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Abstract

We investigated the widespread belief that life gets better and better over time—as revealed in individuals’ “subjective trajectories” for life satisfaction (LS) derived from their ratings of recollected past, current, and anticipated future LS—among depressed (i.e., current major depressive disorder, fully remitted, partially remitted) and nondepressed groups using a two-wave longitudinal sample of American adults. Linear and inclining subjective trajectories (past LS < current LS < future LS) were normative among nondepressed individuals, as were nonlinear but inclining subjective trajectories (past LS ~ current LS < future LS) among depressed individuals. Furthermore, Wave 1 temporal-perspective LS ratings uniquely predicted risk of depression 10 years later (Wave 2), even after we controlled for baseline depression status. Thus, the use of a novel temporally expanded perspective revealed that even depressed individuals view their lives as improving over time and that such beliefs predict heightened (rather than less) risk of future depression.

Keywords

depression, life satisfaction, subjective trajectories, temporal perspective

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Beliefs individuals hold concerning how their lives are unfolding over time are an important component of their identity and self-concept (Keyes & Ryff, 2000; McAdams, 2006). Adults typically believe that life gets better and better over time (Ross & Newby-Clark, 1998). For example, young and middle-aged individuals perceive their life satisfaction (LS), a primary component of subjective well-being (Busseri & Sadava, 2011, Diener, 1984), to be improving over time; that is, one’s current life is typically evaluated more positively than is one’s recollected past life, and the anticipated future is expected to be even more positive than is one’s life at present (Ryff, 1991; Shmotkin, 1991; Staudinger, Bluck, & Herzberg, 2003). Such inclining “subjective trajectories” (i.e., individuals’ beliefs concerning how their lives are unfolding over time) are consistent with the primary developmental tasks and priorities during younger adulthood, which include growth, achievement, and accumulation of resources (Baltes, 1987).

Furthermore, self-evaluations of one’s life across subjective time have important implications for psychological functioning, including emotional experience, motivation, and self-regulation (Albert, 1977; Freund, 2006; Peetz & Wilson, 2009; Taylor, Neter, & Wayment, 1995; Wilson & Ross, 2001). It is surprising that although inclining subjective trajectories are commonly interpreted as an optimistic sign (Gallagher, Lopez, & Pressman, 2013; Lang, Weiss, Gerstorf, & Wagner, 2013; Moore, 2006), emerging evidence has indicated that such beliefs are an indication of distress and dysfunction rather than positive psychological health (Busseri, Choma, & Sadava, 2012; Choma, Busseri, & Sadava, 2014; Röcke & Lachman, 2008). For example, individuals who perceive their LS to

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be improving over time, particularly between their current and anticipated futures, are characterized by less positive psychological functioning (less positive affect, greater negative affect, lower self-esteem, less hope) compared with individuals who perceive their lives to be relatively stable over time—a pattern that has been observed on the basis of cross-sectional and longitudinal findings (Busseri, Choma, & Sadava, 2009a; Keyes & Ryff, 2000; Lachman, Röcke, Rosnick, & Ryff, 2008). The available evidence thus suggests that how individuals view their lives as unfolding over time not only reflects but also prospectively predicts their psychological health and well-being. Moreover, the belief that life gets better may not be psychologically optimal.

The psychological implications of how individuals view their lives as unfolding over time may have (previously unrecognized) relevance to clinical disorders, such as depression, that are characterized by negative thoughts and beliefs. In particular, cognitive theories of depression (e.g., Beck, 1967) assert that depression results from, and is maintained by, distorted beliefs about one's self, the world, and the future. Individuals who are clinically depressed (vs. nondepressed) are characterized by negative thoughts related to personal past life events and experiences that are often conveyed in themes related to personal loss and failure (Beck, Wenzel, Riskind, Brown, & Steer, 2006; Bjärehed, Sarkohi, & Andersson, 2010; Dagleish, Hill, Golden, Morant, & Dunn, 2011; Eysenck, Payne, & Santos, 2006; Macleod, Tata, Kentish, & Jacobsen, 1997; Miles, MacLeod, & Pote, 2004). Depressed individuals also tend to experience greater distress in their current lives and to evaluate their current lives more negatively than do nondepressed individuals (Burns, Anstey, & Windsor, 2011; Miles et al., 2004; Miranda & Mennin, 2007; Satyanarayana, Enns, Cox, & Sareen, 2009). Depression has been further linked with more negative and less positive predictions concerning future personal life events and experiences (Strunk, Lopez, & De Rubeis, 2006), which often reflects themes of hopelessness or lack of control (e.g., Beck et al., 2006; Bjärehed et al., 2010; Miranda & Mennin, 2007).

