Narrative Engagement:

The Importance of Assessing Individual Investment in Expressive Writing

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This publication was made possible through the support of a grant from the John Templeton Foundation.

The opinions expressed in this publication are those of the authors and do not necessarily reflect the views of the John Templeton Foundation.
Abstract

The positive benefits of narrative and expressive writing have been demonstrated in numerous experimental studies, but these experimental efforts have not focused on understanding authors' perceptions of the writing experience. This study presents a new brief measure of narrative engagement that assesses authors' investment and motivation for expressive writing. The Narrative Engagement Index was developed based on theory and an extensive review of participants’ reflections on a narrative-based writing intervention, and could be tailored to suit many written narrative exercises. For the present study, it was used to assess narrative engagement for the Laws of Life Essay program. Participants (n=717) were drawn from a rural, low-income Southern region, and a subset (n=55) were asked to bring “someone who knew them well” in order to provide reliability and validity data from a close informant. To our knowledge, it is the first study to include a close informant in the study of the correlates of narrative. Positive, significant correlations were found for measures of related constructs, including expressive writing items that are widely used in experimental studies of narrative, meaning making, and posttraumatic growth. Close informants perceived writers with higher levels of narrative engagement to have higher levels of current well-being than less engaged writers. The Narrative Engagement Index has good psychometric qualities and complements existing measures of narrative by assessing the author’s investment in the writing process.

Keywords: expressive writing, appraisal, reflection, measurement, autobiographical narrative, reflective learning, education
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Many studies have suggested that forming—and disclosing—a cohesive narrative offers the storyteller a means of reflecting upon, reappraising, and reframing experiences, and through these processes promote psychological well-being (McAdams & McLean, 2013; McLean, Pasupathi, & Pals, 2007; McLean, Wood, & Breen, 2013). McAdams and McLean (2013) suggest that narrative formation is a meaning-making process that involves organizing personal experiences into a cohesive story. Researchers have begun to explore expressive writing in a variety of contexts. Even brief narrative exercises have been found to have numerous psychological and physiological benefits (J. Pennebaker, 2004; J. Pennebaker & Chung, 2007, 2011; J. W. Pennebaker, 1997; Spera, Buhrfeind, & Pennebaker, 1994). To date, most studies of expressive writing have evaluated narrative coherence and other aspects by rating essays themselves (Graybeal, Sexton, & Pennebaker, 2002; J. Pennebaker & Chung, 2011) and by the responses of the audience (Yale, 2012, 2013), but there has been little attention to the author's subjective experience or motives for expressive writing. The existing literature is largely lacking quantitative measures of investment in expressive writing exercises and programs, yet an author's personal investment can influence the psychological impact of expressive writing. This study develops a new measure of an author's engagement in expressive writing and presents data on the impact of varying levels of engagement as perceived by authors and others.

The Construct of Narrative

McAdams and McLean (2013) argue that expressive writing or the process of creating narrative helps the storyteller to create what they term a “narrative identity,” which in turn helps craft a sense of purpose and meaning. Narrative identity has to do with constructing (or
adapting) a cohesive story that best encompasses one’s own life experiences; as the term “identity” suggests, this narrative is an essential aspect of an individual’s self-concept.

Narratives have been explored in relation to positive aspects of the self (Burton & King, 2004) and in educational settings in terms of character education, but these processes may be especially crucial when individuals must cope with and integrate a negative or traumatic event into their sense of self (Banyard, Hamby, de St. Aubin, & Grych, 2014). Ryff and Singer (1998) argue that turning a traumatic experience into a meaning-making experience is far more beneficial to well-being than ignoring or avoiding reflection on the experience. Pasupathi and Carstensen (2003) found that people report less negative emotion in the retelling of a story than they did in the initial experience, and McLean (2007) proposes that one possible reason for this varying recollection is that people are giving their negative experiences meaning and using them as a means to gain insight and an increased sense of purpose.

