

## COMMENTARY

## Not Universally Sinful: Cultural Aspects of Memory Sins

Annelies Vredeveldt and Gabi de Bruïne

Department of Criminal Law and Criminology, Faculty of Law, Vrije Universiteit Amsterdam, The Netherlands

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Schacter's (1999, 2001) seminal work on the seven memory sins was inspired by the biblical seven deadly sins commonly known in Western cultures. The world view of many within Western cultures is based on a tripartite division of the tangible earth in the middle between heaven and hell. Yet, in many cultures, there is no concept of purgatory or the afterlife, which means that sins must be dealt with in life on earth (e.g., by offering). In the Lugbara culture (an ethnic group that lives mainly in Uganda and the Democratic Republic of the Congo), unlike in Christianity, sins are categorized in terms of severity, with the worst possible sins being incest and murder of a close kinsman (Anguandia, 2005). In the Semang culture (an ethnic group that lives mainly in Peninsular Malaysia and southern Thailand), people believe that thunder and lightning are caused by sinfulness, which arouses the anger of the God Karei (Von Furer-Haimendorf, 1974). The most serious offence against Karei is incest, but it is also considered sinful to tease or ridicule animals.

Analogously, while the focus of Schacter's original work (1999, 2001) and the target article (2022a) is squarely on research conducted in Western countries (with a particular overrepresentation of undergraduate students from the United States), the memory sins he speaks of may manifest in meaningfully different ways in other cultures. Henrich et al. (2010) highlighted that the widespread focus in the psychological literature on people from Western, Educated, Industrialized, Rich, and Democratic (WEIRD) countries disregards

88% of the world population (see also Apicella et al., 2020; Rad et al., 2018). Here, we consider cultural aspects of memory sins and discuss research conducted outside of WEIRD countries.

We define culture in a broad sense, as “the interactive aggregate of common characteristics that influence a human group's response to its environment” (Hofstede, 1980, p. 21). Hofstede (1980, 2001) proposed that societies differ in terms of six cultural dimensions, of which the two most well known are collectivism–individualism (the degree to which people in society value group cohesion vs. autonomy) and power distance (the degree to which people accept a hierarchical distribution of power in society). These two cultural dimensions will feature in our discussion. It is important to stress that there is considerable variation *within* cultural groups as well (cf. Fischer & Poortinga, 2018), but the current article focuses on differences *between* cultural groups because the role of culture is so often overlooked.

## Transience

Transience refers to forgetting information over time. What we remember and what we forget is largely culturally determined (for overviews, see Ross & Wang, 2010; Wang, 2021). For example, people from individualist cultures tend to have more independent self-construal, with their sense of identity closely linked to individual experiences and achievements, whereas people from collectivist cultures tend to have more interdependent self-construal, focusing on collective experiences and relationships (Markus & Kitayama, 1991). That explains why people from individualist countries, such as the United States and Australia, tend to report more autobiographical memories surrounding individual experiences, while people from collectivist countries, such as China and Russia, tend to report more memories of social or historical events (Jobson & O'Kearney, 2008; Marian & Kaushanskaya, 2004; Wang, 2001; Wang & Conway, 2004). Additionally, autobiographical memory reports by people from individualist cultures tend to be higher in specificity compared to reports from collectivist cultures (Anakwah et al., 2020; Jobson, 2009; Wang, 2001; Wang & Conway, 2004). Even the age at which people start to form conscious memories of events differs between cultures (Wang, 2003). Thus, when, what, and how much we forget (the sin of transience) depends on our cultural background.

Cultural differences in transience can have serious consequences in real-world contexts. In the asylum determination process, the decision to grant asylum is often solely based on the applicant's

 Annelies Vredeveldt  <https://orcid.org/0000-0003-1925-4062>

 Gabi de Bruïne  <https://orcid.org/0000-0002-7420-9582>

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Correspondence concerning this article should be addressed to Annelies Vredeveldt, Department of Criminal Law and Criminology, Faculty of Law, Vrije Universiteit Amsterdam, De Boelelaan 1105, 1081 HV Amsterdam, The Netherlands. Email: [a.vredeveldt@vu.nl](mailto:a.vredeveldt@vu.nl)

story about their country of origin and/or fear of persecution (Herlihy et al., 2010). Most immigration officials come from an individualist culture, in which reports about experienced events are specific, emotionally elaborate, and focus on the role of the narrator (Jobson & O’Kearney, 2008; Wang, 2001; Wang & Conway, 2004). Most asylum seekers come from a collectivist culture, in which reports about experienced events are more general, emotionally neutral, and focus on the role of groups and relationships. Immigration officials may therefore conclude that an asylum seeker is lying or does not really remember the event, based on an expectation that a report about a genuine experience would look different (Herlihy et al., 2012).

### Absentmindedness

Absentmindedness is a failure to pay attention during encoding or retrieval. Someone’s cultural background influences what they pay attention to. For example, people from societies that value “social conformity” (i.e., high on collectivism and power distance) tend to focus more on the environment than on individual elements in a scene—a field-dependent cognitive style—whereas people from societies that value autonomy (i.e., low on collectivism and power distance) focus more on individual elements—a field-independent cognitive style (Witkin & Berry, 1975). In line with this research on cognitive style, Masuda and Nisbett (2001) found that when exposed to underwater scenes, Japanese participants paid more attention to the background and relationships between the fish, whereas American participants paid more attention to the individual fish (see also Kitayama et al., 2003). Nisbett et al. (2001; Varnum et al., 2010) suggest that these cultural differences in perception may be rooted in ancient philosophies: Whereas the ancient Greek philosophy that inspired much of Western culture places a large emphasis on the independence of separate entities, ancient Asian philosophies such as Confucianism place more emphasis on the balance and harmony between things.

