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# Remembering and telling self-consistent and self-discrepant memories

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It has been argued that memories that are inconsistent with one's self would differ from those that are consistent with the self. The present study addresses retrieval, phenomenology, rehearsal and narrative characteristics of autobiographical memories that are consistent versus discrepant with one's self. One hundred participants were asked to recall one self-consistent and one self-discrepant memory as well as an episode of telling these memories to others. They also filled out the Autobiographical Memory Questionnaire and the Centrality of Event Scale for each memory. Results showed no difference between self-consistent and self-discrepant memories in retrieval time, specificity or phenomenology. However, self-discrepant memory narratives contained more meaning-making statements and less autonomy than self-consistent memories. Compared to self-consistent memories, self-discrepant memories were told to fewer people, and listener responses were more negative when they were told. Results are discussed in relation to the functions these memories serve.

**Keywords:** Autobiographical memory; Self-defining memory; Self-consistent; Self-discrepant.

It is well accepted that autobiographical memories (AMs) and the self are mutually related. Who we are has an impact on what we store and retrieve, and what we retrieve contributes to the narrative of who we are. Thus, the self is central to the construction of AMs, and in turn, AMs are essential to form a coherent self-concept, linking one's past, present and future (Conway, 2005; Conway & Pleydell-Pearce, 2000; Habermas & Bluck, 2000; McAdams, 2001; Prebble, Addis, & Tippett, 2013). The present study aims to address how discrepancy between self-concept and memories is linked to retrieval, phenomenology, rehearsal and narrative characteristics of AMs.

The self impacts people's recollections of the personal past (Conway, 2005; Conway & Pleydell-Pearce, 2000; McAdams, 2001); that is, individuals' AMs may be constructed or reconstructed to reflect their goals, beliefs and attitudes at the time

of encoding and retrieval. The influence of current self on the reconstruction of AMs may emerge in several forms, such as showing a systematic bias in estimating how close or far away a past event seems (Ross & Wilson, 2002, 2003; Wilson, Gunn, & Ross, 2009; Wilson & Ross, 2003), derogation of past experiences when people tend to view their current self more favourably (e.g., Conway & Ross, 1984; Karney & Coombs, 2000; Karney & Frye, 2002; McFarland, Ross, & Giltrow, 1992) and exaggerating the past experiences when they view current self in decline (e.g., McFarland et al., 1992) or when accessibility of past experience is reduced (e.g., Gramzow & Willard, 2006; Willard & Gramzow, 2008). For example, McFarland and colleagues (1992) investigated older adults' memories for the characteristics they possessed when they were young in comparison to younger adults' reports for the same characteristics at their current age. For

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characteristics expected to decline with age (e.g., memory or activity level), older adults recalled themselves having higher levels of these characteristics at an earlier age than younger participants' reports for having those characteristics at their current age. In contrast, for characteristics expected to increase with age (e.g., understanding, affection), older participants recalled themselves as having lower levels of these at an earlier age than the younger group's reports for having those characteristics at their current age.

### Consistency and discrepancy of memories

It is unclear how consistency versus discrepancy of memories with the current self influences the experience of remembering. One possibility is that self-consistent memories are easily accessible and narrated as specific memories with details, whereas self-discrepant memories may be more difficult to access to and narrated in more of a summary form (Conway & Pleydell-Pearce, 2000; Singer & Salovey, 1993).

In his influential theory, the self-memory system (SMS), Conway maps out how self and AM interact. According to the SMS (Conway, 2005; Conway & Pleydell-Pearce, 2000), AM representations include two components: autobiographical knowledge base and working self. Autobiographical knowledge base is organised in a hierarchical structure consisting of different levels of specificity on an interlinked network. These levels of specificity range from "lifetime periods" at the most general level (e.g., when I was in high school) to "general events" at an intermediate level (e.g., the times I went fishing with my dad) and "event-specific knowledge" at the most specific level (e.g., the first time I watched a football match in a stadium).

The working self is the reflection of a person's goals and motivations, operating as a control process to ensure that the SMS and its components remain consistent with the current self-concept. In other words, AMs are selectively encoded and retrieved depending on the working self. If the autobiographical event is consistent with the goals of self, then this event would be integrated into the SMS, and hence it could be readily activated by a cue at retrieval. Otherwise, as noted by Conway (2005), the event would be much less well integrated into the SMS, and it would not be available to be activated, or it would be integrated into the

SMS in a different manner (e.g., maximising positive affect and minimising negative affect, or distortion of the experience; Conway, 2005; Conway, Singer, & Tagini, 2004). In this line of thinking, the working self integrates self-consistent events into the SMS, making them more accessible at retrieval. In contrast, self-discrepant events are less well integrated into the SMS and may therefore be less accessible at retrieval.