Several studies have shown that disclosing a story about adversity can promote well-being (Crossley, 2000; Graybeal, et al., 2002; Harvey, 2001; Hemenover, 2003; Tuval-Mashiach et al., 2004). A key facet of this process is that the person is creating a narrative about something that is personally important. Most research on expressive writing compares writing about a personally meaningful topic (positive or negative) with writing about a neutral topic, and this work shows that it is writing about something personally meaningful that shows effects. For example, Hemenover (2003) found that people who had used a writing exercise to disclose a traumatic experience (the personally meaningful prompt) ultimately developed a more resilient self-concept than those who wrote about their plans for the following day (the neutral prompt). Likewise, those who wrote about trauma also scored higher on measures of personal growth and
self-acceptance, and exhibited decreased psychological distress. Similar findings are reported when individuals write about positive aspects of themselves (Burton & King, 2004).

Narrative engagement is a term that can be used to describe the investment an individual puts into narrative creation (Banyard, et al., 2014). It also captures the range of impacts that participants experience as a result of writing the narrative, such as feeling better about themselves as writers, feeling more optimistic about the future, and feeling they could make a difference in their community (Veljkovic & Schwartz, 2001). As such, it may be a construct that helps explain links between expressive writing and well-being.

Existing Narrative Measures and Gaps in the Expressive Writing Literature

The current literature on narrative and expressive writing includes a range of measures of different aspects of narrative, but surprisingly, authors' investment in the writing experience has received relatively little attention. Existing measures (reviewed below) focus primarily on features such as authors' writing ability, positivity of impact, effort, and the laboriousness of writing tasks. None of them, however, fit the need for a brief quantitative measure that assesses one's personal investment in an autobiographical writing exercise.

Pennebaker's and colleagues' work is probably the best known research on expressive writing (J. Pennebaker, 2004; J. Pennebaker & Chung, 2007, 2011; J. Pennebaker, Colder, & Sharp, 1990). Their experimental framework contrasting personal, expressive essays with writing on neutral topics has helped show the wide range of benefits that expressive writing yields. These benefits are both psychological and physiological in nature (J. Pennebaker & Chung, 2011), such as improved grades for students, decreased absences from work or class, reduced physician visits, and improved immune system functions, among others. Pennebaker and colleagues developed a few questions on perceptions and impact (positive or negative) of writing
(J. Pennebaker, et al., 1990) that touch on some aspects of perceptions of the narrative process, but for the most part they have relied on their experimental paradigm to demonstrate the effects of expressive writing on outcome measures such as mental or physical health symptoms and have not looked at individual differences in the investment in or benefits from narrative.

Other existing measures of narrative are geared toward coding elements of the narrative itself. Typically, participants are given a set amount of time in which they are asked to tell a story, sometimes in writing, and then researchers code the content of the story (McLean & Breen, 2009; McLean, Breen, & Fournier, 2010; McLean, et al., 2013). These measures are related to the concept of narrative engagement in the sense that they often assess narrative coherence and other qualities of the story that are likely to be higher in narratives that are produced by engaged versus disengaged authors. However, the amount of effort and engagement from the author is not often documented in these exercises and may not always be reflected in narrative quality. For instance, someone who is more practiced and comfortable as a writer might craft a better narrative with less effort than somebody who is insecure in their writing abilities (Lavelle, 1993, 1997). These studies can also potentially confound academic achievement or IQ with involvement in the narrative process. Therefore, the quality of the finished product is not necessarily reflective of the author's engagement. Pennebaker's line of research suggests that a highly polished narrative is not necessary for the desired psychological impact, as random assignment to condition should minimize the effects of any individual differences in writing ability.

