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REVIEW ARTICLE

Reconciling a phenomenological with a functional approach to memory: narrative coherence and its social function

Lauranne Vanaken [a], Theodore E. A. Waters[b], Yannick Boddez[c,a], Patricia Bijttebier[d] and Dirk Hermans[a]

[a]Centre for the Psychology of Learning and Experimental Psychopathology, Faculty of Psychology and Educational Sciences, KU Leuven, Leuven, Belgium; [b]Department of Psychology, New York University – Abu Dhabi, Abu Dhabi, UAE; [c]Department of Experimental Clinical and Health Psychology, Ghent University, Ghent, Belgium; [d]School Psychology and Development in Context, Faculty of Psychology and Educational Sciences, KU Leuven, Leuven, Belgium

ABSTRACT

To date, the phenomenological and functional aspects of autobiographical memory have by and large been studied separately. This is quite remarkable, given that both can inform each other, and that investigating their interaction can add to the understanding of the (in)adaptivity of certain memory characteristics for our well-being. In other words, examining how particular features of autobiographical memory are adept or inept at serving specific functions, could help us to better comprehend and explain relations between memory and psychological well-being. We discuss previous attempts to integrate phenomenology with functionality and formulate three main directions for future research based on the current state of the art. The directions concern (1) focusing on functionality (adaptivity) and not merely on the use of memories in phenomenological work, (2) attention for the bidirectionality of the relation between phenomenology and functionality, and (3) the addition of narrative constructs like coherence to the traditional range of phenomenological features. We will illustrate our directions for the reintegration of phenomenology with functionality through the social function of coherent autobiographical memories. This framework could help to stimulate future empirical studies and pave the road for new clinical interventions to improve psychological well-being.

The autobiographical memory system is often thought of as a distinct form of memory within the episodic memory system (Brewer, 1986; Conway, 1990; de Decker, 2001; Roediger & Marsh, 2003; Tulving, 2002). Much like episodic memories more generally, autobiographical memories include temporal, contextual, and descriptive information about past personal experiences (Fivush, 2011; Nelson, 1993; Tulving, 1972, 2002). However, autobiographical memories move beyond the mere factual representation of events, by connecting significant experiences of the past, present and imagined future, and integrating these with personal perspective, interpretation, and emotional evaluation to often create meaningful narratives (Fivush et al., 2011; Habermas & Bluck, 2000). Autobiographical memory has been investigated from different perspectives, including developmental (e.g., Fivush, 2011; Reese, 2002a), cognitive (e.g., Conway & Pleydell-Pearce, 2000; Raes et al., 2006; Williams et al., 2007), clinical (Adler et al., 2007; Pennebaker & Chung, 2011; White &

Epston, 1990), social (e.g., Fivush et al., 2011; Nelson & Fivush, 2004; Pasupathi, 2001; Reese, 2002b), and personality psychology (McAdams, 2011; McAdams & McLean, 2013; Waters & Fivush, 2015).

In spite of these separate perspectives, one large commonality has been a predominant focus on phenomenological features or characteristics of autobiographical memories, such as accuracy, detail, valence, emotion, and specificity (e.g., Palombo et al., 2018; Sutin & Robins, 2007). The term "phenomenology" has been defined in various ways. Literally, phenomenology is the study of "phenomena": the mere appearances of things. Initially, it was conceptualised as the study of structures of experience, or consciousness, without the inclusion of causal analyses or explanations (e.g., Heidegger, 1982; Husserl, 1963). Other authors suggest that phenomenology is characterised by the first-person perspective and hence can be defined as the investigation of things as they appear in our own experience, the ways we experience things, or the meanings things have in our experience

(D'Argembeau et al., 2003; Johnson et al., 1988). In both cases, memories are assessed without looking for possible origins, mechanisms, or functions. For instance, D'Argembeau et al. (2003) showed that positive memories contained more sensorial (visual, smell, taste) and contextual (location, time) details than both negative and neutral ones, whereas negative and neutral memories did not significantly differ on most dimensions. Also, in a study by Johnson et al. (1988), autobiographical memories for real events contained more details than memories for imagined events.

Since the outset of psychology, phenomenology has been a central topic of research, with Wundt (1874) favouring the approach of introspection to discover characteristics of psychological processes and Freud (1905/1953) suggesting memory features to be the way to discover unconscious meaning. An important reason why there has been and still is a great deal of attention for memory phenomenology, has often to do with its suggested relations to psychological well-being (both eudemonic and hedonic aspects; Keyes & Magyar-Moe, 2003). It is assumed and evidenced that the manner in which individuals narrate about personal past experiences, can be reflective of their well-being (e.g., Adler et al., 2016; Baerger & McAdams, 1999; Frattaroli, 2006; Mitchell et al., 2020; Waters & Fivush, 2015). For instance, it has been shown that lower levels of memory specificity (i.e., overgeneral autobiographical memory) are generally related with higher levels of depression (e.g., Gibbs & Rude, 2004; Hermans et al., 2008; Williams et al., 2007).

Present study Aims

Unfortunately, in the phenomenological field, the idea that autobiographical memory can be conceptualised as a functionally adaptive system has not been thoroughly incorporated. To date, the functional and phenomenological aspects of memory have by and large been studied separately. That is not to say that researchers interested in function are operating in a strictly separate world from the phenomenologists, but rather that the functionality of autobiographical memory is usually not taken into account in the same studies that phenomenology is examined in. Possibly, investigating functionality is not deeply engrained in the "default mode or core business" of the traditionally more phenomenology- and intrapersonally-oriented memory research. It could also be because the Diagnostic and Statistical Manual of Mental Disorders (DSM-5; American Psychiatric Association, 2020) generally conceptualises psychopathology as residing within the individual (cf. intrapersonal traditional illness model). To the contrary, the functional model also looks at factors outside the individual which can contribute to psychopathology, like the absence of social support. However, these answers to the question of why phenomenology and functionality have mainly been studied separately remain speculative. Nonetheless, merely the observation

of this lack of integration is quite remarkable, given that both approaches can inform each other, and that studying their interaction can provide valuable psychological insights (e.g., Alea et al., 2019; Barry et al., 2019; Beike et al., 2016; Waters, 2014; Waters et al., 2014; Waters & Fivush, 2015).

In this manuscript, we argue for an approach that integrates phenomenological and functional autobiographical memory research in the hopes of gaining deeper understanding of human memory functions in their context. We suggest that examining how features of autobiographical memory are adept (or inept) at serving specific functions, could help us to better understand how and why memory and psychological well-being are often found to be associated. We will illustrate this approach through the social function of coherent autobiographical memories. More specifically, we will start by explaining the functions of autobiographical remembering and in particular the social function. Next, we will elaborate on valuable previous attempts at integrating the functional approach with phenomenology. Throughout, we will show how new insights of the past decades of research can give rise to three directions for future research. In particular, we will argue for (1) focusing on functionality (adaptivity) and not merely the use of memories in phenomenological work, (2) attention for both directions of the relation between phenomenology and functionality, and (3) the addition of narrative constructs like coherence to the traditional phenomenological features. Our suggestions aim to direct future hypothesis-driven research on the transactional relations between narrative coherence and the social function of autobiographical memory and, more broadly, the integrative investigation of autobiographical memory phenomenology with functionality.

Memory functionality

Overview of the functions of autobiographical memory

With his famous adagium: "But what the hell is it for?", Baddeley (1988) was one of the first – together with others like Bruce (1989) and Neisser (1978) – to encourage researchers to study autobiographical memory from a functional perspective (see also Bluck et al., 2013). Ever since, various researchers have been identifying and examining, in studies that were rather separate from phenomenology-focused studies, the functions that autobiographical memory serves (e.g., Bluck, 2003; Bluck & Alea, 2002; Bluck et al., 2005; Fivush et al., 2003; Hyman & Faries, 1992; Pillemer, 1992, 2001). As stated before, autobiographical memory is indeed not a passive storage space but rather transcends a plain description of the past, by serving specific functions that facilitate and preserve certain outcomes, like psychological well-being.

Importantly, in our manuscript, we refer to the "functionality" of autobiographical memory as the extent to

which a certain function of autobiographical memory is fulfilled (Bluck & Alea, 2010). Whilst previous research has predominantly been investigating the "use" (which function is used) of memories, the focus in this manuscript is on "adaptive use" or "adaptivity" (the extent to which the function is served, how much of an effect is observed) (Hyman & Faries, 1992; Pasupathi et al., 2002). In other words, the term "functional" here means that a behaviour is adaptive in serving an outcome, a goal or leading to some preferred end state, like good psychological well-being (see Figure 1; Bruce, 1989; see also Bluck & Alea, 2010). In the literature, the respective difference between use and adaptivity is often illustrated by the distinction between goals and goal achievement (e.g., Brandtstädter & Renner, 1990). These functions, goals or outcomes can be situated on an ontogenetic level (in the lifespan of the individual), as well as on a phylogenetic level (survival and reproduction of the species).

Different conceptualisations and taxonomies of the functions of autobiographical memory have been suggested over the years (e.g., Harris et al., 2013; Pasupathi, 2020; Webster, 1993). However, Pillemer's (1992) threefold taxonomy of the functions of autobiographical memory is the most commonly used and has received the most empirical evidence until now (e.g., Bluck, 2003; Bluck et al., 2005; Bluck & Alea, 2002; Hyman & Faries, 1992). Pillemer and later authors recognise three major functions of autobiographical memory, being the development and maintenance of an identity (self-function), directing future behaviour (directive function), and establishing, maintaining and enhancing social relationships (social function) (Bluck, 2003; Bluck et al., 2005; Pillemer, 1992, 2001).

The self-function develops over time from childhood into adolescence and serves the creation of a sense of self throughout life, which promotes feelings of continuity and purpose (Conway, 1996; Fivush, 1998; Neisser, 1988). Using episodic knowledge of the self in the past, a stable internalised representation of the self can be formed, sometimes also referred to as a narrative identity (Bluck & Alea, 2008; McAdams, 1985, 2011; McAdams & McLean, 2013; Wilson & Ross, 2003).

The directive function entails the guidance of future behaviour, making plans or setting goals for the future, and solving present problems, based on past experiences (Kuwabara & Pillemer, 2010; Pillemer, 2003).