One important real-world application of research on absentmindedness, highlighted by Schacter (2022a), is missing person alerts. He identifies three stages: (a) attention to the alert, (b) continued awareness of the task to identify the missing person, and (c) recognition of the missing person when encountered. Although we are unaware of cross-cultural research on missing person alerts, we can formulate some hypotheses on cultural differences at each stage. First, we expect that the amount of attention paid to the alert depends on the degree of respect and deference for the authority that published the alert, which relates to power distance (cf. Hofstede, 2001; Johnson et al., 2005). Second, people’s continued awareness to search for the missing person likely depends on the sense of shared responsibility in society. For example, in South African isiXhosa culture, the expectation is that everyone looks after the children in the community (see, e.g., Otter, 2012, pp. 64–65). Third, recognizing a missing person based on a photograph is likely more difficult for people from rural societies with less experience transforming a two-dimensional image (the photograph) to a three-dimensional image (the person in front of you; cf. de Bruïne et al., 2018; Hudson, 1960; Jahoda & McGurk, 1974). The chances of recognizing a missing person might also be lower in more ethnically diverse societies (cf. Gier & Kreiner, 2020), since recognition is less likely when the recognizer and target have different ethnicities (known as the own-race bias; Lee & Penrod, 2022).

### Blocking

Blocking happens when one is unable to retrieve specific information from memory, even when appropriate cues are presented. The most well-known blocking phenomenon, described by Schacter (1999), is the tip-of-the-tongue (TOT) effect (but see also the think/no-think effect; Schacter, 2022b). The TOT effect seems to be a universal memory sin, observed across languages and cultures (Schwartz & Metcalfe, 2011). Even the expression itself, a metaphor involving the tongue or mouth, translates directly in 45 of the 51 languages surveyed by Schwartz (1999), such as “navonotootse’a” in Cheyenne (“I have lost it on my tongue”) and “Hyeu kkedu-te mam-dol-da” in Korean (“sparkling at the end of my tongue”). In languages that do not have the expression, speakers may still experience it. For example, once the phenomenon was explained to speakers of the unwritten Mayan language Q’eqchi’, which lacks a term for TOT, they indicated that they experienced it frequently in Q’eqchi’ too (Brennen et al., 2007). In two further studies, Brennen and colleagues induced the TOT state at rates equivalent to those found in speakers of Western languages. Thus, of all seven memory sins, blocking is perhaps the most universal sin, at least in terms of the TOT phenomenon (which was central to the conceptualization of blocking; Schacter, 1999).

### Misattribution and Suggestibility

The sins of misattribution and suggestibility both constitute source-monitoring errors (Johnson et al., 1993). Misattribution refers to the general incorrect remembering of the source of a memory (e.g., confusing a dream with reality), while suggestibility refers specifically to misattributions caused by influence from others. Strikingly, the very notion that reporting someone else’s memory as your own is a memory sin is culturally specific. In predominantly oral cultures, such as certain communities in Rwanda, East Timor, and Sierra Leone, “testimony of individuals about what they saw or experienced ... may merge with the collective understanding of their neighbors, kin, or communities about what happened” (Cohen, 2012, p. 14). Thus, an eyewitness may consider it perfectly acceptable to testify about an event that was described to them by a family member or trusted friend as if they had seen it themselves, because they consider that person’s account to be as valuable as their own observations (Combs, 2010; O’Brien & Keibell, 2014; Schot, 2021).

Suggestibility relates to various concepts that cross-cultural psychologists have studied extensively, such as agreeableness (the tendency to agree with others; cf. Valchev et al., 2014), obedience to authority (the tendency to agree with someone in authority; cf. Katz et al., 2020), and acquiescence (the tendency to respond “yes” to questions; cf. Cheung & Rensvold, 2000). Importantly, people may outwardly agree with others while knowing perfectly well that they do not actually agree (i.e., “compliance”; Gudjonsson, 2013) or because they have incorporated the suggested information into their own memory (i.e., false memory). Research on false memories implanted by suggestion has overwhelmingly been conducted with participants from WEIRD countries, with a few exceptions in Indonesian (Irwanda et al., 2022; Maulina et al., 2021) and Chinese (Zhu et al., 2010) samples. We are aware of only two studies that examined cross-cultural differences in false memory formation. Schwartz et al. (2014) found that Americans falsely

remembered more categorically related words than Turks, whereas Turks falsely remembered more noncategorically related words than Americans. They concluded that Americans are more likely than Turks to use categories to organize information in memory. J. Wang et al. (2021) found that Europeans (Belgium, Dutch, German) had more false recollections on a Deese–Roediger–McDermott task with lists of pictures, while Chinese participants reported more familiarity. Further, Europeans formed more self-related false memories, which could be explained by the individualist tendency to focus more on the self.