Another possibility is that people use their self-discrepant experiences to gain insights about the past and guide the self to correct and improve behaviour (McAdams & McLean, 2013; Pillemer, 2003). In this case, discrepant memories are considered self-relevant and may be equally accessible as consistent memories. However, although they may be equally accessible, they may differ in terms of narrative characteristics (e.g., more expression of meaning making in discrepant memories) and social sharing (e.g., sharing discrepant memories less frequently) as a consequence of discrepancy resolution.

In this study, we address possible effects of consistency versus discrepancy of memories with the self through self-defining memories (SDMs). SDMs are described as highly important personal memories which are emotionally intense, highly vivid, repeatedly recalled, linked to other similar intense memories as well as current goals and unresolved conflicts (Blagov & Singer, 2004; Singer, Rexhaj, & Baddeley, 2007; Singer & Salovey, 1993).

To our knowledge, there has been no research directly assessing the retrieval and phenomenology of SDMs that are consistent versus discrepant with one's current self, and only a few studies investigated self-consistent and self-discrepant AMs in general. Taking a narrative perspective, Rice and Pasupathi (2010) investigated how younger and older adults' self-discrepant and self-confirming narratives about a recent experience differed. Previous research (e.g., Webster & McCall, 1999) showed that older adults have more stable and positive sense of self than younger adults. Based on these findings, Rice and Pasupathi (2010) hypothesised that older adults may be less likely to engage in narrative self construction, as operationalised in terms of using less self-focused pronouns and present tense language. They found that self-focused pronouns and present tense language were more common in self-discrepant than in self-confirming events for both younger and older adults. This indicates that it is more likely to engage in self-concept construction and maintenance in the narratives of self-discrepant experiences. However,

self-discrepant narratives of older adults, compared to those of young adults, had fewer self-focused pronouns, less emotional language and attempts to deal with discrepancies with the self, suggesting that once the self is established (i.e., in older adulthood), people less often use the past experience to construct and maintain self-concept.

More recently, Schoofs, Hermans, and Raes (2012) investigated specificity of AMs elicited by cue words that were low or high in discrepancy. Participants were asked to recall “important or trivial” memories in response to high- or low-discrepant cue words. They recalled a higher proportion of summary memories in response to high-discrepant cue words than those in response to low-discrepant cue words, a finding consistent with the SMS model (Conway & Pleydell-Pearce, 2000). Taken together, the few existing studies suggest that people use self-discrepant as well as self-consistent experiences in self-concept construction and consistency and discrepancy of an experience with the current self may have an impact on narrative characteristics and specificity of memory narratives.

### Telling narratives

Rehearsal is an important factor affecting the retrieval and phenomenology of AMs (Pasupathi, 2001). People may rehearse their experiences with others selectively; they may be more likely to share their less transgressive experiences (Pasupathi, McLean, & Weeks, 2009) or culturally more acceptable narrative forms of experiences (Thorne & McLean, 2003). Meaning making may often occur in sharing negative experiences (McLean & Thorne, 2003; Thorne, McLean, & Lawrence, 2004). Listener response may also have a role in promoting a particular meaning-making style; listeners tended to accept the stories with insights more than the stories with lessons (Thorne et al., 2004). To sum up, theoretical and empirical investigations of social aspects of AMs suggest that both our self-concept and past experiences are reflected in and reconstructed by the stories that we shared with others. In this study, we explore how consistency and discrepancy of SDMs are associated with telling about these memories to others. We specifically assess a number of rehearsal-related characteristics emphasised in recent research: frequency of telling episodes, meaning making and listener response.

### The present study

In this study, we aimed to address possible effects of consistency versus discrepancy of SDMs on retrieval, phenomenology and narrative characteristics. We asked participants to write one consistent and one discrepant SDM. Then, they filled out the Autobiographical Memory Questionnaire (AMQ; Rubin, Schrauf, & Greenberg, 2003) and Centrality of Event Scale (CES; Berntsen & Rubin, 2006). Participants were also asked to describe a specific episode of telling this SDM to someone else, if they had such a “telling narrative” (Thorne et al., 2004). The tasks were computerised so that time measures for the narratives could be obtained.