The Inventory of Processes in College Composition (Lavelle, 1993) is one of the few existing measures that aims to assess not only the quality of the work, but also the author’s experience of writing. Lavelle's scale emphasizes writers' intentions and beliefs about their
writing over the content of the writing. Her 119-item measure is broken down into five main categories of writing styles which she labels “Elaborationist,” “Low Self-Efficacy,” “Reflective-Revision,” “Spontaneous-Impulsive,” and “Procedural.” This scale includes a few items, notably on the Elaborationist scale, that capture elements of narrative engagement. Lavelle found a negative correlation between the Elaborationist and the Low Self-Efficacy scales, suggesting a relationship between narrative engagement and well-being. The true/false format, although it offers a reliable means of scoring, is ultimately too limiting, especially in tandem with item wording that uses extreme terms such as "always" and "never," such as “writing an essay is always a slow process.” The length of the scale can also be problematic in some settings. Finally, most of the items are skills-focused, reflecting the author's interest in education, and do not capture broader psychological processes. The main limitation of this scale as a measure of narrative engagement is that is not the primary purpose of the scale, and items that assess narrative engagement are located in multiple subscales.

Piazza and Siebert (2008) also developed a quantitative measure of students’ attitudes towards writing. The items on the Writing Dispositions Scale aim to gauge students’ behaviors, beliefs, and feelings about writing, making it one of the few existing quantitative measures to assess both motivational and behavioral aspects of the writing process. It also has students assess each item on a 5-point Likert scale, offering more flexibility than a true/false format, and offering a clear and consistent scoring method. However, it also occasionally uses extreme language (“I am never worried about having my writing evaluated”). Likewise, this scale was written specifically for elementary and middle school students, and although certain items are generalizable to a broader population, the intended sample limits the use of this scale. This scale shares the same primary limitation as does the Lavelle (1993) scale--the items on this scale
assess writing behaviors and attitudes, but they do not gauge the psychological investment in the writing process.

Another limitation of past literature is that almost all studies of the impact of expressive writing or narrative have looked at relatively short-term outcomes, rarely extending more than a few months past the writing date. However, many therapeutic and character development programs strive to have a more lasting impact. Further understanding of the long-term outcomes of narrative engagement is needed. A new quantitative tool that overcomes some of the limitations above could aid this inquiry. Further, as educational settings increasingly pursue character development goals in tandem with academic outcomes, and use expressive writing tasks as a method for character development, measures of aspects of the expressive writing process that may moderate the effectiveness of these expressive writing interventions are needed.

The Current Study

The Laws of Life Essay program is one of the most widely implemented school-based narrative interventions designed to promote character development (Meyer, Meyer, & Veljkovic, 2003; Templeton, 2012; Veljkovic & Schwartz, 2001). In recent years, more than 100,000 students around the world have completed the program annually. Students are instructed to reflect on and write about a value that they believe transcends cultures and religions and typically work on the essay both inside and outside the classroom (Veljkovic & Schwartz, 2001). Although some students write about values in an impersonal way, most draw on personal (and sometimes traumatic) experiences, and write reflective essays about how the experience has shaped their development. By encouraging students to share a personally meaningful life lesson, the exercise becomes largely focused on narrative formation. The present study utilizes a large
sample of participants who wrote Laws of Life essays to develop a measure of narrative engagement.

Many of the available narrative measures, although they contain several positive components, were written to assess writing in an educational context and do not meet the needs of those interested in the psychological aspects of narrative. For this study, we developed a scale that maintains the strengths of many existing measures (e.g., quantitative, easily scored, Likert rating scale, clearly worded items), but goes beyond the basic educational context.

The purpose of this paper is to present preliminary data for a brief new narrative engagement scale. We present internal consistency and factor analytic data for the Narrative Engagement Index (NEI), examine its correlations with Pennebaker and colleagues’ items on perceptions of the narrative process, and evaluate its associations with constructs that are theoretically related to narrative engagement, such as meaning making strengths, regulatory behaviors, and dimensions of well-being. We hypothesize that the NEI will be more strongly related to the Pennebaker items than it will be to variables that are theoretically-related but more distinct. For a subset of our sample, we also present correlations with close-informant reports.

