

# A review of adolescent autobiographical memory and the implications for assessment of unaccompanied minors' refugee determinations

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## Abstract

The number of unaccompanied asylum-seeking children (UASC) is increasing, and unlike those who arrive with their parents, UASC are subject to interview to determine refugee status. The limited amount of objective evidence available in most asylum claims means that the UASC's account of their experiences often becomes key in deciding whether or not the young person is granted protection. Research indicates that assumptions about human memory influence decision-makers' views on asylum seekers' accounts; however, these do not necessarily appear to fit with the published research on autobiographical memory and may lead to an unfair decision. Therefore, understanding the nature and limitations of autobiographical memory is key to a fair refugee determination process. A literature review of published research on autobiographical memory among adolescents was undertaken across four databases. In total, 45 papers were identified which were thematically organised into three areas: development of autobiographical memory, contextual influences and impact of psychopathology. From this review, conclusions are drawn about what can be reasonably expected of an adolescent's autobiographical memory generally and more specifically when the unique characteristics of UASC are taken into account. We also discuss how commonly used credibility indicators in refugee status determinations for minors are problematic in light of this research. It is important that the psychological evidence on the nature of autobiographical memory in adolescents is considered in asylum processing of UASC.

## Keywords

Asylum, refugee, adolescent, autobiographical memory, unaccompanied asylum-seeking children

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## Introduction

This article considers published psychological literature on adolescent autobiographical memory and the implications for credibility assessments of unaccompanied asylum-seeking children (UASC).

UASC are people under 18 years old who are seeking state protection in a foreign country without an adult guardian. There are increasing numbers of asylum seekers worldwide, which has created political tension and concerns around available resources in receiving countries. There are approximately 34,000 UASC across the world, and the majority of them are adolescents (UN High Commission for Refugees (UNHCR), 2015).

Unlike accompanied minors, unaccompanied children are exposed to a number of state authorities as they are assessed for their eligibility for state protection as well as whether they are under 18 years old and eligible for further support from legal services, social services and education. As a result, UASC will be repeatedly interviewed on what has happened to them and likely to create variation in the information obtained (Bianchini, 2011).

Crucially, to receive state protection as part of an asylum claim, the unaccompanied young person will be required to provide an account of what has happened to them in an interview with a government immigration employee. To gain state protection, they must prove

a well-founded fear of being persecuted because of his or her race, religion, nationality, membership of a particular social group or political opinion; and is unable or unwilling to avail him or herself of the protection of that country, or to return there, for fear of persecution. (UNHCR, 2002)

However, as there is often an absence of objective evidence to support a person's claim, decisions about whether someone is granted state protection are judged by how credible the applicants' account seems to be – for example, whether the applicant's narrative is consistent over time, retains chronological order and is rich in detail (UNHCR, 2013, 2014).

Research indicates that assumptions about human memory are commonly used to guide credibility decisions in asylum applications (Herlihy, Gleeson, & Turner, 2010; Herlihy & Turner, 2015; Cronin, Sandhu, & Kohli, 2015; UNHCR, 2014) or that inconsistencies in someone's story are a sign of lying (Granhag, Stromwall, & Hartwig, 2005). For example, the statement 'I would have expected a raped person to know when they were raped' highlights an assumption that significant traumatic events should not only be recalled but also disclosed (Herlihy et al., 2010). Similarly, accounts provided in different interviews may be compared to look for evidence of consistency. Autobiographical memory is the aspect of human memory which enables us to tell the story of what we have experienced and consequently is central to the asylum process as the interview relies on the applicant's narration of their autobiographical memories. These assumptions do not appear to be supported by the scientific research on autobiographical memory (Herlihy et al., 2010).

Assessing credibility is no doubt a difficult task – and even more so in the case of UASC who present with additional vulnerability due to having been separated from caregivers; often exposed to high levels of abuse, exploitation or violence; and resultantly present with high rates of psychological difficulty such as posttraumatic stress disorder and depression. In addition, their developmental stage may also affect how they interact with those assessing their claims.

The difference between adults and children is acknowledged in asylum law and policy and highlights the importance of considering a child's claim within the context of age and maturity (Home Office, 2016). This is to protect against the disadvantages children may suffer due to being less articulate or having less understanding than adults. Despite guidance on adjusting the asylum applications process to accommodate a child's age and maturity, there is little concrete guidance provided on how such differences may affect UASC's autobiographical memory, for example,

their ability to recall certain events or recount details of their story. The majority of UASC are adolescents (between 12 and 18 years old); consequently, it is particularly important to be aware of developmental changes in autobiographical memory during adolescence. It is also important to hold in mind the additional disadvantages UASC may be subject too. They are a particularly vulnerable group and are often in contact with a number of different services who all take statements about their situations but require different information. Consequently, the information elicited in different interviews is likely to be different.

Psychological research is well placed to provide insight into the nature and developmental limitations of autobiographical memory in adolescents.

There are a number of guidelines published on the special considerations of assessing the credibility of UASC's asylum claims; unfortunately, practice seems to vary significantly (Cronin et al., 2015; UNHCR, 2014). It seems that the published knowledge of autobiographical memory can be of particular relevance in improving interviews and assessments of young asylum seekers as often assumptions about how humans remember in the asylum context are not in line with scientific research. This article presents a review of research on adolescents' autobiographical memory and considers how this information may be used to create fairer decision-making in refugee status determination processes for children.