The pervasiveness of such negative self-evaluations suggests that depression may arise, at least in part, from of an underlying predisposition toward negativity (T. A. Brown & Barlow, 2009; Clark, 2005; Mineka, Watson, & Clark, 1998; Shankman & Klein, 2003). Amplifying this tendency, depressed individuals have a heightened proclivity to ruminate on negative memories, thoughts, and emotions concerning the personal past and present (Nolen-Hoeksema, 2000; Watkins & Nolen-Hoeksema, 2014). Depressed individuals may also view a positive future as a normative standard relative to which they are consistently failing rather than as a positive goal they are actively striving to meet (Higgins, Klein, & Strauman,

1985; Strauman, 1989; Veith et al., 2003); such chronic perceived self-discrepancies may diminish their determination to achieve a brighter future and lead to a sense of hopelessness and helplessness (Klenk, Strauman, & Higgins, 2011). Furthermore, attributions for negative personal outcomes and experiences to internal, stable, and global causes lead depressed individuals to feel less able and, thus, less motivated to work toward controlling future life outcomes, which ultimately increases the risk of sustained or future depression (Abramson, Alloy, & Metalsky, 1989; Peterson & Seligman, 1984). Evidence thus suggests that depressed individuals view their past, current, and anticipated future lives more negatively than do nondepressed individuals and that these negative memories, thoughts, experiences, and predictions may increase the risk of future depression.

Yet to be determined, however, is how depressed individuals evaluate their lives as unfolding over time, given that previous research on subjective LS trajectories has been based on nonclinical samples. Consequently, evaluation of whether findings from such studies extend (even) to depressed individuals would constitute a strong test of a potential boundary condition on the widespread belief that life gets better and better. It would also provide an important extension to previous clinical research focused on comparisons between depressed and nondepressed individuals on the basis of their memories of the past and predictions for the future (e.g., Beck et al., 2006; Miranda & Mennin, 2007)—rather than global self-appraisals pertaining to how their lives, overall, are unfolding over time. For example, although it has been suggested that “in principle, those with a history of depression can contemplate the future in a way that is not simply a forward projection of their depressogenic analysis of the past” (Dagleish et al., 2006, p. 10), this notion awaits empirical investigation.

Thus, in the present study, our first goal was to determine how depressed (vs. nondepressed) individuals perceived their lives to be unfolding over time, as reflected in their evaluations of their recollected past, current, and anticipated future LS. Given the developmental imperative of growth and self-improvement during younger adulthood (Baltes, 1987), we focused on individuals who were 45 years of age or younger at the first wave of a large-scale, longitudinal survey of American adults. Consistent with previous clinical research and theorizing that has linked depression with negative self-evaluations and thoughts concerning one's life (Beck, 1967; Mineka et al., 1998; Shankman & Klein, 2003), our expectation was that depressed individuals would report lower LS than would nonclinical individuals at each subjective temporal perspective. With respect to how depressed individuals evaluate their LS as unfolding over time, however, two possibilities were specified a priori. Given the

generalized negativity characteristic of depression (T. A. Brown & Barlow, 2009; Clark, 2005), depressed individuals could be characterized by low LS across all three temporal perspectives, thereby resulting in low and stable subjective trajectories. Alternatively, the widespread belief that life gets better over time (Shmotkin, 1991; Staudinger et al., 2003) supports the provocative prediction that even depressed individuals would be characterized by inclining subjective LS trajectories.

Our second goal was to evaluate whether beliefs concerning how one's life is unfolding over time predict risk of depression across time. In research based on nonclinical samples, subjective trajectories and related beliefs have been shown to longitudinally predict future psychological functioning, including emotional distress and dysphoria (Busseri et al., 2009a; Keyes & Ryff, 2000; Lachman et al., 2008). Yet researchers have yet to test whether temporal self-evaluations predict risk of depression in a longitudinal context based on a clinical sample. Evaluating this issue would provide opportunities for new insights concerning predictors of depression on the basis of a temporally expanded perspective. To do so, we evaluated ratings of past, current, and anticipated future LS from the first wave of the longitudinal survey as predictors of depression status at the second wave of the survey (approximately 10 years later) with controls for Wave 1 depression status and demographic variables. On the basis of previous research concerning the psychological implications of subjective LS trajectories (e.g., Busseri et al., 2009a; Choma et al., 2014), we expected they would have predictive utility above and beyond signaling the concurrent distress and dissatisfaction typical of clinical depression. Specifically, we predicted that the temporal-perspective LS ratings would play a unique role in predicting risk of depression over time.