We expected that self-consistent and self-discrepant SDMs would be similar in ease of retrieval, specificity and phenomenological properties. We also expected that these memories would be different in meaning making, autonomy, centrality of the event to life story and identity as well as telling narratives. Below, underlying reasoning of these predictions is outlined in detail.

On the basis of the idea that self-discrepant experiences challenge the goal structure of the self, and that these experiences would not be integrated into the SMS to maintain self-coherence (e.g., Conway, 2005; Conway & Pleydell-Pearce, 2000), it might be expected that self-discrepant memories would be less accessible (i.e., longer latency and lower ratings of ease of retrieval), associated with weaker phenomenological experience and expressed in more of a summary narrative form. However, because these memories were identified by the participants as self-defining, and thus relevant to the self, we predicted that these potential differences would be diminished.

Although self-consistent and self-discrepant memories may both be relevant to the self, they may serve different functions which might lead to differences on some variables (Bluck et al., 2005; Harris, Rasmussen, & Berntsen, 2014; Pillemer, 2001, 2003). Existing theoretical formulations generally agree on three major functions of AM: self, directive and social (Bluck, 2003), while at the same time recognising that these functions may overlap (Bluck et al., 2005; Harris et al., 2014), or the same memory may serve different functions in different contexts (Bluck, 2003). Within this functional framework, self-discrepant memories may be more likely to serve directive function; they contribute to solving a current

problem or guiding future behaviour through lesson learning and gaining insight (e.g., McAdams & McLean, 2013; Pillemer, 2003). On this basis, we predicted that there would be more meaning making in self-discrepant memories than in self-consistent memories. On the other hand, the tendency for discrepancy resolution may have to do with the self function and be crucial to preserve the sense of coherence (Conway, 2005). Individuals may tend to resolve discrepancies between the past and current selves using various resolution strategies, such as outweighing, or providing justifications for the inconsistent behaviour (Beike & Landoll, 2000). Another resolution strategy may be to show self-serving bias (Campbell & Sedikides, 1999; Miller & Ross, 1975) and focus on one's own role in the self-consistent experiences while focusing on the roles of other sources in the self-discrepant experiences. This possibility led us to the prediction that the proportion of self-discrepant memories with the expression of autonomy would be less than that of self-consistent memories.

As a preliminary effort to highlight how consistent and discrepant SDMs are socially constructed, in the present study, we also explored the telling episodes of self-consistent and self-discrepant SDMs. We specifically focused on frequency of telling memory to other people, integrative meaning in the telling narrative, as well as the listener reaction reflected in the telling narratives.

To summarise we predict that self-consistent and self-discrepant SDMs would be equally accessible, specific and phenomenologically rich because both memories will be considered relevant to the self. On the other hand, because they may serve different functions, self-consistent and discrepant SDMs may differ in how they are narrated and socially shared leading to differences in meaning making, autonomy and telling narratives.

## METHOD

### Participants

One hundred Boğaziçi University undergraduates (50 men and 50 women; mean age = 20.60 ± 2.11) participated in the experiment in return for course credit. All participants provided informed consent and they were debriefed at the end of the session.

### Materials and procedure

The task was programmed in E-Prime 2.0 (Psychology Tools, Inc.). Participants were required to complete the task in individual cubicles in the laboratory. In the first part of the study, participants were asked to write two memories and telling narratives for these memories on the computer. They were, then, asked to fill out the questionnaires for each memory, again on the computer. Below, these materials and procedure are described in detail.

*SDM task.* For the SDM task, participants were asked to write two SDMs, one consistent and one discrepant with the self. Each memory task began with instructions presented on the screen while they were read aloud by the experimenter. At the end of each consistency/discrepancy instruction, the experimenter gave an example without giving any direction in terms of specificity or content of the memories. A consistent memory was defined as “a memory, which describes who you are, and which is consistent with your current self-concept”. At the end of the instruction, the experimenter said “For example, I am a(n) ... person, and ...”. A discrepant memory was defined as “a memory, which describes who you are, but which is inconsistent with your current self-concept, and describes you from this aspect”. At the end of the instruction, the experimenter said “For example, I am a(n) ... person, but ...”. Conjunctions (i.e., and/but) were emphasised. The second instruction described the features of a SDM (e.g., vivid, emotionally intense, repetitively recalled, important and linked to other memories) according to the standard SDM instructions (Blagov & Singer, 2004; Singer et al., 2007). Then, participants were asked to write the first consistent (or discrepant) SDM that came to their minds. After providing consistent and discrepant memory narratives, participants were asked to report a specific telling of each event to someone else (“telling narrative”), if they had such a specific memory.