Methods

Participants

Participants were 717 people from three Southern states. Participants ranged in age from 10 to 76 years old ($M=25.5$, $SD=10.0$) and were 33% male and 67% female. Most (71%) participants were European American/White Non-Latino, 14.5% were African American/Black Non-Latino, 9% of participants were Latino/a, 5% reported being of more than one race, .3% were Asian, and .2% were Hawaiian or Pacific Islander.
At the time of the study, 17% of participants reported currently attending middle or high school, and 36% held either a high school diploma or a GED. Sixty percent of participants reported earning less than $30,000 per year (total household income). Forty percent of participants reported receiving public financial aid of some sort. Twenty two percent of participants reported living in a “rural area” with a population of less than 2,500 people; thirty five percent reported living in a “small town” with a population 2,500-20,000 people.

A subset of 55 people were asked to bring “someone who knew them well” to act as a close informant; 47% of informants were family members, 39% were friends, and 13% were spouses.

Procedure

Participants were recruited through a range of advertising techniques. The majority of participants (66%) were recruited at local community events, such as local arts and crafts festivals and county fairs. Word-of-mouth was the second most productive recruitment strategy, accounting for 20% of participants. The remaining 14% were recruited through other strategies, including flyers, newspaper and radio ads, and direct mail. This wide range of recruitment strategies allowed us to reach segments of the population who are rarely included in psychology research. Interviewers offered to meet participants in multiple locations throughout the community (including our research center, other campus locations, and their homes), during daytime or evening hours. This flexibility provided people with limited availability or transportation an opportunity to participate. This region of Appalachia still has limited and often unreliable cellular and internet service; therefore, the survey software was specifically chosen to operate without internet connectivity. The survey was administered using Snap10 survey software on laptops and iPads. An audio option was available. Technical problems (such as
iPads overheating) and time limitations prevented some individuals from completing the survey; overall, the completion rate was 85% and the median completion time was 53 minutes. This is an excellent result by current survey standards, especially considering the fairly long survey, with current completion rates often under 70% (Abt SRBI, 2012) and sometimes under 50% (Galesic & Bosnjak, 2009). All participants received a $30 Walmart gift card and information on local resources (the subset of participants who were asked to bring “someone who knew them well” received a $40 Walmart gift card, as did their close informant). All participants and informants received informed consent both in writing and orally, and gave their consent by clicking that they agreed to participate on the computer and then advancing to the first screen of the survey, similar to online survey procedures. Signatures were not collected to maintain anonymity. The IRB of the University of the South approved all procedures.

Measures

Narrative Engagement Index. The Narrative Engagement Index (NEI) was created for this project to capture an author’s experience of reflection, reappraisal, and disclosing a personal narrative with an audience. The narrative exercise participants reflected on was the Laws of Life Essay program, a school-based program offered in the area. See Appendix 1 for the NEI items. These items were developed based on both theory and data. First, we drew on ideas from the narrative literature regarding what comprises engagement in narrative tasks and exercises. Second, we examined past essay writers’ reflection of their personal experiences in the Laws of Life program (Veljkovic & Schwartz, 2001) and qualitative interviews with a subset of the participants in the current sample (Banyard, et al., 2014) to identify how they described their approach to and involvement in the writing process. It should be noted that although these items were worded to specifically reference the Laws of Life Essay program, they were designed to
also be applicable to other similar expressive writing programs and exercises. All items are scored on a 4-point Likert scale (“very much,” “somewhat,” “a little,” and “not at all”), with higher scores indicating more engagement in reflection and reappraisal. Scores were a prorated mean. Internal consistency (coefficient alpha) was .94. See the Results for more information on the reliability and validity of this scale.

**Pennebaker’s narrative items.** Five items were adapted from Pennebaker, Colder and Sharp (1990), with minor wording edits to better address the essay program. For example, the item “since the writing experiment, how much have you talked to other people about what you wrote?” was changed to “not counting required class discussion, how often did you talk with other people about what you wrote?” For the two items asking about frequency, response categories were: more than 10 times, 5 to 9 times, 3 or 4 times, 2 times, 1 time, or not at all. For remaining items, participants answered on a 4-point Likert scale (very, somewhat, a little, not at all). Mean scores for the five items were used in analyses. In our sample, internal consistency (coefficient alpha) was .64.