Method

Participants and procedure

The data come from the Midlife Development in the United States (MIDUS) survey, a two-wave nationally representative sample of middle-aged American noninstitutionalized, English-speaking adults (for an overview, see Brim, Ryff, & Kessler, 1995, 2004). Participants were selected using a random-digit-dialing procedure. At Wave 1, participants completed a 1-hr telephone survey and a 2-hr self-administered questionnaire. At Wave 2, approximately 10 years later, participants were recontacted and invited to again complete a telephone survey and a self-administered questionnaire. Note that several studies have reported findings from the MIDUS, including reports on depression (e.g., Sbarra, Emery, Beam, & Ocker, 2014; Whisman, Johnson, & Rhee, 2014) and LS (e.g., Röcke &

Lachman, 2008; Staudinger et al., 2003). No studies to date, however, have focused on the issues addressed in the present work.

We examined two subsamples from the full baseline sample. Given that inclining subjective LS trajectories are normative among younger and middle-aged adults, we limited our analyses to individuals 45 years of age or younger at Wave 1 so that these individuals would still be within the target age range at Wave 2 (i.e., 54 years of age or younger, consistent with findings from Staudinger et al., 2003). The first subsample, hereafter referred to as the Wave 1 subsample, comprised all Wave 1 participants who were 45 years of age or younger and whose Wave 1 data on all of the measures described in the Measures section were available ($n = 2,974$). The second subsample, hereafter referred to as the longitudinal subsample, comprised participants in the Wave 1 subsample for whom data from the relevant measures were also available at Wave 2 ($n = 1,760$). See Table 1 for demographic information and variable descriptive statistics.

Note that in the Wave 1 subsample, participants' self-identified race was 88.4% White, 6.1% Black and/or African American, and 5.5% other. Furthermore, their primary country/area of ethnic origin was 47.8% Europe/Russia, 29.4% United Kingdom, 11.1% North America, 3.7% Africa, 3.6% Central America/Caribbean, 1.8% Asia/India, 0.7% Middle East, 0.3% South America, and 1.7% other (unspecified). Results were similar in the longitudinal subsample.

Measures

Demographics. Age, sex, education level, and household income were self-reported at Wave 1. Age (in years) and household income (\$0–\$300,000 or greater) were treated as continuous variables. Sex (0 = female, 1 = male) and education level (0 = high school or less, 1 = some college or more) were examined as dichotomous variables.

LS. The self-anchoring scaling approach (Kilpatrick & Cantril, 1960) was used to assess participants' recollected past (10 years ago), current, and anticipated future (10 years ahead) LS at Wave 1; responses were made using an 11-point scale from 0 (*worst life possible*) to 10 (*best life possible*). The validity and reliability of this approach has been well documented (e.g., Diener, Inglehart, & Tay, 2013; Lucas & Donnellan, 2012; McIntosh, 2001).

Depression. At each wave, a structured clinical interview was undertaken with each participant by trained telephone interviewers on the basis of the World Health Organization's Composite International Diagnostic Interview (CIDI; Blazer, Kessler, McGonagle, & Swartz, 1994;

Table 1. Wave 1 Demographic and Descriptive Information by Subsample

| Variable | Subsample | |
|------------------------------------|-----------------|-----------------|
| | Wave 1 | Longitudinal |
| Demographic | | |
| Age | 35.80 (5.84) | 36.34 (5.78) |
| Sex (% male) | 48 | 44 |
| Education (% some college or more) | 67 | 71 |
| Income (\$) | 73,390 (58,791) | 75,507 (57,630) |
| Wave 1 life satisfaction | | |
| Past (–10 years) | 6.80 (1.98) | 6.81 (1.96) |
| Current | 7.56 (1.57) | 7.65 (1.46) |
| Future (+10 years) | 8.57 (1.37) | 8.57 (1.30) |
| Wave 1 depression status (%) | | |
| Nondepressed | 85.8 | 86.4 |
| Fully remitted | 8.3 | 8.2 |
| Partially remitted | 4.5 | 4.4 |
| Currently depressed | 1.3 | 1.0 |
| Wave 2 depression status (%) | | |
| Nondepressed | | 89.8 |
| Fully remitted | | 6.1 |
| Partially remitted | | 2.8 |
| Currently depressed | | 1.2 |

Note: The table presents means for each measure. Standard deviations are shown in parentheses. Wave 1 subsample: $n = 2,974$; longitudinal subsample: $n = 1,760$.

