

## **Missing data due to a 'checklist-effect'**

Item non-response is a potential threat to the validity of study results. Taking the somatisation subscale of the SCL-90-R as an example, we hypothesize a specific response pattern ('checklist-effect'), that is characterized by symptom-free persons not checking the 'not at all'-category. The present study analyzes the extent and relevance of this postulated 'checklist-effect'.

Our data is derived from a survey of n=228 blue collar workers who previously had filed applications for medical rehabilitation benefits. We defined the 'checklist-effect' by the following response pattern: (1) at least one missing value and (2) at least one valid item response and (3) no 'not at all'-responses.

75 % of the responders had complete data, 16.2 % a postulated 'checklist-effect'.

Substantial covariations in terms of missing-at-random could not be found.

Imputation of missing values under the assumption of a 'checklist-effect' lead to a reduction of missing data in the somatisation-subscale score from 12.3 % to 0.4 % compared to a manual-based calculation. Correlation with various external criteria (general health perception, level of functioning, depression) remained unchanged.

Ignoring the 'checklist-effect' would overestimate symptom load. However, the validity of this effect has still to be proven in methodological studies.

## References

Schafer JL, Graham JW (2002). Missing data: our view of the state of the art.

Psychological Methods 7: 147-177.

Wirtz M (2004). Über das Problem fehlender Werte: Wie der Einfluss fehlender Informationen auf Analyseergebnisse entdeckt und reduziert werden kann.

Rehabilitation, 43: 109-115.

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