**Meaning Making Practices.** The Meaning Making Practices scale (Banyard, Hamby, & Grych, 2013) assesses various ways in which people create meaning in their lives and is based on the conceptual work of Schnell (2009). For example, one item read “I do things where I can be creative or imaginative,” and another read “I keep a journal, diary or blog.” Participants and informants were asked 31 items. Participants responded on a 4-point Likert scale (mostly true about me, somewhat true about me, a little true about me, not true about me); scores were a mean, with higher scores indicative of more meaning making practices. Internal consistency (coefficient alpha) was .90, and validity was established with moderate correlations with reports
by a close informant \((r=.41, p=.000)\) and correlations with other constructs of meaning making in a pilot sample (Hamby, Grych, & Banyard, 2013).

*Life Regard.* Five items from the Life Regard Index (Battista & Almond, 1973) measure a person’s positive regard for life, a main component of well-being, with minor wording edits to better suit a population that includes many people with low educational attainment and limited reading skills. For example, one item originally read “I get so excited by what I’m doing that I find new stores of energy I didn’t know that I had,” but we presented it as “I get so excited by what I’m doing that I find energy I didn’t know I had.” Participants respond using a 4-point Likert scale (mostly true about me, somewhat true about me, a little true about me, not true about me), and scores were a mean, with a higher score indicating a more positive regard for life. All items were also asked of close informants. Reliability and validity for this version are indicated by internal consistency (coefficient alpha) of .75, a moderate correlation with informant ratings \((r=.29, p=.004)\), and strong correlations with other indicators of well-being in a pilot sample.

*Subjective Well-Being.* Diener and colleagues' widely used 5-item Satisfaction With Life scale (Diener, Emmons, Larsen, & Griffin, 1985) was used to assess subjective well-being. A sample item reads “In most ways, my life is close to my ideal.” Participants answered on a 4-point Likert scale (mostly true about me, somewhat true about me, a little true about me, not true about me) to maintain consistency with response categories for other scales. Higher mean scores indicate more satisfaction with life. Close informants also answered all items. Reliability, measured through internal consistency (coefficient alpha), within our sample was high at .89, and correlation with informant ratings was moderate \((r=.30, p<.01)\).

*Purpose.* Two items were adapted from The Meaning in Life Questionnaire (Steger, Frazier, Oishi, & Kaler, 2006) to determine the extent to which an individual considers their life
purposeful and meaningful. The items read “My life has a clear sense of purpose” and “I have a good sense of what makes my life meaningful.” Participants answered on a 4-point Likert scale (mostly true about me, somewhat true about me, a little true about me, not true about me); close informants responded to each statement in regards to the main participant. Scores were a prorated mean, with higher scores indicating a stronger sense of purpose. In our sample, reliability as indicated through internal consistency (coefficient alpha) was high at .86, and correlations with a close informant were moderate ($r=.40, p=.000$).

**Coping Appraisal.** Three items were adapted from the widely used Coping Strategies scale (Holahan & Moos, 1987) to simplify wording and better capture general coping patterns. For example, an original item read “tried to step back from the situation and be more objective,” and instead we presented it as “when dealing with a problem, I try to step back from the problem and think about it from a different point of view.” In addition, we wrote 4 new items to better tap into a wider range of coping strategies. For example, we added “when dealing with a problem. I try to see the humor in it.” Participants and informants responded to all items using a 4-point Likert scale (mostly true about me, somewhat true about me, a little true about me, not true about me); scores were a mean, with higher scores indicating better coping. Internal consistency (coefficient alpha) was .89, indicating high reliability, with a single factor accounting for 60% of the variance. As with our other measures, construct validity was established in a pilot sample (Hamby, et al., 2013).

