

Psychotherapy and Psychosomatics

Psychother Psychosom , DOI: 10.1159/000551662

Received: February 25, 2026

Accepted: March 19, 2026

Published online: March 20, 2026

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ISSN: 0033-3190 (Print), eISSN: 1423-0348 (Online)

<https://www.karger.com/PPS>

Psychotherapy and Psychosomatics

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Letter

The need for flexible, co-developed Adverse Childhood Experiences (ACEs) assessment: response to Chang & Su, Adverse Childhood Experiences (ACEs) in the Digital Era: An Urgent Call for Precision Assessment

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Short Title: ACE assessment in the digital era

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Keywords: adverse childhood experiences, assessment, indecent online content, digital era, childhood abuse, Trauma, Psychological trauma.

We thank Chang & Su [1] for their eloquent and fascinating reflections on our systematic review of validated adverse childhood experience (ACE) questionnaires [2]. As Chang & Su [1] highlight, the findings of our review identified mixed evidence with respect to existing ACEs questionnaires, demonstrating moderate to poor psychometrical quality. Furthermore, the content validity of the included questionnaires, conducted by people with lived experiences (PWLE), identified how existing ACEs questionnaires do not appropriately assess the diversity and real-life impact of ACEs. Consequently, we called for an urgent new approach towards ACEs assessments, co-developed with PWLE, to ensure ACEs assessments are trauma-informed and assess a diverse range of relevant experiences [2]. As Chang & Su [1] outline in detail and provide a strong rationale for, a key development that needs to take place within ACEs assessment is the inclusion of adverse experiences within online environments. We agree with Chang & Su [1] that this type of ACE is critically lacking from current assessments, with none of the questionnaires included in our review assessing digital or online negative experience, such as cyberbullying [2].

Despite age-restrictions being in place on most social media platforms and for adult-orientated online content, age declaration methods are easy to circumvent [3]. Consequently, many young people are exposed – often incidentally – to indecent content, including sexual exploitation and cyberbullying [4], which makes them vulnerable to experience considerable psychological harm [5]. This has led the Australian government to ban children younger than age 16 from having social media accounts [6], legislation that is also being considered by the UK government and is currently under consultation. Given the substantial rise in prevalence of young people being exposed to indecent online content since the COVID 19 pandemic, UNICEF recommends acknowledging and including cyberspace as a key environment where abuse in childhood can take place [4,5].

We agree with Chang & Su [1] that AI can further amplify harm and reinforce cyberbullying. At the same time, AI may offer powerful tools for the prevention and intervention of cyberbullying, including the real-time monitoring of vast volumes of online interactions that humans cannot otherwise monitor [7]. Consequently, AI has the potential to both intensify and mitigate digital harm. Focusing on prevention, research might consider how to 1) reduce digital harm using AI pre-emptively; 2) detect patterns of repeated, targeted harassment rather than isolated incidents; and 3) identify coordinated group attacks [8]. AI actions in response to digital harm should be organised to prompt users to reconsider their use of aggressive language and to provide victims with immediate support.

The current lack of ACE assessments addressing potential digital harm and abuse is a striking omission that urgently needs our attention. However, as alluded to by Chang & Su [1], the key to including these types of digital harm or abuse effectively and appropriately will be to fully understand the lived experiences. Furthermore, given the rapid development and changes in the digital environment, for any assessment to remain relevant and current, the developed tools will need to be responsive to change and include flexibility. To be able to achieve these two key aims for ACEs assessment, the involvement of PWLE, especially young adults with negative online experience, will be critical.

As platforms and social media evolve and technologies such as AI develop, the ACE questionnaires should be able to capture the following three aspects: asking questions that are general in concept, specific in structure, and flexible for adjustment, to allow cross-cultural adaptability through translations [9-12].

Specifically, when creating ACE questionnaires, while it is important to be specific, precise and ask clear questions, the items need to be broad enough to encompass different contexts and easy to answer. Well-structured questions that are both structurally specific and conceptually generic will ensure that respondents understand them and can provide accurate, relevant answers to these questionnaires. For example, in the context of cyberbullying, the ACE questions may focus on repeated harassment, social exclusion through digital or online communications, humiliation, and online threats. These items represent a broad context rather than provide specific examples of what might have happened (e.g., posting comments meant to shame someone [13-14]). In this way, ACE questions can capture behavioural constructs rather than lists of behaviours. With respect to

flexibility, ACE questionnaires need to be applicable and usable across different cultures, age groups and settings. To accomplish this, all questions, but especially those about cyberbullying, need to use non-culture-specific terms (i.e., avoid slang and colloquialisms), so that they can be translated without loss of meaning across languages [15].

To this end, based on the findings of our systematic review, we have co-developed with our Consortium Against Pain Inequality (CAPE) - Chronic Pain Advisory Group (CPAG) a new ACEs questionnaire, called the CAPE-ACEQ, which includes new items reflecting negative experience or harm due to online indecent content. Evaluation of the psychometrical qualities of CAPE-ACEQ is currently underway and the instrument is anticipated to be available soon.

Accepted Manuscript

Statements

Acknowledgement (optional)

The authors of this study are members of the Advanced Pain Discovery Platform and the Consortium Against Pain Inequality (CAPE) studying the impact of adverse childhood experiences on pain and responses to treatment.

Conflict of Interest Statement

The authors have no conflicts of interest to declare.

Funding Sources

This study was supported by a UKRI and Versus Arthritis Grant: MR/W002566/1

Author Contributions

LC took the lead on drafting the content and writing of the letter.

AC, TGH and LAC provided meaningful and comprehensive feedback and additional content on the letter drafts and have approved the final version of the letter.

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