Whittchen, 1994). Note that although this version of the CIDI was based on the *Diagnostic and Statistical Manual of Mental Disorders* (3rd ed., rev.; *DSM-III-R*; American Psychiatric Association, 1987), the criteria for major depression episode and major depressive disorder are the same as those specified in the *DSM-5* (American Psychiatric Association, 2013). More specifically, at each wave, participants were determined to have had a major depression episode if they had a period of 2 (or more) weeks in the past 12 months during which they experienced at least five of the following symptoms: depressed mood or loss of interest in most activities (for most of the day, nearly every day) in combination with decreased or increased appetite, insomnia, fatigue or loss of energy, feelings of worthlessness, concentration problems, and recurrent thoughts of death.¹ Using information provided by participants concerning the timing of this 2-week period, and comparing this timing with the date of the telephone interview, we classified participants into one of four diagnostic groups for major depressive disorder, consistent with the *DSM-5*: nonclinical/control (no major depression episode in the past 12 months), fully remitted (met criteria for a major depression episode in the past 12 months but not in the past 2 months), partially remitted (met criteria in the past 2 months but not in the

current month), and current (met criteria in the current month, i.e., the same month as the interview).

Results

Wave 1 subjective trajectories by depression status (Wave 1 subsample)

Correlations among the Wave 1 study variables are shown in Table 2. To evaluate the Wave 1 subjective LS trajectories as a function of Wave 1 depression status, we compared ratings of their past, current, and anticipated future LS using a 4 (Comparison Group: nondepressed, fully remitted, partially remitted, currently depressed) \times 3 (Subjective Temporal Perspective: past, current, future) mixed-model analysis of covariance, with four demographic variables (age, sex, education, and income) entered as covariates. The main effects of subjective temporal perspective, $F(2, 5932) = 109.80, p < .001, \eta^2 = .04$, and comparison group, $F(3, 2966) = 33.85, p < .001, \eta^2 = .03$, were significant, as was their interaction, $F(6, 5932) = 8.80, p < .001, \eta^2 = .01$. A plot of the mean subjective LS trajectories by comparison group is shown in Figure 1. Results from pairwise comparisons are summarized in Table 3.

Compared with the nondepressed group, each of the depression groups had significantly lower LS at each temporal perspective, with one exception (past LS did not differ between nondepressed vs. currently depressed groups). Within groups, comparisons between each pair of subjective temporal perspectives were significant in the nondepressed and fully remitted groups; in the partially remitted and currently depressed groups, the contrast between past and current LS was nonsignificant, whereas the contrasts between past and current LS versus future LS were significant. Together, these findings indicate that the shapes of the subjective LS trajectories differed among the comparison groups. As shown in Figure 1, individuals in the partially remitted and currently depressed groups were characterized by (relatively) flat subjective trajectories between past and current LS, rather than the inclining subjective trajectories between these two temporal perspectives observed in the fully remitted and nondepressed groups. Furthermore, the subjective trajectories between current and anticipated future LS were steeper among the depressed groups than the nondepressed group.

Predicting Wave 2 depression status (longitudinal subsample)

To evaluate the Wave 1 temporal-perspective LS ratings as predictors of depression risk across time, we estimated a logistic regression model in which Wave 2 depression

Table 2. Correlations Among Wave 1 Study Variables (Wave 1 Subsample)

| Variable | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |
|---------------------------------------|------|------|------|------|------|------|------|---|
| 1. Age | — | | | | | | | |
| 2. Sex (% male) | .04 | — | | | | | | |
| 3. Education (% some college or more) | -.04 | .04 | — | | | | | |
| 4. Income (\$) | .13 | .07 | .20 | — | | | | |
| 5. Past life satisfaction | .03 | .03 | .04 | .08 | — | | | |
| 6. Current life satisfaction | -.01 | -.02 | .00 | .18 | .30 | — | | |
| 7. Future life satisfaction | -.15 | -.09 | .04 | .08 | .15 | .61 | — | |
| 8. Depression status | .02 | -.07 | -.06 | -.09 | -.08 | -.23 | -.11 | — |

Note: $n = 2,974$. Depression status is represented as an ordinal variable (0 = no past-year depression, 1 = fully remitted, 2 = partially remitted, 3 = currently depressed). Correlations larger in absolute value than .03 are significant at $p < .05$.

status (1,581 nondepressed participants, coded as 0, compared with 179 past-year/current depression participants, coded as 1)² was regressed onto the four Wave 1 demographic variables (age, sex, education, and income), Wave 1 depression status (represented by three dummy codes, each representing a comparison between the control group, coded as 0, and one of the three depression groups, coded as 1), and Wave 1 ratings of past, current, and anticipated future LS.