The social function of autobiographical memory serves to develop, maintain or strengthen relationships (see social functionality/adaptivity in Figure 1), through evoking empathy, creating intimacy, teaching or informing, and establishing a shared reality of the personal past (Alea & Bluck, 2007; Bluck et al., 2005; Fivush et al., 2006; Waters & Fivush, 2015). For the purpose of organisation, each function has been presented separately, but in reality, autobiographical memories can serve multiple functions at a given point in time and the functions served by a specific memory can also change across time (Camia et al., 2020).

The social function

Relevance

In this manuscript, we will focus on the social function of autobiographical memory since it has been argued to be fundamental (Bruce, 1989; Neisser, 1988; Pillemer, 1992). Research has shown that the social sharing of past emotional events does occur very frequently (e.g., Bohanek et al., 2009). Up to 80–95% of emotional events are shared with members of our entourage, with numbers as high as 60% for the sharing of events on the same day as experiencing them (Gable & Reis, 2010; Rimé, 2009; Rimé et al., 1992, 1998). This already demonstrates the ubiquity of socially sharing autobiographical memories. "Like all stories, life stories exist to be told or performed in social contexts" (McAdams, 2006, p. 109).

Not only do we share memories with others very often, sharing memories to bond with others is suggested to have clear adaptive value. More precisely, it has been argued that humans universally experience a need to belong (Baumeister & Leary, 1995). According to Maslow's theory of human motivation (1943), feeling connected and supported by a social network is seen as a necessary condition for well-being. Thus, sharing memories seems to be one very frequently used manner in which socially satisfying relationships can be built and maintained (ontogenetic adaptation) and through which associated health/survival benefits can occur (phylogenetic adaptation; Harandi et al., 2017; see also Figure 1). Or to say it with Perel's words: "The quality of your life ultimately depends on the quality of your relationships" (Perel, 2019). Indeed, a large body of research has demonstrated that social support is robustly associated with and predictive of good mental and physical health (Harandi et al., 2017; Ozbay et al., 2007).

Subfunctions

The social function of autobiographical memory can actually be subdivided into three subfunctions (Alea & Bluck, 2003), thereby creating multiple ways through which social relationships can be established/maintained and associated health benefits can be obtained (Harandi et al., 2017; Ozbay et al., 2007). These subfunctions are also referred to as different ways of using memories with the goal of building or maintaining social relationships (see "use" in Figure 1).

According to Alea and Bluck's conceptualisation (2003), a first subfunction can be defined as teaching or informing. This usually takes place to inform a person who was not present during the recalled experience, referred to as biographical disclosure, or to give others advice based on own past experiences. This subfunction is also thought to particularly be of importance in the interaction between parents and their children, in the context of developing autobiographical remembering skills (Fivush et al., 2003).

Psychological well-being
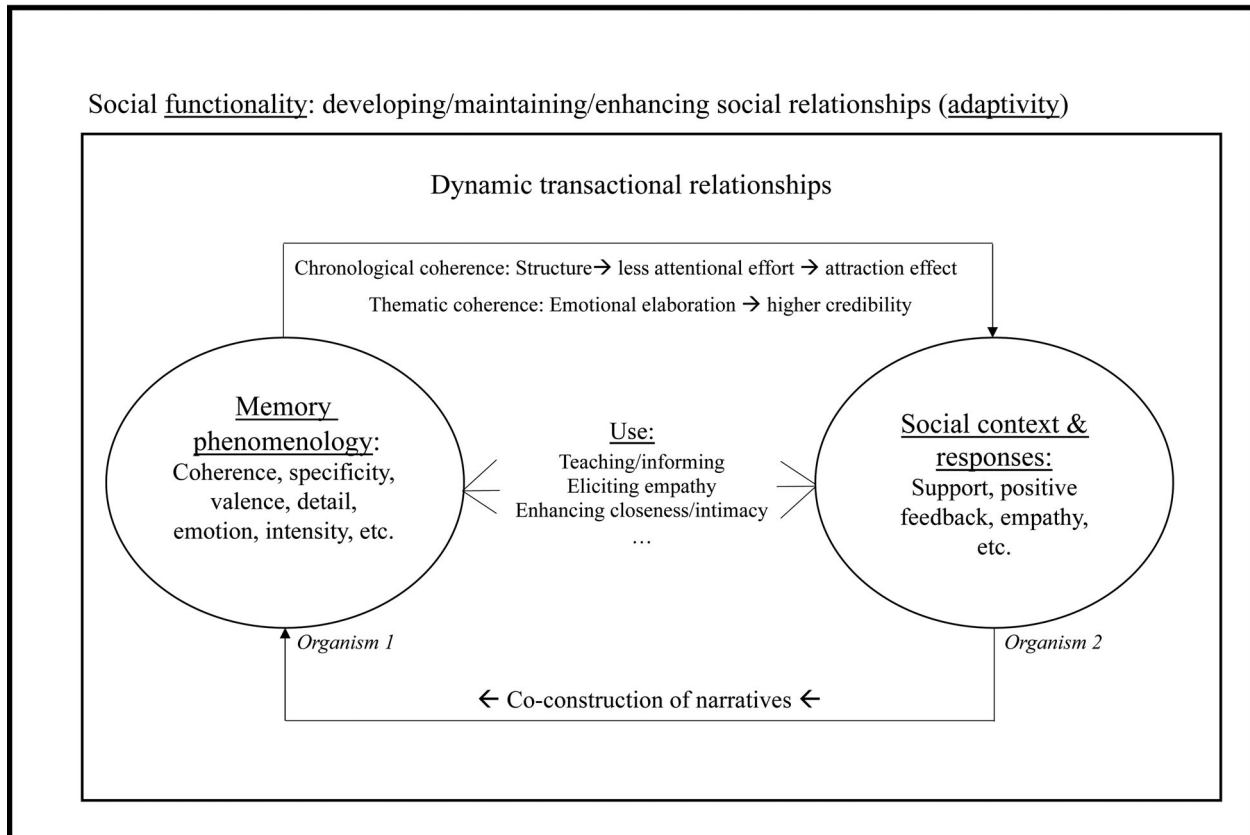
Figure 1. The integration of memory phenomenology and functionality in a dynamic transactional relationship.

A second subfunction concerns evoking or showing empathy through sharing a memory. Memories are shared with one another in order to reciprocate feelings and (co-) construct a common understanding (Alea & Bluck, 2003; Pasupathi et al., 2002).

A third subfunction involves the creation, maintenance or enhancement of relationship intimacy. This subfunction usually takes place when the listener was present at the time of experiencing the event. For instance, in a study of Alea and Bluck (2007), one partner of younger and older couples participated in the study, and they felt closer to the other partner (who was not present during the study) after orally narrating about an autobiographical relationship event, than after sharing fictional non-autobiographical relationship events from vignettes.

The categorisation in subfunctions is predominantly theoretical. It is a non-exhaustive list to organise important phenomena that can occur when remembering for social purposes. These subfunctions are not mutually exclusive, but they do demonstrate the broad array of effects, as well as the adaptive nature of the social function for psychological well-being in various ways. Furthermore, not only in the taxonomy of Pillemer (1992; followed up by Alea & Bluck, 2003), but also in other taxonomies, it becomes clear that social functions of remembering are quite broad. For instance, in Webster's Reminiscence

Functions Scale (1993, 1997), also a multitude of social subfunctions/uses can be identified (e.g., functions of conversation, teaching/inform and intimacy maintenance). A later study by Cappeliez and O'Rourke (2006) further investigated Webster's model in relation to health. They indicated that prosocial functions (reminiscence for conversation, and to teach–inform others) may affect health by means of their role in emotional regulation, which demonstrates that memories can serve relevant outcomes (adaptivity) via a multitude of ways (uses).

Relatedly, different uses of memory can depend on the (social) context in which remembering occurs. For instance, in a recent study by Demiray et al. (2019), a more naturalistic observation approach to reminiscence was employed to study healthy older adults' social reminiscence behaviour in everyday life. The results showed that the social context in which participants were situated in, related to the specific use of the memory. For instance, when with their children and strangers, participants' reminiscence was more focused towards teaching/informing. Reminiscing for conversation happened predominantly when participants were together with their partner and friends.

In addition, the social function of autobiographical memory does not necessarily have to occur in collaborative remembering, defined as the remembering in the

presence of an audience, with or without active inter-action/contribution of (a) listener(s) (Meade et al., 2018). Social bonding can also be obtained through solitary remembering or reminiscing since thinking about an event experienced with someone else who is not there with you at the time of reminiscing, can increase feelings of intimacy to the person in mind (Alea & Bluck, 2007; Waters, 2014). For instance, Webster (1995) indicated that people often remember experiences with loved ones who have passed away, in order to keep a sense of closeness. However, for the remainder of this manuscript, we will predominantly refer to the social function of auto-biographical memory in an interpersonal context, so in the form of collaborative remembering.

Origin

Autobiographical narratives develop and evolve in a social context and trough social interaction (Fivush, 2011). Auto-biographical memory is thus inherently social, and it is important to consider this social origin of autobiographical memory since the parental reminiscing style has an endur-ing impact on children's memory phenomenology (for a meta-analysis see Waters et al., 2019).

Research taking a developmental perspective has thoroughly investigated the ways in which memory is shaped over time, as well as variables that can impact both content and style of autobiographical remembering (for reviews, see Fivush et al., 2006; Waters et al., 2019). Through parent–child reminiscing, children can learn to construct narratives about their experiences and commu-nicate it to their parents and others (Reese & Fivush, 1993, 2008). Children of parents who are highly elaborative (i.e., have sufficiently long and detailed conversations with their children and ask open-ended questions) demonstrate better autobiographical memory in terms of detail and are able to narrate more coherently about their own personal experiences, have greater vocabulary, and perform better on the theory of mind tasks (Fivush, 2001, 2007, 2008; Fivush & Haden, 2005; Reese, 2002a, 2020b; Waters et al., 2019). Long-term longitudinal data suggest that these results are robust and enduring, even into adulthood (Fivush, 2007; Fivush et al., 2006; Reese, 2002a, 2002b).

At the core, the social outcomes which parents provide for their children (like love, attention, follow-up questions) can thus shape their memory phenomenology in an ongoing way, which consequently will affect its functional-ity again in a process of dynamic interaction over time (see also Figure 1).