The order of presentation of memory type was counterbalanced, such that participants either reported a consistent SDM first and a discrepant SDM second or vice versa.

*Autobiographical Memory Questionnaire.* The AMQ was developed by Rubin et al. (2003). It measures the phenomenological properties of AMs. The AMQ items used in the present study

are presented in Table 2. The items on the questionnaire were rated on a 7-point scale, except the merging and the perspective statements, which are rated on 3- and 2-point scales, respectively.

*Centrality of Event Scale.* The CES measures how central an event is to a person's identity and life story (Berntsen & Rubin, 2006). The CES consists of 20 statements, each of which is rated on a 5-point scale (1: totally disagree—5: totally agree).

*Further questions.* Before presenting the AMQ and CES, we asked a few questions for different purposes: Participants rated the degree to which the memory was consistent with or discrepant from their self-concept on a 7-point scale (i.e., 1: very little consistent—7: totally consistent for self-consistent memories and 1: very little discrepant—7: totally discrepant for self-discrepant memories). They made the consistency rating only for the self-consistent memory and the discrepancy rating for the self-discrepant memory they reported. This question allowed us to assess whether our consistent and discrepant memory instructions functioned as intended.

For the telling narratives, participants were asked approximately to how many people they told the event. At the end of the study, participants provided demographic information.

## Memory coding

All memories were coded for specificity, content, integrative meaning and autonomy.

*Specificity.* Specificity was coded according to the Singer and Blagov's (2002) manual. Specific memories were divided into three subtypes: Specific Type 1 (the memory narrative of entirely single-event statements pertaining to the happenings of one day), Specific Type 2 (single-event statements pertaining to the happenings of one day with autobiographical context of the memory) and Specific Type 3 (at least two specific memories of Type 1 or Type 2). Summary memories were divided two subtypes: episodic (series of events over days with deprived of details) and generic (abstraction of repeated experience). We coded all narratives for different subtypes of specificity (Specific Types 1, 2, 3, episodic and generic) and then collapsed all

specific memory subtypes into "specific" memories and all other memories (i.e., episodic and generic) into "summary" memories.

*Content.* The contents of memories were coded following the Classification System and Scoring Manual for Coding Events in SDMs (Thorne & McLean, 2001), which categorises memories into the following: life-threatening events, recreation, relationship, achievement/mastery, guilt/shame, drug/alcohol and an "events not classifiable" category for memories that do not fit into any other category. Since "drug/alcohol use" was coded separately for the purpose of another project in Thorne and McLean (2001), and the few memories including drug/alcohol were more appropriately classified into other categories in our data, we excluded this category from our coding.

*Integrative meaning making.* Memory narratives with integrative meaning making (thereafter called meaning making) were identified as the narratives that contain explicit statements about "what the memory has taught the individual about herself/himself or the world" (Singer & Blagov, 2002, p. 10).

*Autonomy.* Autonomy was coded regarding the role of the participant (narrator) in the course of events. The coding was based on whether there were references to exerting control one's own actions and maintaining or changing the course of events. Autonomy was nominal; it was identified as the presence or absence of autonomy in the memory narrative.

*Listener response.* Telling narratives were coded for listener response as well as meaning making (i.e., lesson learning and gaining insight). Following Thorne et al. (2004), listener response was evaluated (positive or negative) based on the participant's evaluation of the telling episode and of the listener's reaction.

An independent rater, who was blind to the hypotheses as well as memory type (i.e., consistent or discrepant), coded 20% of the memories. Agreement between raters for each classification was as follows: for consistent memories, specificity: 85%; meaning making: 80%; content: 90%; autonomy: 85%, and for discrepant memories, specificity: 80%; meaning making: 90%; content: 75%; autonomy: 80%.

## RESULTS

### Manipulation check

In order to check that our instructions worked and elicited appropriate memories, we compared the ratings participants provided after reporting the memories. The participants were asked to rate the degree of consistency (for the consistent memory) and the degree of discrepancy (for the discrepant memory) with the self. Because ratings were collected on a scale from 1 to 7, the mid-point (4) was taken as the chance value for consistency/discrepancy.