**Coping Behaviors.** Spitzberg and Cupach (2008) developed a conceptual model of coping (particularly with stalking) that categorizes coping into 5 main types. We adapted 8 of their original items to be less specific to stalking and more suited for a population with low educational attainment. For example, we changed “While this person was pursuing you, did you
ever seek therapies?” to instead read “when dealing with a problem, I have used professional help, such as calling the police or going to a doctor or therapist.” Again, participants and informants respond to all items using a 4-point Likert scale (mostly true about me, somewhat true about me, a little true about me, not true about me); scores were a mean with higher scores indicating better coping behaviors. Reliability was fairly high--internal consistency (coefficient alpha) was .74.

Posttraumatic Growth. The Posttraumatic Growth Inventory (Tedeschi & Calhoun, 1996) assesses positive outcomes (such as increased strengths, spiritual change, and appreciation of life) as described by individuals who have experienced adverse events. We included 10 items that assessed the positive impact of negative events. Participants and informants responded to all items using a 4-point Likert scale (mostly true about me, somewhat true about me, a little true about me, not true about me). Higher scores indicate more posttraumatic growth. Internal consistency (coefficient alpha) was .90, indicating high reliability, and this version of the scale was moderately to strongly correlated with other measures of well-being and outcomes in a pilot sample.

Results

Factor Analysis

Given that this is a new measure for a construct that has received very little prior empirical attention, we conducted an exploratory factor analysis using principal axis extraction. The first factor accounted for 63% of the variance with an eigenvalue of 6.9, and all items loaded at .72 or higher. The next largest factor only accounted for 6.2% of the variance, so we opted to adopt the single factor model. See Table 1 for the individual item loadings. Following analyses of a pilot sample, 10 items were chosen from an original 25 on the basis of factor loadings and
conceptual breadth. The short form correlated strongly with the full 25 items \( r=.97, p<.001 \) and so was used in all subsequent analyses. This short form can be found in Appendix 1.

*Item-level Descriptive Statistics*

Means for individual items ranged from 2.60 to 2.93. See Table 1 for all means and standard deviations. The item, "How much did writing the Laws of Life Essay help you learn to work through problems and not just give up,” not only had the highest average, it was also the most highly endorsed item, with 39.2% of participants answering “very much.” The item with the fewest participants answering “very much” was “How much did writing the Laws of Life Essay help you feel more optimistic about the future?” while the item with the highest percentage of people reporting “not at all” (22%) was, “How much did writing the Laws of Life Essay help you to face difficult feelings?”

*Correlations with Other Theoretically-Related Constructs*

Scores for the Narrative Engagement Index correlated significantly with the index created by Pennebaker’s (1990) commonly-used narrative items \( r=.47, p=.000 \). These frequently used items about the experiences of expressive writing provide good evidence of convergent validity.

The Narrative Engagement Index also showed significant positive correlations with other theoretically-related constructs, with correlations ranging from .18 to .36. As expected, all three measures of current well-being were modestly, positively correlated. Likewise, both measures of coping showed significant positive correlations. The Posttraumatic Growth Inventory correlated moderately and positively as well, see Table 2.

*Correlations with Ratings by a Close Informant*

Although there are many strengths to using self-report methods to collect data, there are also many known weaknesses that sometimes detract from the overall findings. For instance,
social desirability and shared method variance both potentially influence results. To counteract some of these weaknesses, we collected close-informant ratings for a subset of our sample. To minimize shared method variance, we correlated self-report measure of narrative engagement with close-informant reports of other scales. See Table 2. The participants' NEI scores were moderately and significantly correlated with close-informant data for measures of well-being, including the Life Regard Index (this was the highest correlation we examined with $r=.47$, $p<.001$) and the Satisfaction with Life Scale ($r=.35$, $p<.001$). Likewise, it correlated with informant ratings of meaning making ($r=.33$, $p=.014$).

