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Relationships among personal life stories, vicarious life stories about mothers and fathers, and well-being

Dorthe Kirkegaard Thomsen^{1,2} and Anna Vedel¹

¹Department of Psychology and Behavioural Sciences, Aarhus University

²Center on Autobiographical Memory Research (CON AMORE), Aarhus University

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Corresponding author: Dorthe Kirkegaard Thomsen, Department of Psychology, Aarhus University, Bartholins Allé 9, DK-8000 Aarhus C, dorthet@psy.au.dk

Abstract

We examined whether vicarious life stories about mothers and fathers differed in their relationships with personal life stories and well-being. Seventy-six emerging adults completed scales measuring well-being and described three chapters in their personal, mothers', and fathers' life stories. Chapters were self-rated and content coded for emotional tone and positive/negative person change. Characteristics of personal life stories were positively correlated with characteristics of vicarious life stories for mothers and fathers. Personal life stories were higher on positive person change than vicarious life stories about mothers and fathers. Higher well-being was related to rating all three life stories as more positive, but results for content coding were more mixed. The results indicate that vicarious life stories for mothers and fathers are related in similar ways to personal life stories and well-being.

KEYWORDS: VICARIOUS LIFE STORIES; INTERGENERATIONAL STORIES; SELF-RATING; WELL-BEING; NARRATIVE IDENTITY

Relationships among personal life stories, vicarious life stories about mothers and fathers, and well-being

Parents and children talk about events every day and even as children turn into young adults they retain the stories told by parents (McLean, 2016; Merrill & Fivush, 2016). These stories may be combined with stories heard from grandparents, aunts, and uncles as well as with direct observation of shared events to form vicarious life stories about parents (Thomsen & Pillemer, 2017). Vicarious life stories refer to mental representations of temporally, causally, and thematically coherent accounts of close others' lives and may shape personal life stories by coloring individuals' reflections about how they are (or wish to be) *different from* and how they are (or wish to be) *similar to* the other person (Lind & Thomsen, 2017). Thus, for emerging adults, vicarious life stories about parents may shape their developing narrative identities as they experience milestones such as education, work, romantic relationships, and parenthood.

Compared to personal life stories, vicarious life stories are much less researched. In a related research area, studies have examined intergenerational narratives of circumscribed events and found differences in narratives about mothers and fathers (Zaman & Fivush, 2011; see Merrill & Fivush, 2016 for a review). However, these studies have not examined vicarious life stories and in order to capture broader life stories in the present study, we ask for chapters in personal and vicarious life stories. Chapters are important parts of life stories (McAdams, 2001) and refer to "extended time periods with perceived beginnings and endings that are considered important to how the person has become who she or he is today" (Thomsen, Steiner, & Pillemer, 2016, p. 144). Since one chapter often leads directly to the next chapter (e.g., high school-college; marriage-widowhood), they support temporal and causal coherence in life stories, and studies show that individuals often include chapters when they tell life stories (Thomsen, 2009; 2015). Using the chapter approach, we examined whether vicarious life stories about mothers and fathers differed. We tested first whether

vicarious life stories about mothers and fathers related to and differed from personal life stories in similar ways, and second, whether vicarious life stories about mothers and fathers related to subjective well-being in similar ways. Below, we address each of these in turn: Relations between personal life stories and vicarious life stories about mothers and fathers, differences between personal life stories and vicarious life stories about mothers and fathers, and lastly, vicarious life stories and well-being.

Relations between personal and vicarious life stories

Personal life stories are constructed to support identity and have also been termed narrative identity (McAdams & McLean, 2013; Singer & Bluck, 2001). Storying events is a basic human capacity that is central to achieve meaning and self-understanding (Bruner, 1990). At the same time, different ways of constructing narratives are related to variance in a wide range of outcomes such as well-being, mental illness, and personality (Adler, Lodi-Smith, Philippe, & Houle, 2016; Allé et al., 2015; McAdams, Anyidoho, Brown, Huan, Kaplan, & Machado, 2004).

