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USING PSYCHOMETRIC ANALYSES

TO CLARIFY AND INTEGRATE CONCEPTS

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Words: 495

References: 9

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Successful research into subjectively defined constructs (such as addictions) relies on their clear definition in our theories, the selection of appropriate indicators (usually questions), and testable theories about how these constructs and indicators relate. The psychometric techniques applied in the paper on inter-individual differences in tanning addiction in this issue of the BJD[1] were developed to test exactly such theories. The development of the Bergen Tanning Addiction Scale (BTAS) starts with clinical addiction criteria (construct definition) and the derivation of indicators that represent the relevant aspects (content coverage). The authors then employ confirmatory factor analysis for categorical data to test (a) whether the BTAS' seven items are indicators of a single dimension of problematic tanning and (b) whether they unfairly discriminate between gender or age groups. The results are very encouraging.

Assessing inter-individual differences in tanning addiction based on single-symptom indicators and with a gradated and (according to the results) precise measure is important for research into correlates of this behaviour. But it also speaks to debates whether psychopathology should be represented rather by categories or dimensions[2,3] and whether behavioural addictions are best conceptualised as addictions or impulse control disorders.[4] Substance use disorders are frequently researched in this context,[5] but work on behavioural addictions is still missing.[6] Instruments developed in the outlined manner allow investigating the categorical/dimensional nature of behavioural addictions[3] and how the symptoms of behavioural addictions can be integrated into broader (e.g., higher-order) models of psychpathology.[2,5] Nevertheless, caution is necessary when translating categorical diagnostic criteria into dimensional measures: clinical diagnostic criteria of a disorder do not need to be unidimensional since they were developed for categorical diagnoses that characterise and identify (extreme) configurations. Approaches to the measurement of depression are one of the key examples for this.[7]

The authors review available instruments at the start of their paper, which is an important step to provide a benchmark for improvement and not to re-invent the wheel. Sometimes this type of narrative needs to be strengthened by a systematic review of the existing instruments and their validation results. The development of an instrument is not finished with a single study, but rather sets of studies accumulate evidence for the psychometric validity of an instrument, and often only for

specific purposes. Finding, analysing, and aggregating psychometric results from these studies is therefore an important task. Frameworks such as the COnsensus-based Standards for the selection of health Measurement INstruments (COSMIN)[8] offer tools to consolidate knowledge about existing instruments. Additionally, to show that the BTAS is actually better in measuring individual differences and predicting relevant outcomes than other available instruments necessitates comparative studies, investigating incremental predictive validity as well as (a) whether the instruments measure the same construct and if so, (b) whether one does this better than another one.[9]

Andreassen and colleagues[1] present an instrument validation that evidences very good psychometric properties of the BTAS in a general population sample. Their study further provides several directions for future thinking and debate about the measurement of behavioural addictions.

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CONFLICTS OF INTEREST

The author has no current or past affiliations or other involvement in any organization or entity with an interest in this commentary. The author is co-editor in chief of "Quality of Life Research".