

Sociodemographic and work-related factors associated with psychological resilience in South African healthcare workers

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Resilience was relatively low in this group of South African healthcare workers. The strong association between low resilience and individual and workplace factors provides avenues for early intervention and building resilience among healthcare workers.

BACKGROUND

- **Psychological resilience** facilitates adaptation in stressful environments and is an important personal characteristic that enables workers to navigate occupational challenges.
- Few studies have evaluated the factors associated with psychological resilience in healthcare workers (HCWS).

AIMS AND OBJECTIVES

- To determine the **prevalence and factors associated with psychological resilience** in a group of South African medical doctors and ambulance personnel.

METHODS

- This analytical **cross-sectional study** used secondary data obtained from two studies conducted among healthcare workers in 2019 and 2022.
- **Self-reported factors associated with resilience**, as measured by the Connor-Davidson Resilience Scale-10 (CD-RISC-10), were evaluated.
- Missing data for the age variable was adjusted via multiple imputation.
- R statistical software was used for analysing the data and performing statistical tests.

RESULTS

- A total of **647 healthcare workers** were included in the study, of which 259 were doctors and 388 were ambulance personnel.
- Resilience **scores were low overall** (27.6 ± 6.6) but higher for ambulance personnel (28.0 ± 6.9) than for doctors (27.1 ± 6.0) ($p=0.006$).
- **Female gender** ($\beta: -1.77, p = 0.032$) and **over-time work** in doctors ($\beta: -5.11, p = 0.006$) increased the likelihood of low resilience.
- Conversely, **higher salary** ($\beta: 5.11, p = 0.006$) and **current smoking status** ($\beta: 3.52, p = 0.009$) were protective against low resilience amongst doctors.
- Only **previous alcohol use** for ambulance personnel ($\beta: 3.22, p = 0.003$) was protective against low resilience.

ADDITIONAL KEY INFORMATION

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- This study was approved by the University of Cape Town's Human Research Ethics Committee (HREC 712/2023).

RESULTS CONTINUED

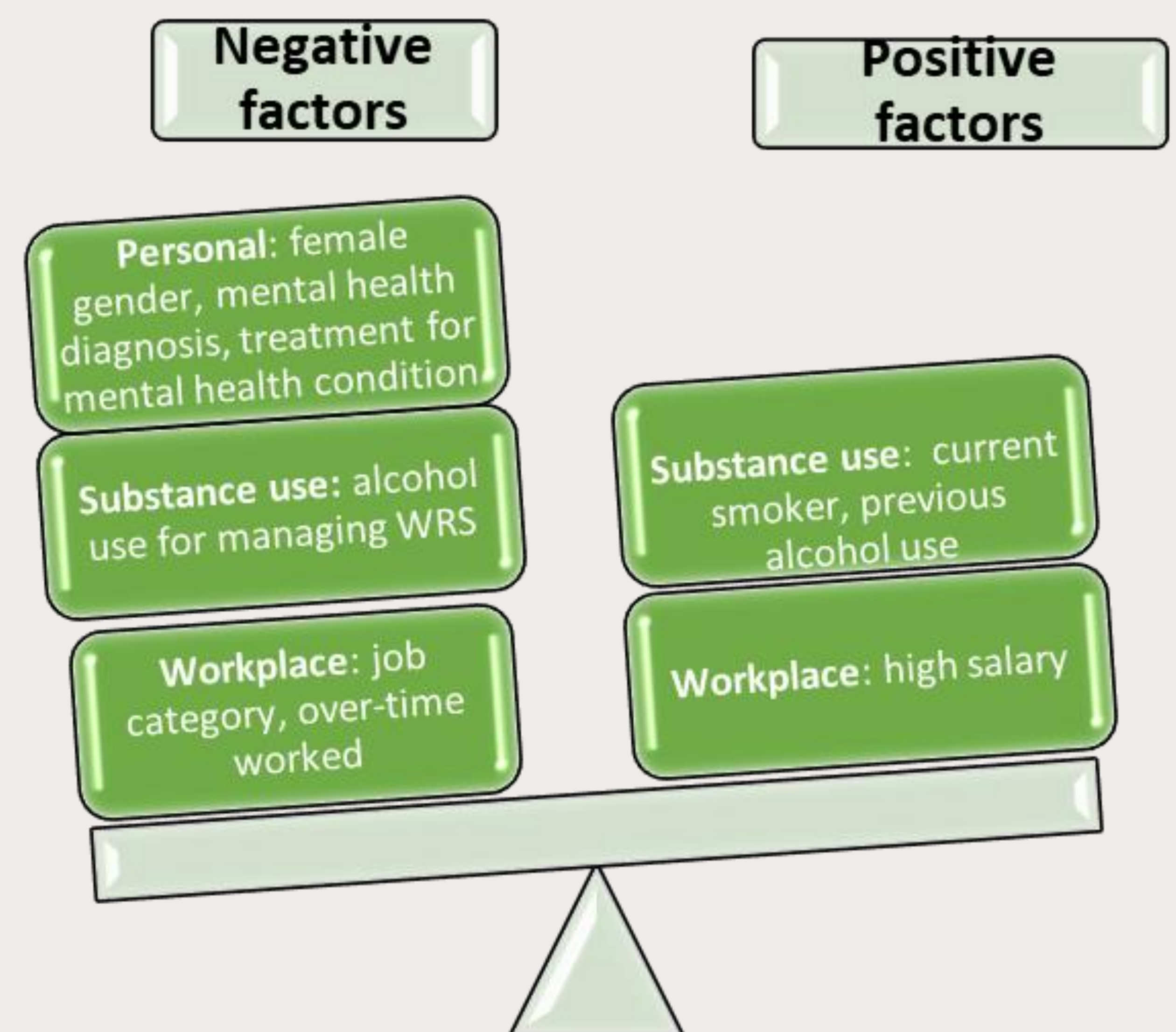


Figure 1: Summary of identified positive and negative factors associated with psychological resilience of healthcare workers

CONCLUSIONS

- **Resilience was relatively low** in this group of South African HCWS compared to similar studies globally, highlighting the need to build resilience among HCWS in South Africa.
- This study demonstrated that **resources need to be directed** towards building resilience among female healthcare workers, those working long hours and earning lower income.
- **Support such as psychological counselling** should be offered to HCWS who have been diagnosed with mental health conditions.
- Further research is needed to better characterise the sociodemographic and work-related factors impacting the psychological resilience of HCWS in South Africa.
- This will assist in understanding determinants of psychological resilience and may inform intervention strategies that would build psychological resilience in the healthcare workforce in South Africa.

REFERENCES

1. Mcizana T, Adams S, Ntamatamala I. Determinants of psychological resilience among healthcare workers in low- and middle-income countries, using the Connor-Davidson Resilience Scale: a narrative literature review. *Occup. Health South. Afr.* 2024. doi: <https://doi.org/10.62380/ohsa.2024.30.2.2>.
2. Mcizana, T., Adams, S., Khan, S. et al. Sociodemographic and work-related factors associated with psychological resilience in South African healthcare workers: a cross-sectional study. *BMC Health Serv Res* 24, 979 (2024). <https://doi.org/10.1186/s12913-024-11430-0>.