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The Curious Case of the Coding and Self-Ratings Mismatches: A Methodological and Theoretical Detective Story

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Abstract

In this paper, we investigate methodological and theoretical constraints implicated by findings of low correlations between researcher codings and participant ratings of conceptually similar narrative features. We discuss potential explanations for these puzzling mismatches from a measurement perspective and from theoretical perspectives drawn from personality, developmental, and cognitive literatures. The mismatches raise questions for traditional theoretical assumptions of narrative identity as being internalized and subjective and may reflect different narrative constructs created through two different social contexts.

Keywords: narrative identity, narrative methods, implicit themes, self-ratings, meaning-making
The Curious Case of the Coding and Self-ratings Mismatches: A Methodological and Theoretical Detective Story

Narrative coding has established itself as the method of choice for researchers seeking to study narrative identity through quantitative mechanisms. Rarely do studies employ – or at least publish – participant self-ratings of narrative features either as the primary method or along with coding of the same features. Our intention in this paper is to explore the occurrence of a puzzling phenomenon in a few instances, of which we are aware, where both methods were used – namely, low overlap between researcher codings and participant ratings of the same narrative feature. As both measures were purportedly measuring the same construct, we found these correlational mismatches intriguing. What might the mismatches reveal about our methods, measurements, or theoretical assumptions? We were therefore prompted to respond to the call for this special issue in order to peel back the methodological and theoretical layers of this phenomenon, ultimately implicating the deeply embedded assumptions that narrative identity is a narrative representation of one’s life that is internalized and subjective. These assumptions are not merely theoretical; they have served as the basis for numerous studies of coded narratives, which have led to meaningful contributions, particularly concerning the relation between narrative and personality and psychological health (for reviews see Adler, Lodi-Smith, Philippe, & Houle, 2016; McAdams & McLean, 2013; McAdams & Pals, 2006).

Despite such broad evidence supporting narrative approaches, these puzzling mismatches call out for further investigation. We sought to untangle potential implications of these mismatches for narrative identity methodology and theory. But we open by describing how we arrived at a place where each of us, via different routes, began to question coding practices and the underlying assumptions behind them.
Katherine’s Route

My (KP) introduction to the field of narrative identity and life stories came as part of a qualitative study of life stories that entailed detailed line-by-line coding, repeated readings, group consensus and multiple memo writings. So on learning that research on life stories within the more cognitively oriented field of autobiographical memory was conducted with participant ratings of autobiographical reasoning based on their narrated memories (e.g., Thomsen et al., 2016), I responded with polite (I hope) skepticism. How could we be confident that someone’s check on a rating scale indicated that the hard, narrative processing work needed to integrate a meaning into one’s identity had occurred? But as I engaged in laborious and time consuming quantitative coding for my own studies, I could not ignore that my colleagues with self-rated narratives could far more quickly analyze their data and replicate their work. More importantly, these participant ratings seemed to meaningfully predict traits and subjective well-being. It was time to question my own biases: what did my preference for coding and against self-ratings reveal about my assumptions regarding life narratives, and were those assumptions consistent with narrative identity theory?

Kate’s Route

At the same time, I (KCM) had noticed a puzzling mismatch in my data between personal meaning-making, coded from narratives, and self-report ratings of the meaning of those same narratives. Personal meaning captures the degree to which individuals feel that they have grown, learned about themselves, or changed via reflection on the personal past (McLean & Pratt, 2006; McLean & Thorne, 2003). I assumed that through coding I was capturing the participant’s explicit personal meaning of the story. But the correlations between scales (asking questions such as ‘how much have you learned from this event?’) and coded meaning were mild, at best. I was left with the question of what the disparity meant: did participants omit the meaning making from their narratives despite indicating in their
self-ratings that such meaning making exists? Were they lazy in their work? Or had participants not really found meaning and the self-ratings were simply a response to a cultural imperative to say they had grown and learned about themselves? These and other possibilities made me wonder about the relationship between narrative and subjective self-understanding, and how stable, or method-specific, personal meaning might be. Further, this idea - that by collecting and coding personal narratives we were capturing some ‘truth’ about one’s identity - was being further challenged by findings that narrative construction appears dependent upon one’s audience. That is, some people make meaning to one audience and not another, leaving me to wonder if meaning is a property of the storytelling context, rather than inherent to the story. Thus, the question of what the ‘real’ story is lurks.

With these experiences on our minds, we used the call for this special issue to address these puzzling findings and speculate on the implications for our assumptions about narrative identity. Such an exercise in considering the relation between methodological choices and theoretical assumptions may open new ways of thinking about narrative approaches and contribute novel insights to personality and identity development. In this paper, we introduce and investigate coding and rating mismatches in two studies, first, by focusing on measurement questions, including construct operationalization, socially desirable responding, and individual differences in self-disclosure, and, second, by focusing on the theoretical assumptions that personal narratives are internalized and subjective. In this section, questions regarding implicit versus explicit narrative features, researchers’ hermeneutic assumptions and the role of audience context will be addressed. We conclude by arguing for the benefits of using both methods in tandem.