The regression model was significant—model $\chi^2(10, N = 1760) = 148.96, p < .001, -2 \log \text{likelihood} = 1,008.49$, Nagelkerke $R^2 = .17$. As shown in Table 4, Wave 2 depression status was uniquely predicted by sex, education, and Wave 1 depression status, as well as Wave 1 ratings of

of past and current LS. More specifically, risk of current/past-year depression at Wave 2 was significantly higher among female (vs. male) participants, individuals with lower education at Wave 1, and classification of past-year or current depression at Wave 1 (i.e., fully remitted, partially, or currently depressed vs. nondepressed), as well as lower ratings of past and current LS at Wave 1. These findings indicate that, even after we controlled for demographic variables and baseline depression status, risk of past-year/current depression at Wave 2 was significantly higher among individuals with subjective LS trajectories at Wave 1 characterized by lower than normal ratings of past and current (but not future) LS, which is consistent with the means plot shown in Figure 1.

Discussion

Depressed individuals reported lower levels of LS than did nondepressed individuals at all three temporal perspectives. Furthermore, the shapes of the subjective LS trajectories differed between depressed (stagnation from past to current LS plus a brighter future) versus nondepressed (linear improvement in LS across the entire subjective trajectory) individuals. Nonetheless, depressed individuals evaluated their lives as improving from the recollected past to the anticipated future. Thus, the belief that life gets better over time is common even among individuals with major depressive disorder. Furthermore, the link between these beliefs and depression was observed not only concurrently but also across a 10-year period; that is, ratings of past and current LS at Wave 1 predicted heightened risk of future depression, after we controlled for baseline depression status. We consider the implications of these findings for research and theorizing on depression, subjective LS trajectories, and clinical intervention in the following paragraphs.

With respect to our first goal, the present findings provide new insights concerning how depressed versus nondepressed individuals evaluate their past, current, and

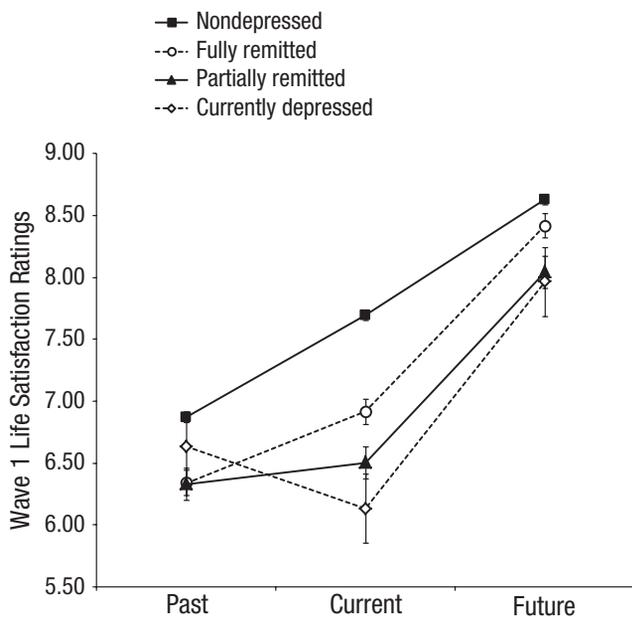


Fig. 1. Results: mean Wave 1 life satisfaction ratings as a function of subjective temporal perspective and Wave 1 comparison group. Error bars represent \pm standard error.

Table 3. Mean Wave 1 Subjective Temporal-Perspective Life Satisfaction Ratings by Comparison Group (Wave 1 Subsample)

| Comparison group | Life satisfaction | | | Comp B |
|------------------------|-------------------|--------------|--------------|-----------|
| | Past | Current | Future | |
| 1. Nondepressed | 6.87 (0.04) | 7.70 (0.03) | 8.63 (0.03) | P < C < F |
| 2. Fully remitted | 6.34 (0.13) | 6.92 (0.10) | 8.42 (0.09) | P < C < F |
| 3. Partially remitted | 6.33 (0.17) | 6.51 (0.13) | 8.04 (0.12) | P, C < F |
| 4. Currently depressed | 6.63 (0.32) | 6.13 (0.24) | 7.97 (0.22) | P, C < F |
| Comp A | 1, 4 > 2, 3, 4 | 1 > 2 > 3, 4 | 1 > 2 > 3, 4 | |

Note: The table presents means for each measure. Standard errors are shown in parentheses. The Wave 1 subsample ($n = 2,974$) comprised 2,553 nondepressed, 248 fully remitted, 135 partially remitted, and 38 currently depressed individuals. Comp A = summary of results from pairwise comparisons among groups, within each subjective temporal perspective (column; 1 = nondepressed, 2 = fully remitted, 3 = partially remitted, 4 = currently depressed); Comp B = summary of results from pairwise comparisons among subjective temporal perspectives, within each group (row; P = past, C = current, F = future).