Recently, it has been suggested that individuals also construct life stories about close others, vicarious life stories (Thomsen & Pillemer, 2017). Like personal life stories, vicarious life stories are constructed by selecting some events over others, organizing events into coherent accounts, and interpreting the effects of events on the person (Habermas & Bluck, 2000; McAdams, 1996; Pasupathi, Mansour, & Brubaker, 2007; Singer, Blagov, Berry, & Oost, 2013). These biographical reasoning processes shape the emotional content of life stories such that they are told with positive or negative emotional tones and with interpretations of whether events caused the person to change in positive or negative ways (Holm & Thomsen, 2018; McAdams, 1996; Pasupathi et al., 2007).

In outlining a theory about vicarious life stories, Thomsen and Pillemer (2017) suggested that individuals construct mental models of close others, including knowledge about the others' traits, characteristic adaptations, and life stories. Drawing on a range of ideas, the theory further assumes

that these mental models of close others are interrelated with mental models of the self and that relationships between personal and vicarious life stories are therefore to be expected (Thomsen & Pillemer, 2017). Such relationships are probably more likely for personal life stories and vicarious life stories about parents, given that parents are caregivers and that mental models of parents and the self develop in close interaction (Bowlby, 1975). Thus, when individuals construct their personal life stories to understand who they are, they may draw on vicarious life stories, particularly those of parents, which may then shape personal life stories to become similar to vicarious life stories about parents (McLean, 2016; Merrill & Fivush, 2016; Thomsen & Pillemer, 2017). For example, when encountering difficulties in educational settings, similar problems experienced by parents may come to mind and if the parents' stories emphasize learning and personal growth, this may infuse personal life stories with similar themes. Consistent with this assumption, studies have found that the personal life stories of adult children are related to vicarious life stories about the parent they feel closest to on emotional tone and person change (Lind & Thomsen, 2017), that personal and vicarious life stories about mothers are related on emotional tone and person change (Thomsen, Panattoni, Allé, Wellnitz, & Pillemer, under review). This finding also extends to vicarious life stories about other people: Describing personal life stories as more positive is related to describing vicarious life stories about close friends more positively (Thomsen & Pillemer, 2017), and romantic partners' personal and vicarious life stories about their partners are related on themes of agency, communion, and redemption (Panattoni & Thomsen, 2018). However, these previous studies have not directly compared whether vicarious life stories about mothers and fathers are related to personal life stories in similar ways and we examined this question in the present study.

We expected similar relationships between personal life stories and vicarious life stories about mothers and fathers. Mothers are often primary caregivers (Craig & Mullan, 2010; Moon & Hoffman, 2008) and have been suggested to take on the role as family story keepers (Merrill &

Fivush, 2016). Still, both mothers and fathers are attachment figures and the quality of relationships to both mothers and fathers predict a range of outcomes (Grossman, Grossman, Kindler, & Zimmermann, 2008). In addition, in Denmark, where the present study was conducted, the difference in childcare time between mothers and fathers is small (Craig & Mullan, 2010), in principle leaving both mothers and fathers similar opportunities to form attachment and share life stories with their children. Hence, children may form vicarious life stories about both mothers and fathers, and both vicarious life stories may shape children's personal life stories. In addition, the studies reviewed above have found a similar pattern of relations between personal and vicarious life stories across a range of close others (friends, romantic partners, and mothers) also leading to the prediction of no differences in relations between personal life stories and vicarious life stories about mothers and fathers.

Differences between personal and vicarious life stories

Vicarious life stories may also be used in the construction of personal life stories by emphasizing how the individual is *different from* the other person. Differences between oneself and others may play out in a wide range of life story aspects, but here we focus on the construction of oneself as a worthy and growing person. The reason for this focus is that maintaining a positive view of the self is a dominant motive affecting a range of processes (Sedikides & Gregg, 2008) and would likely be involved in how personal life stories are constructed differently from vicarious life stories (Thomsen & Pillemer, 2017).