From an applied perspective, misremembering lists of words or pictures is clearly not as consequential as falsely remembering aspects of a witnessed event or even an entire event that did not happen. To our knowledge, the only cross-cultural study on the misinformation effect (i.e., misleading information resulting in misremembered aspects of events; see Loftus, 2005) was conducted by Anakwah (2021). Mock witnesses from Ghana and the United Kingdom received postevent misinformation about a theft they had witnessed on video and later completed a free recall and recognition task. In free recall, there were no significant differences between groups in endorsement of misinformation, but on the recognition task, Ghanaians endorsed misleading details more than U.K. participants. The author argued that Ghanaians' collectivist background could explain why they were more likely to incorporate others' reports into their own. Finally, we are unaware of any studies in which false memories of entire events, or "rich false memories" (Loftus, 2003), were implanted in non-WEIRD samples. This is a clear gap in our knowledge that future researchers need to address, given that rich false memories have the potential to result in serious false allegations and even wrongful convictions (for overviews, see Loftus & Davis, 2006; Otgaar et al., 2022), and yet, the extant findings may not apply in non-WEIRD contexts.

### Bias

Our memories of the past are influenced by our current knowledge and beliefs, due to the memory sin called bias. Schacter (2022a) excluded bias in the target article (due to space constraints), even though bias may well be the memory sin that has received most research attention in the past 2 decades. Memories are always biased in the sense that we retrieve aspects that are most relevant to us (e.g., focus on individual or collective experiences), but some forms of bias are more consequential than others. One of the more egregious biases is the influence of stereotypes, the "cognitive representation of the ideas, facts, and images that are associated with a social group" (Lenton et al., 2001, p. 3). Stereotypes affect not only reasoning and decision-making but also what we remember. People are more likely to falsely remember information if it is consistent with stereotypes about stigmatized groups such as immigrants (Araya et al., 2003), skinheads (Peters et al., 2006), or women (Lenton et al., 2001). Further, stereotypes can affect eyewitnesses' memory of who did what during a witnessed event (e.g., Kleider et al., 2008; Leichtman & Ceci, 1995) and potential jurors' memory of incriminating information about the defendant (Giner-Sorolla et al., 2002; Van Knippenberg et al., 1999).

Racial stereotypes also affect memory for faces. Black suspects are not only more likely to be misidentified by a White eyewitness due to the own-race bias mentioned earlier (Lee & Penrod, 2022), but Black men with facial features associated with the "criminal

Black man" stereotype—such as dark skin, thick lips, and a wide nose—are even more likely to be misidentified than Black men with less stereotypical features (e.g., Knuycky et al., 2014). Kleider-Offutt et al. (2017) put this finding to the test in a real-world setting: They asked participants to rate the facial features of Black men who had been wrongfully convicted and later exonerated by the Innocence Project in the United States. Those who had been convicted due to eyewitness identification errors had more stereotypically "criminal" facial features than those who had been convicted due to other errors. In sum, stereotypes influence how we remember faces, actions, and other aspects of events, which can have severe consequences in legal settings.

### Persistence

Persistence refers to the intrusive recall of traumatic events. How people cope with traumatic memories is profoundly culturally specific (Hunt, 2010, 2013). For example, whereas American and European war veterans typically report psychological symptoms (such as intrusive thoughts, hypervigilance, and irritability), survivors of the Cambodian and Rwandan genocides often report somatic symptoms (such as headaches, dizziness, and shortness of breath; Hagengimana & Hinton, 2009; Hinton & Good, 2016). Some African languages do not even have the vocabulary for Western psychopathological concepts such as depression and rather describe posttraumatic distress in terms of physical ailments (Weiss et al., 2022). The diagnosis of posttraumatic stress disorder (PTSD) has been criticized for not including somatic symptoms (e.g., Hinton & Lewis-Fernández, 2011) and has even been referred to as a "Western cultural syndrome" (Summerfield, 1999). Yet, there is also evidence that many PTSD symptoms, including intrusive memories of traumatic events, are reported across cultures (Hinton & Good, 2016; Hinton & Lewis-Fernández, 2011). It is therefore useful to consider how interventions designed to reduce intrusive traumatic memories affect people from different cultural backgrounds.

Schacter (2022a) discussed pharmacological and behavioral treatments for PTSD symptoms. A finding of particular interest was that playing the video game *Tetris* shortly after memory reactivation consistently reduced PTSD symptoms across five studies. Yet, all participants in those five studies hailed from individualist cultures (the United Kingdom: Iyadurai et al., 2018; James et al., 2015; Sweden: Kanstrup et al., 2021; Germany: Kessler et al., 2018; and Iceland: Thorarinsdottir et al., 2022). Whether behavioral treatments such as playing *Tetris* are also effective for traumatized people from collectivist cultures, remains to be seen. We hypothesize that people who place great value on discussing the context and relationships surrounding a traumatic event, rather than the event itself (see, e.g., Hall, 1976, on high-context culture), may benefit more from narrative-based interventions. Indeed, in the aftermath of atrocities traumatizing many people, authorities in collectivist cultures established institutions to allow people to tell their stories, reconcile, and come together to rebuild society. Examples include the Truth and Reconciliation Commission (TRC) in South Africa (see Gibson, 2004; Mendeloff, 2009) and Gacaca ("grass") courts in Rwanda (see Clark, 2010; Reyntjens, 1990), though some evidence suggests that testifying at the TRC (Kaminer et al., 2001) and Gacaca courts (Brounéus, 2010) did not actually benefit healing on a personal level. Empirical research on the effectiveness of narrative-based interventions in non-WEIRD cultures



is scarce, but Zang et al. (2011) found that Chinese children traumatized by the Sichuan earthquake in 2008 benefited significantly from an intervention designed to help them express their trauma-related emotion. Yet, Zang and colleagues involved only one cultural group and did not compare the narrative-based intervention to a behavioral intervention. Ultimately, to test our hypothesis, we need cross-cultural studies comparing different types of treatment (e.g., narrative vs. behavioral) across different cultural groups (e.g., collectivist vs. individualist cultures).