Further development

Moreover, not only in childhood, but during the entire life-span, memory is shaped by the socio-cultural context in which the individual's life takes place (Fivush & Nelson, 2004). Grysman and Mansfield (2017, p. 110) go as far as saying that "the notion of isolating a pure and individua-lised memory narrative distinct from the social sphere may be methodologically impossible and fundamentally inaccurate".

Memory's phenomenology and memory's social func-tionality are inseparably linked through an ongoing or dynamic process of reinforcement learning, also called operant conditioning (Skinner, 1953, 1957). In Figure 1, this ongoing bidirectional process is illustrated. If some-thing in the phenomenology of memory changes, the functionality will be affected over time. Inversely, if some-thing in the reinforcement/functionality changes, then the phenomenology will change accordingly over time. There-fore, we can say that memory phenomenology and func-tionality are bidirectionally related over time, also referred to as a "transactional relationship". This term means that a relation that goes in both ways, whilst encompassing a certain time span (see Figure 1). For instance, certain phenomenological characteristics (e.g.,: specificity, coherence: Barry et al., 2019; Vanaken et al., 2020) will evoke positive social responses, which will reinforce the used phenomenology and cause this behav-iour to take place more often or intensify it. Thereby, more positive social reactions will be evoked over time. This will cause the social function of autobiographical memory to become fulfilled better for the speaker and outcomes of well-being to be reached more adequately.

Thus, it is important to consider this ongoing inter-action between phenomenology and functionality because we might come to understand why certain phe-nomenological characteristics are related to psychological well-being issues, by looking at the level of underlying mechanisms in terms of the functions of memory. For example, one of the reasons that this person feels depressed might involve other people drawing away from them when they narrates incoherently, upon which a loss of social support and increased feelings of loneliness might fuel more depressive symptoms (cf. Interpersonal theory of depression, Coyne, 1976a, 1976b).

Note that even when remembering occurs in solitude, memories are in essence still social since a large number of social and contextual variables are unconsciously interna-lised via social learning or socialisation (e.g., individualis-tic/collectivistic norms, gender typical norms, etc. Altunnar & Habermas, 2018; Bandura, 1971; Clausen, 1968; Fivush & Haden, 2003; Fivush & Nelson, 2004; Mead, 1934; Wang & Ross, 2007). An individual will thus recall his/her experiences in a way that aligns with his/her social learning history.

Memory phenomenology and functionality integrated

Previous integration attempts

Until now, only a small body of previous work has looked at reconciling the phenomenological and (social-)func-tional approaches. One of the first theoretical attempts for integration stems from almost 20 years ago. In 2003,

Alea and Bluck developed a conceptual model of the social function of autobiographical memory, in which they delineated a range of different variables and elements, like the lifespan context, memory phenomenology (e.g., detail, emotion), characteristics of the speaker (e.g., age, gender, personality), the listener (e.g., familiarity, similarity), their relationship (e.g., quality, length), and aspects of the sharing process (e.g., responsiveness), that are of significant impact in the process of socially sharing and constructing autobiographical narratives. This model aimed to stimulate empirical work on the interaction between the social function and the delineated variables. Since the development of the model in 2003, empirical evidence for the interaction of memory phenomenology and functionality has been increasing. We present a short overview of the literature and provide directions for future research.

Use

First, much of the previous work that has attempted to reconcile phenomenology with functionality has actually investigated "function" in the sense of "use" (which function) and not in the sense of "adaptive use" or "adaptivity" (to what extent is the function fulfilled). For instance, McLean and Lilgendahl (2008) observed in a sample of emerging and older US adults that high points narratives (memories with positive valence) were more often used for the functions of identity, teaching/informing, and conversation than low point narratives (memories with negative valence). Similarly, in a group of Danish folk high school students, Rasmussen and Berntsen (2009) indicated that directive narratives were dominated by negative emotion, whereas self- and social narratives were dominated by positive emotion. Also, Alea et al. (2013) found in a sample of younger, middle-aged, and older adults from different cultures, that memories used for the directive function were the most negative, and memories used for the social function were the most positive. Finally, also Wolf and Demiray (2019) investigated valence in interaction with functions of memories, in a group of German middle-aged and older adults. They observed that emotional valence was positively associated with mood-enhancement and social functions, whereas negatively associated with self and directive functions. In sum, research proposes that positive autobiographical memories are, in comparison to negative ones, more frequently used for social purposes.

Clearly, it is not the actual interaction between phenomenology and functionality that has been measured in aforementioned studies, but rather the interaction between phenomenology and use. This may in part have to do with the adopted methodology. A large part of the "functional" (use) work that has been done until now, has predominantly been using a self-report questionnaire approach (e.g., Bluck et al., 2005), in which individuals indicate how often (frequency) memories are used for specific functions. This can be problematic since research indicates

that individuals are seldom aware of the functions that their memories are serving (e.g., Kuwabara & Pillemer, 2010; Pillemer, 2009). For instance, when a memory is retrieved and shared because you intend to bond with others, you give it a high rating on the social function. However, research usually does not take into account how close the bond is to another person who listens to your autobiographical narrative. In other words, although memories may be endorsed by the participant as serving a certain use, they can in practice still fail to serve that function, for instance due to missing/inadequate phenomenological characteristics. In line with some recent suggestions by Waters and colleagues (2014; Waters & Fivush, 2015), future research may benefit from less reliance on self-report questionnaire measures when studying memory in its functional social context to truly capture adaptivity. We thus argue for a more ecologically valid approach, in which the actual fulfilment of the function is measured.

Unidirectional research

Second, the majority of studies that have been conducted thus far have largely focused unidirectionally on the impact of or the direction from the social context onto memory phenomenology. In these studies, the social aspect is measured as an antecedent (social context before remembering) of behaviour (remembering), rather than as a consequent (social responses after remembering). It should be noted here that the social function is a broader term that can be fulfilled by receiving adequate social responses (e.g., social support), but is also dependent on the specifics of the social context (e.g., solitary vs collaborative remembering). However, in a social world, there is often a behavioural chain, in which the consequents of one narrative/act of remembering can serve as the antecedents of a new one, thereby making it hard to distinguish between different social terms.

Hyman (1994) for instance, found that higher familiarity and similarity of listeners increases the number of affective-evaluative elements in speakers' narrations. Furthermore, Pasupathi and colleagues have demonstrated the active role of listeners in collaborative remembering in a large body of research (Pasupathi, 2001; Pasupathi & Billiteri, 2015; Pasupathi & Carstensen, 2003; Pasupathi & Hoyt, 2010; Pasupathi et al., 1998; Pasupathi & Rich, 2005). More specifically, they indicated that listeners' responsiveness and specifically their attention for, rather than their agreement with the speaker, can shape both the content and the form of what is disclosed in autobiographical remembering, a process referred to as co-narration or co-construction of the personal past (see Figure 1; Pasupathi, 2001; Pasupathi & Billitteri, 2015; Pasupathi et al., 1998; Pasupathi & Rich, 2005). In addition, Bavelas et al. (2000) point to a crucial role of the listener, by indicating that moment-to-moment collaboration through generic and specific listener responses can substantially impact the narrators' autobiographical storyline. Whilst

all very valuable research, it is nonetheless remarkable that the functional approach that Baddeley (1988) called for, and that was theoretically developed and applied to the social function of autobiographical memory by Alea and Bluck (2003), has pretty much only unidirectionally permeated the domain of phenomenological research, namely from the social context onto memory phenomenology. The investigation of the impact of or direction from memory phenomenology onto social responses has largely remained untouched and would benefit from further research.

Phenomenological characteristics

Third, it is in some regards quite striking that the scope of phenomenological characteristics that has been taken into account in relation to memory functionality has generally been confined to single-dimension qualities of memories, like valence, specificity, detail, emotion, and accuracy (cf. aforemenetioned studies: Alea et al., 2013; McLean & Lilgendahl, 2008; Rasmussen & Berntsen, 2009; etc.). Also Alea and Bluck (2003) focused in their model primarily, although not exclusively, on characteristics of detail and emotion. They refer to research of Tannen (1990), who showed that memories rich in detail and emotion are better at serving an intimacy function since they signal caring and confidentiality, rather than neutral emotions which mark emotional detachment. Similarly, Alea and Bluck (2003) argue that including details and emotions during the retrieval of memories in a social context, enables listeners to relate to the experience and empathise with the narrator, thus enhancing the empathy function of memories (Schank & Abelson, 1995). Since the underlying idea here is valuable, we suggest it would be useful to broaden the range of phenomenological characteristics of memories to include other narrative constructs as well, thereby reconciling traditionally phenomenology-orientated views on memory with broader narrative literatures. In se, memory and narrative can indeed be seen as two sides of the same coin, one being the underlying cognitive construct, the other being the operationalisation.

Directions for future research

Given the current state of the art, we propose directions for future research in order to drive new empirical work. We hope to guide further research that integrates phenomenology with functionality, with attention not only for the direction of the social context towards the memory phenomenology, but also on how specific features of the memory, including coherence, can affect social responses (i.e., social function), and thereby also more broadly well-being (see Figure 1).

Adaptivity

It is quite remarkable that a true integration of phenomenology and functionality (in the sense of adaptivity) has not been given more attention in the past, despite their common emphasis on the link between autobiographical narrative and psychological adjustment. Nonetheless, it is important to not merely investigate use, but also adaptivity of memories, because of the suggested links between functionality and psychological well-being. When memories are capable of successfully serving certain outcomes (e.g., developing social relationships), this holds implications for our well-being.

Only quite recently, some work has come out that has investigated phenomenology in interaction with functionality. For instance, a recent study of Alea et al. (2019) investigated the valence of memories in relation to social functionality in a sample of undergraduates from various cultures. Their results showed that participants liked a stranger more after receiving a positive autobiographical story, but they felt more empathy toward her after the negative autobiographical story.

Relatedly, Beike et al. (2016) investigated phenomenology in relation to functionality. They examined whether sharing memories of specific discrete events creates and maintains relationship intimacy, compared to sharing more general self-related information. However, they did not find evidence for this hypothesis. Discussing specific autobiographical memories led to greater closeness among unacquainted conversation partners than discussing non self-related topics, but no greater closeness than discussing other, more general self-related information. In addition, they observed that the relation between specificity and the social function was manifested in the opposite direction. Namely, experiencing a social context of relationship closeness increased the number of specific memories shared.