While life stories are assumed to support continuity of the self (McAdams, 1996), there are reasons to believe that life stories may also be constructed to support a positive view of the self. First, self-enhancement is pervasive and since life stories are based on subjective interpretation, they are open to a range of processes that may shift personal life stories to promote an understanding of the self as worthy and growing. Second, life stories are based on autobiographical

memory (McAdams, 2001), which has been found to be subject to a variety of self-enhancement processes (D'Armenteau & van der Linden, 2008; Ross & Wilson, 2003; Walker, Skowronski, & Thompson, 2003). An assumption in the theory of vicarious life stories was therefore that individuals construct vicarious life stories as less positive and more negative than personal life stories (Thomsen & Pillemer, 2017). Consistent with this idea, studies have found that young adults describe vicarious life stories about close friends as less positive than their personal life stories (Thomsen & Pillemer, 2017), that romantic partners describe the vicarious life stories about their partner with fewer themes of agency and redemption than their personal life stories (Panattoni & Thomsen, 2018), and that adult children describe vicarious life stories about their mothers as less positive and with less positive person change compared to personal life stories (Thomsen et al., under review). Although these studies indicate that the effect replicates across different types of vicarious life stories and life story characteristics, none of these studies have examined vicarious life stories about fathers. We extend these studies by examining whether vicarious life stories about both mothers and fathers are described as less positive and more negative than personal life stories. Based on the reasoning used above to develop hypotheses for relationships between personal and vicarious life stories, we expected similar patterns for vicarious life stories about mothers and fathers.

Life stories and well-being

Individuals organize and interpret events in their lives to story them with more or less positive emotional tone and meaning with these individual differences relating to well-being (Adler et al., 2016). Storying lives in ways that emphasize growth, learning, and agency also predicts positive outcomes over time, such as improvement in therapy and recovery from alcohol dependence (Adler, 2012; Dunlop & Tracy, 2013).

Given that personal life stories may be shaped in interaction with vicarious life stories, we should expect to see similar relations between vicarious life stories and well-being. Thus, individuals who have heard and retained stories from their parents about how they overcame obstacles and gained strength may be likely to construct their personal life stories mirroring these themes and thus experience the associated positive outcomes. Studies confirm that characteristics of intergenerational stories are related to well-being (Merrill & Fivush, 2016). In a recent study, we found that young adults who described vicarious life stories about their mothers with a more positive emotional tone and with more positive person change reported higher subjective well-being (Thomsen et al., under review). However, knowledge about whether the same pattern will be observed for vicarious life stories about fathers is lacking and here we examined whether vicarious life stories about mothers and fathers would both be positively related to subjective well-being.

We expected that vicarious life stories about mothers and fathers would show similar relations to subjective well-being. As indicated above, we assume that vicarious life stories about mothers and fathers will show similar relationships to adult children's personal life stories. If vicarious life stories about both mothers and fathers shape personal life stories, they are also likely to relate to the children's well-being in similar ways.

The present study

To summarize, in a group of emerging adults we examined whether vicarious life stories about both mothers and fathers would be 1) related to personal life stories, 2) described as less positive than personal life stories, and 3) related to subjective well-being. For all three questions, we expected a similar pattern for vicarious life stories about mothers and fathers. We asked participants to identify important chapters in their own, their mothers', and their fathers' life stories. Focusing on chapters seemed an appropriate strategy because describing chapters is the first part of the widely used Life Story Interview (McAdams, 2008) and studies suggest that chapters are utilized to

construct coherent life stories and correlate with aspects of the self, both of which indicate that chapters are an important part of narrative identity (Thomsen, 2015).

We examined positive and negative emotional tone of the chapters as well as interpretations of positive and negative person change, because emotional characteristics of life stories capture essential identity aspects such as whether the person perceives her/himself as worthy and growing. These characteristics were examined through both self-rating and content coding of the narratives. Life stories have typically been researched through content coding of themes, meaning, and coherence (e.g., Adler et al., 2016; Merrill & Fivush, 2016). Recently, however, studies have begun to use self-rating of life story characteristics, based on the assumption that self-report is a valid way to assess individuals' subjective reflections about their internal life stories (Holm & Thomsen, 2018). Here we took the opportunity to use both methods to examine relations between personal and vicarious life stories about parents and compare the results.

Method

Participants

The participants were 76 newly enrolled students at Aarhus University. The sample consisted of 54 women and 22 men with a mean age of 21.92 years ($SD = 4.18$). Most participants self-reported their ethnic background as Danish (73), with three reporting other. The participants were recruited as part of a larger project on personality and well-being, with the aim of examining personality differences between different academic majors and how personality, including life stories, related to well-being (Vedel & Thomsen, 2017). In the present study, only participants who described and rated at least one chapter in both their personal, their mothers', and their fathers' life stories were included. Initial analyses tested whether female and male participants differed, but since the analyses showed no significant gender differences for any of the 27 life story variables (all t s < 1.23 ; d s $< .29$), the genders were collapsed in the remaining analyses.

