

Commentary on Kumar et al.: The importance of conceptual clarity and alignment between constructs and measurements in social cognition research in addiction

Social cognition research is considered pivotal for understanding and tackling the interpersonal problems involved in the persistence of alcohol use disorder (AUD [1, 2]). Recently, Kumar and colleagues reported to have provided meta-analytical evidence for impairments in empathy, and particularly cognitive (versus affective) empathy, in AUD [3]. Although their results, in themselves, valuably extend the social cognition literature in AUD, we believe that the authors' interpretations thereof, as they are stated, are misleading to researchers and clinicians in the field.

Indeed, the included measures are detached, in nature and content, from the empathy concept they are claimed to capture: the 'ability' to 'share' (affective empathy) and 'understand' (cognitive empathy) 'others' emotional states'. First, all but one effect sizes in the general empathy meta-analysis are based on retrospective self-report questionnaires. Such instruments offer important insights, but cannot supplant behavioral tasks for indexing objective ability [4, 5]. This is especially true when investigating empathy in AUD, as (a) individuals with AUD show reduced awareness of their (social) cognitive difficulties [6] and (b) self-report empathy measures correlate weakly, if at all, with their alleged behavioral counterparts [7–9]. Secondly, the most frequently used questionnaires, upon which the proposed distinction between cognitive and affective empathy predominantly relies, comprise many items that do not target the intended construct. We have listed examples of problematic items in Supporting information, Table S1. Among these, no affective empathy item emphasizes the correspondence between one's own and others' emotions (e.g. 'I really enjoy caring for other people'), while no cognitive empathy item even directly pertains to others' emotions (e.g. 'I am good at predicting what someone will do'). Hence, we propose that the current results support neither impaired ability nor particularly pronounced alterations in individuals' understanding versus sharing of others' emotions. Closer consideration of what was actually measured suggests instead that they may highlight, for example, reductions in propensity, motivation or self-perceived ability to care for, identify or react to others' mental states in AUD. Such interpretations carry markedly different, although equally valuable and critical, implications for research and practice.

Importantly, mismatches between measures and constructs are not specific to the current meta-analysis, but characterize nearly half

of recent empathy studies [10], including our own. This is partly attributable to the concept of empathy itself which, more than other social cognition domains, suffers from considerable vagueness and inconsistency [10, 11]. Measures assessing different 'empathies' are hence assigned identical labels, and then viewed as assessing interchangeable constructs. This raises the more general concern that the empathy taxonomy may be more confusing than informative to social cognition research in addictions: conceptual ambiguity favours misinterpretations of data and conversely obscures important findings, jeopardizing both efficient cumulative research and later translation into precise and coherent interventions. A solution, until consensus on the conceptualization and assessment of empathy is reached in addiction science, is to bypass the term to favour definitions of investigated components (e.g. propensity to feel concerned by other's distress) that are clearer, more specific and more faithful to the actual nature and content of assessment tools [10].

AUTHOR CONTRIBUTIONS

Arthur Pabst: Conceptualization; project administration; writing—original draft. **Pierre Maurage:** Conceptualization; funding acquisition; project administration; writing—review and editing.

ACKNOWLEDGEMENTS

P.M. (Senior Research Associate) and A.P. (FRESH grant holder) are supported by the Belgian Fund for Scientific Research (F.R.S.-FNRS). We thank the members of the Alcohol Group from the LEP for their feedback on earlier versions of this manuscript.

DECLARATION OF INTERESTS

The authors declare that they have no known competing financial interests or personal relationships that could have appeared to influence the work reported in this paper.

Arthur Pabst 

Pierre Maurage 

Louvain Experimental Psychopathology Research Group (LEP),
Psychological Science Research Institute, UCLouvain,
Louvain-la-Neuve, Belgium

Correspondence

Pierre Maurage, UCLouvain, Faculté de Psychologie, Place du Cardinal Mercier, 10, B-1348, Louvain-la-Neuve, Belgium.
Email: pierre.maurage@uclouvain.be

ORCID

Arthur Pabst  <https://orcid.org/0000-0002-1265-3899>

Pierre Maurage  <https://orcid.org/0000-0003-0197-0810>

REFERENCES

1. Bora E, Zorlu N. Social cognition in alcohol use disorder: a meta-analysis. *Addiction*. 2017;112:40–48.
2. Heilig M, Epstein DH, Nader MA, Shaham Y. Time to connect: bringing social context into addiction neuroscience. *Nat Rev Neurosci*. 2016;17:592–599.
3. Kumar L, Skrzyński CJ, Creswell KG. Meta-analysis of associations between empathy and alcohol use and problems in clinical and non-clinical samples. *Addiction*. 2022;117:2793–2804.
4. Olderbak S, Wilhelm O. Overarching principles for the Organization of Socioemotional Constructs. *Curr Dir Psychol Sci*. 2020;29:63–70.
5. Dang J, King KM, Inzlicht M. Why are self-report and behavioral measures weakly correlated? *Trends Cogn Sci*. 2020;24:267–269.

6. Le Berre AP. Emotional processing and social cognition in alcohol use disorder. *Neuropsychology*. 2019;33:808–821.
7. Melchers M, Montag C, Markett S, Reuter M. Assessment of empathy via self-report and behavioural paradigms: data on convergent and discriminant validity. *Cogn Neuropsychiatry*. 2015;20:157–171.
8. Sunahara CS, Rosenfield D, Alvi T, Wallmark Z, Lee J, Fulford D, et al. Revisiting the association between self-reported empathy and behavioral assessments of social cognition. *J Exp Psychol Gen*. 2022; 151:3304–3322.
9. Murphy BA, Lilienfeld SO. Are self-report cognitive empathy ratings valid proxies for cognitive empathy ability? Negligible meta-analytic relations with behavioral task performance. *Psychol Assess*. 2019;31: 1062–1072.
10. Hall JA, Schwartz R. Empathy present and future. *J Soc Psychol*. 2019;159:225–243.
11. Cuff BMP, Brown SJ, Taylor L, Howat DJ. Empathy: a review of the concept. *Emotion Rev*. 2016;8:144–153.

SUPPORTING INFORMATION

Additional supporting information can be found online in the Supporting Information section at the end of this article.