Cultural background may also influence how traumatic memories are reported. The handful of studies on traumatic memory in cross-cultural settings (Humphries & Jobson, 2012; Jobson, 2009, 2011; Jobson & O’Kearney, 2006) suggests both similarities and differences between individualist and collectivist cultures. One reported similarity is that memory reports of traumatic events are significantly less specific than reports of nontraumatic events, regardless of cultural background (Humphries & Jobson, 2012). One reported difference is that in individualist cultures, trauma survivors with PTSD are less likely than those without PTSD to express autonomy and self-determination in their memory reports, whereas the opposite is true for trauma survivors from collectivist cultures (Jobson, 2011). More knowledge about how culture interacts with trauma to influence memory reporting is crucial (cf. Vredeveltdt et al., 2022), for instance, in immigration interviews with asylum seekers, who have often experienced traumatic events and are almost always from a different culture than the interviewer (for an overview, see Herlihy et al., 2012).

## Conclusion

Schacter’s (1999, 2001) conceptualization of memory sins has made an undeniable impact on the field of psychology, and his target article focusing on applied contexts (Schacter, 2022a) is a valuable addition. Yet, the focus of Schacter’s reviews is also undeniably WEIRD. In this commentary, we present a missing piece of the puzzle, highlighting cross-cultural comparisons of memory sins and research conducted outside of WEIRD societies. Our review shows that culture has a profound influence on what is forgotten (transience), what is paid attention to in the first place (absent-mindedness), what external information is incorporated in memory (misattribution and suggestibility), how memories are colored by stereotypes (bias), and how trauma affects memory (persistence). The only memory sin that seems to be universally experienced across cultures and even described in the same way in most languages is blocking (specifically, the TOT phenomenon). We recommend that researchers pay more attention to cultural differences in future studies on memory. Given the “important—sometimes life-changing—effects of these sins in applied settings” (Schacter, 2022a, p. 455), it is crucial that we do not ignore 88% of the world population.

## References

- Anakwah, N. (2021). *Considering the native land of witnesses: Cultural influences on memory reports* [Doctoral thesis, Maastricht University, University of Portsmouth]. The House of Legal Psychology. <https://doi.org/10.26481/dis.20210921na>
- Anakwah, N., Horselenberg, R., Hope, L., Amankwah-Poku, M., & van Koppen, P. (2020). Cross-cultural differences in eyewitness memory reports. *Applied Cognitive Psychology, 34*(2), 504–515. <https://doi.org/10.1002/acp.3637>
- Anguandia, A. E. E. (2005). *The concept of sin in African worldview, with special reference to the Lugbara people of the Democratic Republic of Congo*. [Master’s thesis]. Nairobi Evangelical Graduate School of Theology.
- Apicella, C., Norenzayan, A., & Henrich, J. (2020). Beyond WEIRD: A review of the last decade and a look ahead to the global laboratory of the future. *Evolution and Human Behavior, 41*(5), 319–329. <https://doi.org/10.1016/j.evolhumbehav.2020.07.015>
- Araya, T., Ekehammar, B., & Akrami, N. (2003). Remembering things that never occurred: The effects of to-be-forgotten stereotypical information. *Experimental Psychology, 50*(1), 27–32. <https://doi.org/10.1027//1618-3169.50.1.27>
- Brennen, T., Vikan, A., & Dybdahl, R. (2007). Are tip-of-the-tongue states universal? Evidence from the speakers of an unwritten language. *Memory, 15*(2), 167–176. <https://doi.org/10.1080/09658210601164743>
- Brounéus, K. (2010). The trauma of truth telling: Effects of witnessing in the Rwandan Gacaca courts on psychological health. *The Journal of Conflict Resolution, 54*(3), 408–437. <https://doi.org/10.1177/0022002709360322>
- Cheung, G. W., & Rensvold, R. B. (2000). Assessing extreme and acquiescence response sets in cross-cultural research using structural equations modeling. *Journal of Cross-Cultural Psychology, 31*(2), 187–212. <https://doi.org/10.1177/0022022100031002003>
- Clark, P. (2010). *The Gacaca courts, post-genocide justice and reconciliation in Rwanda: Justice without lawyers*. Cambridge University Press. <https://doi.org/10.1017/CBO9780511761584>
- Cohen, D. (2012). The passage of time, the vagaries of memory, and reaching judgment in mass atrocity cases. In M. Bergsmo & C. Wui Ling (Eds.), *Old evidence and core international crimes* (p. 313). Torkel Opsahl Academic EPublisher. <https://cdm21069.contentdm.oclc.org/digital/collection/pp11/id/341544>
- Combs, N. A. (2010). *Fact-finding without facts: The uncertain evidentiary foundations of international criminal convictions*. Cambridge University Press. <https://doi.org/10.1017/CBO9780511760259>
- de Bruïne, G., Vredeveltdt, A., & van Koppen, P. J. (2018). Cross-cultural differences in object recognition: Comparing asylum seekers from Sub-Saharan Africa and a matched Western European control group. *Applied Cognitive Psychology, 32*(4), 463–473. <https://doi.org/10.1002/acp.3419>
- Fischer, R., & Poortinga, Y. H. (2018). Addressing methodological challenges in culture-comparative research. *Journal of Cross-Cultural Psychology, 49*(5), 691–712. <https://doi.org/10.1177/0022022117738086>
- Gibson, J. L. (2004). Does truth lead to reconciliation? Testing the causal assumptions of the South African truth and reconciliation process. *American Journal of Political Science, 48*(2), 201–217. <https://doi.org/10.1111/j.0092-5853.2004.00065.x>
- Gier, V. S., & Kreiner, D. S. (2020). The effect of educational priming on face recognition from a silver alert. *The Journal of General Psychology, 147*(2), 140–168. <https://doi.org/10.1080/00221309.2019.1656163>
- Giner-Sorolla, R., Chaiken, S., & Lutz, S. (2002). Validity beliefs and ideology can influence legal case judgments differently. *Law and Human Behavior, 26*(5), 507–526. <https://doi.org/10.1023/A:1020251921659>
- Gudjonsson, G. H. (2013). Interrogative suggestibility and compliance. In A. M. Ridley, F. Gabbert, & D. J. La Rooy (Eds.), *Suggestibility in legal contexts: Psychological research and forensic implications* (pp. 45–61). Wiley. <https://doi.org/10.1002/9781118432907.ch3>
- Hagengimana, A., & Hinton, D. E. (2009). ‘Ihahamuka’ a Rwandan syndrome of response to the genocide: Blocked flow, spirit assault, and shortness of breath. In D. E. Hinton & B. J. Good (Eds.), *Culture and panic disorder* (pp. 205–229). Stanford University Press. <https://doi.org/10.1515/9780804771115-013>
- Hall, E. T. (1976). *Beyond culture*. Anchor Press/Doubleday.
- Henrich, J., Heine, S. J., & Norenzayan, A. (2010). The weirdest people in the world? *Behavioral and Brain Sciences, 33*(2–3), 61–83. <https://doi.org/10.1017/S0140525X0999152X>