Materials and procedure

The participants received links to two electronic questionnaires by e-mail. The first contained scales measuring personality (the big 5 and the dark triad, not relevant for the present study) and subjective well-being (life satisfaction, well-being, negative affect) and the second contained a questionnaire on personal, mothers', and fathers' life stories. The order of life stories was randomized across participants.

The Satisfaction With Life Scale (SWLS; Diener, Emmons, Larsen, & Griffin, 1985) includes 5 items rated on 1-7 point Likert scales (e.g., "I am satisfied with my life"). The scale has shown excellent psychometric properties and is widely used (Diener et al., 1985). The internal reliability was good in the present study (Cronbach's alpha .80) and items were summed to form a total for life satisfaction.

The World Health Organization well-being scale (WHO-5; Bech, Olsen, Kjoller, & Rasmussen, 2003) was used to measure well-being. It includes 5 items rated on 0-5 point Likert scales (e.g., "I have felt cheerful and in good spirits") and has shown excellent psychometric properties (Bech et al., 2003). Internal reliability was good in the present study (Cronbach's alpha .83) and the total score was used in analyses.

The subscale measuring negative affect of the widely used Positive and Negative Affect Schedule was included as a measure of negative affect (PANAS-NA, Watson, Clark, & Tellegen, 1988). The ten affect items (e.g., "distressed") are rated on 1-5 point Likert scales and were added to form a total. Internal reliability was good in the present study (Cronbach's alpha .86).

The life story questionnaire was based on previous studies (Thomsen et al., under review; contact first author for verbatim instructions). First, the participants were instructed that they would be asked to describe three important life story chapters in their own life story, their mother's life story, and their father's life story. We asked for three chapters because a higher number of chapters

for each person may have led participants to drop out before completing chapters for all three life stories. It was explained that chapters referred to extended time-periods and that they should think about their whole life course up to the present. The participants were informed that they should write a brief title for each chapter, describe the main content, and answer some questions. They were instructed that chapters could run in parallel, that chapters need not have clear-cut beginnings or endings, that some chapters could be ongoing, and that there were no right or wrong way to choose chapters. Finally, they were given three examples of chapters and asked to include descriptions of what happened during the chapters, what the chapter told about the person, and how the chapter affected the person (themselves, their mother, or their father). When describing chapters in vicarious life stories about mothers and fathers, the participants were instructed to focus on what the chapters meant to and how it had influenced their mother/father. When rating vicarious life story chapters, the participants were asked to rate the chapters according to how *they* perceived the chapter and its effect on their mother/father. The four questions measuring positive and negative emotional tone and positive and negative person change asked for each chapter were the following: "To what degree would you describe the chapter as positive/negative?", "Did the chapter change you/your mother/your father in a positive/negative way?", all rated on 1-5 point Likert scales with 1 = to a very low degree and 5 = to a very high degree. These questions have been used in several studies and correlate in theoretically meaningful ways with self-esteem, subjective well-being, and symptoms of psychopathology (Holm & Thomsen, 2018; Steiner, Thomsen & Pillemer, 2017; Jensen, Thomsen, O'Connor, & Mehlsen, in press). Scores for each question were summed and divided by number of chapters rated on the question, yielding four mean scores for each life story (positive tone, negative tone, positive person change, and negative person change).

Coding

The chapters were coded for positive and negative emotional tone (0 = no positive/negative emotions or evaluations, 1 = some positive/negative emotions or evaluations, 2 = many and overweight of positive/negative emotions or evaluations) and for positive and negative person change (0 = no positive/negative person change and 1 = positive/negative person change; contact first author for details on the coding manual). We decided to use relatively simple coding scales because the chapter descriptions were often fairly short and thus descriptions did not allow more nuanced content coding.

