

Introduction

The Adult Self Report (ASR) is a well-validated instrument to assess adult psychopathology. However, the length is a burden for its use. Recently, the Brief Problem Monitoring (BPM) has been introduced with selected items from the ASR. The present study investigated how well the BPM can serve as an alternative for the ASR for clinical and scientific purposes.

Adult Self Report (ASR)

(Achenbach & Rescorla, 2003)

- 126 items
- ~20 minutes to complete
- Internalizing Problems (n= 37)
(Anxious/Depressed, Withdrawn, Somatic Complaints)
- Externalizing Problems (n=35)
(Aggressive Behavior, Rule Breaking Behavior, Intrusive Behavior)
- Attention Problems (n=15)
- Thought Problems (n=10)
- Other Problems (n=21)

Brief Problem Monitoring (BPM)

(Achenbach & Ivanova, 2018)

- 18 items
- <5 minutes to complete
- Internalizing Problems (n=6)
- Externalizing Problems (n=6)
- Attention Problems (n=6)

Methods

Sample:

- 9,835 participants (mean age: 31.0, SD=14.5, 68.1% females)
- 3,255 complete twin pairs (N= 6,510) and 3,325 incomplete twin pairs
- 1344 monozygotic male (MZM), 822 dizygotic male (DZM), 3436 monozygotic female (MZM), 1815 dizygotic female (DZF) and 2418 dizygotic opposite-sex (DOS) twins

Measures:

- Adult Self Report (ASR)
- Brief Problem Monitoring (BPM)
- Well-being (WB): Satisfaction with Life scale (Diener et al., 1985).

Analyses/comparisons:

- Reliability
- Means
- Clinical classification concordance
- Ordinal univariate (+ bivariate) twin models
- External validation with well-being: regression + bivariate twin models

Table 1. The reliability of the ASR and BPM (α)

	ASR	BPM
Total Problems	.95	.86
Internalizing Problems	.91	.79
Externalizing Problems	.84	.63
Attention Problems	.81	.71