One sample *t* test revealed that the mean ratings for both consistent ( $M = 6.27$ ,  $SD = 0.99$ ) and discrepant ( $M = 5.73$ ,  $SD = 1.34$ ) memories were significantly greater than the chance value ( $t_s > 12.80$ ,  $ps < .001$ ). Additionally, when we look at individual ratings, we observed that a large majority of memories (96% of consistent and 86% of discrepant memories) were rated above 4 on the 7-point scale, indicating that the instructions worked in eliciting consistent or discrepant memories.

There were no gender differences or interactions across the variables (all  $ps > .05$ ).

### Retrieval

Retrieval of self-consistent and self-discrepant SDMs was assessed by an objective (retrieval time in seconds) and a subjective (ease of retrieval item in AMQ) measure. Self-consistent ( $M = 75.75$ ,  $SD = 103.32$ ) and self-discrepant memories ( $M = 76.45$ ,  $SD = 134.48$ ) did not differ in terms of retrieval latency,  $t(99) < 1$ . Consistent with retrieval latency, participants' ease of retrieval ratings was not different for self-consistent and self-discrepant memories ( $M = 1.65$ ,  $SD = 1.18$  and  $M = 1.59$ ,  $SD = 1.06$ , respectively),  $t(99) < 1$ . The low ratings also indicate that both types of memories were relatively easy to retrieve. Thus, the data showed that self-consistent and self-discrepant memories were equivalently accessible.

### Narrative characteristics

In this section as well as in the section on telling narratives below, we used the McNemar's chi-square test to compare percentages of memories when they were considered dependent, since each

individual reported one consistent and one discrepant memory.

*Specificity.* A large majority of both consistent and discrepant SDMs were specific (81% and 89%, respectively), and that there was no difference between the two types of memories,  $\chi^2(1) = 1.89$ ,  $p = .17$ .

*Content.* Percentages of content categories for each type of memory are given in Table 1. Overall, chi-square analyses showed that relationship was more frequently mentioned (43%) than other type of content in self-discrepant memories. For self-consistent memories relationship and achievement content were the most frequently mention and not different from each other (all  $\chi^2s > 5.95$ ,  $ps < .01$ ). The only difference between consistent and discrepant SDMs was that the guilt/shame content was more frequently present in self-discrepant (16%) than in self-consistent memories ( $p < .001$ ).

*Autonomy.* Participants more frequently expressed autonomy in self-consistent (85%) than self-discrepant memories (70%),  $\chi^2(1) = 6.76$ ,  $p = .009$ .

*Meaning making.* Meaning-making statements were more common in self-discrepant memories (56%) than self-consistent memories (34%); a higher proportion of self-discrepant memories contained meaning-making statements than self-consistent memories,  $\chi^2(1) = 10.02$ ,  $p = .002$ .

Overall, these results demonstrate that self-consistent and self-discrepant SDMs are comparable in terms of specificity and phenomenology but differ in contents, autonomy and meaning making. Self-discrepant memory narratives contained more meaning making and less autonomy statements than self-consistent memories; this was true regardless of the content of the memories.

### Centrality of the events

To examine the centrality of events to the self in the self-consistent and self-discrepant memories, we calculated the average CES ratings (Berntsen & Rubin, 2006) for both types of memories. Self-consistent memories were rated higher than self-discrepant memories on the CES ( $M = 3.11$ ,  $SD = 0.94$  versus  $M = 2.76$ ,  $SD = 0.90$ ,  $t(98) = 3.59$ ,  $p < .001$ ,  $d = .38$ ).

**TABLE 1**  
The percentage of event contents in self-consistent and self-discrepant SDMs

Content categories	Self-consistent (%)	Self-discrepant (%)
Relationship	43	40
Achievement/mastery	33	21
Life threatening event	8	11
Guilt/shame	0	16*
Leisure	9	7
Other	7	5

\* $p < .001$ .

This result suggests that even though self-discrepant SDMs contained much more statements of lesson learning and gaining insights and hence may have been integrated to the self, consistent SDMs were seen more central to the self.

### Phenomenological properties

Descriptive statistics regarding phenomenological properties as measured by AMQ are given in Table 2. Results showed that self-consistent and self-discrepant memories did not differ in phenomenological properties, such as sensory experiences, relieving, significance of memory and so on (all  $t_s \leq 1.66$ , all  $p_s \geq .10$ , two tail).