A co-rater was trained by the first author on chapters from three participants. The co-rater and the first author then coded portions of three participants until interrater reliability was acceptable (16 participants were coded this way). The coding that the coders agreed on for these participants were used for analyses. The co-rater then coded the remaining chapters alone. To examine interrater reliability for these participants, the first author co-rated chapters from 11 participants and agreement was acceptable: 81% for positive emotional tone ($\kappa = .70$); 84% for negative emotional tone ($\kappa = .73$); 85% for positive person change ($\kappa = .62$); and 87% for negative person change ($\kappa = .32$; note that kappa is probably low due to the skewed distribution, i.e., low frequency of negative person change; Syed & Nelson, 2015). Means for positive emotional tone, negative emotional tone, positive person change, and negative person change were calculated for each person yielding four variables (positive tone, negative tone, positive person change, and negative person change).

Results

The content of the chapters varied, including both normative periods and extended negative events. Many chapters focused on family relations, education, romantic relationships, childhood, work life, illness, travelling, death, and divorce, whereas other chapters had a more unique content. Mean length of chapters was 4.13 years ($SD = 4.13$, range 0-19) in personal life stories, 8.13 years

($SD = 8.31$, range 0-43) in vicarious life stories about mothers, and 8.81 years ($SD = 10.70$, range 0-78) in vicarious life stories about fathers. The start and end ages of chapters were widely distributed over the life span of the participants and their parents with mean start and end ages of 14.52 ($SD = 7.34$) and 17.28 ($SD = 4.40$) years for personal chapters; mean start and end ages of 30.37 ($SD = 15.99$) and 33.88 ($SD = 13.19$) years for chapters in vicarious life stories about mothers; and mean start and end ages of 28.93 ($SD = 16.31$) and 33.59 ($SD = 15.41$) years for chapters in vicarious life stories about fathers. In personal life stories, 34% of the chapters were perceived as ongoing, for mothers and fathers 40% and 44% of chapters were perceived as ongoing.

The means for the life story variables are shown in Table 1 (see Appendix for examples of chapters). There were no significant differences in the number of chapters described in personal, mothers', and fathers' life stories, but the participants used more words to describe chapters in their own lives. Below, we 1) examine correlations between personal and vicarious life stories; 2) compare personal and vicarious life stories; and 3) examine relations between life stories and well-being. For all analyses, we first report results on self-rated characteristics of life stories and then content-coded characteristics of life stories. Note that although the self-rated and content-coded characteristics were positively and in most cases significantly related, the correlations were low to moderate ($r(73)$ from .20 to .56; controlling for number of words in life stories).

Relations between personal and vicarious life stories

We examined relations between personal and vicarious life stories. Self-rated characteristics of personal life story chapters correlated positively and in most instances significantly with characteristics of vicarious life story chapters about both mothers and fathers (see Table 2). In addition, characteristics for mothers' and fathers' life story chapters correlated positively ($r(74) = .47; .44; .48$; and $.43$, $ps < .0005$ for positive tone, negative tone, positive person change and negative person change, respectively).

When examining relations between life stories using the content-coded characteristics of life stories, we found similar, but lower and sometimes non-significant correlations (see Table 2; note that correlations were controlled for words in chapters because verbosity was positively related to all four codes ($r(74)$ from .15 to .69). In addition, correlations between mothers' and fathers' life stories were small-medium and positive, with the exception of negative person change ($r(72) = .46; .23; .29, ps < .05$ for positive tone, negative tone, and positive person change, respectively; $r(72) = .01, p = .914$ for negative person change).

Differences between personal and vicarious life stories

We examined differences between personal and vicarious life stories using a series of repeated measures 1-way ANOVAs with Bonferroni post hoc tests. The participants rated their personal life story chapters as more positive compared to their mothers' ($p = .027$), but the difference between personal and fathers' life story chapters did not reach significance ($p = .133$), although it was in the expected direction (Table 1). The participants rated their personal life stories higher on positive person change compared to their vicarious life stories about both mothers and fathers ($ps < .0005$), but there were no differences for negative emotional tone or negative person change. Life story chapters about mothers and fathers did not differ significantly ($ps > .05$).

When comparing personal and vicarious life stories on content-coded characteristics, we controlled for number of words in personal, mothers', and fathers' life stories (see Table 1). As for self-rated characteristics, the personal life stories were coded as more positive and with more positive person change compared to both mothers' ($ps < .0005$) and fathers' life stories ($ps < .0005$), which did not differ significantly ($ps > .05$). Surprisingly, personal life stories were also coded as higher on negative person change compared to fathers' life stories ($p = .015$; but no significant difference when comparing personal life stories to vicarious life stories about mothers, $p = .935$);

however, given that content coding of negative person change displayed a floor effect, we hesitate to elaborate on findings based on this measure.