## Search strategy

Relevant papers published on autobiographical memory in adolescence were identified in four electronic databases (PsycInfo, Medline, JSTOR and Embase). Search terms which reflected the concept were developed based on focus topics and running a pilot search. Once the search terms were established, truncations were applied to those which may have multiple endings (i.e. plural, noun or adjective form). Age group was represented through the search terms 'child\*' or adolescent\* or youth\* or juvenile\* or teen\* or junior\*'. The search term for autobiographical memory was 'autobiographical memor\*'. A hand-search was conducted to identify additional relevant papers. This search initially yielded 260 papers once duplicates were removed. The abstracts were reviewed, and 188 were excluded as they did not meet the following criteria: being published in a language other than English, did not cover the adolescent age range, did not address the psychological construct of autobiographical memory or did not provide an interpretable outcome. The remaining 72 papers were read and considered for quality and relevance. The quality was assessed drawing on the guidance provided by Katrak, Bialocerkowski, Massy-Westropp, Kumar, and Grimmer (2004) and considered the constructs researched, measures used, sampling methods and analysis. In total, 45 papers were included in this review.

## Results

The reviewed papers on adolescent autobiographical memory appeared to organically fall into three main thematic areas: typical development in adolescence, contextual differences and psychopathology. The results are reported in these categories below.

In total, 45 papers were considered to be relevant and of adequate quality to be included. The papers represented different areas of psychology including how individuals construct and recount their memories, what can be expected of 'normal' autobiographical memory, the specific relationship between telling and the relationship between autobiographical memory and psychopathology. Twenty-one papers considered typical development of autobiographical memory during adolescence. Twenty papers reported on how autobiographical memory in adolescence can be affected by individual and contextual factors. Fourteen reported on autobiographical memory and psychopathology.

### Typical development of autobiographical memory

Autobiographical memories are dynamically constructed mental representations. Unlike a film recording, memories are not fixed, but they are reconstructed every time they are retrieved and narrated. Adolescence is a period of significant development, and Fivush, Habermas, Waters, and Zaman (2011) argue this leads to changes in autobiographical memory narration. The coherence in which an adolescent can narrate his or her story improves – first, the capacity to order memories chronologically, and at around 16 years or more, the capacity to make causal inferences and thematic coherence emerges (Habermas & Reese, 2015; Kober & Habermas, 2013).

Autobiographical memories develop from approximately 2 years, when memories begin to take on personal meaning (Courage & Howe, 2010; Jack, MacDonald, Reese, & Hayne, 2009). Although accessing generic memories is possible from early childhood, the ability to access specific episodes on one's life is a more advanced skill (Brennen et al., 2010). Research indicates that the complexity, length and amount of information in autobiographical memories increase during adolescence, while accuracy rates remain stable (Lamb, Sternberg, & Esplin, 1995; Sutherland & Hayne, 2001). The ability to provide a coherent account improves concurrently with neurological development particularly between the ages of 12 and 16 years, but does not fully mature until early 20s (Bosmans, Dujardin, Raes, & Braet, 2013; Chen, McAnally, Wang, & Reese, 2012; Habermas & de Silveira, 2008; Pasupathi & Wainryb, 2010).

There are a number of domains present in a 'full' autobiographical memory account. These include the ability to organise isolated events into a meaningful narrative which has a clear order of events (*temporal*), overarching themes (*thematic*) and description of motives and causes for events (*causal*) (Bohn & Berntsen, 2008, 2013; Habermas & de Silveira, 2008). Developmental differences across adolescence affect when someone achieves temporal, thematic and causal coherence – typically increasing in coherence during adolescence, but at different ages (Habermas & de Silveira, 2008).

Young adolescents typically provide narratives of their memories with factual content and action statements but with less orientation in time and place, fewer emotions and interpretations, or causal accounts (i.e. explanations of someone's actions) compared to older adolescents (Willoughby, Desrocher, Levine, & Rovet, 2012). Temporal coherence increases in early adolescence, which is thought to coincide with acquisition of knowledge about calendars, time and dates (Habermas & de Silveira, 2008).

Causal coherence increases most between 12 and 16 years, coinciding with increased capacity to consider another's perspective (Bohanek & Fivush, 2010). A study found that older adolescents were significantly more proficient than young adolescents in recalling when they had been harmed or had harmed another (Pasupathi & Wainryb, 2010). The authors suggest this is a conceptual challenge during adolescence because it demands interpretations of facts in light of motives and emotions – a task associated with frontal lobe development. The ability to order life events into themes also emerges in late adolescence or early adulthood (Chen, McAnally, & Reese, 2013).

One study which examined the life narratives recalled by 8-, 12-, 16-, and 20-year-olds found increased age was associated with increased length and coherence of narratives (Habermas, Negele, & Mayer, 2010). This same study found that temporal coherence increased most between 8 and 12 years and causal-motivational coherence increased most between 12 and 16 years. Overall, they found an increase in global coherence in later adolescence and early adulthood, which the authors suggest correspond with cognitive development.

Developments in cognitive skills (i.e. relational memory and executive function) from 8 to 16 years of age increase the amount of detail reported in episodic memory (Gott & Lah, 2014). The same research also found that more episodic details were recalled than semantic details of memory.