**TABLE 2**  
Phenomenological properties in self-consistent and self-discrepant SDMs

Variable	Consistent		Discrepant		t	df	p
	M	SD	M	SD			
Relieving	5.09	1.67	5.40	1.60	1.40	99	.16
Seeing	5.63	1.44	5.85	1.30	1.21	99	.23
Hearing	5.00	1.81	5.20	1.66	1.00	95	.32
Emotions	5.21	1.75	5.22	1.64	0.05	88	.96
Setting	6.37	1.22	6.32	0.99	0.31	92	.76
Spatial	5.85	1.55	5.54	1.56	1.63	96	.11
Remember/know	6.11	1.36	6.15	1.15	0.20	95	.84
Participating	5.35	1.96	5.38	1.87	0.09	95	.93
Perspective	1.24	0.43	1.31	0.46	1.22	99	.22
Story	5.14	1.90	5.07	1.87	0.31	95	.76
Importance	5.17	1.87	5.18	1.84	0.04	98	.97
Thinking	4.42	1.86	4.76	1.62	1.48	95	.14
Talking	3.36	1.99	2.97	1.94	1.51	93	.13
Real/imagine	6.67	0.76	6.64	0.63	0.43	97	.67
Merged/extended	1.68	0.83	1.50	0.81	1.66	99	.10
Age of memory (year)	4.17	4.94	3.79	4.24	0.70	93	.49

### Telling narratives

Participants were asked to report one telling episode for each memory. These episodes of telling the memories to others were coded for valence of listener response and the presence of meaning-making statements in the telling narrative. We also examined the number of people to whom the memory was told.

*Frequency of telling episodes.* There was no difference between the self-consistent and self-discrepant memories in terms of whether or not the memory was told to other people; 74% of consistent memories and 71% of discrepant memories were told to other people,  $\chi^2(1) = 0.11, p = .74$ . However, self-discrepant memories were told to significantly fewer people ( $M = 5.84, SD = 6.32$ ) than self-consistent memories ( $M = 11.00, SD = 15.27$ ),  $t(54) = 2.34, p = .023, d = .48$ .

*Listener response and meaning making.* Results showed that the percentage of negative listener responses was significantly higher in the telling narratives of self-discrepant memories (53%) than that in self-consistent memories (23%),  $p = .003$ . Integrative meaning was marginally more common in telling narratives of self-discrepant memories (35%) than in that of self-consistent memories (21%;  $p = .064$ ). Valence of listener response was not related to the meaning-making statements in

memory narratives in either self-consistent or self-discrepant memories (all  $\chi^2$ s  $< 0.08$ ,  $ps > .70$ ).

## DISCUSSION

Our results indicate that memories that are discrepant with the self can still be self-defining. We also found that these self-discrepant SDMs are not different from self-consistent SDMs in retrieval time, specificity or phenomenology. However, self-discrepant memory narratives contained more meaning making and less autonomy statements than self-consistent memories. Self-discrepant memories were also told to fewer people, and listener responses were more negative when they were told.

### Self-discrepant yet self-defining?

We found that self-discrepant memories may be self-defining and that they are equally accessible and vivid as self-consistent memories. These findings are not necessarily at odds with theoretical formulations suggesting that autobiographical experiences consistent with the self or goals are preferentially processed. Conway's (2005) SMS model, for instance, leave room for exceptions suggesting that even experiences violating goal structures may be integrated into the SMS and may remain accessible to some extent. Beike and Landoll (2000) provided evidence for use of such resolution strategies for self-inconsistent experiences, which included providing justifications for the inconsistent behaviour or providing stronger evidence to the contrary.

Within this context, we suggest that the ease of access to these two different types of memories makes sense when considering the different functions these memories may serve (e.g., Bluck et al., 2005; Harris et al., 2014; Pillemer, 2003). One function of the AM is the directive function (Pillemer, 2003), which provides guidance for what to do and not to do in the future through lesson learning, warnings about how to avoid future problems or insights about how things work in a new situation. That is, past experiences serve as a general prescription for how to behave in a novel situation or how to avoid a similar problem in the future. Along the same lines, it has been suggested that individuals may transform their negative or disruptive experiences into

positive self-change through gaining insights about the past experiences and goals of the current self; disruptive experiences may result in lesson learning and gaining insights, enriching an individual's life over time (McAdams & McLean, 2013; Pasupathi, Mansour, & Brubaker, 2007). Thus, self-discrepant experiences can obviously have a role in guiding the self and maintaining coherence and therefore suggests the possibility that even discrepant memories can be self-defining. Such an interpretation is also consistent with the results of D'Argembeau and Van der Linden (2008) showing that pride memories were remembered with more details than shame memories; however, phenomenology ratings for shame memories were still above the midpoint of the rating scale. They argued that people remember pride memories with more details to maintain a positive self-view but the ability to access shame memories may help them to make decisions avoiding to repeat past failures. Given the important role of guiding behaviour, it is meaningful that these memories are as accessible as self-consistent ones.

