

The relation between action orientation and rumination in competitive sports

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Introduction

Athletes often report that during competition their thoughts revolve around the future or past instead of being focused on current challenges. This raises the question whether there is a relation between the distraction of thoughts and particular personality traits. The theory of action control (Kuhl, 1983) distinguished between action and state orientation, two poles of a continuum that promise a further starting point. Failure-related state orientation in comparison to action orientation is described as ruminative cognitions about past, present and future states that inhibit the individual action readiness and implementation (Dibbelt & Kuhl, 1994). Given that, there are little empirical results of this postulated relation, we investigated whether there is a relation between failure-related action orientation and individual rumination in competitive sports.

Sample

Within a period of three months (October – December 2016) 157 athletes (80 females, 77 males) from different sports participated in an online-study voluntarily. Mean age was 21.57 years ($SD = 3.63$; range : 15 - 30 years). At the time of the survey 120 athletes were part of a squad (A-, B-, C-, D- or D/C- squad) or active in a comparable level (cf. Beckmann & Wenhold, 2009). The athletes averaged 10.00 hours ($SD = 5.60$) of discipline-specific training in 4.46 training sessions ($SD = 2.54$) and 2.54 additional sessions ($SD = 1.99$; e.g., weight or athletic training) per week. The averaged participation in competitions per year was 13.40 ($SD = 8.02$). Besides, 32 athletes were already part of the junior national team and 16 athletes were part of the senior national team in their sports.

Materials

We used the following questionnaires for investigating the relation between failure-related action orientation and rumination:

- Action orientation subsequent to failure scale (HOM, Beckmann & Wenhold)
- a general rumination questionnaire (PTQ, Ehrling et al., 2011),
- a clinical rumination questionnaire (RRQ, König, 2012)
- a competition-related rumination questionnaire (KSR-WK, modified from Krys et al., *in prep.*).

References

Beckmann, J., & Kazén, M. (1994). Action and state orientation and the performance of top athletes. In J. Kuhl & J. Beckmann (Hrsg.), *Volition and personality. Action versus state orientation* (p. 439-451). Göttingen : Hogrefe & Huber.

Beckmann, J., & Wenhold, F. (2009). Handlungsorientierung im Sport (HOSP), Manual.

Dibbelt, S., & Kuhl, J. (1994). Volitional processes in decision making: Personality and situational determinants. In: J. Kuhl & J. Beckmann (Hrsg.), *Volition and personality: Action versus state orientation* (p.177-194). Göttingen: Hogrefe & Huber.

Ehrling, T., Zetsche, U., Weidacker, K., Wahl, K., Schönfeld, S. & Ehlers, A. (2011). The Perseverative Thinking Questionnaire (PTQ): Validation of a content-independent measure of repetitive negative thinking. *Journal of Behavior Therapy and Experimental Psychiatry*, 42(2), 225-232.