Nonetheless, Barry et al. (2019), in a sample of university students, did observe evidence in a longitudinal study that lower levels of memory specificity were associated with lower social support given by friends and romantic partners, and that this was in turn associated with elevated general distress at timepoint 2, even when accounting for social support and general distress at timepoint 1. This research shows that we can better understand why certain phenomenology (high specificity) is linked to better psychological well-being, when investigating its functionality. We recommend for future research to take not only use but also functionality into account when investigating phenomenological characteristics of memories, given the importance of successful function fulfilment for psychological well-being. Thereby, we can keep autobiographical memory research clinically relevant, and inspire the road for possible clinical interventions (cf. infra).

Bidirectionality

Whilst most of the research has focused unidirectionally on how the social context can shape memory phenomenology, it is important not to forget that the initial work linking phenomenology with functionality was bidirectional (Alea & Bluck, 2003). In that sense, it was already

hypothesised that memory phenomenology can also affect social responses and thereby the social function of autobiographical memory, but empirical evidence has been lacking. Moreover, it was suggested that memory characteristics not only influence the specific subtype of social function that is served (use: teaching/informing, evoking empathy, enhancing closeness/intimacy), but also the extent to which the function is successfully served (adaptivity: the specific social function targeted to become actually fulfilled: information is taught, empathy is evoked, intimacy is enhanced). In other words, it is proposed that certain phenomenological features of memories can enhance or hinder the degree to which the social function is successfully served. Studying this side of the relationship (i.e., the adaptivity of remembering) would be crucial in order to shed light on social and psychological difficulties that can arise when a behaviour (remembering) fails to serve its function (social bonding). Furthermore, studying the reciprocal relationships between memory features and social responses in longitudinal studies with cross-lagged designs would be necessary to uncover bidirectionality.

Coherence

There are many other features of memories/narratives that may be less often investigated in the traditional phenomenological literature on memory since they stem from the related narrative identity domain that has a broader view on narratives as a whole. These narrative constructs are often more complex or less clearly defined, which may make them less attractive to take into account in traditional memory research. However, we argue that it can be illuminating to investigate these concepts nonetheless. In this manuscript, we will demonstrate the benefits thereof by including the concept of narrative coherence.

Coherence is thought of as a multidimensional construct, which has been defined and used across a variety of disciplines in slightly distinct manners (Adler et al., 2018). In broad terms, two main forms of coherence can be outlined, coined global and local coherence.[1] Global coherence refers to the coherence of full life narratives (Baerger & McAdams, 1999; Bohn & Berntsen, 2008; Habermas & Bluck, 2000; Habermas & de Silveira, 2008; McAdams, 1985; Waters & Köber, 2018). It has its roots in personality psychology, in which the coherence of the narrative identity, or the coherence of full life narratives/life stories, is thought to be a crucial aspect of individual differences (McAdams, 2011; McAdams & McLean, 2013). By contrast, local coherence is the coherence of single-event narratives and stems from cognitive-developmental psychology (Reese et al., 2011). In this manuscript, the focus is on local coherence. According to this perspective, coherence is defined as a cognitive skill, needed to structure single-event narratives about high-impact positive and negative memories, that develops over time and in relation to event-processing (Fivush et al., 2017; Reese

et al., 2011; Waters et al., 2019). Reese and colleagues developed a coding system to score for local coherence, called the "Narrative Coherence Coding Scheme" (NaCCS) (Baker-Ward et al., 2007; Reese et al., 2011), which consists of three dimensions: context, chronology and theme. In other words, three elements indicate coherence in a narrative: (1) the context of the described event is defined, consisting of specific time and place indications, (2) the event is structured in a logical and chronological order using time indication words (e.g., thereafter, next, …), and last but not least (3) the event is elaborated on not merely factually, but also emotionally, and includes a resolution, closure, a link to other important events, or to the self (Reese et al., 2011).

First, we argue that coherence is not merely a narrative construct but can also be conceptualised as a phenomenological characteristic of autobiographical memories. Although coherence is traditionally regarded as a narrative construct, stemming from the narrative identity literature, it fits just as well with the definitions of a phenomenological quality. In line with the first definition (cf. supra), coherence fits the idea that it can be studied descriptively (coded in narratives), without having to investigate the causes or consequences of it. Also, in line with the second definition proposed earlier, the coherence of a personal narrative can also define the memory for the experiencer since it contains a thematic dimension that includes personal information like the emotional evaluation or the meaning of the event (e.g., I felt really happy, it taught me a lot about the value of family). Even the more "structural" dimensions of coherence in personal narratives can let us know that the memory is ours, that we have experienced the event ourselves. For instance, remembering the specific partial actions that made up the total event are different for every individual (e.g., first I ate breakfast, then I went for a run … : chronology). Also the place and time where the event happened are specific to the individual (e.g., on my 18th birthday … .: context).

Furthermore, coherence has been suggested to be important with regards to the social function of autobiographical memory. Already in 1970, Labov referred to coherence in his seminal essay on sociolinguistics, called "The study of Language in its Social Context", as the fundamental cornerstone for communication. This idea was later on reiterated by McAdams (2006, p. 111), who said that "In the most basic sense, the problem of narrative coherence is the problem of being understood in a social context". Nonetheless, coherence has yet to be incorporated in the study of memory's social function. Coherence has previously been referred to as "the necessary feature of a high-quality narrative" (Reese et al., 2011, p. 425), and "the fundamental story criterion" (Adler et al., 2007, p. 1193). As briefly introduced above, generally defined, coherence refers to the extent to which a narrative is logically structured and meaningfully elaborated upon. In other words, a coherent personal narrative is "one that makes sense to a naïve listener" (Reese et al., 2011, p. 425).

Finally, coherence may be a particularly interesting concept to work with since research has shown that it can be reflective of important psychological well-being outcomes. Particularly over the last two decades, research that investigates coherence in relation to psychological well-being has been increasing, showing generally positive relations to psychological well-being and negative relations to psychopathology (e.g., Adler et al., 2012, 2013, 2016; Baerger & McAdams, 1999; Booker et al., 2020, 2021; Chen et al., 2012; Habermas & Bluck, 200; Lysaker et al., 2002; Reese et al., 2011; McLean et al., 2020; Mitchell et al., 2020; Tuval-Mashiach et al., 2004; Vanderveren et al., 2019; Waters & Fivush, 2015).

Empirical evidence for the relation between coherence and the social function correlational research

As of yet, only a couple of studies have indeed investigated narrative coherence in relation to social functioning. Additionally, most of the work is correlational, and correlations are only a first step in uncovering causes of possible effects. For instance, Waters and Fivush (2015) showed in a sample of undergraduate students that the coherence of written narratives of significant nuclear life episodes, as measured with Reese's system (2011), was not only positively related to psychological well-being, but also to the quality of social relationships, which is in line with the social function of autobiographical memory. Moreover, Burnell and colleagues (2010) found that veterans who were able to communicate in a coherent manner about their war experiences reported that communication with friends and family was more satisfying, and societal opinions seemed more positive, in comparison to those who narrated incoherently. Relatedly, Oppenheim et al. (1996) found that couples whose co-constructed narratives of their child's birth were more coherent, rated with their own coding system, had higher concurrent and longitudinal marital satisfaction. Vanaken et al. (2021) also showed in a student sample that higher local coherence of written narratives, especially of high point memories, measured with the three-dimensional NaCCS (Reese et al., 2011), was associated with more positive social interactions 2 years later. These studies support the idea that the more coherent an autobiographical memory is, the more positive the social responses are and thus the better the memory serves a social function. Or more generally put, that memory phenomenology is indeed important for the extent to which the functions of remembering are adaptively fulfilled.

Experimental research

Nearly all studies that did focus on the relation between coherence and social function fulfilment have used correlational designs, which do not allow causal inference. Nonetheless, recent experimental work is providing promising results by trying to respond to the aforementioned limitation that the effect of coherence on the social function has been understudied. For instance, Vanaken and colleagues (2020) conducted a within-subjects experimental study, in which 96 university undergraduates listened to pre-recorded audio clips in which an unfamiliar speaker narrated about a low or high point autobiographical experience, in either a coherent or an incoherent manner, according to Reese's three-dimensional local coherence system (2011). Results were in line with hypotheses deduced from the presented model. Participants showed more willingness to interact, more instrumental support, more positive feelings, more empathy and more trust towards those narrators who talked in a coherent manner about their autobiographical memories, as compared to towards those that talked in an incoherent manner. A follow-up study by Vanaken and Hermans (2020) replicated these results and extended them, using similar procedures. Specifically, they investigated the multidimensional impact of local narrative coherence in high and low points, on listeners' social responses. Chronological and thematic coherence were observed to be the major factors in impacting social responses of listeners, but only when the memories concerned high points in life. For negative narratives, coherence did not have an impact on listeners' social responses. Furthermore, an additive effect of the dimensions in positive narratives was found, indicating that the more incoherent the story became, the more negative social responses turned out.

Mechanisms of the relation between coherence and social responses

Up to now, two candidate mechanisms for the impact of coherence on social responses have been suggested, each related to a particular dimension of coherence (Vanaken et al., 2020; see also Figure 1). The first candidate mechanism concerns a reduction of an attraction effect when meeting a person. This occurs when effortful processing, also referred to as attentional effort, is augmented (Tsuzuki et al., 2019). It is suggested that particularly chronological incoherence might set in motion increased effortful processing. In fact, research has demonstrated that this increased allocation of cognitive resources reduces the initial social attraction effect (Tsuzuki et al., 2019). The more attentional effort it takes to process information, the lower attraction will be. Narratives that are chronologically incoherent, give the listener a hard time following the flow of thought of the narrator, hence requiring a great deal of cognitive resources to process and order the events. This might result in reduced attraction towards the narrator, more negative social feedback, and consequently less social bonding (i.e., worse fulfilment of the social function, see also Figure 1).

The second candidate mechanism stems from semiotic psychology and involves the idea that coherence might be a necessary condition to establish credibility in

communication (Elleström, 2018). In cognitive psychology, this idea has been studied as well. Conway for instance, suggested that memories scoring low on internal coherence and low on external correspondence are often categorised by outsiders as confabulated memories (Conway, 2005; Conway et al., 2004). Therefore, it is proposed that an incoherent narrator could come across as less credible, which increases distrust in the relationship and decreases the willingness for future interactions or social support. Particularly, narratives scoring low on thematic coherence, which lack emotional elaborations and personal interpretations, could give the listener the impression that the narrator is making up the story, as if they did not in fact experience the narrated event him-/herself (see also Figure 1).