In line with this perspective, our findings show that compared to self-consistent memories, a greater proportion of self-discrepant SDMs contained expressions of meaning making. Since self-discrepancies may have an important role in guiding future behaviour (Pillemer, 2001, 2003), self-improvement (McAdams & McLean, 2013) and forming self-concept (Rice & Pasupathi, 2010), the fact that self-discrepant memories contained more meaning making may illustrate the directive function of these memories.

Self-consistent memories, on the other hand, may be more likely to serve the self function (e.g., Bluck et al., 2005), which emphasises the role of memories with regard to consistency and continuity of the self as well as self-enhancement (Wilson & Ross, 2003). This idea finds support from the present data in a number of ways. Most importantly, although consistent and discrepant memories were equally accessible and vivid, consistent memories were considered as more central to the self as demonstrated by higher CES scores on all three dimension of centrality. Moreover, people rehearsed self-consistent memories more than they rehearsed discrepant ones. Finally, the non-significant tendency ( $p = .09$ ) for more frequent achievement memories in self-consistent than self-discrepant memories fit in with this idea.

## Memory content

The distribution of memories across content categories were similar to those obtained in earlier studies carried out in different countries such as the USA (e.g., Singer et al., 2007; Thorne & McLean, 2002) and Switzerland (Lardi et al., 2010). In general, themes in SDMs are considered as reflections of current goals and concerns (Conway, 2005; Singer & Salovey, 1993; Singer et al., 2007). Our findings showed that close to half of both self-consistent and self-discrepant memories were about relationships. These findings fit in with earlier studies in that relationships emerge as the dominant theme in SDMs (Thorne & McLean, 2002). Our participants were late adolescents or young adults in college, a period where relationships with different individuals are very central to identity (McLean & Thorne, 2003; Thorne et al., 2004).

The only difference in the content was that guilt/shame theme was more frequent in self-discrepant than in self-consistent memories; indeed, none of the self-consistent memories contained guilt/shame theme. As pointed out by D'Argemba and Van der Linden (2008), shame memories may be more likely to be used for directive purposes. Similarly, studies on counterfactual thinking have suggested that guilt and shame experiences may be beneficial in behaviour regulation; they may have a functional role in correcting and improving behaviour (e.g., Saffrey, Summerville, & Roese, 2008). Guilt/shame memories in the present study may be an indication of this type of beneficial processing. Of all guilt/shame memories, 81% contained meaning-making statements, indicating a message was gleaned from the experience. Taken together, our findings on the content of memories, in conjunction with meaning making, suggest that discrepant SDMs may promote to gain insight about past experience for achieving current goals.

## Autonomy

Less frequent use of autonomy statements in self-discrepant as compared with self-consistent SDMs may be a true reflection of the experience but it may also reflect less engagement with the past experiences that are inconsistent with the current self-concept; distancing as a part of an effort at discrepancy resolution. It is well established that people show self-serving biases to

maintain or enhance self-concept; that is, people tend to make internal attributions for successes and external attributions for failures (Campbell & Sedikides, 1999; Miller & Ross, 1975). As Conway et al. (2004) and Conway (2005) noted, AMs balance the adaptive coherence (consistency of memories with the self-concept) and correspondence (accuracy of memories), by achieving some optimum level of retention to maximise positivity and minimise negativity. The use of such a resolution strategy is also in line with the cognitive dissonance theory which suggests that discrepancy between cognitions or a cognition and behaviour results in psychological discomfort and people are motivated to reduce dissonance to maintain coherence (Beike & Landoll, 2000; Festinger, 1957; Pasupathi, 2001). For discrepant memories, coherence may be achieved by expressing autonomy less frequently, at least in the socially shared narratives of these memories (also see, Beike & Landoll, 2000).

## Telling of memories

Telling of memories to someone else was not influenced by the consistency of memories. However, compared to self-consistent memories, self-discrepant memories were told to fewer people, and when they were told, listener responses were more likely to be negative. The differential listener responses may suggest that listeners are more willing to accept self-consistent memories than self-discrepant memories. It is consistent with the previous findings that listeners prefer to hear positively framed stories placing fewer burdens on themselves (Thorne & McLean, 2003). In response to this preference, people may communicate relatively more positive (e.g., self-consistent) stories to connect with others and disclose various aspects of the self in an entertaining atmosphere (McLean & Thorne, 2006). Therefore, the fact that self-consistent memories were told to more people may be a combined result of self (e.g., self-enhancement) and social (e.g., social-bonding) functions.