Discussion

The current study found support for the reliability and validity of a new measure of narrative engagement. Unlike existing measures of narrative investment, the items on this scale were derived from participants' and teachers' comments about how narrative exercises affect them (Veljkovic & Schwartz, 2001). The findings add to the growing literature on narrative and expressive writing by highlighting the potential utility of assessing an individual's engagement in the narrative process. These data provide evidence that narrative engagement in an essay-writing program is associated with a number of indicators of current well-being and psychological health. Notably, this is true for outcomes measured using either self-reports or a significant others' perceptions of essay writers' well-being. The findings also provide good initial support for the reliability and validity of the Narrative Engagement Index. Finally, this study supports the theoretical models of narrative proposed by McAdams (2006) and McLean (2007), in which engaging in the creation of a story that is personally meaningful helps participants to reappraise an adverse event, and ultimately transform it into an experience that lends meaning and purpose to life.
Narrative has long been recognized as an important factor in psychological well-being (Fivush, 2001; McAdams, et al., 2006; J. Pennebaker, et al., 1990; J. W. Pennebaker, 1997). Recent qualitative research on narrative has used a more naturalistic setting to further examine how it might be used to promote well-being (Banyard, et al., 2014). However, to our knowledge, there are currently no quantitative measures in the existing literature that focus on the engagement of the author. The Narrative Engagement Index addresses this gap by providing a brief, easily-scored measure with good psychometric qualities. This measure may be an important element in assessing the effectiveness of expressive writing exercises (Banyard, et al., 2014).

**Strengths and Limitations**

As always, the limitations of the data should be considered. Although the community sample is an asset to this study, it was drawn from a specific region of the country. Laws of Life Essay program has been implemented world-wide (Veljkovic & Schwartz, 2001), nonetheless, this is a specific program and it would be beneficial to assess engagement in other expressive writing programs as well. In order to most effectively examine the impact of this and other writing-based intervention programs, data would need to be collected from other locations as well.

Strengths of the study included close informant reports, which allowed us to minimize the effect of shared method variance. Close informants are uncommon in the positive psychology literature, making it a particular asset of this study, even though we were only able to include these for a subset of the sample. The items in this measure were written specifically to be appropriate for as many people as possible, including participants who have low literacy. For example, all items are straightforward with no negative wording or reverse scoring, and are
appropriate for participants of all ages. Similarly, the brevity of the scale is another strength, as it further adds to its practical applicability. These features allowed us to include a greater, more-representative portion of the community.

**Implications**

Theoretical and empirical work suggests that narrative engagement may be a key element of expressive writing’s effectiveness. A brief, easily understood, and psychometrically sound measure such as the NEI can aid future research in a number of ways. For example, it can be used to identify which programs or instructional sets generate the highest levels of narrative engagement, to examine individual differences in participation in expressive writing programs, and to understand the outcomes in these programs. Expressive writing instructions currently focus on a range of topics and vary in their specificity, and the NEI offers a tool to begin to identify whether some topics are more likely to produce higher levels of narrative engagement. For example, Pennebaker's research suggests that writing about one's own relationships or previous adverse experiences produces better outcomes than writing about less emotionally salient topics, such as plans for the day or study skills (J. Pennebaker & Chung, 2007, 2011; J. Pennebaker, et al., 1990). Narrative engagement is one possible mechanism for this effect. It also can be used to identify in more detail which topics are most engaging. For example, do youth benefit more from writing about early childhood experiences or recent peer relationships? Do these variations in topics affect their emotional investment in expressive writing? Writing-based intervention programs have the potential to be widely implemented because they are often relatively low cost and can be easily built into existing classroom activities with minimal burden on teachers. Reliable assessment of narrative engagement can increase our ability to identify the benefits of these programs.
References


Appendix 1

*The Narrative Engagement Index*

All references to the Laws of Life Essay may be replaced with any applicable program title.

Items are scored on a 4 point Likert scale (very much=4, somewhat=3, a little=2, not at all=1), with higher scores indicating more engagement.