The Phenomenon of Narrative Coding and Self-Rating Mismatches

For this paper, narrative is defined, minimally, as the representation of an experience, demarcated by a beginning, middle and end, with “good” narratives offering contextual
details (e.g., who, what, where, when) and chronological and thematic coherence and meaning in light of storytelling norms of the culture (Habermas & Reese, 2015). Event narratives can be assessed through observer coding at the level of the proposition (e.g., Pasupathi & Wainryb, 2010, coding each proposition in a narrative as interpretation or fact) or through self-ratings or observer coding at the event narrative level, where the event story is assessed globally (e.g., McAdams, Reynolds, Lewis, Patten, & Bowman, 2001, coding an event narrative’s overall emotional tone on a 1-5 scale).

Narrative identity studies typically employ narrative coding methodology and sometimes self-ratings, but rarely both methods to assess the same constructs. Here we use as examples two studies, of which we are aware, that did include both measures and found surprisingly low correlations: Syed and McLean’s (2016) study of identity and personality processes and Grysman, Merrill, and Fivush’s (2016) study regarding gender and emotion in autobiographical memory. We should note that low to moderate correlations have also been found on autobiographical memory functions (Waters, Bauer, & Fivush, 2014), self-acceptance (Tibubos, Habermas & Rohrmann, 2017), and other narrative measures (M. Pasupathi, personal communication, February 10, 2017; see also Rubin et al., 2016, in which correlations between self-rated and observer coded (i.e., human and computer) coherence measures were significant on only six percent of potential correlates). After presenting the two main studies, we will consider methodological and theoretical explanations for the correlational mismatches.

The Studies: Meaning-making and Affect

**Meaning-making.** Syed and McLean (2016) collected narratives of eight important identity domains (e.g., family, religion; see also McLean, Syed, & Shucard, 2016) from 255 university students ($M$ age = 19.15, $SD$ = 1.71, range 17–29; 74% women), using prompts based on McAdams’ (2006) guided autobiography.
Please think of an important autobiographical memory that highlights your [domain included here]. It can be a memory of actual past [domain] experiences or a memory that is related to your [domain]. Please take your time and describe your memory of the event, including where you were, whom you were with, what happened, your reaction, the reaction of anyone else involved in the event, and why it is important to you.

The narratives were then reliably coded for meaning-making using a 4-point scale that captures the degree to which individuals report that they have changed their behavior, self-understanding, or worldview based on a past event (McLean & Pratt, 2006). According to the scale, a narrative that contains no evidence of meaning having been made scores 0, evidence of a specific lesson learned earns 1, evidence of vague meaning-making, i.e., narrator reports self-change but without specifics, receives a 2, and evidence of an insight that could be applicable to other life areas scores 3. After each narrative, participants answered 18 Likert items (scale ranged 1 – 7) about the event. These questions were drawn from prior work aimed at assessing conscious representations of the relations between self and event (e.g., Pasupathi et al., 2015). Those questions concerning the stability or change in self-views were condensed into two factors representing self-stability (e.g., “The kind of person I am explains why this experience happened the way it did.”) and self-change (e.g., “This experience really changed the kind of person I am – caused me to become a different type of person.”). The latter factor targets the meaning-making concept. Despite substantial linguistic and conceptual similarities of these two measures, they were only moderately related, $r (251) = .34$.

**Affect.** In a study on the impact of gender identity on personal narratives, Grysman et al. (2016) used Amazon’s Mechanical Turk to obtain four detailed and specific event narratives, i.e., a neutral event, a high point, low point and a self-defining memory, from 98
men ($M_{\text{age}} = 29.04, SD = 6.01$) and 98 women ($M_{\text{age}} = 29.05, SD = 6.25$). Prompts for high and low points included examples of affect often associated with each event type, e.g., “great uplifting, joy, excitement, contentment” or “despair, disillusionment, terror, profound guilt, shame.” After each narrative, participants rated the emotional intensity of their experience using the following three items of Sutin and Robins’ (2007) Memory Experiences Questionnaire: “My emotions are very intense concerning this event,” “I do not remember having particularly strong emotions at the time of this event,” and “The memory of this event evokes powerful emotions.” Additionally, each event narrative was reliably coded by third parties for the number of emotionally or affectively laden utterances or propositions, e.g., “My heart sank” (1 utterance) or “I remember the excitement and joy that I felt,” (2 utterances). The self-ratings of emotional intensity and the coded affect utterances were summed across the four narratives to create a total emotional intensity score and a total affect score, respectively. However, these two measures were not correlated for the entire sample, $r_{(194)} = .09$, nor for women and men separately (Grysman et al., 2016).