Life stories and well-being

We then examined whether self-reported characteristics of personal, mothers', and fathers' life story chapters correlated in similar ways with well-being (measured as life satisfaction, well-being, and negative affect). More positive and less negative personal life story chapters were related to higher well-being across measures (see Table 3). Regarding well-being and vicarious life stories, the characteristics of both mothers' and fathers' life story chapters showed patterns that were very similar to personal life story chapters: More positive and less negative chapters were related to better well-being across measures. The only difference was that fathers' chapters showed fewer significant correlations with life satisfaction and mothers' chapters showed fewer significant correlations with negative affect.

Finally, we examined whether content-coded characteristics of personal, mothers', and fathers' life stories correlated in similar ways with well-being (Table 4; note that correlations were controlled for words in life stories). The correlations were generally weaker than correlations between self-reported life chapter characteristics and fewer significant correlations emerged. More positive and less negative personal life stories were related to lower well-being, with WHO-5 well-being scale showing the strongest and most consistent correlations. Surprisingly, positive person change in personal life stories was not related to any of the well-being variables. Only few correlations between vicarious life stories and well-being reached significance: Lower negative emotional tone and lower negative person change in mothers' life stories were related to higher scores on the WHO-5 well-being scale and more negative emotional tone in fathers' life stories was related to more negative affect.

Discussion

As expected, we found few differences between vicarious life stories about mothers and fathers in how they related to personal life stories and well-being. Characteristics of both mothers' and fathers' chapters were positively related to characteristics of personal chapters. Both mothers' and fathers' life story chapters were rated lower on positive person change than personal life story chapters. These relationships were found using both self-rated and content-coded life chapter characteristics. More positive and less negative chapters for both mothers and fathers were related to higher subjective well-being when using self-reported chapter characteristics, but fewer of these correlations reached significance when focusing on content-coded life chapter characteristics.

Relations between personal and vicarious life stories

The positive correlations between personal life stories and vicarious life stories about mothers and fathers replicate and extend previous studies which have found similar results for mothers, friends' mothers, romantic partners, the parent one felt closest to, and close friends (Lind & Thomsen, 2017; Panattoni & Thomsen, 2018; Thomsen & Pillemer, 2017; Thomsen et al., under review). The results are consistent with the theoretical assumption that personal and vicarious life stories are inter-related (Thomsen & Pillemer, 2017) and suggest that vicarious life stories about mothers are not privileged compared to fathers. When previous studies have found differences between intergenerational narratives about mothers and fathers, the results have often been moderated by the gender of the participant (Merrill & Fivush, 2016). In addition, these studies have assessed characteristics of narratives different from the present study. Future studies could recruit larger samples to explore relations between these two research areas, assessing intergenerational narratives of circumscribed events and broader vicarious life stories about both mothers and fathers and examining possible moderation effects of gender.

It is possible that the nature of the parent-child relationship rather than the parent figure (mother versus father) moderates relationships between personal and vicarious life stories. Thus,

children who identify more with their parents, feel more similar to their parents, and are more securely attached to their parents may show stronger associations between personal and vicarious life stories. This idea could be examined in future studies. However, it is also possible that the different functions of vicarious life stories about fathers and mothers are not captured when asking for broad life stories that span different themes and events, but would become apparent if assessing stories with themes pertaining to the distinct roles of mothers and fathers. Fathers generally engage in more intense play with their children compared to mothers and relationships to fathers may hold special importance for exploring the external world and possible identities (Grossmann et al., 2008; Parke & Buriel, 1998). Attachment to mothers, on the other hand, may be more important to support emotional comfort during times of distress (Grossmann et al., 2008). Future studies could address whether such differences in parent roles play out in how vicarious stories about mothers and fathers relate to personal stories by examining stories with themes of exploration versus distress.

Differences between personal and vicarious life stories

Replicating and extending previous studies, we found that personal life stories were self-rated and content coded higher on positive person change compared to vicarious life stories about mothers and fathers. A critical reader might argue that the effect reflects a tendency for vicarious life stories to be less emotionally intense, vivid, and elaborate than personal life stories (as indicated in the lower word counts) and hence score lower on all characteristics, including positive person change. However, vicarious life stories were self-rated numerically higher than personal life stories on negative emotional tone and negative person change, suggesting that this interpretation is unlikely as a general explanation of the results.