No associations were found between language skills among adolescences and their ability to recall early life events or the age of their first memory (Jack et al., 2009).

Accuracy of autobiographical memory within a developmental framework was also addressed. Accuracy of autobiographical memories is not particularly high in all human beings; however, it seems that accuracy rates of adolescence do not differ significantly from accuracy rates of adults. However, adolescents typically provide less detail when narrating their memories. Accuracy is also affected depending on the nature of the memory. One study which asked 13-year-olds to recall an injury or hospital admission found that 5 years later the central facts in their memories remain just as accurate, while the accuracy of peripheral details has deteriorated (Peterson & Whalen, 2001). If the young person was highly distressed at the time of the events, difference between the accuracy recalling 'central' events compared with 'peripheral' events was heightened (Peterson & Whalen, 2001). Memories which hold more personal importance or emotional salience are more likely to be recalled more accurately than those which did not have any personal salience (Kuyken & Howell, 2006).

Lower accuracy rates are associated with autobiographical memories in repeated events. When an event occurs repeatedly, 'script memories' are established based on typical events rather than the specifics of each event, and consequently, memories tend to become generalised. For example, an adolescent asked to describe an experience of 'shame' gave the response 'every time my teacher punished me in front of the classroom' (Bosmans et al., 2013, p. 711).

### *Individual and contextual differences*

**Gender.** Gender was examined in 10 papers. It is unclear whether there are gender differences in adolescents' autobiographical accounts. Some studies indicate that adolescent girls provide longer (Chen et al., 2013) and more emotionally rich narratives (Bohanek & Fivush, 2010), with more time and event details (Pasupathi & Wainryb, 2010; Willoughby et al., 2012). They have also been reported to offer more interpretations about their own and others' emotions and motives in their narratives (Bohanek & Fivush, 2010; Wang, Shao, & Li, 2010). However, many studies have found no gender differences (Arie, Apter, Orbach, Yefet, & Zalzman, 2008; Bohn & Berntsen, 2008, 2013; Chen et al., 2013; Park, Goodyer, & Teasdale, 2002; Swales, Williams, & Wood, 2001). The discrepancies between studies may be explained by the different aspects of autobiographical memory measured (i.e. detail vs emotional content) or that due to later development among males, they do not achieve the same proficiency in recall until they are older (Gryzman & Hudson, 2010). The research reviewed does not provide a conclusive answer on the presence of gender differences in autobiographical memory,

**Maternal influence.** Four papers reported on the influence of maternal reminiscing on autobiographical memory development.

Early interactions appear to have a long-lasting impact on the development of autobiographical memory. The communication between an infant or child and caregiver shapes the child's autobiographical memory development. Studies that have examined mother-child interactions have found that mothers who describe elaborative and detailed memories foster offspring who do the same (Bosmans et al., 2013; Pasupathi & Wainryb, 2010; Reese, Jack, & White, 2010). A ratio of high number of elaborations and low number of repetitions in maternal reminiscing style was associated with earlier memories being recalled by their children (Jack et al., 2009). Maternal reminiscing style appears to have a lasting effect on adolescents' narration of autobiographical memory – elaborative reminiscing results in children with more detailed and coherent autobiographical memory (Fivush et al., 2011).

**Culture.** Nine papers reported on cultural differences in autobiographical memory (Bohn & Berntsen, 2014; Reese et al., 2014).

The reviewed research indicates that people from individualistic cultures provide longer and more detailed memories which focus on emotions, intentions and personal beliefs. In contrast, people from interdependent cultures provide shorter memories which focus more on social events, rather than individual experiences (Antalikova, Hansen, Gulbrandsen, De La Mata, & Santamaria, 2011). For example, Chinese adolescents process their memories holistically, integrating information, focusing on connections between events and so recall memories as more general events (e.g. the adolescent describes his or her story within a social context), contrasting European Americans who take a more analytic and individualistic approach (the adolescent's feelings and actions are central to the story) (Chen et al., 2013).

Autobiographical memories are structured around 'schemata' or 'scripts' (Fitzgerald, 1981) and will be influenced by the cultural norms, prototypical life and what is considered a significant event in that culture (Bohn & Berntsen, 2008). Knowledge of a culturally defined life script has been found to increase global coherence of adolescent narratives, but this effect was not found for isolated memories (Bohn & Berntsen, 2014). These 'cultural life scripts' become a filter through which experiences are recorded mentally and how autobiographical memories are then categorised and recounted (Chen et al., 2013). For example, one study found that adolescents provided less coherent accounts of memories that were incongruent with their self-concept (Schoofs, Hermans, & Raes, 2012).

Interestingly, when bilingual (Mandarin and English) adolescents were tested, the identification with a set of cultural values and quality of their autobiographical memories appeared to shift depending on which language they used. The authors suggest this is because bilingual children possess different modes and ways of thinking associated with different languages (Wang et al., 2010). Wang et al. (2010) suggest that individualist cultures emphasise self-sufficiency and personal uniqueness and focus on inner attributes, qualities and opinions, leading to cognitive resources processing event information with a focus on uniqueness and individualistic aspects in contrast to collectivist cultures where memories are more focused on interdependence and group solidarity.

Despite differences in the volume and specificity of memories, one study found that forgetting rates were the same in adolescents with different cultural backgrounds (Chen et al., 2013).