Results

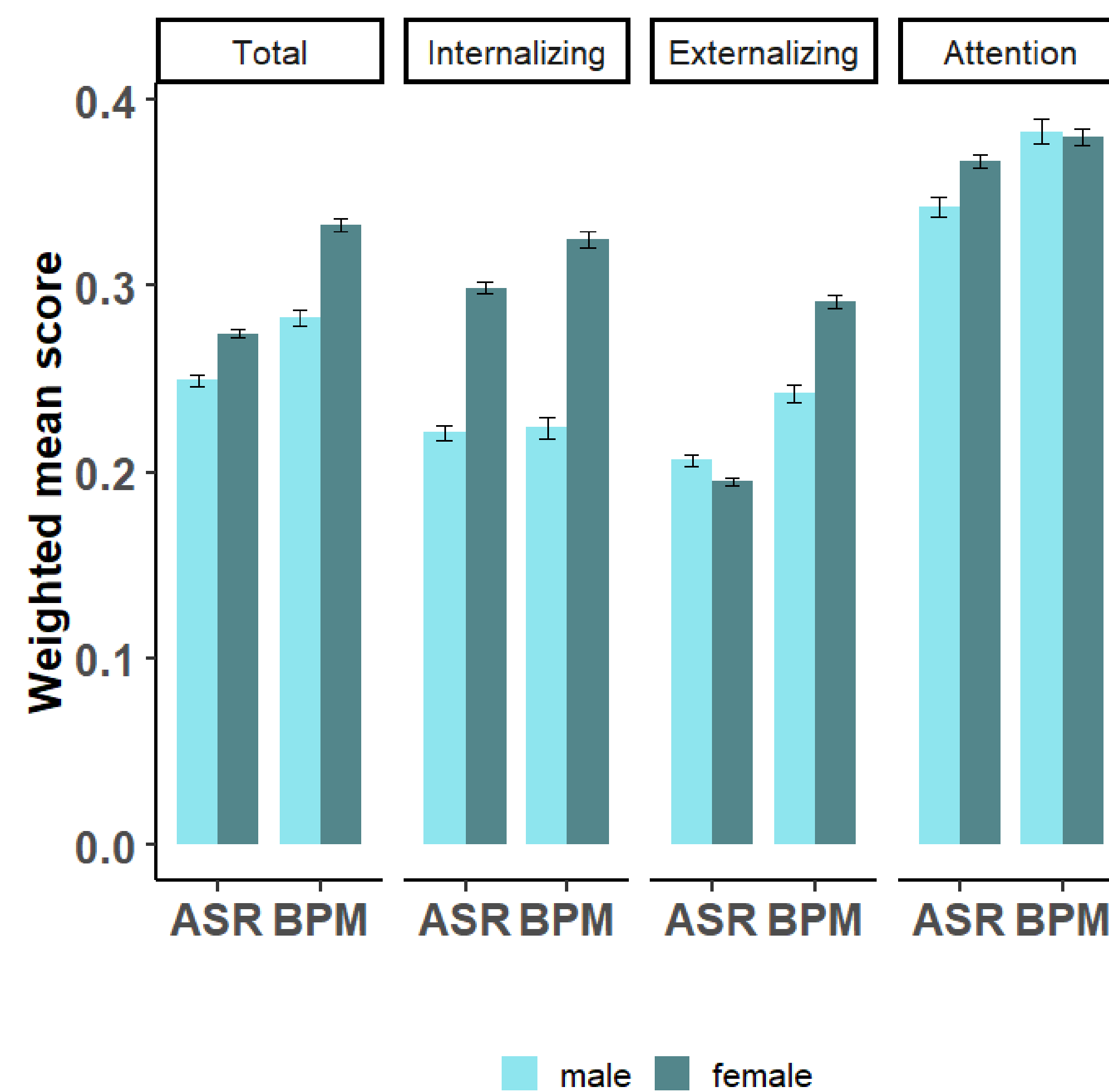


Fig 1. The sex differences in weighted means for the ASR and BPM. All scales show the expected pattern, except the BPM Externalizing scale.

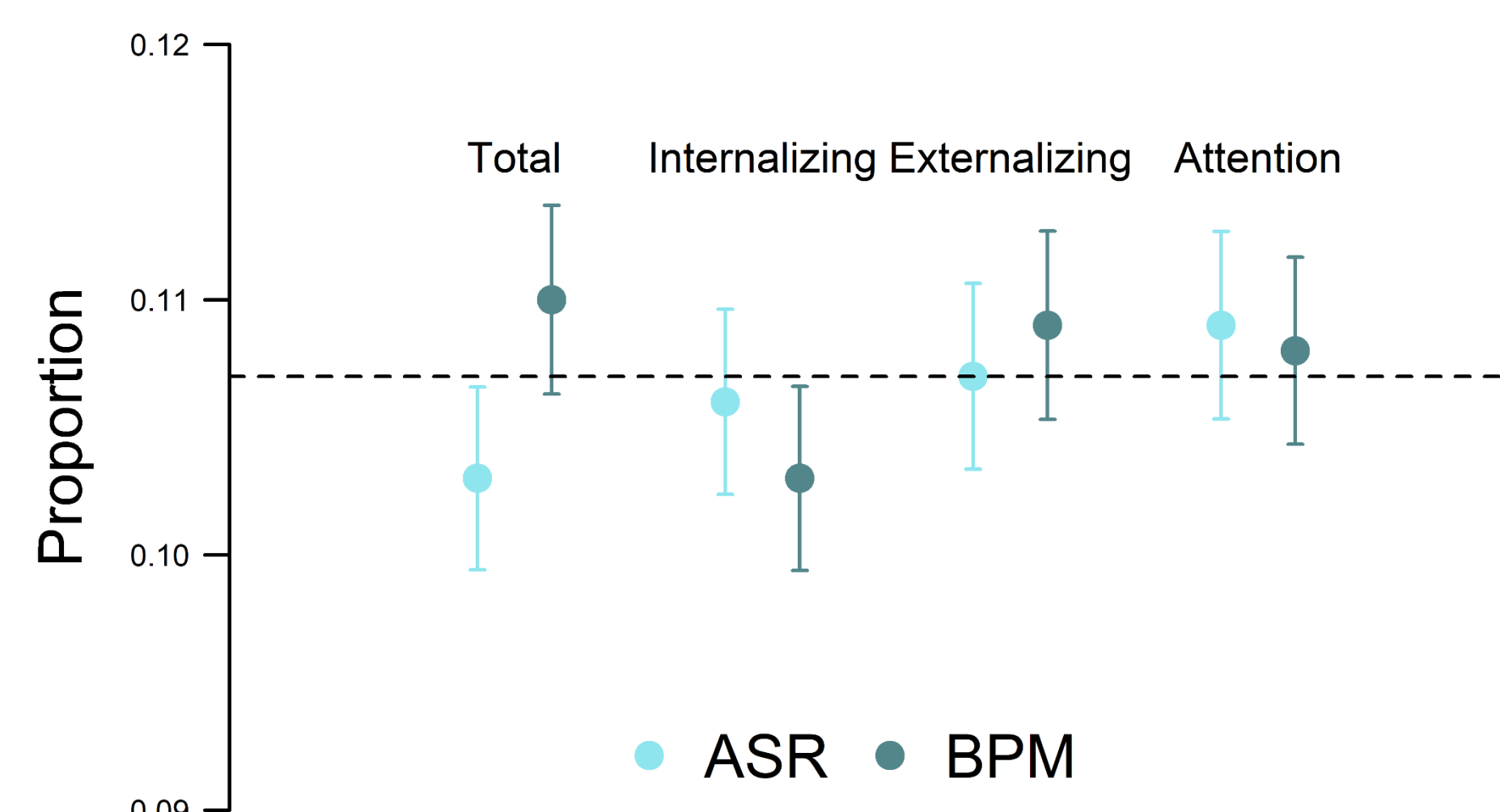


Fig 2. The clinical categorization concordance of the ASR and BPM is high.