In Syed and McLean’s study, meaning-making and self growth were conceptually almost identical and yet relations were moderate, and in Grysman et al.’s study self-rated emotional intensity and content coded affect were conceptually similar yet showed no relationship. If self-ratings and narrative codes both express evaluations of a person’s narrated experience, the weak relationships are surprising and suggest a gap either in measurement, or in our theoretical assumptions about what it is we are capturing through the two methods.

However, the complications do not end there. We also see that participant ratings and codes are not always associated with the same constructs. In the Syed and McLean’s study, participant ratings of self-change predicted a survey measure of identity exploration (positively) and identity commitment (negatively), but these relations were weaker or absent
for coded meaning-making. Similarly, in the Grysman et al. study, self-reported female
gender typicality was associated with self-reports of emotional intensity, but not with coded
affect. Coded affect was associated with being male or female, not with self-perceptions of
female gender typicality. These initial findings suggest, at the very least, that our
methodological choices have significance in terms of associations between variables, but
understanding the source of those differential associations is the more interesting puzzle.

**Methodological Explanations**

There are a number of possible explanations for these discrepancies between self-
ratings and codings, with both methodological and theoretical implications. We, first,
examine methodological or measurement issues, including common method variance,
intensity versus prevalence coding, and socially desirable responding.

**Operationalization issues**

In terms of the simplest explanation, perhaps one of the measures – coding or self-
ratings – is simply a poor tool for capturing the underlying construct in question. This simple
explanation seems unlikely, however, as all of these measures have been reliable predictors in
previous studies (Bauer, Stennes, & Haight, 2003; Grysman, Prabhakar, Anglin, & Hudson,
2013; McLean & Pratt, 2006; Pasupathi et al., 2015). Second, self-ratings and third party
narrative coding methods differ crucially on who does the assessment, thereby limiting any
correlation inflation that could be due to shared method variance. In contrast, the self-rating
scales did share a common method and presumably method variance with other self-rated
variables in each study (e.g., identity exploration and commitment and gender typicality),
offering a partial explanation for those stronger relations. Third, regarding the particularly
low correlations in the Grysman et al.’s study, an explanation may lie with differences in how
intense affect was operationalized. Coding was conducted at the proposition level, counting
the number of affect expressions per episode, in contrast to self-ratings of emotional intensity,
which were assessed at the narrative level. Had coders evaluated global intensity at the narrative level, an episode’s overall emotional power might have been captured, even when that intensity was expressed in a single proposition (e.g. “I was completely devastated,” in contrast to “I was disappointed.”). Such coding would have more closely mirrored the operationalization of self-rated emotional intensity, presumably resulting in more shared method variance and higher coding/self-rating correlations for the Grysman et al. study. For both studies, operationalization issues, i.e., low shared method variance due to self v. third party assessment, and for Grysman et al. global intensity (at the event narrative level) v. prevalence (at the proposition level), may explain a portion of the weak relations between the coding and self-rating scores.

**Socially desirable responding**

Alternatively, perhaps clues to the mismatch puzzle might be found in the fact that both methods might be considered a type of self-report (Paulhus & Vazire, 2007). Although widely used, self-reports, particularly of the rating scale variety, have come under regular criticism for susceptibility to socially desirable responding (SDR) (see Paulhus & Vazire, 2007 for a review). These involve unintentional or intentional misrepresentations on the part of participants about themselves and their stories to investigators. *Unintentionally,* participants may produce shorter, less thoughtful or incomplete narratives due to misunderstanding prompts or due to waning interest or effort (e.g., McAdams’ Life Story Interview (2008) typically lasts two hours). This may be especially problematic for narrative coding, as coders rely on participants’ ability to express themselves to determine the presence and extent of narrative content. In contrast, participants can make an evaluation of how a story figures into their identity and life experiences via self-ratings, even when the story is not written down. In the Syed and McLean and Grysman et al. studies, however, we have no reason to believe that the studies’ performance demands were particularly burdensome, such
that it could explain the weak relations between coding and self-ratings.

There is also the risk of intentional misrepresentation; that is, participants may have a clear, internalized narrative in their heads, but intentionally omit or change part of the story for investigators either on scales or in their narratives, resulting in weak relations between the two. A participant, for example, may want to keep narrative details about personal growth private, but may be comfortable disclosing the evaluation that there was growth on a generically worded rating scale. Alternatively, a participant may self-rate to please the investigator, but may be unable to creatively and consistently do the same in a narrative rendering, an example of impression management (Paulhus & Vazire, 2007). For instance, if a participant wished to present herself as not being stereotypically female, it is presumably easier for her to fill in a different bubble on a survey, than to radically change an existing story in a credible and coherent way. Each of these self-report criticisms comes with mechanisms for empirically exploring their validity, as well as potential solutions. For example, if a researcher has reason to believe that a particular study design places greater social demands on participants to present a particular impression of themselves, then coding may be less vulnerable to manipulation and, therefore, be a preferred method (see also Woike, 2007).