### *Psychopathology and autobiographical memory*

**Depression.** Seven papers reported on the effects of depression on adolescents' autobiographical memory. Four of the papers found that depressed adolescents provide less event-specific autobiographical memories which have less emotional and sensory content and often describe events from an observer perspective (e.g. giving an account in the third person) (Kuyken & Howell, 2006; Kuyken, Howell, & Dalgleish, 2006; Park et al., 2002; Stokes, Dritschel, & Bekerian, 2004). As a result, their memories become overgeneralised – a summary of repeated occasions – rather than specific events which occurred at a particular time (Park et al., 2002).

However, three studies did not find overgeneral memory to be associated with depression (Brennen et al., 2010; de Decker, Hermans, Raes, & Eelen, 2003; Swales et al., 2001). These differences may be related to ways in which an adolescent mentally copes with difficulties. Using repression and mental avoidance to circumvent troubling thoughts is common in depression as well as other psychopathology, such as posttraumatic stress disorder, particularly among young people.

It may be that these mental strategies to avoid distress are responsible for overgeneral autobiographical memory (Kuyken et al., 2006; Stokes et al., 2004).

*Depression and posttraumatic stress disorder.* Two papers compared depressed and traumatised adolescents with those who are just depressed; the traumatised adolescents had less overgeneral memory; however, they still provided less specificity than those who possessed good mental health (Kuyken et al., 2006; Valentino, Bridgett, Hayden, & Nuttall, 2012).

*Traumatic events and posttraumatic stress disorder.* Ten papers reported on adolescent memory following being exposed to traumatic events. Some papers used a measure of negative life events and others specifically focused on a diagnosis of posttraumatic stress disorder.

Poor autobiographical memory, characterised by broad generalisations, is associated with more negative life events (Arie et al., 2008). The developmental stage at which the trauma occurred will also impact the person's autobiographical recall. Early exposure to abuse, neglect and trauma has also been found to reduce specificity of autobiographical memory. Previous abuse has a particularly significant effect on reducing adolescents' ability to recall specific events, resulting in overgeneral memory (Valentino, Toth, & Cicchetti, 2009). Another study that examined interviews with adolescents who had overgeneral memories found that interviewers need to provide more prompts to encourage these youth to access memories (Johnson, Greenhoot, Glisky, & McCloskey, 2005).

If exposure to negative events was ongoing, adolescents' memories were even more limited – as their accounts were typically shorter and had more omissions (Johnson et al., 2005). The type of exposure also made a difference. For example, one study asked children to recall violence they had witnessed or experienced themselves and found that more details were forgotten if they had observed the violence rather than having direct experience (Greenhoot, McCloskey, & Glisky, 2005). If exposed to a trauma at a young age, it is proposed that youth avoid accessing specific memories to prevent experiencing further distress when remembering them. However, this also results in an overgeneral autobiographical memory. Adolescents traumatised by events occurring in later childhood or adolescence may have more difficulty reporting autobiographical facts compared with non-traumatised counterparts (Meesters, Merckelbach, Muris, & Wessel, 2000).

Particularly relevant to asylum-seeking minors, one study compared adolescents who had been exposed to war (in Bosnia or Serbia) and those who had not (in Norway) (Brennen et al., 2010). It found that the Bosnian and Serbian adolescents had less specific memories of negative, neutral or positive events than the Norwegians. Another study found that the number and severity of trauma adolescents had experienced were associated with less specificity in the autobiographical memories that they were able to give (de Decker et al., 2003).

Interestingly, two papers found that adolescents memories associated with trauma were more vivid and well rehearsed (Kuyken & Howell, 2006; Swales et al., 2001). This is thought to be due to the increased personal and emotional salience of these traumatic events (Kuyken & Howell, 2006). Consequently, an uneven memory pattern may emerge where they will provide overgeneral memory accounts in some settings, but in others have vivid, intrusive memories (Swales et al., 2001).

The delay between recall and the trauma event may also change the type of narrative provided. If the trauma event was recent (i.e. in the past 2 months), the adolescent may still be making sense of what happened and consequently provide a conceptual description (e.g. giving description of events) but little emotional or sensory information (O'Kearney, Speyer, & Kenardy, 2007).

The individual's current emotional state also influences the specificity and coherence of autobiographical memory accounts. Generally, retrieval of emotion-based memories is difficult for adolescents, and research indicates this is even more so in traumatised and depressed adolescents.

## **Limitations of the reviewed literature**

The reviewed literature was considered to be of a satisfactory standard of quality before being included in this report. Quality was considered with reference to the constructs researched, measures used, sampling methods and analysis (Katrak et al., 2004).

Most of the reviewed research represents participants from Western cultures and over-represents those who have attained education. Given the language skills associated with autobiographical memory, there may be significant differences in populations who diverge from this norm. Particularly pertinent are asylum-seeking children who are often not from industrialised countries and may have had less or different education.

The majority of research reviewed in relation to psychopathology focused on the presence of overgeneral memory. To assess this, most papers used the Autobiographical Memory Test (AMT; Williams & Broadbent, 1986) which prompts people to recall specific past events in response to cue words. This exercise may not easily generalise to the task required of UASC in an asylum interview. Similarly, the research examining 'life stories' may also not directly relate to the task required of UASC in an asylum interview as this is recall of a series of memories.

