Application of Inner Speech in the Motor Learning Context: A Validation Study

Amir. Dana[1]* , Thomas M. Brinthaupt[2]

[1] Department of Physical Education, Ta.C., Islamic Azad University, Tabriz, Iran
[2] Department of Psychology, Middle Tennessee State University, Murfreesboro, TN, USA

* Corresponding author email address: amirdana2010@gmail.com

1. Round 1

1.1 Reviewer 1

Reviewer:

The distinction between gross and fine motor skills is appropriate, but a clearer bridge is needed between this classification and the relevance of inner speech. Consider briefly stating why inner speech may play different roles in these categories.

The sentence, "research indicates that cognitive strategies can also facilitate motor skill acquisition…" would benefit from more specific recent citations to strengthen the claim (e.g., more recent than Hatzigeorgiadis et al., 2011).

The rationale for adapting LISS specifically—rather than developing a new motor-domain tool—needs more justification. The authors should elaborate on why LISS was more suitable for adaptation than existing sport-specific instruments.

Demographic characteristics such as participants' prior exposure to sports or motor learning tasks are not reported. These factors could influence baseline inner speech patterns and should be acknowledged or controlled for.

The claim that "subscales... have not been previously explored within the realm of motor learning" may be an overstatement. Prior research has addressed motivational and instructional self-talk in motor learning. Please nuance this claim accordingly.

Although Table 5 shows good model fit indices, there is no discussion about potential multicollinearity or overlap between predictors. Consider addressing this to validate the unique contribution of each subscale.

Authors revised the manuscript and uploaded the updated document.

1.2   Reviewer 2

Reviewer:

The authors state that "the timing and rationale behind novices' use of self-talk… remain ambiguous." This assertion is intriguing, but it should be supported with a citation or theoretical basis for the ambiguity.

While the distinction between self-talk and inner speech is acknowledged, the manuscript does not fully elaborate on how inner speech, as defined here, is methodologically or functionally distinct from self-talk. Clarifying this distinction will enhance conceptual rigor.

The manuscript states that participants had completed a basketball course, but it does not clarify the time gap between course completion and this study. This could influence their retention or skill accuracy.

While the use of established tests for basketball performance is commendable, the manuscript does not clarify whether the coach scoring the participants was blind to the inner speech data. This is important for reducing bias.

Structural equation modeling was conducted using Smart-PLS, yet the manuscript does not mention how missing data (if any) were handled. This is critical for reproducibility.

Authors revised the manuscript and uploaded the updated document.

2.   Revised

Editor's decision after revisions: Accepted.
Editor in Chief's decision: Accepted.