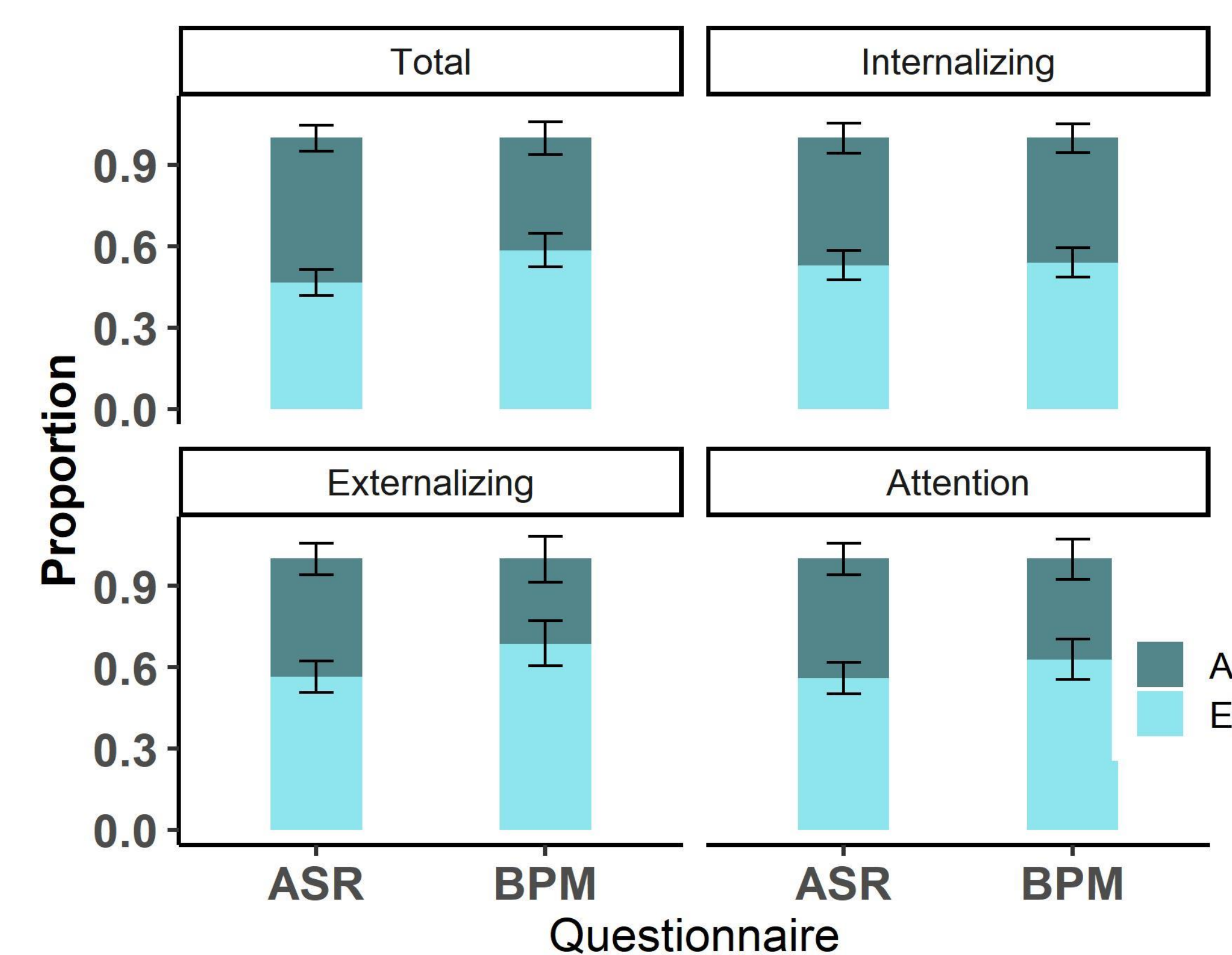


Fig 3. Genetic and environmental components explain the variance to a similar extent for the ASR and BPM.