1. How much did writing the Laws of Life Essay give you a chance to realize you have something important to say?
2. How much did writing the Laws of Life Essay help you face difficult feelings?
3. How much did writing the Laws of Life Essay help you set goals for yourself?
4. How much did writing the Laws of Life Essay help you understand yourself better?
5. How much did writing the Laws of Life Essay increase your sense of who you are?
6. How much did writing the Laws of Life Essay help you feel in control of important parts of your life?
7. How much did writing the Laws of Life Essay help you feel more optimistic about the future?
8. How much did writing the Laws of Life Essay help you make your own decisions?
9. How much did writing the Laws of Life Essay help you learn to be yourself, not who others want you to be?
10. How much did writing the Laws of Life Essay help you work through problems and not give up?
Table 1
*Factor Loadings, Means and Standard Deviations for Individual Items in the Narrative Engagement Index*

<table>
<thead>
<tr>
<th>Item</th>
<th>Factor 1</th>
<th>M</th>
<th>SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Realize you have something important to say</td>
<td>.719</td>
<td>2.93</td>
<td>1.00</td>
</tr>
<tr>
<td>2. Face difficult feelings</td>
<td>.744</td>
<td>2.60</td>
<td>1.10</td>
</tr>
<tr>
<td>3. Set goals for yourself</td>
<td>.804</td>
<td>2.80</td>
<td>1.04</td>
</tr>
<tr>
<td>4. Understand yourself better</td>
<td>.816</td>
<td>2.79</td>
<td>1.01</td>
</tr>
<tr>
<td>5. Increase your sense of who you are</td>
<td>.812</td>
<td>2.74</td>
<td>1.00</td>
</tr>
<tr>
<td>6. Feel in control of important parts of your life</td>
<td>.791</td>
<td>2.71</td>
<td>1.01</td>
</tr>
<tr>
<td>7. Feel more optimistic about the future</td>
<td>.766</td>
<td>2.73</td>
<td>1.02</td>
</tr>
<tr>
<td>8. Help you make your own decisions</td>
<td>.783</td>
<td>2.83</td>
<td>1.05</td>
</tr>
<tr>
<td>9. Learn to be yourself, not who others want you to be</td>
<td>.736</td>
<td>2.89</td>
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</tr>
<tr>
<td>10. Work through problems and not give up</td>
<td>.780</td>
<td>2.93</td>
<td>1.04</td>
</tr>
</tbody>
</table>

Notes: N=717
Table 2
Correlations of Self-Reported Narrative Engagement Index with Self Report and Informant Report of Other Theoretically-Related Constructs

<table>
<thead>
<tr>
<th>Scale</th>
<th>Self-Report</th>
<th>Informant Report</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>r</td>
<td>p</td>
</tr>
<tr>
<td>Pennebaker Narrative Items</td>
<td>.47***</td>
<td>.000</td>
</tr>
<tr>
<td>Meaning Making Practices</td>
<td>.36***</td>
<td>.000</td>
</tr>
<tr>
<td>Life Regard Index</td>
<td>.18***</td>
<td>.000</td>
</tr>
<tr>
<td>Satisfaction with Life Scale</td>
<td>.29***</td>
<td>.000</td>
</tr>
<tr>
<td>Purpose: Meaning in Life</td>
<td>.24***</td>
<td>.000</td>
</tr>
<tr>
<td>Coping Appraisal</td>
<td>.24***</td>
<td>.000</td>
</tr>
<tr>
<td>Coping Behaviors</td>
<td>.29***</td>
<td>.000</td>
</tr>
<tr>
<td>Posttraumatic Growth Inventory</td>
<td>.32***</td>
<td>.000</td>
</tr>
</tbody>
</table>

Notes: N=717 for self-report. N=55 for informant reports (only a small subset were asked to bring informants). Not all scales were asked of informants; n/a marks a scale that was only asked of main participants.

*p<.05; **p<.01; ***p<.001