The context in which adolescents are asked about their memories is also likely to influence recall – for example, interrogative suggestibility issues, the context in which the interview is conducted and who else is present, and issues with interpretation. Unfortunately, these were beyond the scope of this literature review but are important and relevant to how adolescent asylum seekers describe their memories and how credible they are assessed to be.

Given this, while the research offers good insight into the nature of autobiographical memory, the studies which have examined recall of relevant events among asylum-seeking child populations should be afforded the most weight when drawing conclusions.

Publication bias is also inherently present in this literature review. It is possible that some unpublished research could offer different results.

## **Discussion**

In all, 45 papers published on adolescent autobiographical memory were reviewed with the aim to better inform credibility assessments and decision-making in adolescents' refugee status determinations. These papers covered three areas which could be broadly categorised into typical development of autobiographical memory, individual and contextual differences, and influence of psychopathology.

Collectively, the papers highlight the complexity of autobiographical memory and how it interacts with development, culture, individual differences and psychopathology. This body of literature should be applied to how UASC are interviewed and assessed in their asylum applications, for example, making adjustments in the level of detail provided based on developmental stage or culture and providing a warm and encouraging interview environment to elicit the most from the applicant.

The findings of this review suggest that there is a significant increase in elaboration of autobiographical memory narratives during adolescence. This appears to be due to concurrent neurological maturation and ongoing social influence – particularly through caregiver's elaboration of young people's memories. As age increases typically, it is expected that accounts provided of autobiographical memories become more rich and more coherent. This seems to mirror neurological development, which perhaps allows the adolescent to have more complex tools for organising their experiences into a narrative. However, this autobiographical recall can be influenced by a number of factors, including the nature of the memory (i.e. peripheral vs central, single vs repeated events), developmental stage, early caregiver interactions, culture and psychopathology.

When considering the level of coherence and consistency that could be expected of UASC's narratives, it is important to hold in mind that much of the research, for example, by Habermas et al. (2010), was drawn from a highly educated Western population which may affect the quality and degree of memory coherence. Despite this, it seems likely that age differences would be generalised in the broader community, but the level of coherence achieved may not be. Such research suggests that before an UASC's report is discounted on the grounds of lacking consistency, their unique circumstances and developmental stage should be considered to determine what we might reasonably expect from their account of what has happened to them.

This research on how autobiographical memory develops and improves in detail and coherence during adolescence is important to note, given commonly used credibility indicator is the coherence of the applicants' story. The research suggests that taking into account age and maturity, it cannot be reasonably expected for someone to provide a globally coherent narrative until early 20s. Given what we know about developmental differences in adolescents' capacity to tell their story and the guidance to take into account maturity when interviewing UASC (UNHCR, 2014), it would make sense to increase the opportunities for a minor to recount more detail by offering more prompts (Johnson et al., 2005). This is particularly important given the current system through which UASC are assessed typically involves a formal interview which may lack developmentally appropriate adjustment in interviewing style, such as adjusting language, offering more prompts or acknowledging the power differences between the applicant and interviewer.

While linguistic and cognitive development are necessary for providing coherent accounts of autobiographical memories, it is not sufficient (Bohn & Berntsen, 2008). Children and adolescents develop the skills of narration through conversation with caregivers, which enable young people to re-examine their experiences and bring them together into formed memories of past experiences (Habermas & de Silveira, 2008). This is important to consider in the case of UASC who may not have had such scaffolding from caregivers and consequently may not have such well-developed memory systems (Melinder, Baugerud, Ovenstad, & Goodman, 2013). Further research is required to ascertain whether those separated would achieve the same level of coherence.

Autobiographical memory is more than episodic recall; rather, it contains thoughts, emotions and sensory experiences of events and integrates these individual experiences into cultural frames through which we understand ourselves, identities and lived experiences (Fivush et al., 2011). These are influenced by our culture and individual experiences. The research reviewed indicates that we should expect differences in how memories are encoded and recalled depending on the person's culture. Those from interdependent cultures may not describe their autobiographical memories with the same individualistic references and descriptions of an agentic self as someone from an independent culture (Bohn & Berntsen, 2014). The differences noted in independence compared with interdependent cultures suggest that in independent cultures the primary role of reminiscing may be to construct narratives portraying self as autonomous and possessing agency compared with interdependent cultures where reminiscing reinforces social and moral values and highlights responsibility and connectedness to others (Fivush et al., 2011). Without acknowledgement of the published research on autobiographical memory and culture, such differences may be interpreted in an asylum interview as an account lacking in detail, which in turn could be viewed as a lack of credibility.

The variations outlined above in autobiographical memory may be misconstrued in an asylum interview as signs of fabricated or unreliable reports. This research highlights the importance of holding the individual and contextual factors which may influence the account given by the young person.

Psychopathology also affects the specificity of autobiographical memories among adolescents. Research has linked depression with overgeneral autobiographical memories in adolescents. The

impact of traumatic events or a diagnosis of posttraumatic stress disorder on the specificity of autobiographical memories is less clearly defined. However, one study which examined populations akin to UASC populations found them to report significantly less detail and more overgeneral memories (Brennen et al., 2010). The likelihood of such overgeneral accounts among asylum-seeking children is high, given the high prevalence of trauma and depression among them (Fazel, Wheeler, & Danesh, 2005).