Of course, the two suggested mechanisms above are not mutually exclusive, neither do they rule out other possible pathways of the relation between narrative coherence and social responses. Future experimental research is recommended to investigate these and other candidate mechanisms. Relatedly, it would be interesting to relate these mechanisms that are suggested to be of particular importance for certain dimension of coherence (attraction effect for chronological coherence, credibility for thematic coherence) to the different uses/subfunctions of the social function of autobiographical memory. For instance, the initial social attraction effect might possibly be more relevant when developing new relationships. The telling of a narrative by a new person might thus leave us with a first impression depending on the chronological coherence of the story. To give another example, with respect to credibility, this could be particularly interesting in terms of teaching and informing others. This would imply that informing others should happen foremost in a thematically coherent manner, for it to be highly adaptive (reaching the desired outcome). However, note that these relations are merely speculative until now and need to still be empirically evidenced by future research.

Discussion

The aim of this paper concerned demonstrating how the reconciliation of phenomenological and functional approaches to the investigation of autobiographical memory can add towards a deeper understanding and explanation of the relation between memory and psychological well-being. Following from the three topics that were put on the research agenda, we argue that this integrative framework could help to stimulate future empirical studies. More specifically, more experimental research is needed to investigate (1) the adaptivity and not merely the use of socially sharing autobiographical memories. This could, for instance, take the form of a social experiment in which the actual social support given by the listener towards an (in)coherent narrator is measured.

Additionally, in order to (2) examine both directions of the relation between phenomenology and functionality, longitudinal work with cross-lagged designs over time and experimental work from both starting points is necessary. This could allow us to investigate transactional associations and causal effects in both directions. Finally, we argue for (3) the integration of narrative identity literatures and more phenomenology-oriented literatures. Future research would be benefitted by also taking more complex and multi-dimensional narrative constructs like coherence into account to investigate their relation to psychological well-being, and the possible mediation through the functions of autobiographical memory. To examine candidate mechanisms of the relation between coherence and psychological well-being, both in terms of social mediators (i.e., social function), as well as different mediators that might be related to the other functions of autobiographical memory (e.g., identity, direction), more experimental research would be needed. The model should also stimulate new empirical work that measures coherence as an active, real-time construct that can develop in social interaction, in addition to only using written measures of coherence. Of course, finding a balance between internal and external validity will be an ongoing task here. In addition, future research should examine the proposed model with attention for relationship dynamics (e.g., stranger vs familiar person), and in subgroups that could vary in terms of coherence (e.g., different educational levels, different cultures, different age groups, etc.).

Furthermore, the proposed framework could pave the road for new clinical interventions to improve well-being. In that sense, one interesting route would be to develop an experimental form of training to investigate whether coherence can be improved, and if so, whether this improvement brings about better social relationships (a better fulfilment of the social function) and higher levels of well-being. In this training, we could use the context/consequences in order to change phenomenological characteristics that are not adaptive (e.g., incoherence) for the individual, by bringing more adaptive phenomenology (e.g., coherence) under operant control (for a related idea with memory specificity, see Debeer et al., 2014). The idea of training people has already been translated to clinical practice and has inspired the development of a clinical intervention called Memory Specificity Training, a treatment that has its theoretical roots in operant learning and that has proven to make people more specific in practice (Barry et al., 2019; Raes et al., 2009). Moreover, it would be important to take into account multiple phenomenological characteristics in order to have an ecologically valid approach to often quite complex, multi-layered autobiographical narratives, and an equally complex social world. A coherence training would, for instance, not only concern the narration of difficult or negative events, but also of positive events, since our research has shown that social responses are more

negative when particularly positive stories are told in an incoherent manner (Vanaken et al., 2020). Learning to narrate coherently about all types of events, the positive ones included, could help to "broaden and build" (cf. Fredrickson, 2004) a supportive social network and strong social relationships, which are crucial with regards to protecting and maintaining our psychological well-being (Harandi et al., 2017). Of course, caution is needed when translating experimental findings to clinical practice, hence the future of narrative coherence in clinical work is yet to be determined.

Conclusion

In sum, the phenomenology and the functionality of autobiographical memory have, at least for a considerable part, been studied too independently in the past. Throughout this manuscript, we have discussed prior attempts to reconcile phenomenology with functionality. Three remarks were made, which can provide guidance for a future research agenda. We argued that future research would benefit from (1) the inclusion of functionality and not merely use of memories in phenomenological work, (2) research attention for both directions of the relation between phenomenology and functionality, and (3) the addition of narrative constructs like coherence to the traditional phenomenological features. We have illustrated our directions for this integration of phenomenology with functionality through the social function of coherent autobiographical memories. We have proposed that coherent narration and positive social responses or socio-contextual variables are connected through a dynamic transactional relation, reinforcing each other over time, and thereby fulfilling the social function of autobiographical memory. In turn, this dynamic circular process adds to the development, maintenance and enhancement of strong social relationships, consequently improving psychological well-being. The first studies testing the presented framework are already providing promising results, by indicating that narrative coherence has a beneficial effect on social responses. Nonetheless, more empirical studies are needed to investigate phenomenology in relation to functionality. This can inspire the road to the development of experimental forms of training or clinical interventions to stimulate adaptive phenomenological qualities of autobiographical memory which could enhance psychological well-being.

Note

1. Note that this is a non-exhaustive list and other conceptualizations and measures of coherence – or similar concepts – have been described. For instance, conversational coherence in clinical psychology (Lysaker et al., 2002) is usually only investigated in clinical samples. The number of causal and insight words of narratives obtained through expressive writing (Pennebaker & Beal, 1986) does not capture the multidimensionality of coherence; on top of this, neither the phenomenology

nor the functionality of shared narratives is measured in this approach. Hence, these and other forms of coherence fall outside the scope of this manuscript.

ORCID

Lauranne Vanaken 🄳 http://orcid.org/0000-0002-7793-9732

References

Adler, J. M., Chin, E. D., Kolisetty, A. P., & Oltmanns, T. F. (2012). The distinguishing characteristics of narrative identity in adults with features of borderline personality disorder: An empirical investigation. *Journal of Personality Disorders*, *26*(4), 498–512. https://doi.org/10.1521/pedi.2012.26.4.498

Adler, J. M., Harmeling, L. H., & Walder-Biesanz, I. (2013). Narrative meaning making is associated with sudden gains in psychotherapy clients' mental health under routine clinical conditions. *Journal of Consulting and Clinical Psychology*, *81*(5), 839–845. https://doi.org/10.1037/a0033774

Adler, J. M., Lodi-Smith, J., Philippe, F. L., & Houle, I. (2016). The incremental validity of narrative identity in predicting well-being: A review of the field and recommendations for the future. *Personality and Social Psychology Review*, *20*(2), 142–175. https://doi.org/10.1177/1088868315585068

Adler, J. M., Wagner, J. W., & McAdams, D. P. (2007). Personality and the coherence of psychotherapy narratives. *Journal of Research in Personality*, *41*(6), 1179–1198. https://doi.org/10.1016/j.jrp.2007.02.006

Adler, J. M., Waters, T. E. A., Poh, J., & Seitz, S. (2018). The nature of narrative coherence: An empirical approach. *Journal of Research in Personality*, *74*, 30–34. https://doi.org/10.1016/j.jrp.2018.01.001

Alea, N., Arneaud, M. J., & Ali, S. (2013). The quality of self, social, and directive memories: Are there adult age group differences? *International Journal of Behavioral Development*, *37*(5), 395–406. https://doi.org/10.1177/0165025413484244

Alea, N., & Bluck, S. (2003). Why are you telling me that? A conceptual model of the social function of autobiographical memory. *Memory*, *11*(2), 165–178. https://doi.org/10.1080/741938207

Alea, N., & Bluck, S. (2007). I'll keep you in mind: The intimacy function of autobiographical memory. *Applied Cognitive Psychology*, *21*(8), 1091–1111. https://doi.org/10.1002/acp.1316

Alea, N., Bluck, S., Mroz, E. L., & Edwards, Z. (2019). The social function of autobiographical stories in the personal and virtual world: An initial investigation. *Topics in Cognitive Science*, *11*(4), 794–810. https://doi.org/10.1111/tops.12370

Altunnar, Neşe Hatiboğlu, & Habermas, Tilmann. (2018). Life Narratives Are More Other-Centered, More Negative, and Less Coherent in Turkey Than in Germany: Comparing Provincial-Turkish, Metropolitan-Turkish, Turkish-German, and Native

German Educated Young Adults. *Frontiers in Psychology*, *9*, 290. http://dx.doi.org/10.3389/fpsyg.2018.02466

American Psychiatric Association. (2013). Diagnostic and statistical manual of mental disorders(5th ed.). https://doi.org/10.1176/appi.books.9780890425596.

Baddeley, A. (1988). But what the hell is it for? In M. M. Gruneberg, P. E. Morris, & R. N. Sykes (Eds.), *Practical aspects of memory: Current research and issues*: *Memory in everyday life* (Vol. 1, pp. 3–18). John Wiley.

Baerger, D. R., & McAdams, D. P. (1999). Life story coherence and its relation to psychological well- being. *Narrative Inquiry*, *9*(1), 69–96. https://doi.org/10.1075/ni.9.1.05bae

Baker-Ward, L., Bauer, P. J., Fivush, R., Haden, C. A., Ornstein, P. A., & Reese, E. (2007). *Coding coherence in autobiographical narratives*. Symposium conducted at the biennial meetings of the Society for Research in Memory and Cognition, Lewiston, ME, USA.

Bandura, A. (1971). *Social learning theory*. General Learning Press.