- Herlihy, J., Gleeson, K., & Turner, S. (2010). What assumptions about human behaviour underlie asylum judgments? *International Journal of Refugee Law*, 22(3), 351–366. <https://doi.org/10.1093/ijrl/eeq027>
- Herlihy, J., Jobson, L., & Turner, S. (2012). Just tell us what happened to you: Autobiographical memory and seeking asylum. *Applied Cognitive Psychology*, 26(5), 661–676. <https://doi.org/10.1002/acp.2852>
- Hinton, D. E., & Good, B. J. (2016). The culturally sensitive assessment of trauma: Eleven analytic perspectives, a typology of errors, and the multiplex models of distress generation. In D. E. Hinton & B. J. Good (Eds.), *Culture and PTSD: Trauma in global and historical perspective* (pp. 50–112). University of Pennsylvania Press. <https://doi.org/10.9783/9780812291469-002>
- Hinton, D. E., & Lewis-Fernández, R. (2011). The cross-cultural validity of posttraumatic stress disorder: Implications for DSM-5. *Depression and Anxiety*, 28(9), 783–801. <https://doi.org/10.1002/da.20753>
- Hofstede, G. (1980). *Culture's consequences: International differences in work-related values*. Sage Publications.
- Hofstede, G. (2001). *Culture's consequences: Comparing values, behaviors, institutions, and organizations across nations* (2nd ed.). Sage Publications.
- Hudson, W. (1960). Pictorial depth perception in sub-cultural groups in Africa. *The Journal of Social Psychology*, 52(2), 183–208. <https://doi.org/10.1080/00224545.1960.9922077>
- Humphries, C., & Jobson, L. (2012). Short report: Influence of culture and trauma history on autobiographical memory specificity. *Memory*, 20(8), 915–922. <https://doi.org/10.1080/09658211.2012.710432>
- Hunt, N. C. (2010). *Memory, war and trauma*. Cambridge University Press. <https://doi.org/10.1017/CBO9780511845017>
- Hunt, N. C. (2013). Memory and social meaning: The impact of society and culture on traumatic memories. In M. Linden & K. Rutkowski (Eds.), *Hurting memories and beneficial forgetting: Post-traumatic stress disorder, biographical developments and social conflicts* (pp. 49–57). Elsevier. <https://doi.org/10.1016/B978-0-12-398393-0.00004-3>
- Irwanda, D. Y., Maulina, D., Sekarmewangi, T. H., Putri, K. M. H., Otgaar, H., & Bücken, C. (2022). The effect of different delivery modes of misinformation on false memories in adolescents and adults. *Journal of Cognitive Psychology*, 34(2), 208–216. <https://doi.org/10.1080/20445911.2021.1994980>
- Iyadurai, L., Blackwell, S. E., Meiser-Stedman, R., Watson, P. C., Bonsall, M. B., Geddes, J. R., Nobre, A. C., & Holmes, E. A. (2018). Preventing intrusive memories after trauma via a brief intervention involving Tetris computer game play in the emergency department: A proof-of-concept randomized controlled trial. *Molecular Psychiatry*, 23(3), 674–682. <https://doi.org/10.1038/mp.2017.23>
- Jahoda, G., & McGurk, H. (1974). Pictorial depth perception in Scottish and Ghanaian children: A critique of some findings with the Hudson Test. *International Journal of Psychology*, 9(4), 255–267. <https://doi.org/10.1080/00207597408247109>
- James, E. L., Bonsall, M. B., Hoppitt, L., Tunbridge, E. M., Geddes, J. R., Milton, A. L., & Holmes, E. A. (2015). Computer game play reduces intrusive memories of experimental trauma via reconsolidation-update mechanisms. *Psychological Science*, 26(8), 1201–1215. <https://doi.org/10.1177/0956797615583071>
- Jobson, L. (2009). Cultural differences in specificity of autobiographical memories: Implications for asylum decisions. *Psychiatry, Psychology, and Law*, 16(3), 453–457. <https://doi.org/10.1080/13218710902930259>
- Jobson, L. (2011). Cultural differences in levels of autonomous orientation in autobiographical remembering in posttraumatic stress disorder. *Applied Cognitive Psychology*, 25(2), 175–182. <https://doi.org/10.1002/acp.1660>
- Jobson, L., & O'Kearney, R. (2006). Cultural differences in autobiographical memory of trauma. *Clinical Psychologist*, 10(3), 89–98. <https://doi.org/10.1080/13284200600939892>
- Jobson, L., & O'Kearney, R. (2008). Cultural differences in retrieval of self-defining memories. *Journal of Cross-Cultural Psychology*, 39(1), 75–80. <https://doi.org/10.1177/0022022107312073>