The UNHCR (2014) report 'The Heart of the Matter' examined what credibility indicators were commonly used in four countries in Europe when assessing UASC claims. The commonly used indicators were sufficiency of detail, internal consistency and coherence of the applicant's declarations, along with plausibility, and consistency with external and/or expert information (UNHCR, 2014).

Sufficiency of detail has been found to be a key indicator of credibility used by decision-makers in European asylum processing systems (UNHCR, 2014). Judging credibility on the grounds of consistency and detail of an applicant's account is problematic given what is indicated in the reviewed literature. If UASC present their narrative without a clear order or omitting specific details of events they experienced, they may be judged as providing an inconsistent or fabricated account, thus undermining their credibility. Therefore, it is important to provide as many opportunities as possible for the young person to clarify or provide more detail where their account seems to lack detail. However, if there is the possibility of trauma, the degree of detail and consistency expected should be lowered. This should also be in line with the young person's developmental stage.

### *Future research*

More research on adolescent autobiographical memory is needed (Fivush et al., 2011), both generally and in the context of asylum-seeking children. There are some indicators that culture influences autobiographical memory; however, this would benefit from more detailed analysis. Future research also needs to examine autobiographical memory in more culturally diverse populations. The research reviewed indicates that psychopathology plays an influential role in the nature and quality of autobiographical memories. It would be useful to gain further understanding of the causal nature of this relationship and whether negative life experiences contribute to a more overgeneral autobiographical memory style.

### **Conclusion**

A person's ability to retrieve autobiographical memories develops throughout childhood and adolescence. Development of autobiographical memory is influenced by social interaction, culture and language development. However, the capacity to construct a 'life story' is not achieved until late adolescence or early 20s. Experiences such as a significant trauma or diagnosis of depression may negatively affect the detail of an individual's autobiographical memory.

In the case of asylum decisions, assessment of an applicant's credibility (the subjective judgement as to whether or not the source (i.e. the young person) is to be believed; Bruck, Ceci, & Hembrooke, 1998; Youngstrom et al., 2011) is often central to decision-making. Credibility indicators appear to be linked to the need for a coherent narrative of events with sufficient detail and internal consistency (UNHCR, 2014). Unfortunately, the literature reviewed suggests that autobiographical memory is more variable than this. Reasons such as stage of development, maternal reminiscing style, cultural background and psychopathology may all influence the accounts provided by UASC. If this research is not known by the decision-maker, they may draw on erroneous

assumptions about human memory to assess the individual's credibility. As a result, UASC's credibility may be undermined due to erroneous assumptions rather than due to misinformation or a fabricated story.

This highlights the need for asylum decision-makers to be aware of the nature and limitations of adolescent autobiographical memory – particularly in the presence of psychopathology. Ideally, decision-makers should be trained in the area of autobiographical memory and development to ensure they have awareness of the factors and it is integrated into their decision-making processes. Some may benefit from using a checklist of factors that could explain what may at first be judged as a sign of fabrication or lack of credibility.

Given that credibility is a subjective judgement as to whether or not someone is believed (Bruck et al., 1998), it would make sense to support the subjective decision with as much evidence as possible. The literature reviewed in this article provides a good grounding in what we can expect from a young person when telling his or her autobiographical memory at different stages of development and also highlights the importance of taking into account contextual factors such as the child's cultural background and the presence of psychopathology such as depression and posttraumatic stress disorder. A holistic approach which makes adjustments for the individual's unique characteristics and circumstances should be prioritised over system constraints such as resource limitations to ensure interviewers are adequately trained in interviewing and assessing UASC's asylum claims.

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### References

- Antalikova, R., Hansen, T. G., Gulbrandsen, K. A., De La Mata, M., & Santamaria, A. (2011). Adolescents' meaningful memories reflect a trajectory of self-development from family over school to friends. *Nordic Psychology, 63*(3), 4–24.
- Arie, M., Apter, A., Orbach, I., Yefet, Y., & Zalzman, G. (2008). Autobiographical memory, interpersonal problem solving, and suicidal behavior in adolescent inpatients. *Comprehensive Psychiatry, 49*(1), 22–29.
- Bianchini, K. (2011). Unaccompanied asylum-seeker children: Flawed processes and protection gaps in the UK. *Forced Migration Review, 37*, 52–53.
- Bohanek, J. G., & Fivush, R. (2010). Personal narratives, well-being, and gender in adolescence. *Cognitive Development, 25*, 368–379.
- Bohn, A., & Berntsen, D. (2008). Life story development in childhood: The development of life story abilities and the acquisition of cultural life scripts from late middle childhood to adolescence. *Developmental Psychology, 44*, 1135–1147.
- Bohn, A., & Berntsen, D. (2013). The future is bright and predictable: The development of prospective life stories across childhood and adolescence. *Developmental Psychology, 49*, 1232–1241.
- Bohn, A., & Berntsen, D. (2014). Cultural life scripts and the development of personal memories. In P. J. Bauer, & R. Fivush (Eds.), *The Wiley handbook on the development of children's memory* (Vol. I/II, pp. 626–644). Hoboken, NJ: John Wiley.
- Bosmans, G., Dujardin, A., Raes, F., & Braet, C. (2013). The specificity of autobiographical memories in early adolescence: The role of mother-child communication and attachment-related beliefs. *The Journal of Early Adolescence, 33*, 710–731.