Barry, T. J., Vinograd, M., Boddez, Y., Raes, F., Zinbarg, R., Mineka, S., & Craske, M. G. (2019). Reduced autobiographical memory specificity affects general distress through poor social support. *Memory*, *27*(7), 916–923. https://doi.org/10.1080/09658211.2019.1607876

Baumeister, R. F., & Leary, M. R. (1995). The need to belong. Desire for interpersonal attachments as a fundamental human emotion. *Psychological Bulletin*, *117*(3), 497–529. https://doi.org/10.1037/0033-2909.117.3.497

Bavelas, J. B., Coates, L., & Johnson, T. (2000). Listeners as co-narrators. *Journal of Personality and Social Psychology*, *79*(6), 941–952. https://doi.org/10.1037/0022-3514.79.6.941

Beike, D. R., Brandon, N. R., & Cole, H. E. (2016). Is sharing specific autobiographical memories a distinct form of self-disclosure? *Journal of Experimental Psychology: General*, *145*(4), 434–450. https://doi.org/10.1037/xge0000143

Bluck, S. (2003). Autobiographical memory: Exploring its functions in everyday life. *Memory*, *11*(2), 113–123. https://doi.org/10.1080/741938206

Bluck, S., & Alea, N. (2002). Exploring the functions of autobiographical memory: Why do I remember the autumn? In J. D. Webster & B. K. Haight (Eds.), *Critical advances in reminiscence work: From theory to application* (pp. 61–75). Springer Publishing.

Bluck, S., & Alea, N. (2008). Remembering being me: The self continuity function of autobiographical memory in younger and older adults. In F. Sani (Ed.), *Self continuity: Individual and collective perspectives* (pp. 55–70). Psychology Press.

Bluck, S., Alea, N., Habermas, T., & Rubin, D. C. (2005). A TALE of three functions: The self–reported uses of autobiographical memory. *Social Cognition*, *23*(1), 91–117. https://doi.org/10.1521/soco.23.1.91.59198

Bluck, Susan, Baron, Jacqueline M, Ainsworth, Sarah A., Gesselman, Amanda N, & Gold, Kim L.. (2013). Eliciting Empathy for Adults in Chronic Pain through Autobiographical Memory Sharing. *Applied Cognitive Psychology*, *27*(1), 81–90. https://doi.org/10.1002/acp.v27.1

Bohanek, J. G., Fivush, R., Zaman, W., Lepore, C. E., Merchant, S., & Duke, M. P. (2009). Narrative interaction in family dinnertime conversations. *Merrill-Palmer Quarterly*, *55*(4), 488–515. https://doi.org/10.1353/mpq.0.0031

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*(4), 1135–1147. https://doi.org/10.1037/0012-1649.44.4.1135

Booker, J. A., Brakke, K., Sales, J. M., & Fivush, R. (2021). Narrative identity across multiple autobiographical episodes: Considering means and variability with well-being. *Self and Identity*. https://doi.org/10.1080/15298868.2021.1895301

Booker, J. A., Fivush, R., Graci, M. E., Heitz, H., Hudak, L. A., Jovanovic, T., Rothbaumg, B. O., & Stevens, J. S. (2020). Longitudinal changes in trauma narratives over the first year and associations with coping

and mental health. *Journal of Affective Disorders*, *272*, 116–124. https://doi.org/10.1016/j.jad.2020.04.009

Brandtstädter, J., & Renner, G. (1990). Tenacious goal pursuit and flexible goal adjustment: Explication and age-related analysis of assimilative and accommodative strategies of coping. *Psychology and Aging*, *5*(1), 58–67. https://doi.org/10.1037/0882-7974.5.1.58

Brewer, W. F. (1986). What is autobiographical memory? In D. C. Rubin (Ed.), *Autobiographical memory* (pp. 25–49). Cambridge University Press. https://doi.org/10.1017/CBO9780511558313.006.

Bruce, D. (1989). Functional explanations of memory. In L. W. Poon, D. C. Rubin, & B. A. Wilson (Eds.), *Everyday cognition in adulthood and late life* (pp. 44–58). Cambridge University Press.

Burnell, K., Coleman, P., & Hunt, N. (2010). Coping with traumatic memories: Second world War veterans' experiences of social support in relation to the narrative coherence of war memories. *Ageing and Society*, *30*(1), 57–78. https://doi.org/10.1017/S0144686X0999016X

Camia, C., Arneaud, M. J., McLean, K. C., & Waters, T. E. A. (2020). *Stability of autobiographical memory functions in different event types* [Manuscript submitted for publication].

Cappeliez, P., & O'Rourke, N. (2006). Empirical validation of a model of reminiscence and health in later life. *The Journals of Gerontology. Series B, Psychological Sciences and Social Sciences*, *61*(4), 237–244. https://doi.org/10.1093/geronb/61.4.p237

Chen, Y., McAnally, H. M., Wang, Q., & Reese, E. (2012). The coherence of critical event narratives and adolescents' psychological functioning. *Memory (Hove, England)*, *20*(7), 667–681. https://doi.org/10.1080/09658211.2012.693934

Clausen, J. A. (1968). Recent developments in socialization theory and research. *The ANNALS of the American Academy of Political and Social Science*, *377*(1), 139–155. https://doi.org/10.1177/000271626837700115

Conway, M. A. (1990). Associations between autobiographical memories and concepts. *Journal of Experimental Psychology: Learning, Memory, and Cognition*, *16*(5), 799–812. https://doi.org/10.1037/0278-7393.16.5.799

Conway, M. A. (1996). Autobiographical knowledge and autobiographical memories. In D. C. Rubin (Ed.), *Remembering our past: Studies in autobiographical memory* (pp. 67–93). Cambridge University Press. https://doi.org/10.1017/CBO9780511527913.003.

Conway, M. A. (2005). Memory and the self. *Journal of Memory and Language*, *53*(4), 594–628. https://doi.org/10.1016/j.jml.2005.08.005

Conway, M. A., & Pleydell-Pearce, C. W. (2000). The construction of autobiographical memories in the self-memory system. *Psychological Review*, *107*(2), 261–288. https://doi.org/10.1037//0033-295X.107.2.261

Conway, M. A., Singer, J. A., & Tagini, A. (2004). The self and autobiographical memory: Correspondence and coherence. *Social Cognition*, *22*(5), 491–529. https://doi.org/10.1521/soco.22.5.491.50768

Coyne, James C. (1976a). Depression and the response of others. *Journal of Abnormal Psychology*, *85*(2), 186–193. https://doi.org/10.1037/0021-843X.85.2.186

Coyne, J.C. (1976b). Toward an Interactional Description of Depression. *Psychiatry* 39(1), 28–40. https://doi.org/10.1521/00332747.1976.11023874

D'Argembeau, A., Comblain, C., & Van der Linden, M. (2003). Phenomenal characteristics of autobiographical memories for positive, negative, and neutral events. *Applied Cognitive Psychology*, *17*(3), 281–294. https://doi.org/10.1002/acp.856 doi:10.1002/acp.856

Debeer, E., Raes, F., Williams, J. M. G., Craeynest, M., & Hermans, D. (2014). Operant conditioning of autobiographical memory retrieval. *Memory*, *22*(3), 171–183. https://doi.org/10.1080/09658211.2013.774419

de Decker, A. (2001). *The specificity of the autobio- graphical memory retrieval style in adolescents with a history of trauma* [Unpublished doctoral dissertation]. University of Leuven.

Demiray, B., Mischler, M., & Martin, M. (2019). Reminiscence in every-day conversations: A naturalistic observation study of older adults. *The Journals of Gerontology. Series B, Psychological Sciences and Social Sciences*, 74(5), 745–755. https://doi.org/10.1093/geronb/gbx141

Elleström, L. (2018). Coherence and truthfulness in communication: Intracommunicational and extracommunicational indexicality. *Semiotica*, 2018(225), 423–446. https://doi.org/10.1515/sem-2017-0001

Fivush, R. (1998). Gendered narratives: Elaboration, structure, and emotion in parent-child reminiscing across the preschool years. In C. P. Thompson, D. J. Herrmann, D. Bruce, J. D. Read, D. G. Payne, & M. P. Toglia (Eds.), *Autobiographical memory: Theoretical and applied perspectives* (pp. 79–103). Lawrence Erlbaum Associates Publishers.

Fivush, R. (2001). Owning experience: Developing subjective perspective in autobiographical narratives. In C. Moore & K. Lemmon (Eds.), *The self in time: Developmental perspectives* (pp. 35–52). Lawrence Erlbaum Associates Publishers.

Fivush, R. (2007). Maternal reminiscing style and children's developing understanding of self and emotion. *Clinical Social Work Journal*, 35(1), 37–46. https://doi.org/10.1007/s10615-006-0065-1

Fivush, R. (2008). Remembering and reminiscing: How individual lives are constructed in family narratives. *Memory Studies*, 1(1), 49–58. https://doi.org/10.1177/1750698007083888

Fivush, R. (2011). The development of autobiographical memory. *Annual Review of Psychology*, 62(1), 559–582. https://doi.org/10.1146/annurev.psych.121208.131702

Fivush, R., Berlin, L. J., McDermott Sales, J., Mennuti-Washburn, J., & Cassidy, J. (2003). Functions of parent-child reminiscing about emotionally negative events. *Memory*, 11(2), 179–192. https://doi.org/10.1207/S15327647JCD0402_03

Fivush, R., Booker, J. A., & Graci, M. E. (2017). Ongoing narrative meaning-making within events and across the life span. *Imagination, Cognition and Personality*, 37(2), 127–152. https://doi.org/10.1177/0276236617733824

Fivush, R., Habermas, T., Waters, T. E. A., & Zaman, W. (2011). The making of autobiographical memory: Intersections of culture, narratives and identity. *International Journal of Psychology*, 46(5), 321–345. https://doi.org/10.1080/00207594.2011.596541

Fivush, R., & Haden, C. A. (Eds.). (2003). *Autobiographical memory and the construction of a narrative self: Developmental and cultural perspectives*. Lawrence Erlbaum Associates Publishers.

Fivush, R., & Haden, C. A. (2005). Parent-child reminiscing and the construction of a subjective self. In B. D. Homer & C. S. Tamis-LeMonda (Eds.), *The development of social cognition and communication* (pp. 315–335). Lawrence Erlbaum Associates Publishers.

Fivush, R., Haden, C. A., & Reese, E. (2006). Elaborating on elaborations: The role of maternal reminiscing style in cognitive and socioemotional development. *Child Development*, 77(6), 1568–1588. https://doi.org/10.1111/j.1467-8624.2006.00960.x

Fivush, R., & Nelson, K. (2004). Culture and language in the emergence of autobiographical memory. *Psychological Science*, 15(9), 573–577. https://doi.org/10.1111/j.0956-7976.2004.00722.x

Frattaroli, J. (2006). Experimental disclosure and its moderators: A meta-analysis. *Psychological Bulletin*, 132(6), 823–865. https://doi.org/10.1037/0033-2909.132.6.823

Fredrickson, B. L. (2004). The broaden-and-build theory of positive emotions. *Philosophical Transactions of the Royal Society of London. Series B, Biological Sciences*, 359(1449), 1367–1377. https://doi.org/10.1098/rstb.2004.1512

Freud, S. (1953). Fragment of an analysis of a case of hysteria. In J. Strachey (Trans.), *The standard edition of the complete psychological works of Sigmund Freud* (Vol. 7, pp. 16–18). Hogarth Press and the Institute of Psychoanalysis. (Original work published 1905).