- Johnson, M. K., Hashtroudi, S., & Lindsay, D. S. (1993). Source monitoring. *Psychological Bulletin*, 114(1), 3–28. <https://doi.org/10.1037/0033-2909.114.1.3>
- Johnson, T., Kulesa, P., Cho, Y. I., & Shavitt, S. (2005). The relation between culture and response styles: Evidence from 19 countries. *Journal of Cross-Cultural Psychology*, 36(2), 264–277. <https://doi.org/10.1177/0022022104272905>
- Kaminer, D., Stein, D. J., Mbanga, I., & Zungu-Dirwayi, N. (2001). The Truth and Reconciliation Commission in South Africa: Relation to psychiatric status and forgiveness among survivors of human rights abuses. *The British Journal of Psychiatry*, 178(4), 373–377. <https://doi.org/10.1192/bjp.178.4.373>
- Kanstrup, M., Singh, L., Göransson, K. E., Widoff, J., Taylor, R. S., Gamble, B., Iyadurai, L., Moulds, M. L., & Holmes, E. A. (2021). Reducing intrusive memories after trauma via a brief cognitive task intervention in the hospital emergency department: An exploratory pilot randomised controlled trial. *Translational Psychiatry*, 11(1), Article 30. <https://doi.org/10.1038/s41398-020-01124-6>
- Katz, C., Tener, D., Marmor, A., Lusky-Weisrose, E., & Mordi, H. (2020). “Yes, my uncle, I’ll do whatever you say”: Experiences of Israeli Muslim Arab children during forensic interviews following child sexual abuse. *Journal of Interpersonal Violence*, 37(5–6), NP2465–NP2489. <https://doi.org/10.1177/0886260520943732>
- Kessler, H., Holmes, E. A., Blackwell, S. E., Schmidt, A.-C., Schweer, J. M., Bücker, A., Herpertz, S., Axmacher, N., & Kehyayan, A. (2018). Reducing intrusive memories of trauma using a visuospatial interference intervention with inpatients with posttraumatic stress disorder (PTSD). *Journal of Consulting and Clinical Psychology*, 86(12), 1076–1090. <https://doi.org/10.1037/ccp0000340>
- Kitayama, S., Duffy, S., Kawamura, T., & Larsen, J. T. (2003). Perceiving an object and its context in different cultures: A cultural look at new look. *Psychological Science*, 14(3), 201–206. <https://doi.org/10.1111/1467-9280.02432>
- Kleider, H. M., Pezdek, K., Goldinger, S. D., & Kirk, A. (2008). Schema-driven source misattribution errors: Remembering the expected from a witnessed event. *Applied Cognitive Psychology*, 22(1), 1–20. <https://doi.org/10.1002/acp.1361>
- Kleider-Offutt, H. M., Knuycky, L. R., Clevinger, A. M., & Capodanno, M. M. (2017). Wrongful convictions and prototypical black features: Can a face-type facilitate misidentifications? *Legal and Criminological Psychology*, 22(2), 350–358. <https://doi.org/10.1111/lcrp.12105>
- Knuycky, L. R., Kleider, H. M., & Cavrak, S. E. (2014). Line-up misidentifications: When being ‘prototypically black’ is perceived as criminal. *Applied Cognitive Psychology*, 28(1), 39–46. <https://doi.org/10.1002/acp.2954>
- Lee, J., & Penrod, S. D. (2022). Three-level meta-analysis of the other-race bias in facial identification. *Applied Cognitive Psychology*, 36(5), 1106–1130. <https://doi.org/10.1002/acp.3997>
- Leichtman, M. D., & Ceci, S. J. (1995). The effects of stereotypes and suggestions on preschoolers’ reports. *Developmental Psychology*, 31(4), 568–578. <https://doi.org/10.1037/0012-1649.31.4.568>
- Lenton, A. P., Blair, I. V., & Hastie, R. (2001). Illusions of gender: Stereotypes evoke false memories. *Journal of Experimental Social Psychology*, 37(1), 3–14. <https://doi.org/10.1006/jesp.2000.1426>
- Loftus, E. F. (2003). Make-believe memories. *American Psychologist*, 58(11), 867–873. <https://doi.org/10.1037/0003-066X.58.11.867>
- Loftus, E. F. (2005). Planting misinformation in the human mind: A 30-year investigation of the malleability of memory. *Learning & Memory*, 12(4), 361–366. <https://doi.org/10.1101/lm.94705>
- Loftus, E. F., & Davis, D. (2006). Recovered memories. *Annual Review of Clinical Psychology*, 2(1), 469–498. <https://doi.org/10.1146/annurev.clinpsy.2.022305.095315>
- Marian, V., & Kaushanskaya, M. (2004). Self-construal and emotion in bicultural bilinguals. *Journal of Memory and Language*, 51(2), 190–201. <https://doi.org/10.1016/j.jml.2004.04.003>