- Brennen, T., Hasanovic, M., Zotovic, M., Blix, I., Solheim Skar, A.-M., Prelic, N. K., . . . Gavrilov-Jerkovic, V. (2010). Trauma exposure in childhood impairs the ability to recall specific autobiographical memories in late adolescence. *Journal of Traumatic Stress, 23*, 240–247.
- Bruck, M., Ceci, S., & Hembrooke, H. (1998). Reliability and credibility of young children's reports: From research to policy and practice. *American Psychologist, 53*, 136–151.
- Chen, Y., McAnally, H. M., & Reese, E. (2013). Development in the organization of episodic memories in middle childhood and adolescence. *Frontiers in Behavioral Neuroscience, 7*, 84.
- Chen, Y., McAnally, H. M., Wang, Q., & Reese, E. (2012). The coherence of critical event narratives and adolescents' psychological functioning. *Memory, 20*, 667–681.
- Courage, M. L., & Howe, M. L. (2010). Autobiographical memory: Individual differences and developmental course. In A. Gruszka, G. Matthews, & B. Szymura (Eds.), *Handbook of individual differences in cognition: Attention, memory, and executive control* (pp. 403–417). New York, NY: Springer.
- Cronin, K., Sandhu, B., & Kohli, R. (2015). Processing the asylum claim. In *Put yourself in our shoes: Considering children's best interests in the asylum system* (pp. 61–88). London, England: Law Centres Network.
- de Decker, A., Hermans, D., Raes, F., & Eelen, P. (2003). Autobiographical memory specificity and trauma in inpatient adolescents. *Journal of Clinical Child and Adolescent Psychology, 32*(1), 22–31.
- European Migration Network. (2015). *Policies, practices and data on unaccompanied minors in the EU member states and Norway* (Synthesis report for the EMN focussed study), Directorate General Migration and Home Affairs, European Commission, Brussels, Belgium, 28 May.
- Fazel, M., Wheeler, J., & Danesh, J. (2005). Prevalence of serious mental disorder in 7000 refugees resettled in Western countries: A systematic review. *The Lancet, 365*, 1309–1314.
- Fitzgerald, J. M. (1981). Autobiographical memory: Reports in adolescence. *Canadian Journal of Psychology/Revue Canadienne De Psychologie, 35*(1), 69–73.
- Fivush, R., Habermas, T., Waters, T. E., & Zaman, W. (2011). The making of autobiographical memory: Intersections of culture, narratives and identity. *International Journal of Psychology, 46*, 321–345.
- Gott, C., & Lah, S. (2014). Episodic future thinking in children compared to adolescents. *Child Neuropsychology, 20*, 625–640.
- Granhag, P. A., Stromwall, L. A., & Hartwig, M. (2005). Granting asylum or not? Migration board personnel's beliefs on deception. *Journal of Ethnic and Migration Studies, 31*, 29–50.
- Greenhoot, A. F., McCloskey, L., & Glisky, E. (2005). A longitudinal study of adolescents' recollections of family violence. *Applied Cognitive Psychology, 19*, 719–743.
- Grysmar, A., & Hudson, J. A. (2010). Abstracting and extracting: Causal coherence and the development of the life story. *Memory, 18*, 565–580.
- Habermas, T., & de Silveira, C. (2008). The development of global coherence in life narratives across adolescence: Temporal, causal, and thematic aspects. *Developmental Psychology, 44*, 707–721.
- Habermas, T., Negele, A., & Mayer, F. B. (2010). 'Honey, you're jumping about' – Mothers' scaffolding of their children's and adolescents' life narration. *Cognitive Development, 25*, 339–351.
- Habermas, T., & Reese, E. (2015). Getting a life takes time: The development of the life story in adolescence, its precursors and consequences. *Human Development, 58*, 172–201.
- Herlihy, J., Gleeson, K., & Turner, S. (2010). What assumptions about human behaviour underlie asylum judgements? *International Journal of Refugee Law, 22*, 351–366.
- Herlihy, J., & Turner, S. (2015). Untested assumptions: Psychological research and credibility assessment in legal decision-making. *European Journal of Psychotraumatology, 19*, 273–280.
- Home Office. (2016). *Processing Children's Asylum Claims*. UK Visas and Immigration. Retrieved from <https://www.gov.uk/government/publications/processing-an-asylum-application-from-a-child-instruction>
- Jack, F., MacDonald, S., Reese, E., & Hayne, H. (2009). Maternal reminiscing style during early childhood predicts the age of adolescents' earliest memories. *Child Development, 80*(2), 496–505.
- Johnson, R., Greenhoot, A. F., Glisky, E., & McCloskey, L. A. (2005). The relations among abuse, depression, and adolescents' autobiographical memory. *Journal of Clinical Child and Adolescent Psychology, 34*, 235–247.
- Katrak, P., Bialocerkowski, A., Massy-Westropp, N., Kumar, S., & Grimmer, K. (2004). A systematic review of the content of critical appraisal tools. *BMC Medical Research Methodology, 4*, 22.

