Psychological Medicine

cambridge.org/psm

Invited Letter Rejoinder

Cite this article: Widom CS (2021). Rejoinder to Kraav, Tolmunen, Kauhanen, and Lehto Letter to the Editor. *Psychological Medicine* **51**, 1771–1772. https://doi.org/10.1017/S0033291720000926

Received: 14 March 2020
Accepted: 20 March 2020
First published online: 22 April 2020

Author for correspondence:
Cathy Spatz Widom,
E-mail: cwidom@jjay.cuny.edu

CAMBRIDGE UNIVERSITY PRESS

Rejoinder to Kraav, Tolmunen, Kauhanen, and Lehto Letter to the Editor

Cathy Spatz Widom

Psychology Department, John Jay College and City University of New York, New York City, NY, USA

The results of the Kraav et al. study are particularly encouraging in an era when there is so much concern about non-replications in science (Open Science Collaboration, 2015). This replication is even more notable because these new findings represent a complex set of relationships that extend the work of Osborn and Widom (2019) and similarly presents findings that contradict previous research. Replications of findings that challenge existing assumptions are important and warrant serious attention.

The authors found that documented records of ACEs were associated with the elevated levels of CRP that remained significant even controlling for smoking, alcohol use, and depression, whereas retrospective self-reports were not. These findings are similar to our study (Osborn & Widom, 2019) despite a number of differences between the two studies. First, Osborn and Widom compared the results of retrospective self-reports of childhood physical and sexual abuse and neglect with child protective agency (official) reports of childhood physical and sexual abuse and neglect for the same time period. Kraav et al. compared nurses' reports at the time and retrospective reports based on different indicators of adverse childhood experiences, that is, they defined ACES as childhood experiences of poverty, paternal alcohol problems, or parental divorce that might be considered more subtle forms of adverse childhood experiences than childhood maltreatment. Second, they examined the consequences in a substantially longer follow-up period of a group of older middle-age men. Third, the participants were from a different country (Finland) and more homogeneous racially so that the sample was all white Caucasian males, whereas the Osborn and Widom study included males, females, Blacks, and Whites. Fourth, although blood was collected in both studies, there were vast differences between the protocols for blood collection. In the Finnish study, blood tests were conducted during baseline investigations (1984–1986) when the participants (mean age 50.9) were requested to fast overnight, abstain from smoking for 12 h, and avoid alcohol use for 3 days before obtaining blood samples. This was not a possibility with the Osborn and Widom study. Because of these differences, the similarity of the findings is even more striking.

The documented ACES in the Finnish study were retrieved from school health records from nurses' reports based on the 'health and behavior of pupils, home visits and familiarity with the family backgrounds and home conditions of the pupils'. The authors noted that nurses could have missed milder cases and only recorded a case when an ACE was brought to their attention. Although this is a real possibility, the documentation of the childhood experiences is the critical factor given that it predicts this long-term health consequence. Furthermore, this potential limitation has been expressed in relation to the Osborn and Widom study where child protective agency records may have missed milder cases. But as these findings show, reliance on retrospective self-reports is no panacea.

One of the concerns expressed in the reviews of longitudinal cohort studies is that they are somehow limited and lack generalizability because of the particular time period and geographic area where the studies were conducted. The documented ACES in the Finnish study were retrieved from school health records taken by school nurses during the 1930s to 1950s, when the official divorce rate in Finland was very low and divorces were not viewed favorably. Thus, this concern may be particularly relevant for this study, given the time period in which these participants were initially recruited for the study and the definition of adverse childhood experiences. The authors suggest that the stigma associated with divorce at the time might have influenced the nurses' records and whether 'separation' (*v.* divorce) was more common because of legal advantages to families. However, at present, it is reasonable to question the inclusion of parental divorce in the ACES in general, since it may not have as much salience as other adverse childhood experiences, particularly given that the divorce rate is now much higher in general and estimated to be a characteristic of 40–50% of married couples in the USA (Kazdin, 2000).