Gable, S. L., & Reis, H. T. (2010). Good news! Capitalizing on positive events in an interpersonal context. In M. P. Zanna (Ed.), *Advances in experimental social psychology. Advances in experimental social psychology* (Vol. 42, pp. 195–257). Academic Press. https://doi.org/10.1016/S0065-2601(10)42004-3.

Gibbs, Bryce R, & Rude, Stephanie S.. (2004). Overgeneral Autobiographical Memory as Depression Vulnerability. *Cognitive Therapy and Research*, 28(4), 511–526. https://doi.org/10.1023/B:COTR.0000045561.72997.7c

Grysman, A., & Mansfield, C. D. (2017). What do we have when we have a narrative? *Imagination, Cognition and Personality*, 37(2), 105–126. https://doi.org/10.1177/0276236617733823

Habermas, T., & Bluck, S. (2000). Getting a life: The emergence of the life story in adolescence. *Psychological Bulletin*, 126(5), 748–769. https://doi.org/10.1037/0033-2909.126.5.748

Habermas, Tilmann, & de Silveira, Cybèle. (2008). The development of global coherence in life narratives across adolescence: Temporal, causal, and thematic aspects. *Developmental Psychology*, 44(3), 707–721. https://doi.org/10.1037/0012-1649.44.3.707

Harandi, F. T., Taghinasab, M. M., & Nayeri, D. T. (2017). The correlation of social support with mental health: A meta-analysis. *Electronic Physician*, 9(9), 5212–5222. https://doi.org/10.19082/5212

Harris, Celia B, Rasmussen, Anne S., & Berntsen, Dorthe. (2013). The functions of autobiographical memory: An integrative approach. *Memory*, 22(5), 559–581. https://doi.org/10.1080/09658211.2013.806555

Heidegger, M. (1982). *The basic problems of phenomenology* (A. Hofstadter, Trans). Indiana University Press.

Hermans, D., Vandromme, H., Debeer, E., Raes, F., Demyttenaere, K., Brunfaut, E., & Williams, J. M. (2008). Overgeneral autobiographical memory predicts diagnostic status in depression. *Behaviour Research and Therapy*, 46(5), 668–677. https://doi.org/10.1016/j.brat.2008.01.018

Husserl, E. (1963). *Ideas: A general introduction to pure phenomenology* (W. R. Boyce Gibson, Trans). Collier Books.

Hyman, I. E. (1994). Conversational remembering: Story recall with a peer versus for an experimenter. *Applied Cognitive Psychology*, 8(1), 49–66. https://doi.org/10.1002/acp.2350080106

Hyman, I. E., & Faries, J. M. (1992). The functions of autobiographical memory. In M. A. Conway, D. C., H. Spinnler, W. A. Wagenaar (Eds.), *Theoretical perspectives on autobiographical memory*. NATO ASI series (Series D: behavioural and social sciences) (Vol. 65). Springer.

Johnson, M. K., Foley, M. A., Suengas, A. G., & Raye, C. L. (1988). Phenomenal characteristics of memories for perceived and imagined autobiographical events. *Journal of Experimental Psychology: General*, 117(4), 371–376. https://doi.org/10.1037/0096-3445.117.4.371

Keyes, C. L. M., & Magyar-Moe, J. L. (2003). The measurement and utility of adult subjective well-being. In S. J. Lopez & C. R. Snyder (Eds.), *Positive psychological assessment: A handbook of models and measures* (pp. 411–425). American Psychological Association.

Kuwabara, K. J., & Pillemer, D. B. (2010). Memories of past episodes shape current intentions and decisions. *Memory*, 18(4), 365–374. https://doi.org/10.1080/09658211003670857

Labov, W. (1970). The study of language in its social context. In W. Labov (Ed.) (1972) *Sociolinguistic patterns*. Basil Blackwell.

Lysaker, P. H., Clements, C. A., Plascak-Hallberg, C. D., Knipscheer, S. J., & Wright, D. E. (2002). Insight and personal narratives of illness in schizophrenia. *Psychiatry: Interpersonal and Biological Processes*, 65(3), 197–206. https://doi.org/10.1521/psyc.65.3.197.20174

Maslow, A. H. (1943). A theory of human motivation. *Psychological Review*, 50(4), 370–396. https://doi.org/10.1037/h0054346

McAdams, D. P. (1985). *Power, intimacy, and the life story: Personological inquiries into identity*. Guilford Press.

McAdams, D. P. (2006). The problem of narrative coherence. *Journal of Constructivist Psychology*, 19(2), 109–125. https://doi.org/10.1080/10720530500508720

McAdams, D. P. (2011). Narrative identity. In S. J. Schwartz, K. Luyckx, & V. L. Vignoles (Eds.), *Handbook of identity theory and research* (pp. 99–115). Springer Science + Business Media. https://doi.org/10.1007/978-1-4419-7988-9_5.

McAdams, D. P., & McLean, K. C. (2013). Narrative identity. *Current Directions in Psychological Science*, 22(3), 233–238. https://doi.org/10.1177/0963721413475622

McLean, K. C., & Lilgendahl, J. P. (2008). Why recall our highs and lows: Relations between memory functions, age, and well-being. *Memory*, 16(7), 751–762. https://doi.org/10.1080/09658210802215385

McLean, K. C., Syed, M., Pasupathi, M., Adler, J. M., Dunlop, W. L., Drustrup, D., Fivush, R., Graci, M. E., Lilgendahl, J. P., Lodi-Smith, J., McAdams, D. P., & McCoy, T. P. (2020). The empirical structure of narrative identity: The initial big three. *Journal of Personality and Social Psychology*, Advance online publication. https://doi.org/10.1037/pspp0000247.

Mead, G. H. (1934). *Mind, self, and society from the standpoint of a social behaviorist*. University of Chicago Press.

Meade, M. L., Harris, C. B., Van Bergen, P., Sutton, J., & Barnier, A. J. (2018). *Collaborative remembering: Theories, research, and applications*. Oxford University Press.

Mitchell, C., Reese, E., Salmon, K., & Jose, P. (2020). Narrative coherence, psychopathology, and wellbeing: Concurrent and longitudinal findings in a mid-adolescent sample. *Journal of Adolescence*, 79, 16–25. https://doi.org/10.1016/j.adolescence.2019.12.003

Neisser, U. (1978). Memory: What are the important questions? In M. M. Gruneberg, P. E. Morris, & R. N. Sykes (Eds.), *Practical aspects of memory* (pp. 3–24). Academic Press.

Neisser, U. (1988). Five kinds of self-knowledge. *Philosophical Psychology*, 1(1), 35–59. https://doi.org/10.1080/09515088808572924

Nelson, K. (1993). The psychological and social origins of autobiographical memory. *Psychological Science*, 4(1), 7–14. https://doi.org/10.1111/j.1467-9280.1993.tb00548.x

Nelson, K., & Fivush, R. (2004). The emergence of autobiographical memory: A social cultural developmental theory. *Psychological Review*, 111(2), 486–511. https://doi.org/10.1037/0033-295X.111.2.486

Oppenheim, D., Wamboldt, F. S., Gavin, L. A., Renouf, A. G., & Emde, R. N. (1996). Couples co-construction of the story of their child's birth: Associations with marital adaptation. *Jounal of Narrative and Life History*, 6(1), 1–21. https://doi.org/10.1075/jnlh.6.1.01cou

Ozbay, F., Johnson, D. C., Dimoulas, E., Morgan, C. A. I. I. I., Charney, D., & Southwick, S. (2007). Social support and resilience to stress: From neurobiology to clinical practice. *Psychiatry*, 4(5), 35–40.

Palombo, D. J., Sheldon, S., & Levine, B. (2018). Individual differences in autobiographical memory. *Trends in Cognitive Sciences*, 22(7), 583–597. https://doi.org/10.1016/j.tics.2018.04.007

Pasupathi, M. (2001). The social construction of the personal past and its implications for adult development. *Psychological Bulletin*, 127(5), 651–672. https://doi.org/10.1037/0033-2909.127.5.651

Pasupathi, M., & Billitteri, J. (2015). Being and becoming through being heard: Listener effects on stories and selves. *International Journal of Listening*, 29(2), 67–84. https://doi.org/10.1080/10904018.2015.1029363

Pasupathi, M., & Carstensen, L. L. (2003). Age and emotional experience during mutual reminiscing. *Psychology and Aging*, 18(3), 430–442. https://doi.org/10.1037/0882-7974.18.3.430

Pasupathi, M., & Hoyt, T. (2010). Silence and the shaping of memory: How distracted listeners affect speakers' subsequent recall of a computer game experience. *Memory*, 18(2), 159–169. https://doi.org/10.1080/09658210902992917

Pasupathi, M., Lucas, S., & Coombs, A. (2002). Conversational functions of autobiographical remembering: Long-married couples talk about conflicts and pleasant topics. *Discourse Processes*, 34(2), 163–192. https://doi.org/10.1207/S15326950DP3402_3

Pasupathi, M., & Rich, B. (2005). Inattentive listening undermines self-verification in personal storytelling. *Journal of Personality*, 73(4), 1051–1086. https://doi.org/10.1111/j.1467-6494.2005.00338.x

Pasupathi, M., Stallworth, L. M., & Murdoch, K. (1998). How what we tell becomes what we know: Listener effects on speakers' long-term memory for events. *Discourse Processes*, 26(1), 1–25. https://doi.org/10.1080/01638539809545035

Pennebaker, J. W., & Beall, S. K. (1986). Confronting a traumatic event: Toward an understanding of inhibition and disease. *Journal of Abnormal Psychology*, 95(3), 274–281. https://doi.org/10.1037/0021-843X.95.3.274

Pennebaker, J. W., & Chung, C. K. (2011). *Expressive writing: Connections to physical and mental health*. In H. S. Friedman (Ed.), *Oxford library of psychology. The Oxford handbook of health psychology* (pp. 417–437). Oxford University Press.