The result is consistent with the idea that vicarious life stories may be constructed as less positive to subtly enhance the view of the self (Thomsen & Pillemer, 2017). It should not be surprising that personal life stories are constructed to support a view of oneself as valuable and

growing. As reviewed in the introduction, self-enhancement is pervasive and specifically relevant to the present results, studies have shown that individuals will devalue their personal past to support a view of themselves as improving over time, even more so than their peers (Ross & Wilson, 2003).

It should be noted that the differences were small and not significant for all measures. For content coding, personal life stories were actually higher on negative person change compared to fathers' life stories, which runs counter to the assumption that vicarious life stories may be constructed as more negative to support a narrative of oneself as valuable and growing. However, this finding should be viewed with caution due to a possible floor effect in content-coded negative person change. The explanation for the small effect sizes could be that self-enhancement extends to mothers and fathers because they are considered an extension of or even a part of the self. Thus, young individuals may also maintain a positive view of themselves by thinking of their parents in positive terms (Aron, Aron, Tudor, & Nelson, 1991; Sedikides & Gregg, 2008). This is consistent with other studies finding graded differences in positivity between the self, close others, and more distant others (Thomsen et al., under review).

Life stories and well-being

Vicarious life stories about mothers and fathers showed relations to subjective well-being in the same direction and with similar strength as personal life stories when analyzing self-reported life chapter characteristics. Examining the content-coded characteristics of life chapters, correlations were generally weaker and personal life stories were more consistently associated with well-being compared to vicarious life stories. Still, characteristics of mothers' and fathers' life stories were related to well-being in the expected direction.

It appears that vicarious life stories relate to subjective well-being in ways that are similar to personal life stories. Viewed in combination with the result that vicarious life stories about both mothers and fathers were related to personal life stories in similar ways, the present study suggests

that vicarious life stories about mothers and fathers are more similar than they are different. As discussed above, the quality of the relationship to the parent may matter more than the parent role. Given that attachment to both mothers and fathers predict psychosocial adaptation (Grossman et al., 2008), it makes sense that the storied representations of both mothers and fathers would relate to well-being in similar ways. Still, as noted above, it is possible that differences between vicarious life stories about mothers and fathers would emerge if focusing on the different roles of mothers and fathers. Future studies could examine whether vicarious life stories about fathers are more closely related to children's well-being during times of exploration and whether vicarious life stories about mothers are more closely related to children's well-being during times of distress.

It is possible that vicarious life stories about mothers and fathers affect well-being directly, such that mentally representing the stories of one's parents as living fulfilling lives and growing as people is associated with well-being. Positive vicarious life stories may bring happiness in everyday life when parents share these stories with their adult children or when the vicarious stories spring to mind during other activities. Another possibility is that the effect of vicarious life stories is indirect and primarily relates to well-being through shaping personal life stories. Thus, vicarious life stories focused on positive person changes such as learning and becoming closer to others may mold personal life stories to emphasize similar interpretations leading to well-being. However, these ideas remain speculative as we could not test them directly in the present study. Future studies could address whether vicarious life stories causally affect well-being and whether effects are mediated through personal life stories.

Methodological considerations

We used both self-report and content coding to assess characteristics of life stories. Although these were generally related, the correlations were small to moderate in size, indicating that self-rating and content coding do not capture emotional characteristics of life stories in similar ways. It

should be noted, however, that the restricted range for content coding may attenuate correlations and that more detailed descriptions of life stories may have facilitated more nuanced content coding. Self-report and content-coding may supplement each other to capture different aspects of narrative identity. Self-reporting of life story characteristics has the advantage of emphasizing the individual's subjective view, but maybe at the cost of response bias and answering in superficial ways (e.g., Holm & Thomsen, 2018; Panattoni & McLean, 2018). Content coding may circumvent the problems of biased and superficial responding, but because experts code the content according to established criteria, there may be some loss of subjective meaning. In addition, content coding depends heavily on the participants' ability and willingness to verbalize and share very personal information and if this is less than optimal, content coding may not yield an accurate picture of how individuals think about life stories. Despite these different strengths and weaknesses, the results for self-rated and content-coded characteristics were generally similar when examining differences and correlations between personal and vicarious life stories, testifying to the robustness of the results.