Table 2. The genetic and environmental correlations (95% CI) between the ASR and BPM scores are high.

	rA	rE
Total	.95 (.93-.98)	.84 (.83-.85)
Internalizing	.92 (.89-.95)	.81 (.77-.83)
Externalizing	.87 (.80-.94)	.76 (.71-.80)
Attention	.94 (.90-.99)	.85 (.84-.88)

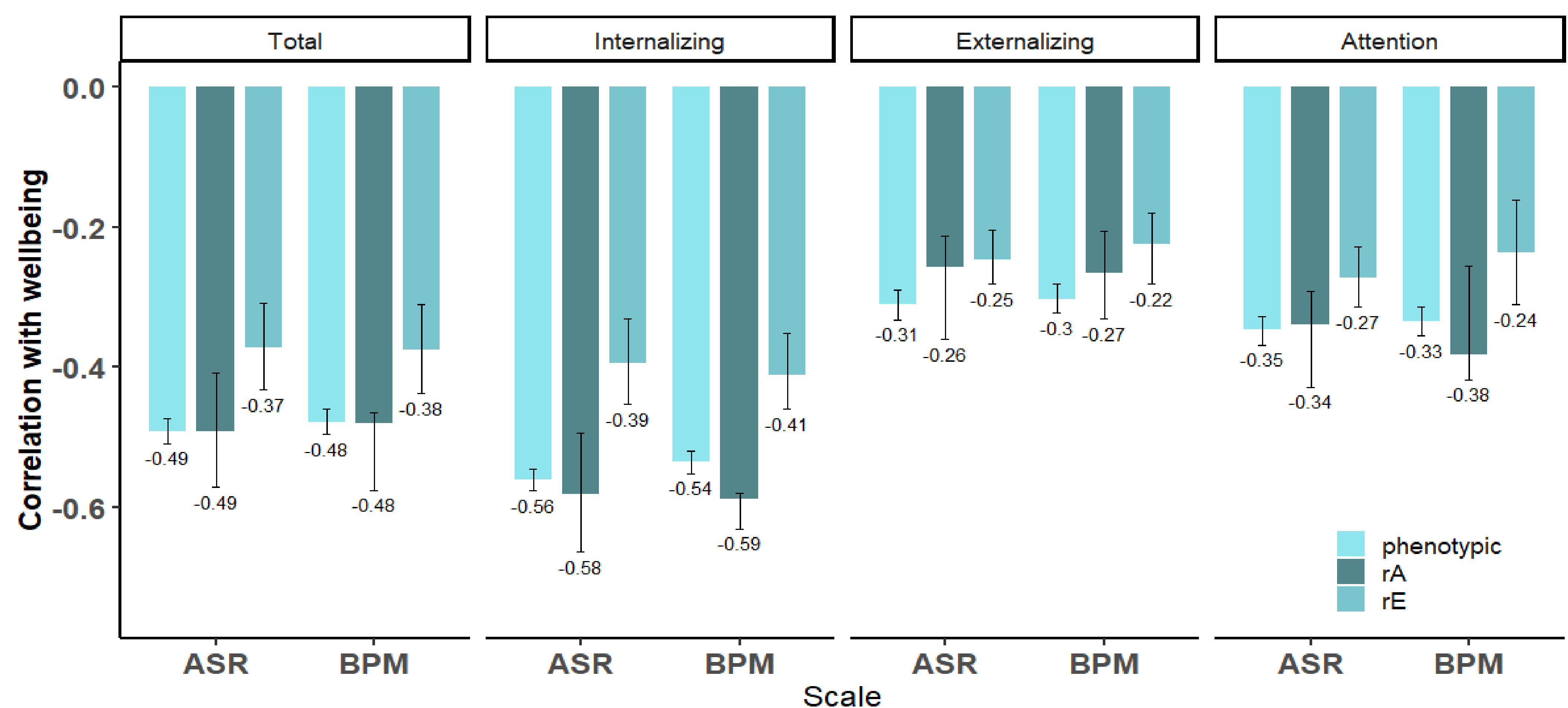


Fig 4. As an external validation, the phenotypic and genetic correlations with well-being are similar for the ASR and BPM.

Conclusion

In situations where a sum score is sufficient, the BPM performs as well as the longer ASR. In conclusion, if replicated, and depending on the situation and goal, it is worth considering the BPM as an alternative for the ASR to reduce the burden for participants

Acknowledgements/Funding

Authors thank all NTR participants, who participated in this study.

This work is supported by an ERC consolidation grant (well-being 771057 PI Bartels), NWO large investment grant (Netherlands Twin Registry repository: researching the interplay between genome and environment (NWO 480-15-001/674)), ZonMW Addiction program ((31160008): Genetic determinants of risk behavior in relation to alcohol use and alcohol use disorder).