- Markus, H. R., & Kitayama, S. (1991). Culture and the self: Implications for cognition, emotion, and motivation. *Psychological Review*, 98(2), 224–253. <https://doi.org/10.1037/0033-295X.98.2.224>
- Masuda, T., & Nisbett, R. E. (2001). Attending holistically versus analytically: Comparing the context sensitivity of Japanese and Americans. *Journal of Personality and Social Psychology*, 81(5), 922–934. <https://doi.org/10.1037/0022-3514.81.5.922>
- Maulina, D., Irwanda, D. Y., Sekarmewangi, T. H., Putri, K. M. H., & Otgaar, H. (2021). How accurate are memories of traffic accidents? Increased false memory levels among motorcyclists when confronted with accident-related word lists. *Transportation Research Part F: Traffic Psychology and Behaviour*, 80, 275–294. <https://doi.org/10.1016/j.trf.2021.04.015>
- Mendeloff, D. (2009). Trauma and vengeance: Assessing the psychological and emotional effects of post-conflict justice. *Human Rights Quarterly*, 31(3), 592–623. <https://doi.org/10.1353/hrq.0.0100>
- Nisbett, R. E., Peng, K., Choi, I., & Norenzayan, A. (2001). Culture and systems of thought: Holistic versus analytic cognition. *Psychological Review*, 108(2), 291–310. <https://doi.org/10.1037/0033-295X.108.2.291>
- O'Brien, M., & Kebbell, M. (2014). Interview techniques in International Criminal Court and Tribunals. In R. Bull (Ed.), *Investigative interviewing* (pp. 91–101). Springer New York. [https://doi.org/10.1007/978-1-4614-9642-7\\_5](https://doi.org/10.1007/978-1-4614-9642-7_5)
- Otgaar, H., Howe, M. L., & Patihis, L. (2022). What science tells us about false and repressed memories. *Memory*, 30(1), 16–21. <https://doi.org/10.1080/09658211.2020.1870699>
- Otter, S. (2012). *Khayelitsha: Umlungu in a township*. Penguin Books. <https://www.amazon.nl/Khayelitsha-Umlungu-Township-Steven-Otter-ebook/dp/B06XDP2L3T>
- Peters, M. J. V., Jelacic, M., & Merckelbach, H. L. G. J. (2006). When stereotypes backfire: Trying to suppress stereotypes produces false recollections of a crime. *Legal and Criminological Psychology*, 11(2), 327–336. <https://doi.org/10.1348/135532505X74055>
- Rad, M. S., Martingano, A. J., & Ginges, J. (2018). Toward a psychology of Homo sapiens: Making psychological science more representative of the human population. *Proceedings of the National Academy of Sciences of the United States of America*, 115(45), 11401–11405. <https://doi.org/10.1073/pnas.1721165115>
- Reyntjens, F. (1990). La gacaca ou la justice du gazon au Rwanda. *Politique Africaine*, 40, 31–41. <https://francegenocidetutsi.org/ReyntjensGacacaDecembre1990.pdf>
- Ross, M., & Wang, Q. (2010). Why we remember and what we remember: Culture and autobiographical memory. *Perspectives on Psychological Science*, 5(4), 401–409. <https://doi.org/10.1177/1745691610375555>
- Schacter, D. L. (1999). The seven sins of memory. Insights from psychology and cognitive neuroscience. *American Psychologist*, 54(3), 182–203. <https://doi.org/10.1037/0003-066X.54.3.182>
- Schacter, D. L. (2001). *The seven sins of memory: How the mind forgets and remembers*. Houghton Mifflin.
- Schacter, D. L. (2022a). Memory sins in applied settings: What kind of progress? *Journal of Applied Research in Memory and Cognition*, 11(4), 445–460. <https://doi.org/10.1037/mac0000078>
- Schacter, D. L. (2022b). The seven sins of memory: An update. *Memory*, 30(1), 37–42. <https://doi.org/10.1080/09658211.2021.1873391>
- Schot, S. L. (2021). *Testimonial evidence of traumatised witnesses in trials of international crimes: Striking a balance in the interest of fair proceedings and accurate fact-finding*. University of Groningen.
- Schwartz, A. J., Boduroglu, A., & Gutchess, A. H. (2014). Cross-cultural differences in categorical memory errors. *Cognitive Science*, 38(5), 997–1007. <https://doi.org/10.1111/cogs.12109>
- Schwartz, B. L. (1999). Sparkling at the end of the tongue: The etiology of tip-of-the-tongue phenomenon. *Psychonomic Bulletin & Review*, 6(3), 379–393. <https://doi.org/10.3758/BF03210827>
- Schwartz, B. L., & Metcalfe, J. (2011). Tip-of-the-tongue (TOT) states: Retrieval, behavior, and experience. *Memory & Cognition*, 39(5), 737–749. <https://doi.org/10.3758/s13421-010-0066-8>