- Kober, C., & Habermas, T. (2013). A longitudinal study of global coherence in life narratives from age 8 to 70. *European Psychiatry, 28*, 43.
- Kuyken, W., & Howell, R. (2006). Facets of autobiographical memory in adolescents with major depressive disorder and never-depressed controls. *Cognition & Emotion, 20*, 466–487.
- Kuyken, W., Howell, R., & Dalgleish, T. (2006). Overgeneral autobiographical memory in depressed adolescents with, versus without, a reported history of trauma. *Journal of Abnormal Psychology, 115*, 387–396.
- Lamb, M. E., Sternberg, K. J., & Esplin, P. (1995). Making children into competent witnesses: Reactions to the amicus brief in re Michaels. *Psychology, Public Policy, and Law, 1*, 438–449.
- Meesters, C., Merckelbach, H., Muris, P., & Wessel, I. (2000). Autobiographical memory and trauma in adolescents. *Journal of Behavior Therapy and Experimental Psychiatry, 31*(1), 29–39.
- Melinder, A., Baugerud, G. A., Ovenstad, K. S., & Goodman, G. S. (2013). Children's memories of removal: A test of attachment theory. *Journal of Traumatic Stress, 26*, 125–133.
- O'Kearney, R., Speyer, J., & Kenardy, J. (2007). Children's narrative memory for accidents and their post-traumatic distress. *Applied Cognitive Psychology, 21*, 821–838.
- Park, R. J., Goodyer, I., & Teasdale, J. (2002). Categorical overgeneral autobiographical memory in adolescents with major depressive disorder. *Psychological Medicine, 32*, 267–276.
- Pasupathi, M., & Wainryb, C. (2010). On telling the whole story: Facts and interpretations in autobiographical memory narratives from childhood through midadolescence. *Developmental Psychology, 46*, 735–746.
- Peterson, C., & Whalen, N. (2001). Five years later: Children's memory for medical emergencies. *Applied Cognitive Psychology, 15*(7), 7–24.
- Reese, E., Chen, Y., McAnally, H. M., Myftari, E., Neha, T., Wang, Q., & Jack, F. (2014). Narratives and traits in personality development among New Zealand Maori, Chinese, and European adolescents. *Journal of Adolescence, 37*, 727–737.
- Reese, E., Jack, F., & White, N. (2010). Origins of adolescents' autobiographical memories. *Cognitive Development, 25*, 352–367.
- Schoofs, H., Hermans, D., & Raes, F. (2012). Effect of self-discrepancy on specificity of autobiographical memory retrieval. *Memory, 20*(1), 63–72.
- Stokes, D., Dritschel, B., & Bekerian, D. (2004). The effect of burn injury on adolescents' autobiographical memory. *Behaviour Research and Therapy, 42*, 1357–1365.
- Sutherland, R., & Hayne, H. (2001). Age-related changes in the misinformation effect. *Journal of Experimental Child Psychology, 79*, 388–404.
- Swales, M. A., Williams, J., & Wood, P. (2001). Specificity of autobiographical memory and mood disturbance in adolescents. *Cognition & Emotion, 15*, 321–331.
- United Nations High Commission for Refugees. (UNHCR). (2002). Guidelines on international protection no. 1: Gender-related persecution within the context of article 1A(2) of the 1951 Convention and/or its 1967 Protocol relating to the status of refugees. Retrieved from <http://www.unhcr.org/refworld/docid/3d36f1c64.html>.
- United Nations High Commission for Refugees. (UNHCR). (2013). *Beyond proof. Credibility assessment in EU asylum systems*. Brussels, Belgium: UN High Commissioner for Refugees.
- United Nations High Commission for Refugees. (UNHCR). (2014). *The heart of the matter. Assessing credibility when children apply for asylum in the European Union*. Brussels, Belgium: UN High Commissioner for Refugees.
- United Nations High Commission for Refugees. (UNHCR). (2015). *Key facts and figures about refugees*. Washington, DC: Pew Research Center.
- Valentino, K., Bridgett, D. J., Hayden, L. C., & Nuttall, A. K. (2012). Abuse, depressive symptoms, executive functioning, and overgeneral memory among a psychiatric sample of children and adolescents. *Journal of Clinical Child and Adolescent Psychology, 41*, 491–498.
- Valentino, K., Toth, S. L., & Cicchetti, D. (2009). Autobiographical memory functioning among abused, neglected, and non maltreated children: The over general memory effect. *Journal of Child Psychology and Psychiatry, 50*, 1029–1038.
- Wang, Q., Shao, Y., & Li, Y. J. (2010). 'My way or mom's way?' The bilingual and bicultural self in Hong Kong Chinese children and adolescents. *Child Development, 81*, 555–567.

- Williams, J., & Broadbent, K. (1986). Autobiographical memory in suicide attempted. *Journal of Abnormal Psychology, 95*, 144–149.
- Willoughby, K. A., Desrocher, M., Levine, B., & Rovet, J. F. (2012). Episodic and semantic autobiographical memory and everyday memory during late childhood and early adolescence. *Frontiers in Psychology, 3*, 53.
- Youngstrom, E., Youngstrom, J., Freeman, A., De Los Reyes, A., Feeny, N., & Findling, R. (2011). Informants are not all equal: Predictors and correlates of clinician judgements about caregiver and youth credibility. *Journal of Child and Adolescent Psychopharmacology, 21*, 407–415.

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