This study found that the agreement between documented and retrospectively self-reported ACES was low: ranging from 0.0001 for poverty to 0.202 for parental divorce, with paternal alcohol problems in between (0.135). These low levels of agreement between retrospective and prospective reports are consistent with the results of the meta-analysis by Baldwin, Reuben, Newbury, and Danese (2019), but they also should remind us of the earlier work

of Henry, Moffitt, Caspi, Langley, and Silva (1994) who found that psychosocial subjective variables (e.g. reports about subjects' psychological states and family processes) had lower levels of agreement compared to relatively objective (residence changes, height, and weight) information. In the Finnish study, the men were asked what their childhood home was like when they were about 10 years old (wealthy to poor) – a subjective and difficult judgment even for adults. Other studies have similarly reported that the absolute level of agreement between the two data sources is low (Offer, Kaiz, Howard, & Bennett, 2000; Sternberg et al., 1993; White, Widom, & Chen, 2007). It is worth remembering that over 25 years ago, Henry et al. (1994) wrote: 'The use of retrospective reports should be limited to testing hypotheses about the relative standing of individuals in a distribution and should not be used to test hypotheses that demand precision in estimating event frequencies and event dates' (p.92).

Finally, the authors' thoughtful discussion of the low levels of agreement in their study adds to the discourse on this increasingly important topic. Kraav et al. call attention to the importance of studies acknowledging the possible source of the trauma information on study results. I would suggest that it is not enough to simply acknowledge this issue but to make all efforts to design research that includes both subjective and objective measures of adverse childhood experiences. This work by Kraav et al. reinforces the concerns expressed in a paper by Danese (2020) and an editorial by Widom (2019) that prospective and retrospective accounts of ACES cannot be considered interchangeably. Studies show that retrospective reports of ACES more strongly predict mental health problems (Newbury et al., 2018), indicating that perceptions of childhood experiences are very important in understanding mental health. But this should not necessarily be considered evidence of causality in determining mental health problems.

References

Baldwin, J. R., Reuben, A., Newbury, J. B., & Danese, A. (2019). Agreement between prospective and retrospective measures of childhood victimization: A systematic review and meta-analysis. *JAMA Psychiatry*, *76*(6), 584–593.

Danese, A. (2020). Annual Research Review: Rethinking childhood trauma – New research directions for measurement, study design and analytical strategies. *Journal of Child Psychology and Psychiatry*, *61*(3), 236–250.

Henry, B., Moffitt, T. E., Caspi, A., Langley, J., & Silva, P. A. (1994). On the 'remembrance of things past': A longitudinal evaluation of the retrospective method. *Psychological Assessment*, *6*(2), 92–101.

Kazdin, A. E. (2000). *Encyclopedia of psychology*. Washington, DC: American Psychological Association.

Newbury, J. B., Arseneault, L., Moffitt, T. E., Caspi, A., Danese, A., Baldwin, J. R., & Fisher, H. L. (2018). Measuring childhood maltreatment to predict early-adult psychopathology: Comparison of prospective informant-reports and retrospective self-reports. *Journal of Psychiatric Research*, *96*, 57–64.

Offer, D., Kaiz, M., Howard, K. I., & Bennett, E. S. (2000). The altering of reported experiences. *Journal of the American Academy of Child and Adolescent Psychiatry*, *39*(6), 735–742.

Open Science Collaboration (2015). Estimating the reproducibility of psychological science. *Science (New York, N.Y.)*, *349*(6251), aac4716.

Osborn, M., & Widom, C. S. (2019). Do documented records and retrospective reports of childhood maltreatment similarly predict chronic inflammation? *Psychological Medicine*, 1–10.

Sternberg, K. J., Lamb, M. E., Greenbaum, C., Cicchetti, D., Dawud, S., Cortes, R. M., … Lorey, F. (1993). Effects of domestic violence on children's behavior problems and depression. *Developmental Psychology*, *29*(1), 44–52.

White, H. R., Widom, C. S., & Chen, P. H. (2007). Congruence between adolescents' self-reports and their adult retrospective reports regarding parental discipline practices during their adolescence. *Psychological Reports*, *101*(3), 1079–1094.

Widom, C. S. (2019). Are retrospective self-reports accurate representations or existential recollections? *JAMA Psychiatry*, *76*(6), 567–568.