- Summerfield, D. (1999). A critique of seven assumptions behind psychological trauma programmes in war-affected areas. *Social Science & Medicine*, 48(10), 1449–1462. [https://doi.org/10.1016/S0277-9536\(98\)00450-X](https://doi.org/10.1016/S0277-9536(98)00450-X)
- Thorarindottir, K., Holmes, E. A., Hardarson, J., Stephensen, E. S., Jonasdottir, M. H., Kanstrup, M., Singh, L., Hauksdottir, A., Halldorsdottir, T., Gudmundsdottir, B., Thordardottir, E., Valdimarsdottir, U., & Bjornsson, A. (2022). Using a brief mental imagery competing task to reduce the number of intrusive memories: Exploratory case series with trauma-exposed women. *JMIR Formative Research*, 6(7), Article e37382. <https://doi.org/10.2196/37382>
- Valchev, V. H., van de Vijver, F. J. R., Meiring, D., Nel, J. A., Hill, C., Laher, S., & Adams, B. G. (2014). Beyond Agreeableness: Social-relational personality concepts from an indigenous and cross-cultural perspective. *Journal of Research in Personality*, 48, 17–32. <https://doi.org/10.1016/j.jrp.2013.10.003>
- Van Knippenberg, A., Dijksterhuis, A., & Vermeulen, D. (1999). Judgement and memory of a criminal act: The effects of stereotypes and cognitive load. *European Journal of Social Psychology*, 29(2–3), 191–201. [https://doi.org/10.1002/\(SICI\)1099-0992\(199903/05\)29:2/3<191::AID-EJSP923>3.0.CO;2-O](https://doi.org/10.1002/(SICI)1099-0992(199903/05)29:2/3<191::AID-EJSP923>3.0.CO;2-O)
- Varnum, M. E. W., Grossmann, I., Kitayama, S., & Nisbett, R. E. (2010). The origin of cultural differences in cognition: The social orientation hypothesis. *Current Directions in Psychological Science*, 19(1), 9–13. <https://doi.org/10.1177/0963721409359301>
- Von Furer-Haimendorf, C. (1974). The sense of sin in cross-cultural perspective. *Man*, 9(4), 539–556. <https://doi.org/10.2307/2801123>
- Vredeveltdt, A., Memon, A., & Given-Wilson, Z. (2022). *Culture, trauma, and memory in investigative interviews* [Manuscript in preparation]. Vrije Universiteit Amsterdam and Royal Holloway University of London.
- Wang, J., Otgaar, H., Santtila, P., Shen, X., & Zhou, C. (2021). How culture shapes constructive false memory. *Journal of Applied Research in Memory and Cognition*, 10(1), 24–32. <https://doi.org/10.1037/h0101792>
- Wang, Q. (2001). Culture effects on adults' earliest childhood recollection and self-description: Implications for the relation between memory and the self. *Journal of Personality and Social Psychology*, 81(2), 220–233. <https://doi.org/10.1037/0022-3514.81.2.220>
- Wang, Q. (2003). Infantile amnesia reconsidered: A cross-cultural analysis. *Memory*, 11(1), 65–80. <https://doi.org/10.1080/741938173>
- Wang, Q. (2021). The cultural foundation of human memory. *Annual Review of Psychology*, 72(1), 151–179. <https://doi.org/10.1146/annurev-psych-070920-023638>
- Wang, Q., & Conway, M. A. (2004). The stories we keep: Autobiographical memory in American and Chinese middle-aged adults. *Journal of Personality*, 72(5), 911–938. <https://doi.org/10.1111/j.0022-3506.2004.00285.x>
- Weiss, L. A., Van Rosmalen, E. A. J., & Vredeveltdt, A. (2022). *Asking the experts: A focus group and review on eyewitness memory in the multicultural context of South Africa* [Manuscript under review].
- Witkin, H. A., & Berry, J. W. (1975). Psychological differentiation in cross-cultural perspective. *Journal of Cross-Cultural Psychology*, 6(1), 4–87. <https://doi.org/10.1177/002202217500600102>
- Zang, Y., Hunt, N., & Cox, T. (2011). The effect of a guided narrative technique among children traumatised by the earthquake. In C. Barrette, B. Haylock, & D. Mortimer (Eds.), *Traumatic imprints: Performance, art, literature and theoretical practice* (pp. 273–282). Brill. [https://doi.org/10.1163/9781848880856\\_030](https://doi.org/10.1163/9781848880856_030)
- Zhu, B., Chen, C., Loftus, E. F., Lin, C., He, Q., Chen, C., Li, H., Xue, G., Lu, Z., & Dong, Q. (2010). Individual differences in false memory from misinformation: Cognitive factors. *Memory*, 18(5), 543–555. <https://doi.org/10.1080/09658211.2010.487051>

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