anticipated future lives. Previous research on such evaluations has been based on nonclinical samples. Yet depression has been conceptualized in highly relevant ways, including in terms of a pervasive, underlying tendency toward negativity (e.g., T. A. Brown & Barlow, 2009; Clark, 2005; Shankman & Klein, 2003). Clinical research to date has evaluated depressive cognitions concerning specific life outcomes or experiences occurring at particular temporal perspectives (e.g., Macleod et al., 1997; Miles et al., 2004; Strunk et al., 2006) or with respect to current LS (e.g., Burns et al., 2011; Miles et al., 2004; Miranda & Mennin, 2007; Satyanarayana et al., 2009). Our findings provide an important extension to this literature by showing that a generalized negativity also pervades depressed individuals' evaluations of their lives across all three temporal perspectives. Accordingly, with respect to the characterization of depression in terms of a cognitive triad of negative thoughts concerning oneself, the world, and one's future (Beck, 1967), our results suggest an expanded triad comprising negativity in self-evaluations of one's personal past, current, and anticipated future life.

The global and temporally expansive nature of these negative evaluations provides a new lens through which to conceptualize and study the negative self-schema thought to underlie the cognitive errors and negative self-related thoughts characteristic of depressed individuals (e.g., Beck, 1967; Young, Rygh, Weinberger, & Beck, 2008). Furthermore, clinical interventions focusing on negative belief systems and distorted thoughts (e.g., Dimidjian, Martell, Addis, & Herman-Dunn, 2008; Young et al., 2008) may benefit from addressing depressed individuals' negative evaluations of their lives encompassing all three temporal perspectives.

Extending beyond the individual temporal perspectives, additional insights emerged from our examination of how individuals view their lives as unfolding over time, as reflected in their subjective LS trajectories. Consistent with previous subjective trajectory research findings based on nonclinical samples (Busseri et al., 2009a; Ross & Newby-Clark, 1998), results in the present study showed that both nondepressed and depressed individuals viewed their LS as improving over time,

Table 4. Results From Logistic Regression Model Predicting Wave 2 Depression Status (Past-Year/Current Depression vs. Nondepressed) From Wave 1 Demographics, Depression Status, and Subjective Temporal-Perspective Life Satisfaction Ratings (Longitudinal Subsample)

| Wave 1 predictor | <i>b</i> | <i>p</i> | Exp(β) |
|--|--------------|----------|----------------|
| Age | 0.00 (0.02) | .78 | 1.00 |
| Sex (0 = female, 1 = male) | -0.99 (0.19) | < .001 | 0.37 |
| Education (0 = high school or less, 1 = college or more) | -0.36 (0.18) | .04 | 0.70 |
| Income (\$) | -0.03 (0.02) | .08 | 0.97 |
| Fully remitted (vs. nondepressed) | 1.27 (0.23) | < .001 | 3.54 |
| Partially remitted (vs. nondepressed) | 1.27 (0.29) | < .001 | 3.54 |
| Currently depressed (vs. nondepressed) | 2.24 (0.51) | < .001 | 9.38 |
| Past life satisfaction | -0.10 (0.04) | .01 | 0.90 |
| Current life satisfaction | -0.14 (0.07) | .03 | 0.87 |
| Future life satisfaction | -0.03 (0.70) | .64 | 0.97 |

Note: Standard errors are shown in parentheses. $n = 1,760$.

particularly from their past to anticipated future lives. This result may be surprising to laypeople, pollsters, clinicians, and researchers alike who tend to interpret inclining subjective trajectories as a positive sign (e.g., Gallagher et al., 2013; Lang et al., 2013; Moore, 2006). Yet the nonlinear subjective trajectories observed among depressed individuals, comprising low and stable trajectories from past to current LS in combination with a more positive anticipated future, are consistent with reports from previous studies of a similar subjective trajectory pattern among less well-functioning individuals (e.g., low self-esteem, low dispositional optimism; Busseri, 2013; Busseri, Choma, & Sadava, 2009b; Busseri, Malinowski, & Choma, 2013; Choma et al., 2014). The present findings extend this previous nonclinical research by revealing that even current (vs. remitted) depression is not a boundary condition for the widespread belief that life gets better over time. That the negative thinking patterns characteristic of depressed individuals do not translate into anticipating a dark or darker future relative to one's past and present lives (but rather an improved future) provides startling new evidence concerning the pervasiveness of this belief. From a life-span perspective, gains during younger adulthood (including self-improvement and growth) are a developmental imperative (Baltes, 1987; Freund, 2006); it appears that the belief in these growth-related processes is ubiquitous, even among individuals characterized by clinically significant distress.

