



Sport Anxiety and Aspects of Mindfulness in Athletes: Implications for Mindful Sport Performance Enhancement (MSPE)



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Abstract

Preliminary analysis of data collected prior to a controlled study of MSPE (with 55 Division I cross-country runners) examined how two measures of mindfulness, the Five Facet Mindfulness Questionnaire (FFMQ; Baer et al., 2006) and the Philadelphia Mindfulness Scale (PHLMS; Cardaciotto et al., 2007), differentially related to trait sport anxiety as well as to state sport anxiety prior to a 2-mile time trial.

Mindfulness has previously been shown to relate inversely to trait sport anxiety (Pineau et al., 2011), but no research to date has examined the associations among the various facets of both mindfulness and anxiety in athletes. This could be a particularly informative endeavor, as Baer et al. (2006) note the importance of looking at the associations between the components of related constructs to obtain a fuller understanding of how these constructs may interact.

Thus, the results of the present investigation could elucidate the nature of the relationship between mindfulness and anxiety in athletes. Additionally, such information could have implications for how to tailor MSPE and other mindfulness-based sport performance enhancement interventions to help athletes manage anxiety.

Correlations Among Measures of Mindfulness and Both Trait and State Sport Anxiety

Mindfulness	Sport Anxiety Scale (Trait; $n = 55$)				CSAI-2R (State; $n = 44$)		
	Total Anxiety	Somatic Anxiety	Worry	Concentration Disruption	Somatic Anxiety	Cognitive Anxiety	Sport-Confidence
PHLMS	-.26	-.19	-.20	-.30*	-.13	-.34*	.41**
Acceptance	-.38**	-.30*	-.32*	-.34*	-.14	-.20	.17
Awareness	.16	.15	.16	.01	-.01	-.28	.44**
FFMQ	-.29*	-.18	-.27*	-.32*	-.07	-.22	.51***
Observe	.05	.03	-.01	.17	-.07	-.27*	.36*
Describe	-.07	-.08	.03	-.19	.03	.00	.44**
Act Aware	-.40**	-.28*	-.34*	-.41**	-.09	.03	.22
Nonjudge	-.22	-.05	-.29*	-.33*	-.02	-.09	.21
Nonreact	-.20	-.17	-.17	-.14	-.10	-.29	.40**

Note. Act Aware = Act with awareness, Nonjudge = Nonjudging of inner experience, Nonreact = Nonreactivity to inner experience. CSAI-2R = Revised Competitive State Anxiety Scale-2.
* $p < .05$. ** $p < .01$. *** $p < .001$.

Future Directions for MSPE Research and Training

- Would emphasizing acceptance-related mindfulness concepts and skills more effectively help athletes manage sport anxiety?
- But, would awareness-related concepts be needed to increase sport confidence?
- Would emphasizing the application of mindfulness skills in real-world settings impact athletes' experience of state sport anxiety?
- Would mindfulness training for athletes alter the associations between mindfulness and somatic and cognitive anxiety?

Summary

More mindful athletes tend to experience less trait sport anxiety.

- This association appears to be stronger for the cognitive components of anxiety than the somatic component.
- *Acceptance-related* aspects of mindfulness appear to be most important for athletes with regard to trait anxiety.

There is less evidence for an association between mindfulness and state anxiety. However, similar to trait anxiety, the observed correlations were more likely to be with the cognitive aspect of state anxiety.

- The less robust relation between mindfulness and state anxiety may be due to a lack of training in how to effectively apply mindfulness skills in stressful situations.

Mindfulness appears to be strongly related to state sport confidence.

- In contrast to the results regarding state and trait anxiety, the awareness-related component of mindfulness seems to play a more important role than acceptance.

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