample1}}=52.7$ ,  $p=0.057$ ;  $X^2(25)_{\text{sample2}}=22.2$ ,  $p=0.625$ ) after the inclusion of LD between items 3 and 4 ( $g_{\text{avg1}}=0.50$ ;  $g_{\text{avg2}}=0.66$ ). Item 2 displayed DIF by employment status ( $X^2(4)=12.60$ ,  $p=0.013$ ,  $g=0.21$ ) in Sample 1. There was no DIF by sex or educational attainment. Unidimensionality was confirmed in both samples ( $g_{\text{obs1}}=0.80$ ;  $g_{\text{exp1}}=0.78$ ,  $p=0.654$ ;  $g_{\text{obs2}}=0.75$ ,  $g_{\text{exp2}}=0.77$ ,  $p=0.163$ ). The SSS displayed good reliability ( $R_{\text{sample1}}=0.82$ ,  $R_{\text{sample2}}=0.84$ ) and probability of person separation ( $P_{\text{sample1}}=0.77$ ,  $P_{\text{sample2}}=0.78$ ). Targeting was poor ( $TTI_{\text{sample1}}=0.28$ ;  $TTI_{\text{sample2}}=0.49$ ).

**Conclusion** The same unidimensional structure was found in both samples, providing confidence in the robustness of results. Item 2 ('There are people in my life who appreciate what I do') displayed DIF by employment status, indicating that participants who were employed were more likely to feel appreciated than those unemployed given the same level of social support. The current study consisted of the first validation of a Western-developed psychological instrument to measure social support in Aboriginal Australians. The results show that the SSS is a culturally-valid and reliable instrument that

can be applied in future health research among Aboriginal and Torres Strait Islanders.

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# **COMPARING MULTIPLE FORMS OF DISCRIMINATION AND POSTPARTUM DEPRESSION AMONG PALESTINIAN-ARAB MINORITY WOMEN, IMMIGRANT AND NON-IMMIGRANT JEWISH WOMEN IN ISRAEL**

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**Background** Drawing on the intersectionality theory, emerging research shows that discrimination is a multidimensional risk factor for health. Yet, associations between multiple forms of discrimination (MFD) and postpartum depression (PPD) have not been explored. This study compares relationships between MFD and PPD among Palestinian-Arab indigenous minority, Jewish immigrant, and Jewish non-immigrant mothers citizens of Israel.

**Methods** We used data from a stratified sample of 1,128 postpartum mothers who were interviewed during visiting maternal and child health clinics in 2014–15. We conducted multivariable logistic regression analysis and generalized estimation equation for PPD (Edinburgh Postnatal Depression Scale with cutoff  $\geq 10$ ) and compared associations with two measure of MFD among the study groups, while considering age, socioeconomic status, anti-depressant use, and single forms of discrimination in different models. The two MFD measures included: cumulative MFD (additive experiences of 0, 1, 2 or  $\geq 3$  forms of discrimination based on ethnicity, skin color, religiosity level, gender, age and socioeconomic status), and composite MFD (12 categories resulting from an interactions terms between cumulative 0, 1, 2 and  $3 \geq$  MFD and women's study groups. The reference category was non-immigrant Jewish mothers who reported no MFD).

**Results** Palestinian-Arab mothers reported highest MFD, followed by Jewish immigrant mothers and non-immigrant Jews ( $\geq 3\text{MFD}=29.2\%$ ,  $24.1\%$  and  $17.8\%$ , respectively). Composite MFD had stronger dose response associations with PPD among Palestinian-Arab women, followed by immigrant Jews and non-immigrant Jewish women. Compared to non-immigrant Jewish women with no MFD, Palestinian-Arab women reporting  $\geq 3\text{MFD}$ ,  $2\text{MFD}$  and one MFD were more likely to experience PPD. Adjusted odds ratio and 95% confidence intervals (AOR, 95%CI) were 12.68 (5.29–30.40), 10.08 (3.73–27.20), and 3.98 (1.23–12.86), respectively, among Palestinian-Arab women; 4.44 (1.45–13.61), 5.76 (1.84–17.97), 2.32 (0.59–9.12), respectively, among immigrant Jewish mothers; and 4.68 (1.87–11.71), 3.74 (1.32–10.63) and 2.70 (1.06–6.87) among non-immigrant Jews mothers. Cumulative or additive MFD showed a strong dose response association with PPD among non-immigrant Jews and Palestinian-Arab women who reported  $\geq 3\text{MFD}$ , but not among immigrant Jewish women.

**Conclusion** The study result sheds light on the importance of studying the facets of MFD in intersection with social