Perel, E. (2019). *The quality of your relationships determines the quality of your life*. In Summit.

Pillemer, D. B. (1992). Remembering personal circumstances: A functional analysis. In E. Winograd & U. Neisser (Eds.), *Emory symposia in cognition, 4. Affect and accuracy in recall: Studies of "flashbulb" memories* (pp. 236–264). Cambridge University Press. https://doi.org/10.1017/CBO9780511664069.013.

Pillemer, D. B. (2001). Momentous events and the life story. *Review of General Psychology*, 5(2), 123–134. https://doi.org/10.1037/1089-2680.5.2.123

Pillemer, D. B. (2003). Directive functions of autobiographical memory: The guiding power of the specific episode. *Memory*, 11(2), 193–202. https://doi.org/10.1080/741938208

Pillemer, D. B. (2009). Commentary: Twenty years after Baddeley (1988): Is the study of autobiographical memory fully functional? *Applied Cognitive Psychology*, 23(8), 1193–1208. https://doi.org/10.1002/acp.1619

Raes, F., Hermans, D., Williams, J. M. G., Beyers, W., Eelen, P., & Brunfaut, E. (2006). Reduced autobiographical memory specificity and rumination in predicting the course of depression. *Journal of Abnormal Psychology*, 115(4), 699–704. https://doi.org/10.1037/0021-843X.115.4.699

Raes, Filip, Williams, J. Mark G, & Hermans, Dirk. (2009). Reducing cognitive vulnerability to depression: A preliminary investigation of MEmory Specificity Training (MEST) in inpatients with depressive symptomatology. *Journal of Behavior Therapy and Experimental Psychiatry*, 40(1), 24–38. https://doi.org/10.1016/j.jbtep.2008.03.001

Rasmussen, A. S., & Berntsen, D. (2009). Emotional valence and the functions. *Memory & Cognition*, 37(4), 477–492. https://doi.org/10.3758/MC.37.4.477

Reese, E. (2002a). A model of the origins of autobiographical memory. In J. W. Fagen & H. Hayne (Eds.), *Progress in infancy research, vol. 2* (pp. 215–260). Erlbaum.

Reese, E. (2002b). Social factors in the development of autobiographical memory: The state of the art. *Social Development*, 11(1), 124–142. https://doi.org/10.1111/1467-9507.00190

Reese, E., & Fivush, R. (1993). Parental styles of talking about the past. *Developmental Psychology*, 29(3), 596–606. https://doi.org/10.1037/0012-1649.29.3.596

Reese, E., & Fivush, R. (2008). The development of collective remembering. *Memory (Hove, England)*, 16(3), 201–212. https://doi.org/10.1080/09658210701806516

Reese, E., Haden, C. A., Baker-Ward, L., Bauer, P., Fivush, R., & Ornstein, P. A. (2011). Coherence of personal narratives across the lifespan: A multidimensional model and Coding method. *Journal of Cognition and Development*, 12(4), 424–462. https://doi.org/10.1080/15248372.2011.587854

Rimé, B. (2009). Emotion elicits the social sharing of emotion: Theory and empirical review. *Emotion Review*, 1(1), 60–85. https://doi.org/10.1177/1754073908097189

Rimé, B., Finkenauer, C., Luminet, O., Zech, E., & Philippot, P. (1998). Social sharing of emo- tions: New evidence and new questions. In W. Stroebe & M. Hewstone (Eds.), *European review of social psychology: Vol. 9* (pp. 145–189). John Wiley & Sons Ltd.

Rimé, B., Philippot, P., Boca, S., & Mesquita, B. (1992). Long lasting cognitive and social consequences of emotion: Social sharing and

rumination. In W. Stroebe & M. Hewstone (Eds.), *European review of social psychology: Vol. 3* (pp. 225–258). John Wiley & Sons.

Roediger, H. L. I. I. I., & Marsh, E. J. (2003). Episodic and autobiographical memory. In A. F. Healy & R. W. Proctor (Eds.), *Handbook of psychology*: Experimental psychology (Vol. 4, pp. 475–497). Wiley.

Schank, R. C., & Abelson, R. P. (1995). Knowledge and memory: The real story. In R. S. Wyer, Jr. (Ed.), *Advances in social cognition*: *Knowledge and memory: The real story* (Vol. 8, pp. 1–85). Lawrence Erlbaum Associates.

Skinner, B F. (1953). *Science and human behavior*. Macmillan.

Skinner, B.F. (1957). Century psychology series. Verbal behavior. Appleton-Century-Crofts. https://doi.org/10.1037/11256-000.

Sutin, A. R., & Robins, R. W. (2007). Phenomenology of autobiographical memories: The memory experiences questionnaire. *Memory (Hove, England)*, *15*(4), 390–411. https://doi.org/10.1080/09658210701256654

Tannen, D. (1990). Gender differences in conversational coherence: Physical alignment and topical cohesion. In B. Dorval (Ed.), *Advances in discourse processes*: *Conversational organization and its development* (Vol. 38, pp. 167–206). Ablex Publishing.

Tsuzuki, T., Takeda, Y., & Chiba, I. (2019). Effortful processing reduces the attraction effect in multi-alternative decision making: An electrophysiological study using a task-irrelevant probe technique. *Frontiers in Psychology*, *10*, 896. https://doi.org/10.3389/fpsyg.2019.00896

Tulving, E. (1972). Episodic and semantic memory. In E. Tulving & W. Donaldson (Eds.), *Organization of memory* (pp. 381–403). Academic Press.

Tulving, E. (2002). Episodic memory: From mind to brain. *Annual Review of Psychology*, *53*(1), 1–25. https://doi.org/10.1146/annurev.psych.53.100901.135114

Tuval-Mashiach, R., Freedman, S., Bargai, N., Boker, R., Hadar, H., & Shalev, A. Y. (2004). Coping with trauma: Narrative and cognitive perspectives. *Psychiatry*, *67*(3), 280–293. https://doi.org/10.1521/psyc.67.3.280.48977

Vanaken, L., Bijttebier, P., Fivush, R., & Hermans, D. (2021). Narrative coherence predicts emotional well-being during the COVID-19 pandemic: A two-year longitudinal study. *Cognition and Emotion*. https://doi.org/10.1080/02699931.2021.1902283

Vanaken, L., Bijttebier, P., & Hermans, D. (2020). I like you better when you are coherent. Narrating autobiographical memories in a coherent manner has a positive impact on listeners' social evaluations. *PloS One*, *15*(4), e0232214. https://doi.org/10.1371/journal.pone.0232214

Vanaken, L., & Hermans, D. (2020). Be coherent and become heard: The multidimensional impact of narrative coherence on listeners' social responses. *Memory & Cognition*, *49*(2), 276–292. https://doi.org/10.3758/s13421-020-01092-8

Vanderveren, E., Bijttebier, P., & Hermans, D. (2019). Autobiographical memory coherence and specificity: Examining their reciprocal relation and their associations with internalizing symptoms and rumination. *Behaviour Research and Therapy*, *116*, 30–35. https://doi.org/10.1016/j.brat.2019.02.003

Wang, Q., & Ross, M. (2007). Culture and memory. In S. Kitayama & D. Cohen (Eds.), *Handbook of cultural psychology* (pp. 645–667). Guilford Press.

Waters, T., Camia, C., Facompré, C. R., & Fivush, R. (2019). A meta-analytic examination of maternal reminiscing style: Elaboration, gender, and children's cognitive development. *Psychological Bulletin*, *145*(11), 1082–1102. https://doi.org/10.1037/bul0000211

Waters, T. E. A. (2014). Relations between the functions of autobiographical memory and psychological wellbeing. *Memory*, *22*(3), 265–275. https://doi.org/10.1080/09658211.2013.778293

Waters, T. E. A., Bauer, P. J., & Fivush, R. (2014). Autobiographical memory functions served by multiple event types. *Applied Cognitive Psychology*, *28*(2), 185–195. https://doi.org/10.1002/acp.2976

Waters, T. E. A., & Fivush, R. (2015). Relations between narrative coherence, identity, and psychological well-being in emerging adulthood. *Journal of Personality*, *83*(4), 441–451. https://doi.org/10.1111/jopy.12120

Waters, T. E. A., & Köber, C. (2018). Individual differences in personal narrative: Coherence, autobiographical reasoning and meaning making. In V. Zeigler-Hill & T. K. Shackelford (Eds.), *The SAGE handbook of personality and individual differences: Origins of personality and individual differences* (pp. 95–111). Sage. https://doi.org/10.4135/9781526451200.n6.

Waters, T. E. A., Köber, C., Raby, K. L., Habermas, T., & Fivush, R. (2019). Consistency and stability of narrative coherence: An examination of personal narrative as a domain of adult personality. *Journal of Personality*, *87*(2), 151–162. https://doi.org/10.1111/jopy.12377

Webster, J. D. (1993). Construction and validation of the reminiscence functions scale. *Journal of Gerontology*, *48*(5), 256–262. https://doi.org/10.1093/geronj/48.5.p256

Webster, J. D. (1995). Adult age differences in reminiscence functions. In B. K. Haight & J. D. Webster (Eds.), *The art and science of reminiscing: Theory, research, methods, and applications* (pp. 89–102). Taylor and Francis.

Webster, J. D. (1997). The reminiscence functions scale: A replication. *The International Journal of Aging & Human Development*, *44*(2), 137–148. https://doi.org/10.2190/AD4D-813D-F5XN-W07G

White, M, & Epston, D. (1990). *Narrative means to therapeutic ends*.

Williams, J. M. G., Barnhofer, T., Crane, C., Herman, D., Raes, F., Watkins, E., & Dalgleish, T. (2007). Autobiographical memory specificity and emotional disorder. *Psychological Bulletin*, *133*(1), 122–148. https://doi.org/10.1037/0033-2909.133.1.122

Wilson, A. E., & Ross, M. (2003). The identity function of autobiographical memory: Time is on our side. *Memory*, *11*(2), 137–149. https://doi.org/10.1080/741938210

Wolf, Tabea, & Demiray, Burcu. (2019). The mood-enhancement function of autobiographical memories: Comparisons with other functions in terms of emotional valence. *Consciousness and Cognition*, *70*, 88–100. https://doi.org/10.1016/j.concog.2019.03.002

Wundt, W. (1874). *Grundzüge der physiologischen Psychologie*. Engelmann.