The foregoing methodological explanations offer food for thought and ought to be investigated in further studies; however, it seems unlikely that they account for the extent of the discrepancies between coding and self-ratings. Thus, we are called to dig deeper and examine what the coding and self-ratings mismatch may reveal about theoretical assumptions underlying the construct of narrative identity itself.

**Theoretical Implications: Subjectivity and Internalized Representation**

In our analysis so far we have assumed that both methods, coding and self-ratings, target the same internalized, relatively stable representation of narrative identity, and that the
mismatches between self-ratings and coding reflect differential error emanating from the two methods. Factors such as common method variance, social desirability effects, fatigue and lagging interest have, therefore, been treated more or less as study “noise” that ought to be reduced through more carefully designed methods. These measurement explanations presume that both methods are aiming to capture the same underlying internalized and subjective narrative construct. But what if they are not? What if we entertain the possibility that the two methods measure different narrative features or different narrative identity constructs altogether. The focus then turns from assumptions underlying how well narrative identity is being measured, to what is being measured.

One fundamental assumption in narrative psychology – rooted primarily in the personality psychology tradition – reflects the idea that a life story is internalized and relatively stable. It is an evolving mental self-representation, as it must integrate a person’s changing and idiosyncratic life experiences, but it still is assumed to show sufficient consistency to give unity to a person’s life and to reveal reliable individual differences (Habermas & Bluck, 2000; McAdams, 1993; McAdams et al., 2006). The method of coding open-ended narratives emerged naturally out of these assumptions, as it allowed researchers to study this internalized story in ways that retained participants’ unique and nuanced perspective, quite different from squeezing a representation into a Likert scale bubble. The method was considered a welcome antidote to the rating scale reductivism of trait assessments that had come to dominate personality psychology by the 1980’s and social psychology’s emphasis on situational factors (McAdams, 1995; Mischel, 1979). That a wide range of studies show life narratives to be predictive of other stable aspects of personality, as well as some support for longitudinal consistency, supports the notion that coding captures a representation that is meaningfully stable (McAdams et al., 2004; McAdams et al., 2006; Thorne, Cutting, & Skaw, 1998; Köber & Habermas, 2017).
A second core assumption is that this internalized narrative identity represents a person’s subjective construction and evaluation of herself and her experiences. Identity is “the self as made into a story by the person whose self it is” (McAdams, 1995, p.385). For narrative psychologists, that subjective story, in contrast to historical or current accuracy, is considered both clinically and humanistically worthy of study in its own right. In terms of clinical concerns, aspects of a person’s subjective representation of his or her life have been associated with mental health outcomes concurrently and over time (Adler et al., 2016). How we think about our lives has causal force – if I believe that being bullied as a child has made me into an empathic person who sticks up for the vulnerable, I am more likely to behave in that way in future social situations and to view myself positively.

In terms of humanistic concerns, a person’s subjective and idiosyncratic take on his or her identity and experiences deserves attention from psychologists interested in understanding the whole person (Bruner, 1990; Josselson, 2004; McAdams, 1993). This may be especially important to researchers concerned that the field of psychology – and our conceptualizations of the human condition – atrophy when the subjective voices of historically marginalized populations are excluded (Gilligan, 1982; Josselson, 2004). Moreover, this subjective identity is argued to be narratively organized (Bruner, 1990; McAdams, 1993; Polkinghorne, 1988; Sarbin, 1986). The chaotic collage of one’s disparate, uncut life experiences is given coherence and meaning through storying.

A closer examination of these two assumptions - subjectivity and internalization - may offer clues to the mismatches between self-ratings and codings. Along the way, we will look at the role of unconscious motivations in narrative features, and examine narrative identity as something enacted within particular social contexts.

The Assumption of Subjectivity

As described above, the commitment to subjectivity means that a person’s own voice
and self-evaluation is the target of measurement and is the privileged piece of data that should be brought into the light. Josselson (2004) described this interpretive stance as a “hermeneutics of restoration,” where a researcher aims to capture faithfully an individual’s subjective point of view and intended meanings. This is contrasted with a “hermeneutics of demystification,” where a researcher intends to uncover hidden, unconscious meanings of a narration.

So how does this apply to the mismatch findings in our studies? Looking at Grysman et al., both self-ratings and codings would purport to be capturing participants’ subjective point of view – how affect-rich the experience was from their perspective. Neither method seeks objective historical accuracy of how the participant felt at the time of the event, nor objective biometric data on her physical arousal now. Both methods sound like they are measuring the same subjective construct, but looking closer, there is reason for doubt. In Grysman et al.’s study, the discrepancies between coding and self-ratings may have been due to greater potential for coding to capture something about participants stories that they were unaware or unconscious of – specifically, the extent to which they expressed emotion and the extent to which that emotional expression conformed to gendered social norms of women being more emotional than men. Coded affect was positively predicted by being female – which presumably partially reflected unconscious and conscious socialization – but it was not predicted by self-ratings of gender typicality. That is, participants’ self-perceptions of their conformity to gender norms was unrelated to how much their emotional expressiveness actually did conform. This suggests that a participant may not have realized that the level of emotion she expressed in her narrative was a marker of a more gender normative identity that would be coded as such.

