

Verification report of Jurek, Niewiadomska & Szot

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The replicated article

Title: “Turning to religion as a mediator of the relationship between hopelessness and job satisfaction [...] in Poland”. See QR code.

Provided information: A table on participant demographics, a table with Pearson correlations, Figure 1. Effect sizes, standard errors, 95% bootstrapped confidence intervals for Figure 1.

Findings: all effects are significant, except that of hopelessness on job satisfaction.

Conclusion: The mediating role of turning to religion between hopelessness and job satisfaction was true, and that “perceived hopelessness is alleviated by turning to religion, which simultaneously leads to an increase in job satisfaction.” (Jurek, et al., 2023. p.2). Nothing was said about any of the individual hypotheses.

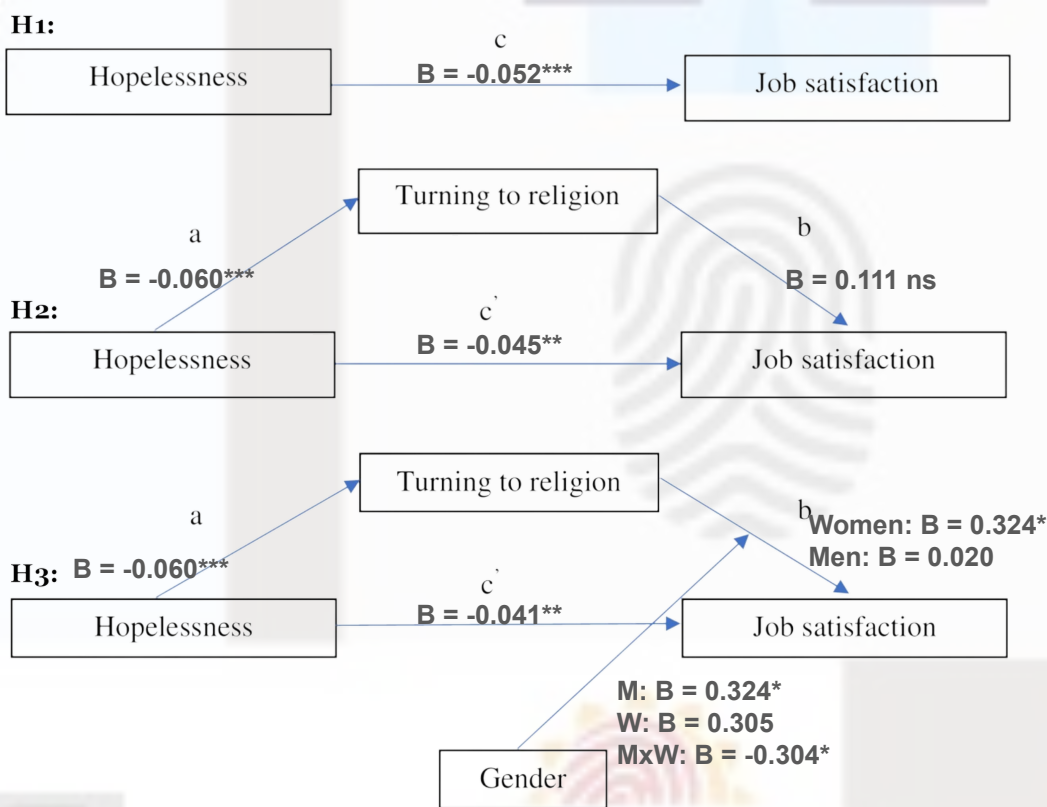


Figure 1: Three Tested Hypotheses & Reproduction Target (Jurek, et al., 2023.)

Results

Bootstrapped 95% Confidence Intervals show small differences, e.g. for the total effect in H2: original BootCI is [-.077; -.027], the replicated is [-.08; -.28]. Those disappear with rounding. Significance levels and model effects also match the replication (see figures 1 and 2).

The summary statistics of the demographics and the correlations could be reproduced exactly (See Table 1 for all deviances of the DVs.)