And yet the present findings support the delineation of a "psychologically *suboptimal*" subjective trajectory as comprising perceived stagnation from (low levels of) past to current LS, juxtaposed against a brighter anticipated future. Among depressed individuals, the perception that one's overall life has not yet improved—as seen in the stagnant subjective trajectories between their recollected past and current lives—may reflect a learning history characterized by disappointment and perceived failure, thereby creating an enduring sense of hopelessness and lack of control over one's life (Abramson et al., 1989). If so, the brighter future envisioned by depressed individuals may in fact be perceived as a burdensome obligation or a comparison standard against which they feel they are chronically failing and the attainment of which is deemed to be beyond one's ability (Klenk et al., 2011; Strauman, 1989). Although it may seem counterintuitive to interpret an inclining subjective trajectory as a sign of hopelessness, in nonclinical samples, steeper upward trajectories are, in fact, linked with lower levels of dispositional hope (Choma et al., 2014) and greater dispositional pessimism (Busseri, 2013; Busseri et al., 2009b; Busseri et al., 2013), which is itself strongly linked with hopelessness (Beck, Weissman, Lester, & Trexler, 1974). Thus, among depressed individuals, visions of a much improved personal future may be a form of

escapism (Marroquin, Nolen-Hoeksema, & Miranda, 2013) or wishful thinking (Busseri et al., 2009a) rather than a reflection of one's confidence in achieving a more satisfying future.

Accordingly, consideration of the degree of incline in the subjective trajectories between depressed individuals' current and anticipated future lives may provide valuable therapeutic insights concerning the perceived likelihood of achieving a brighter future, as well as a context for developing realistic and concrete plans for achieving such a future. Such an approach may be particularly useful in therapies that focus on behavioral activation, goal setting, and commitment to self-change through effective self-regulation (e.g., Haynes, Luoma, Bond, Masuda, & Lillis, 2006; Strauman et al., 2006).

Concerning our second goal, which pertained to whether temporal-perspective LS evaluations predicted risk of depression across a 10-year period, in the longitudinal analysis, more negative ratings of past and current LS were each uniquely predictive of heightened risk of future depression. These findings provide new support for the notion of a depressogenic cognitive feedback loop wherein depression is fostered by a habitual cognitive style characterized by an inability to move past, or set aside, negative thoughts concerning one's past and present life (e.g., Nolen-Hoeksema, 2000; Watkins et al., 2007). Accordingly, valuable clinical insights may emerge from exploring in therapy the reasons why depressed individuals believe that their lives have stagnated, including memories concerning past life events, perceptions of current life outcomes, and attributions for each. In this regard, our longitudinal findings may be particularly informative for intervention modalities that seek to address individuals' habitual thinking patterns with respect to their past and present lives (e.g., Papageorgiou & Wells, 2004), as well as those that address ways to focus positively on one's present life in ways that are not contaminated or limited by the past (e.g., Haynes et al., 2006).

In contrast to the predictive utility of evaluations of past and current LS, the Wave 1 ratings of anticipated future LS were not uniquely predictive of risk of future depression. Of the three subjective temporal perspectives, therefore, evaluations of one's anticipated future life may be least relevant to identifying individuals at greatest risk of future depression. However, given that this was the first study (to our knowledge) to focus on all three temporal perspectives simultaneously in predicting long-term risk of depression, additional research is needed based on a temporally expanded perspective before firmer conclusions can be drawn concerning which subjective temporal perspectives are most or least useful for forecasting depression. It is possible, for example, that risk of depression is best predicted by an underlying (i.e., latent) tendency toward negative life evaluations across all three

temporal perspectives rather than by the separate evaluations of one's past, current, or anticipated future life.

With respect to limitations of the present study, consistent with our interest in examining clinical depression as a potential boundary condition on the widespread belief that life gets better and better over time, our analyses were confined to individuals 45 years of age or younger at Wave 1. Our findings, therefore, may be limited to the developmental life stages between early and middle adulthood, particularly given that declining (rather than inclining) subjective LS trajectories are common among older adults (Busseri, 2013). Furthermore, although a random-sampling procedure was used to select the baseline sample, because of the attrition between Wave 1 and Wave 2, our results will not necessarily generalize to the broader American population from which MIDUS participants were drawn.³ The use of two assessments separated by 10 years provided a unique opportunity to assess the association between LS evaluations and depression over a substantial period of time. However, the evaluation of more fine-grained temporal dynamics requires more intensive longitudinal assessment (e.g., multiple annual assessments).