Like with codings, participants’ self-ratings of emotional intensity may have been influenced by their categorical gender – including conscious and unconscious socialization –
but it also may more directly have been influenced by their self-perceptions of gender norm conformity. Participants were not directly asked how gender typical their emotional experience of a particular event was, but self-ratings of gender typicality generally did predict self-ratings of emotional intensity. In fact, self-rated gender typicality fully mediated the predictive effect of being female (categorical gender) on self-rated emotional intensity. Grysman et al. argued, therefore, that self-report ratings may activate explicit (i.e., self-aware or conscious) self-perceptions about gender identity (i.e., the extent that participants consciously identify with stereotypically female characteristics) more powerfully than narrating a self-defining memory does. Broadly speaking, self-ratings may be a better measure for isolating a participant’s conscious evaluation of features of a narrated experience, while coding may be better at capturing a mix of both consciously and unconsciously motivated features – two different types of features of the construct of narrative identity, though both “subjective” in their own way.

**Ethical implications.** Is this a problem? Only if hypotheses depend on coded features being something the narrator is consciously aware of or if a researcher is committed to describing a person’s subjective construction of herself from her point of view (i.e., from an interpretive stance of restoration, not demystification; Josselson, 2004). Quantitative narrative researchers may assume, but do not generally ask, participants whether they agree with the codes given, and there is reason to doubt that such agreement would always be found. One reason is the low correlations between self-ratings and codings that we have been discussing. Another reason is that in qualitative narrative studies where participants have had an opportunity to comment on researchers’ interpretations of their narratives, disagreements have sometimes arisen (Josselson, 2011).

**Theoretical and clinical implications.** Thus, for investigators who continue to be committed to a restorative project – elevating a participant’s voice – for humanistic or ethical
reasons, this evidence may force them to grapple with difficult questions about whether their studies and methodologies are indeed consistent with that commitment. Even for researchers unconcerned with their hermeneutic stance or who view the potential for capturing implicit narrative features as an advantage over self-ratings (Pasupathi, 2015; Pillemer, 2009; Waters et al., 2014), the risk of conflating conscious and unconscious narrative features still may be problematic. First, ambiguity about what is meant by a commitment to a person’s subjective, idiosyncratic perspective creates confusion, hindering the field’s theoretical development. Second, being in the dark about the extent to which coding interpretations align with participants’ subjective perspective also means being in the dark about which coded features – unconscious or conscious – are those primarily associated with psychological adjustment. The implications range from basic understanding of the phenomenon to more applied settings in which narrative change is a key construct (e.g., Adler, 2012). Thus, self-ratings may be a useful complement to codings as a way of indicating whether a coded narrative feature is operating at a conscious or unconscious level.

Speculatively, we may even find that there are meaningful individual differences in the degree to which participants’ self-ratings of an event are congruent or incongruent with what is visible in the narratives. The degree of incongruency might, for example, be related to the degree a person’s storytelling varies with audience context, i.e., narrative sensitivity (Pasupathi, McLean, Greenhoot, & Fivush, 2016). Alternatively, high congruency between self-ratings and narratives might reflect congruency between one’s unconscious motives and conscious motives and self-concept. Woike (2008) suggested that greater implicit (i.e., conscious) and explicit (i.e., unconscious) motive congruency might lead, not only to more powerful and emotional self-defining memories, but also to greater emotional and intrinsic investment in goals and therefore higher self-efficacy and self-esteem. On the other hand, disagreement between self-ratings and narrative coding may reflect incongruency between
implicit motives and explicit motives and self-concept, which, Woike (2008) suggested, might lead to a preoccupation with certain emotional memories without understanding why, making getting past them difficult. Any meaning-making found might feel vague or unconvincing, reflecting the person’s lack of awareness of motives underlying the memory’s recall. Low agreement between a person’s self-rating and narrative coding might, then, be predictive of rumination, difficulty achieving explicit goals, and consequently, low self-esteem.

The Assumption of an Internalized Narrative Identity

In the previous section, we examined whether the mismatches between coding and ratings might in some cases be a result of measuring two different features of a person’s internalized life story: those of which a participant is unaware (better captured in the Grysman et al. study by codings) and those of which a participant is aware (better captured by self-ratings). Now we entertain the possibility that we are actually measuring two different narratives – emerging out of two different “conversations” – and that is the reason for the low correlations. What if a person’s narrative identity is less something internalized that one has and more something people do in situated storytelling?