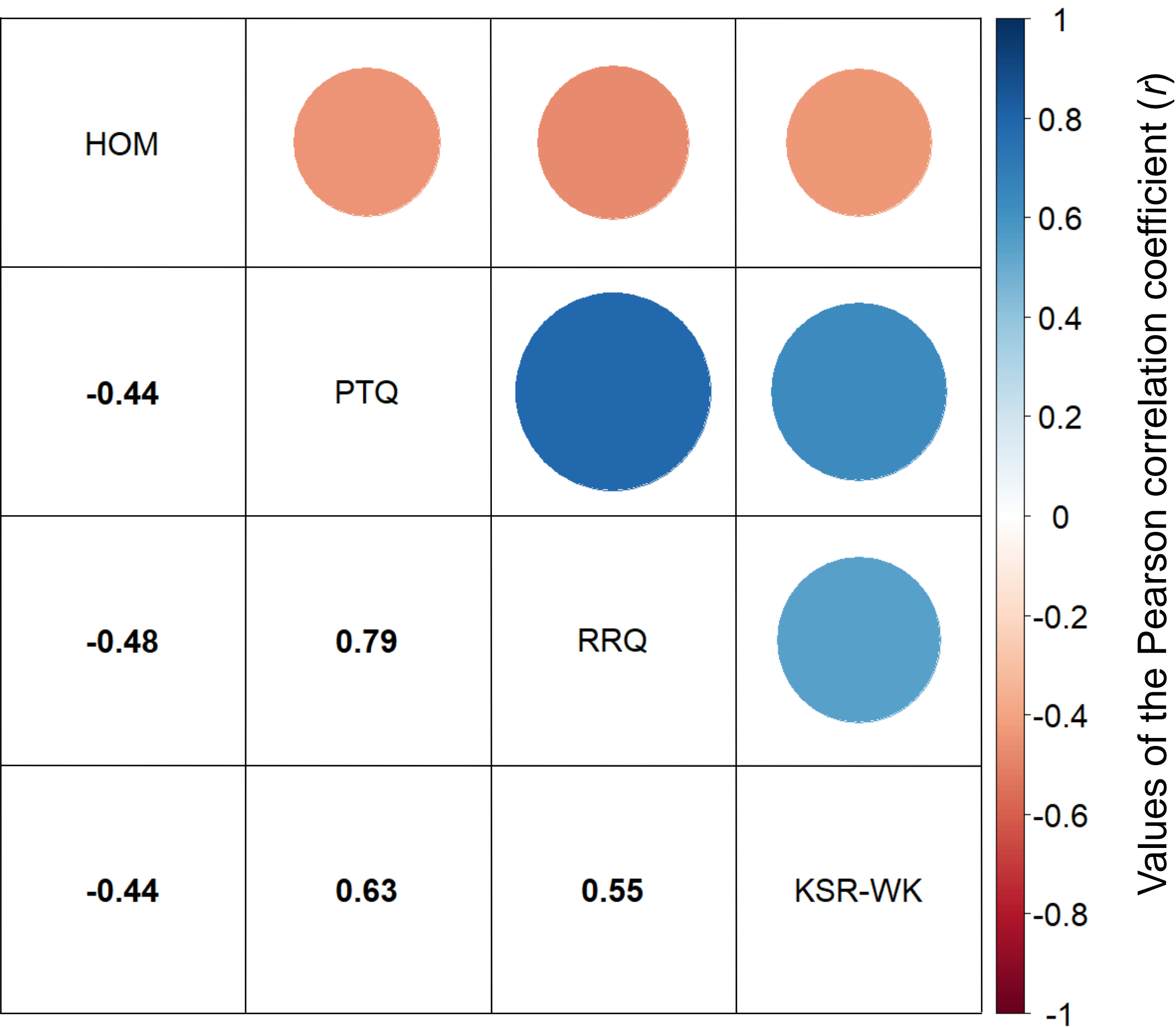
König, D. (2012). *Deutsche Version der Skala Rumination aus dem Rumination-Reflection Questionnaire (RRQ)*. Zugriff am 24.10.2017. http://dk.akis.at/RRQ_Rumination.pdf

Kuhl, J. (1983). Motivation, Konflikt und Handlungskontrolle. Berlin, Heidelberg: Springer.

Raab, M. & Johnson, J. G. (2002). Individuelle Differenzen der Handlungsorientierung bei Risikoentscheidungen im Sport. *Psychologie und Sport*, 4, 159-171.

Methods & Results

The figure summarizes the correlations between action orientation subsequent to failure scale (HOM) and three rumination scales (PTQ, RRQ, KSR-WK; alpha corrected with Holm). The diagonal depicts the individual scales used in this study. The arrays under the diagonal present the correlational coefficients (r) of the particular scales. The arrays above the diagonal illustrate these values in a symbolic way. The size of the circles specify the extent of the parameter value (values between 0 and 1) and the color of the circles show the direction of the parameter value (positive or negative). All correlations are significant ($p > .05$).



Additional robust regression analyses indicated that failure-related action orientation predicts rumination (see table below).

Criterion	Predictor	B	SE B	β	p	R^2_{adj}
PTQ	HOM	-1.57	0.24	-.46	< .001	.23
RRQ	HOM	-1.25	0.17	-.48	< .001	.22
KSR-WK	HOM	-1.13	0.19	-.50	< .001	.24

Discussion

The present study confirms the assumption that failure-related action orientation is associated to rumination in general as well as in a specific competition context. Our results complement studies that showed an association between action orientation and differences in athletic behavior (e.g. Beckmann & Kazén, 1994; Raab & Johnson, 2002). Moreover, the results support the assumption that rumination might be a relevant factor in competitive sports.

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