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Before the 2022 EMCC Global Research Conference, we invited researchers undertaking coaching, mentoring or supervision research, to submit a poster showcasing their research and its impact on practice. We also invited researchers who submitted posters to provide more information about their work

We are delighted to provide this additional information to encourage open access dialogue between researchers and practitioners. The copyright remains with the authors.

Short Biography

Marjolein Stefens is working as an internal PhD Candidate at the department of Lifespan Psychology at Open Universiteit (https://www.ou.nl/web/open-universiteit/-/levensloopspychologie). She has an MSc in Lifespan Psychology from Open Universiteit in the Netherlands, where she got involved in conducting coaching research in her research internship at the Dutch Association of Professional Coaches (Nederlandse Orde van beroepscoaches, NOBCO), and master thesis. Marjolein's PhD research has an overall focus on coaching effectiveness, specifically by considering relational and motivational constructs in the process of coaching. Other research interests involve the utilization of statistics in applied research, especially structural equation modeling.

Longitudinal Measurement Invariance of the Working Alliance Inventory – Short form across Coaching Sessions[1]

In both clinical and scientific practice, decisions are often based on the assessment of scores on measurement scales within persons across time. Therefore, it is important to ensure that potential changes in such scores across measurements are unbiased, and accurately reflect true change in the construct that these scorings are assumed to represent. From a psychometric perspective, a measurement scale needs to demonstrate at least longitudinal measurement invariance (LMI) in order to allow for meaningful comparisons of scores within persons across time. Although one would expect measurement tools to undergo thorough testing on this specific psychometric feature, actual testing is oftentimes merely assumed instead of performed. As far as we are aware, LMI testing of the Working Alliance Short form (WAI-S) across coaching sessions remains unexplored to date. Therefore, the main goal of this study was to investigate LMI of the WAI-S in coaching.

The WAI-S for coaching represents an instrument to chart working alliance in a coaching context. The construct of working alliance originates in the context of psychotherapy, yet has been widely approached from Bordin's (1979) pan-theoretical perspective which applies to all helping relationships. It describes the professional relationship between therapist and client, or coach and coachee, which is fostered by the quality of the *bond*, and mutual agreement on *tasks* and *goals*. Although a number of studies support this co-called three-factor model of the WAI-S (comprising a bond, tasks and goals factor), contrasting results outline the fact that researchers have not yet reached consensus on the factorial structure of the WAI-S. For example, it has also been found that the tasks and goals aspects cluster on a single factor which was accordingly dubbed as "*contract*"factor, whereas the bond aspect formed a second "*contact*"factor. Considering this discord concerning the factor structure of the WAI-S, as well as the fact that LMI testing departs from an established factorial structure, we first investigated the factorial structure of the WAI-S.

In order to do so, the WAI-S was assessed twice in a sample of 490 Dutch coachees. Data were collected by the Dutch Association of Professional Coaches (Nederlandse Orde van Beroepscoaches [NOBCO]). Coachees answered questions regarding the bond with their coach (e.g., "My coach and I trust one another"), and the perceived agreement on tasks (e.g., "We agree on what is important for me to work on") and goals (e.g., "My coach and I are working towards mutually agreed upon goals").
In line with theory, a three-factor model (bond, tasks, goals) showed superior fit to our data than one- and two-factor models, on both measurement occasions.

We then tested for LMI, using a commonly used framework comprising three levels of testing. We tested whether or not the factorial structure (i.e., configural invariance), factor loadings (i.e., metric invariance), and intercepts (i.e., scalar invariance) remained equal over time. Even though we identified one item as 'non-invariant' over time, our data lead to the overall conclusion that the WAI-S for coaching meets assumptions of LMI.

Our results indicate that practitioners and researchers may quantitatively gauge the quality of working alliance across coaching sessions by employing the WAI-S. However, in order to validate and enrich interpretation, we suggest that this application is complemented with additional (qualitative) investigations. Since few researchers have preceded us in engaging into research concerning these psychometric features of the WAI-S in coaching, we believe our research makes a valuable contribution to the evidence-based coaching practice by demonstrating that the WAI-S for coaching (although still in need for further investigation) can be used to accurately assess working alliance across coaching sessions.

Reference: Bordin, E. S. (1979). The generalizability of the psychoanalytic concept of the working alliance. *Psychotherapy: Theory, Research & Practice, 16*(3), 252-260. https://doi.org/10.1037/h0085885