The issues raised in previous sections come out of a framework of narrative identity that assumes the existence of a relatively stable and internalized life story, an assumption that is very much grounded in personality psychology (Habermas & Bluck, 2000; McAdams, 1993). However, in other literature that focuses on narrative identity development as it is constructed in social contexts, the assumptions are somewhat different. In this area, narrative identity is embedded in the social context in which it is elicited. Here, narratives emerge out of conversations with parents and others, who scaffold the individual’s telling of their personal stories (Bird & Reese, 2006; Fivush, Haden, & Reese, 2006; McLean, Pasupathi, & Pals, 2007). Different conversational contexts entail different social and constructive
processes and, thus, produce different stories.

Linking to the present argument, self-ratings and codings could be thought of as two different “conversations.” That is, narrative data collected through the two methods would be different not because the contexts create different measurement noise and hinder access to a true, internalized story, but because self-ratings and coding create two different narrative constructions or two different but overlapping narrative identities that differentially emerge depending on context.

**The “conversation” of narrative prompts.** Let us first look closely at the conversational processes involved in the collection of narratives for coding. With narrative prompts, participants communicate their experiences and their identity by describing, detailing, orienting, and explaining – in short, by storying their unique experience; but they do this within constraints. The amount of space provided and the heavily scaffolded framing of the question (e.g., who was there, how did you feel, what happened, and what does it mean to the participant; McAdams, 2008) may influence how a participant imagines the listener, as well as the way the story is told. Moreover, when a person transforms their retrieved experience into a full, written story, this story will be constrained by the narrative ecology in which they are situated (McLean, 2016), including powerful cultural norms about stories (i.e. cultural master narratives), as well as the stories one has heard from close others (i.e., intergenerational or vicarious stories; Merrill & Fivush, 2016; Thomsen & Pillemer, 2016). For example, a strong tendency for stories of vulnerability to be recounted in the U.S. with some type of resolution or redemption exemplifies the normative power of cultural master narratives to additionally shape narratives constructed in a coding “conversation” (McAdams, 2006; McLean, 2016; McLean & Syed, 2015).

**The “conversation” of self-ratings.** A similar process is at work in the conversation of self-ratings. As those who use narrative coding methods reasonably point out, self-rating
questions are restrictive (McAdams, 1995; Waters et al., 2014). The question being asked and the answers given may have very little to do with what the participant feels is important about an event, because they are questions decided a priori by the researcher. Self-ratings could be regarded as an interrogating listener who says “tell me about an important event, but only on the terms I want.” These terms include the actual questions asked, the way the questions are phrased, their ordering, whether the scale is even or odd (i.e., allows for a true middle), etc.

Yet the problem is not simply that a participant may consciously want to report on some aspect of the event that was not asked about, but that the questions may also influence his or her own memory retrieval and processing of the story. The self-rating ‘listener’ nudges a narrator in unconscious and conscious ways to structure his or her life experiences through a particular narrative filter - and this is the self-rating narrative data we obtain. Consider a person prompted to recall and tell a self-defining memory and rate it for the extent it changed the kind of person he is. If he notices the self-change scale question prior to writing the narrative, the important memories cued into recall are likely to be those that have already been narratively processed to some extent in terms of self-change. This would imply that the self-ratings and coding narrative data would show greater resemblance. If he notices the narrative prompt first, his recall, selection and written narration presumably will be influenced by the same contextual and cultural constraints as those described in the “narrative prompts” paragraph above. Let us assume the latter scenario and say further that he selects the death of a close friend as his self-defining memory. This recalled memory feels emotional, confusing, and impactful on who he is, and he narrates these reactions into his written narrative. The narration may also be structured with some type of resolution or silver lining at the end, as prescribed by cultural master narratives, but he has not thought about the experience in terms of self-change. However, on reading the self-ratings question, the
participant reviews and re-interprets his narrated experience through a self-change filter – as the listener has indicated that this is valuable. One can imagine him reflecting, “hmm, have I changed? Maybe. Let me think about it.” As a result, this self-ratings part of the “conversation” would produce somewhat different narrative data from the one that was just written.

The “conversation” overlap. It is, of course, not only having a self-rating question cue prior to recalling memories that would produce some degree of resemblance between the narrative data coming out of self-rating and coding conversations. The memories and the processes involved in their retrieval would overlap in other cognitive ways that might account for why there is, at least in Syed and McLean’s study, some degree of correlation between the two methods, even if it is rather low (see also Tibubos et al., 2017; Waters et al., 2014). Drawing from the autobiographical memory field, we could say that in both “conversations,” memories may be drawn from a common store of encoded experiences and may be cued by other aspects of one’s self-concept, such as one’s trait self-knowledge (“I am a shy person”), proximity to life chapters transitions (Thomsen, 2015), semantic knowledge about the world, such as the cultural life script (Berntsen & Rubin, 2004), or the lab’s physical environment. In both conversations, the memories are likely to be selected in part because they are easily accessible, possibly due to rehearsal, centrality to identity, or high emotionality. They will be reconstructed on retrieval with a varying mix of key emotions, images, and sensory vividness from the original experience, bits from other similar experiences (Rubin & Umanath, 2015), and possibly some narrative description, depending on how often that story has been told before. Because the memory retrieval processes within these self-rating and coding conversations overlap, we might expect moderate correlations, for example, $r = .3 - .4$, as found in Syed and McLean’s and others’ studies (Tibubos et al., 2017; Waters et al., 2014; M. Pasupathi, personal communication, February 10, 2017). From this perspective, the
seemingly puzzling mismatch between ratings and codings – at least for Syed and McLean’s study - may not be a puzzle at all. It may be exactly what we should expect.