In line with the findings regarding meaning making in memory narratives, telling narratives of discrepant memories included more meaning-making statements than consistent memories. The finding that there was more integrative meaning making in both self-discrepant memory narratives and telling narratives of these memories support the co-construction of memories (Pasupathi,

2001); listeners may help making sense of memories by eliciting more opinions and evaluations with long-lasting effects (Thorne et al., 2004). It is possible that telling experiences of discrepant memories serve as guidance for how to reconstruct and represent these memories. People may prefer to make self-discrepant experiences socially more shareable. This may be achieved by framing narratives of discrepant experiences including lessons and insights gained from these experiences and reducing agency in the course of event. In accord with social functions of sharing AMs (Alea & Bluck, 2003), this may allow the narrator to enhance intimacy, teaching and eliciting empathy in others. In the long run, social sharing of discrepant experiences in an adaptive fashion may show the narrator the way how to reconstruct and represent these memories.

Some limitations of the present study might be mentioned. First, it is possible that the self-discrepant memories we obtained do not represent a random sample of all self-discrepant memories; rather, they may be memories that are more integrated to the self than others or participants may have selected to report one discrepant memory rather than another due to motivational factors. Unfortunately, these issues are very difficult to address methodologically. Any AM study where the participants are asked to report a class of memories (e.g., saddest) suffer from a similar problem. As pointed out by Woike (2008) it may also be very difficult to observe the effects of implicit motives through self-report. With regard to our findings, participants discrepancy ratings clearly indicate that participants considered these memories self-discrepant. In addition, if there was some kind of selection/censorship mechanism participants engaged in with regard to self-discrepant memories, it should be expected that overall it should lead to a more effortful, top-down search process (e.g., generative retrieval; Conway, 2005; Conway et al., 2004) and take longer to report self-discrepant memories. This was, however, not the case.

A second issue regards the potential effects of culture. Although this study is based on a non-western sample, it did not intend to and could not address effects of culture. It is possible, however, that culture might have left a mark on these memories (e.g., Şahin & Mebert, 2013; Wang, 2001; Wang & Conway, 2004). Turkey is argued to have a collectivistic (as opposed to an individualistic) culture (Hofstede, 1980, 2001). In

Markus and Kitayama's terms (1991) it may be considered a culture fostering an interdependent self-construal, emphasising interdependence and relatedness with other individuals as well as group cohesion at the expense of individual concerns.

There has been research clearly showing that culture (e.g., independent versus interdependent self-construal) affects narratives as well as rehearsal of AMs. For instance, Wang (2006) found that earliest memories of Euro-Americans were more likely to contain autonomous orientation than Taiwanese participants (see also, Wang et al., 2011). It is possible, therefore, that the narratives in our study contain these tendencies as well. It is also possible that emphasis on relatedness in the Turkish culture might have led self-discrepant memories to be narrated and rehearsed differently. While we acknowledge these possibilities, we believe we have neither the data nor a strong enough conceptual basis to speculate how interdependent self-construal might have affected different aspects of consistent versus discrepant memories. Just like similar studies comparing conditions/groups in western samples (e.g., Schoofs et al., 2012; Singer et al., 2007), we assumed that these cultural characteristics would affect narratives of self-consistent and self-discrepant memories similarly. Researchers have questioned the validity of Hofstede's dichotomous conceptualisation of individualism versus collectivism (e.g., İmamoğlu, 2003; Kağıtçıbaşı & Berry, 1989; Oyserman et al., 2002) and argued that a given self-construal is unlikely to be true for all members of a given culture to the same degree (İmamoğlu, 2003; Kağıtçıbaşı, 2007; Oyserman et al., 2002). Potential answers to the effects of culture should come from cross-cultural studies as well as studies within a single culture measuring constructs such as relatedness at the level of the individual (e.g., Şahin & Mebert, 2013; Şahin-Acar & Leichtman, 2015).

## CONCLUSIONS

In summary, we found that self-discrepant memories can be considered self-defining and that they are comparable to self-consistent SDMs in terms of ease of retrieval, specificity and phenomenology. We argued that these results along with more meaning making in self-discrepant memories may be explained, at least in part, by the different functions they serve.

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