Also, we focused on two main sets of variables, LS and depression, both of which were assessed using single measures based on self-report. Given the subjective nature of LS, self-report is an appropriate measurement strategy. Nonetheless, although research based on joint assessment of self-ratings and informant ratings of LS has shown a moderate degree of convergence (Schneider & Schimmack, 2009), the association between self-reports and clinician ratings of depression may be less robust (Cunningham, Wernroth, von Knorring, Berglund, & Ekselius, 2011; Moller, 2000). Consequently, observed associations in the present study may have been inflated as a result of common method variance (i.e., self-report) relative to what these associations may have been if based on self-reports of LS and clinician assessments of depression, for example. However, our use of a prospective design covering a 10-year period, and statistical control for baseline depression status, should help minimize the potential bias (e.g., heightened within-wave correlations) resulting from the exclusive reliance on self-report.

Further research should address several critical issues arising from the present work. In particular, studies are needed to shed light on the processes by which individuals' beliefs about how their lives are unfolding over time may affect risk of depression. We speculate that self-regulation may play a key mediating role, particularly individuals' motivation and perceived ability to achieve the brighter futures they envision. Also needed is examination of personal characteristics and social or environmental conditions that may modulate the extent to which subjective LS trajectories are predictive of future risk of

depression. For example, the belief that life gets better over time may be benign (i.e., have a nonsignificant association with depression) among individuals with a strong sense of hope and a realistic plan for future self-improvements; in contrast, this same belief may be predictive of greater risk of depression among individuals lacking the means or social supports needed to change their lives in a positive direction. To these ends, longitudinal research tracking potential mediating and moderating factors in relation to subjective LS trajectories and depression status would be valuable.

Given that inclining subjective LS trajectories were normative among even depressed individuals, additional research is needed to identify possible boundary conditions on the belief that life gets better over time among younger adults. For example, suicidal ideation has been linked with a bleak outlook concerning the personal future (e.g., G. K. Brown, Beck, Steer, & Grisham, 2000; Sargalska, Miranda, & Marroquín, 2011). Thus, among suicidal individuals, the anticipated future may be evaluated as negatively as (if not more so than) one's current life. Such research would provide valuable theoretical and practical clinical information concerning a potential novel and indirect sign of acute suicide risk.

Also needed are investigations evaluating whether individuals' subjective LS trajectories can be modified, either experimentally or through clinical intervention, to gauge the resulting impact on risk of depression. Cognitive-related therapies, including interventions that focus on rumination style (Papageorgiou & Wells, 2004), acceptance-commitment (Haynes et al., 2006), or self-regulatory focus (Strauman et al., 2006), may be particularly useful contexts within which depressive thoughts concerning one's past, current, and future lives can be addressed. For example, therapeutic focus on problem-solving skills relevant to converting the steep path to an improved personal future life into concrete goals and achievable steps may prove effective for harnessing the motivating potential of the widespread belief in a brighter future, even among depressed individuals.

Author Contributions

M. A. Busseri and E. Peck developed the study and analyzed the data. M. A. Busseri drafted the manuscript and both authors revised the manuscript. Both authors approved the final version of the manuscript for submission.

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The authors declared that they had no conflicts of interest with respect to their authorship or the publication of this article.

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Notes

1. One symptom of major depressive disorder specified in both the *DSM-III-R* and the *DSM-5* was not assessed at either wave in the MIDUS: psychomotor agitation or retardation. The present study may therefore underestimate the prevalence of clinical depression because the clinical criteria concerning the total number of symptoms required according to the *DSM-5* (i.e., five or more symptoms) was maintained in the present study despite the assessment of eight, rather than nine, symptoms.
2. To maximize statistical power in predicting Wave 2 depression status, we combined the three depressed groups at Wave 2 (i.e., currently depressed, $n = 21$; partially remitted, $n = 50$; and fully remitted, $n = 108$) into a single “past-year/current depression” group.
3. Of the 2,974 participants in the Wave 1 subsample, 1,214 participated at Wave 1 only and 1,760 were included in the longitudinal subsample. Compared with participants included in the longitudinal subsample, individuals who participated at Wave 1 only were younger, had lower income, had lower current (but not past or future) LS, were more likely to be male, and were less educated at Wave 1 ($ps < .05$); groups did not differ significantly with respect to Wave 1 depression status. Together, the Wave 1 variables previously listed accounted for 6% of the variance between the Wave 1 only group and the longitudinal subsample.

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