**The role of the audience.** Thus, we can draw from both the autobiographical memory and developmental literatures to speculatively render a more complete picture of overlapping and divergent processes involved in the self-rating and coding of narrative features. Unfortunately, in neither of these literatures nor in the personality literature has there been sufficient empirical comparison of the two methods (cf. Rubin et al., 2016; Tibubos et al., 2017; Waters et al., 2014). However, the general idea that storytelling varies by and is constrained by audience context is empirically well-established in the developmental field. Studies have found that adolescents highlight different aspects of events (e.g., relational, moral, autonomy) in parent conversations as compared to peer conversations (McLean & Jennings, 2012; Weeks & Pasupathi, 2010) and emerging adults tell more elaborate stories to attentive listeners (Pasupathi, 2001; Pasupathi & Hoyt, 2009) and also incorporate new meanings in their stories for future retellings based on different listener responses (Jennings, Pasupathi, & McLean, 2014). Further, the immediate goals of telling a story (e.g., of entertainment, self-explanation, or accuracy) can change a narration, impacting the memory of the event in the future (Dudukovic, Marsh, & Tversky, 2004; McLean, 2005). In a particularly novel study, Pasupathi, McLean, and Weeks (2016) investigated differences in storytelling to parents and to peers by allowing emerging adults to edit previously written stories collected via the standard prompts (e.g., turning point, low point) for a friend and for their mother. That is, participants first wrote a turning point, for example, via the standard prompt that does not specify an audience, and were then able to track-changes in that same document to edit the story for a friend, or their mother, if they wanted to make such edits. Preliminary data showed that adolescents told divergent stories or versions of stories in keeping with perceptions that mothers are more engaged and attentive, but friends more open
and agreeable.

To our knowledge, very few studies have been designed specifically to measure the influence of different methods or other contextual variables in study settings on the narratives elicited. However, several informative examples exist. Grysman and Denney (2017) compared men and women’s narrations under conditions of verbal versus written elicitation and female or male interviewer. They found that men’s verbal narratives were lengthier with a female interviewer than a male interviewer, and women’s verbal use of internal state phrases was proportionally lower to a male interviewer compared to a female interviewer. Grysman (2015) also found that participants disclosed more difficult events but in shorter narratives when elicitation was more anonymous – through Amazon Mechanical Turk and an anonymous internet survey - than through verbal interviews or on lab based computer. Schulkind, Rahhal, Klein, and Lacher (2012) found that narratives of memories elicited by cue words (of time period, theme and emotion) exhibited lower specificity and more organization by time period than narratives elicited by richly detailed narrative prompts that also included time period, theme and emotion cues. In sum, different elicitation contexts appear to differentially affect the narrative data produced. In light of these studies, the differences we have seen between narrative data produced through self-ratings and codings become less surprising.

**The continued “conversation” of coding systems.** So the curious case of mismatch between codings and ratings is perhaps no mystery after all. Investigators can recognize the different conversational processes that can shape the narrative data we collect and craft a study “conversation” that best mirrors the narrative identity phenomenon under investigation. But what if we take the “conversation” metaphor one step further - that the “conversation” does not stop at the collection of the narrative output obtained, but continues throughout the coding and writing processes? To the extent that self-rating scale questions could be
understood as an interrogating interviewer (“Tell me only the part of the story I am interested in.”), so could quantitative coding systems be viewed in a similar way. Coding systems restrict an investigator through response options, the question’s framing, and the order of questions, as well as “common understandings” developed through the interrater reliability training process (see Syed & Nelson, 2015). Norms of academic discourse further constrain the researcher’s storying of the narrative. In other words, similar to participants, we can think of researchers not as “having” the participant’s narrative data but as further “doing” the narrative as well - that is, further structuring, shaping and storying the participant’s experience of an event. One could argue that in both self-ratings and coding contexts there is some member of the conversation (the participant or the coder) who must squeeze a richly experienced event into an interrogating listener’s pre-determined story structures on the road to producing academic knowledge.1

**Implications**

So what have we gained through this investigation of the curious mismatches between ratings and codings? We have examined various methodological and theoretical explanations that raise questions about our assumptions of narratives as subjective and internalized. What we have not presented is a slam dunk argument for a “right” method to use. There might be no “right” method, as methodological choice depends on a researcher’s assumptions about the construct or feature being captured (e.g., conscious or unconscious, an internalized representation or two different narratives). These assumptions run implicitly in the

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1 Coding, however, requires the close reading of narratives, which can lead to insights that benefit the long term development of the field. Moreover, coding systems are sometimes developed after reading a sample of narratives, leading to more organic and inclusive codes (Syed & Nelson, 2015).
background of much narrative research, but rarely do results give us cause to face them head on. We used these early findings of mismatch to do just this.