Variable	Original		Reproduction	
	M	SD	M	SD
Turning to religion	1.4	0.9	1.8	0.7
Hopelessness	7.9	4.2	5.9	4.2

Table 1. All deviances of the DVs.

Documentation

The available documentations were the article itself and two excel files, one containing demographic summary statistics and one with the models the authors ran at the corresponding statistics. No codebook or R-file was provided, making it difficult at times to see which variable was which. They did not include a seed number in order to replicate the bootstrapped findings.

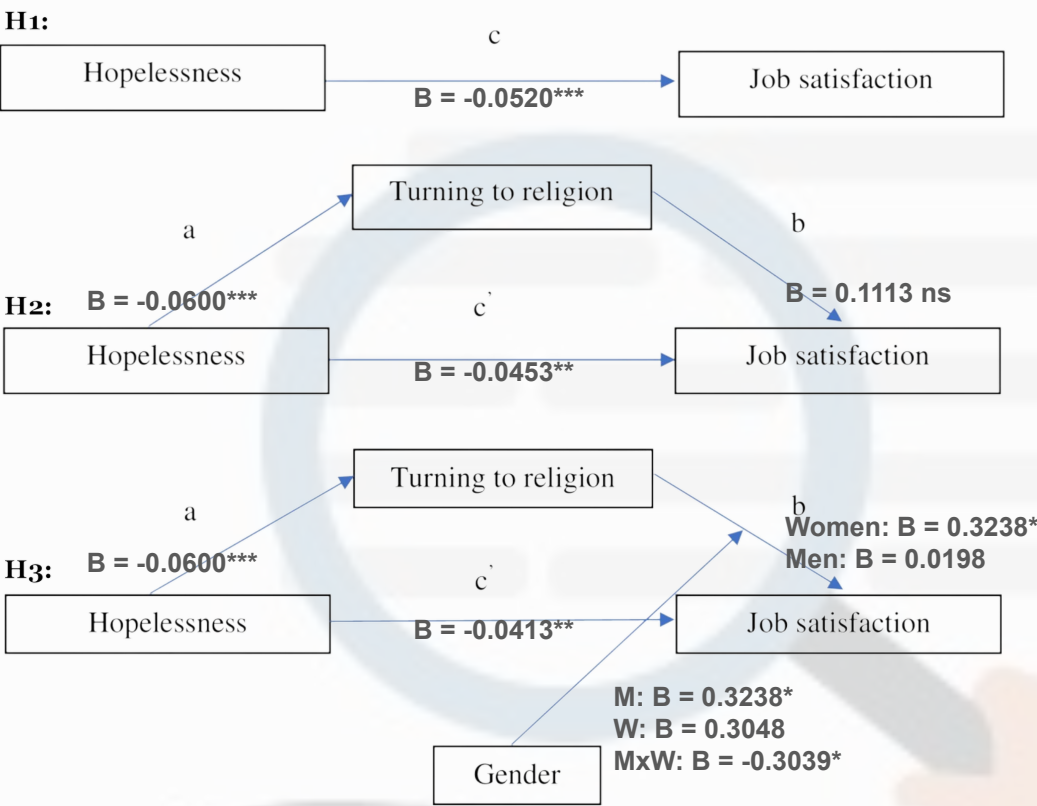


Figure 2: Replication: These results were deemed to have a central role to the conclusions drawn by this paper.

Discussion

The effect sizes are equivalent. There are differences in the BootCI's, but they are reasonably small, they likely come from the bootstrap. There are differences in some descriptive statistics, but they don't influence the results. Conclusions are therefore justified. The article was reproducible, although proper documentation would have made it easier (e.g., codebook, type of analyses, script, etc). However, the file shared with all outcomes helped figuring out the variables. The authors were not consistent with treating missing data, but this did not influence the resulting models.

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Jurek, K., Niewiadomska, I., & Szot, L. (2023). Turning to religion as a mediator of the relationship between hopelessness and job satisfaction during the COVID-19 pandemic among individuals representing the uniformed services or working in professions of public trust in Poland. *Plos one*, 18(12), e0291196.

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