Common to all of the theoretical and methodological explanations discussed is the need for more studies comparing conceptually similar self-ratings and codings to each other and to other measures. The studies in this article are sufficient only as a speculative jumping off point for methodological and theoretical discussions. We welcome more discussion in this vein, whether it comes out of new studies or a researcher’s file drawer of peculiar results. Besides confirming whether the low correlations discussed here are common, such studies could inform our understanding of whether certain narrative features show greater or lower correlations and are more susceptible to measurement noise (for researchers assuming that the same feature is being measured through both methods). Alternatively, such studies might indicate whether a feature being measured operates outside of conscious awareness in predictive and important ways (for researchers assuming that they are two different features of a participant’s internalized story). Then again, they might inform our understanding of the extent of influence of contextual factors in comparison to overlapping memory retrieval processes (for researchers assuming that narrative identity is about the storytelling of experience within different “conversational” contexts).

Speculatively, we might expect that not all types of narrative variables exhibit the same degree of mismatch. As mentioned, narratives coded for intensity rather than prevalence and at the narrative level rather than the proposition level should presumably share more method variance with typical Likert style self-ratings and result in higher correlations. Additionally, higher self-rating and coding correlations might be found for those narrative variables on which third party interrater agreement tends to be easier to obtain, such as manifest content coding (e.g., coding whether a narrative is about a broad category like gender, religion, ethnicity, career, family, or romance), or where participants are asked to self-rate their
narratives using exactly same coding system as third party coders use.

Regardless of whether narrative identity is viewed as something internalized that we have or something we do in situated storytelling, there is widespread agreement among narrative researchers that narrative processing of a memory supports psychological continuity, unity and purpose over and above the recollection of that memory or its representation as self-images or self-thoughts (Adler et al., 2016; Habermas & Bluck, 2000; McAdams, 1993; McLean et al., 2007). A self-change belief is made less fleeting, more reliable and, therefore, more clinically powerful, when it has been explicitly articulated and, even further, when it has been narratively woven into and reinforced by the rest of the architecture of the life story. Although measuring subjective belief as expressed through self-ratings is valuable, narrative identity researchers would contend that it is only through coding that we can confirm that storiied meaning was made - explicitly linking what exactly it was about the event that caused the person to learn a particular lesson, gain a particular insight, or change in some specific and personal way. This confirmation potential of narrative coding distinguishes it from other types of self-reports, making it similar to other types of third party behavioral observation. Thus, explicit autobiographical reasoning has been at the heart of narrative identity theory, as a crucial mechanism through which narrative identity creates unity and purpose across diverse life experiences (Habermas & Bluck, 2000; McAdams, 1996; McLean & Pratt, 2006).

In addition to autobiographical reasoning, there may be further ways that explicit narration serves psychological unity and purpose. Pasupathi (2015) suggested three potential pathways for reinforcing identity besides explicit autobiographical reasoning. First, she suggested that by repeating tacit themes in descriptions of personal events from different time points (e.g., implicit agency or communion), familiarity to a past self may be evoked, leading to a sense of temporal continuity. Secondly, she argued that if identity is created in everyday
conversation through the narrative *positioning* of oneself in relation to conversation partners and other story characters, then repetition of these narrative positions across conversations may recall those earlier identity enactments and reinforce a continuous identity. Finally, she proposed that narration may be a type of embodied action that triggers a set of current bodily feelings, and evokes both the pattern of embodied sensations of the original event *as well as* its past narrations creating continuity through this narrative reliving. Pasupathi proposed these alternative pathways as a way of making sense of the infrequency of explicit autobiographical reasoning in everyday storytelling, but these pathways might be useful in helping to disentangle the extent of overlap and divergence between narrative constructive processes in the “conversations” of self-ratings and coding.

**Conclusions**

As narrative methods and theories have yielded a wealth of insights into memory, personality, and identity in recent decades, it seemed an opportune time to examine assumptions underlying these insights. We used puzzling findings of an apparent mismatch between narrative self-ratings and codings to examine possible limitations of these methodological and theoretical assumptions, in particular the assumptions of narrative identity as something subjective and internalized. In the process, we drew on developmental and autobiographical memory literature to explain the mismatch puzzle through alternative theoretical frameworks and called for more research using both methods in order to shed further light on these assumptions and on coding and self-rating methods.
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