The relations between well-being and life stories were generally stronger for self-reported compared to content-coded characteristics and inflations in correlation due to shared methodology (i.e., self-report) is a possible explanation of this finding. As mentioned above, another possible explanation is that variance was restricted in the content coding used in the present study (0-2 for emotional tone and 0-1 for person change), which reflected that chapters were not described in great detail (probably due to each participant describing up to 9 chapters). In particular, it is possible that a lack of more nuanced coding of positive person change obscured relationships with well-being because the present coding system could not differentiate strong and elaborated positive person change from less elaborated and more superficial positive person change. It is important to examine relationships between content-coded characteristics of vicarious life stories and well-being in future

studies as content-coding may reflect aspects of vicarious life stories that are not captured in self-rating but could be central for well-being.

Limitations

The most important limitation of the present study is the small sample size, which precluded analyses of more complex relationships between variables and analyses of moderation effects of gender. In addition, the study is correlational and future studies should examine relationships between vicarious life stories and well-being as well as vicarious life stories and personal life stories using experimental designs to address questions of causality. Furthermore, we only asked for three life story chapters for each person and the chapters were described in an electronic questionnaire. It is important to examine whether the findings will replicate if participants give fuller descriptions of chapters in interview settings. Such studies may also benefit from eliciting personal and vicarious life stories in separate sessions to minimize possible spill-over effects from one life story to another, which may have conflated both rating and content coding in the present study thus leading to higher correlations. The sample consisted of Danish emerging adults and the findings may not generalize to other age groups and cultures. It is especially worth noting that gender roles in Denmark (and Scandinavia in general) are more equal than in many other cultures and that this may explain the similarities between vicarious life stories about mothers and fathers. This is an area ripe for future research.

Conclusion

In conclusion, vicarious life stories about mothers and fathers were similarly related to personal life stories and well-being. In addition, vicarious life stories about both mothers and fathers were lower on positive person change compared to personal life stories. Thinking about the stories parents have shared may help young adults narrate important events in their lives such as pursuit of

education and starting families both by emphasizing similarities and differences between themselves and their parents.

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Table 1: Means (*SD*) for personal life stories and vicarious life stories about mothers and fathers

	Variable	Personal <i>M (SD)</i>	Mother <i>M (SD)</i>	Father <i>M (SD)</i>	<i>F</i> statistics	Bonferroni post hoc
	Number of chapters	2.95 (.28)	2.93 (.30)	2.92 (.32)	$F(2, 150) = .20$, $\eta_p^2 = .003$	
	Words in chapters	357.21 (280.25)	215.42 (153.22)	205.97 (143.36)	$F(2, 150) = 39.58^*$, $\eta_p^2 = .35$	P > M, F
Self-rated life story characteristics	Positive tone	3.85 (.98)	3.46 (1.07)	3.57 (1.04)	$F(2, 150) = 4.40^*$, $\eta_p^2 = .06$	P > M
	Negative tone	2.18 (.85)	2.43 (1.03)	2.40 (1.02)	$F(2, 150) = 2.44$, $\eta_p^2 = .03$	
	Positive change	4.16 (.79)	3.70 (.97)	3.66 (.95)	$F(2, 150) = 11.99^*$, $\eta_p^2 = .14$	P > M, F
	Negative change	1.81 (.75)	2.02 (.94)	1.97 (.80)	$F(2, 150) = 2.10$, $\eta_p^2 = .03$	
Content-coded life story characteristics	Positive tone	1.04 (.46)	.80 (.51)	.74 (.53)	$F(2, 144) = 6.87^*$, $\eta_p^2 = .09$	P > M, F
	Negative tone	.77 (.49)	.64 (.50)	.53 (.46)	$F(2, 144) = 1.90$, $\eta_p^2 = .03$	
	Positive change	.42 (.37)	.17 (.26)	.18 (.27)	$F(2, 144) = 5.34^*$, $\eta_p^2 = .07$	P > M, F
	Negative change	.11 (.20)	.08 (.20)	.04 (.14)	$F(2, 144) = 3.40^*$, $\eta_p^2 = .05$	P > F

* $p < .05$; P = Personal, M = Mother, F = Father

Table 2: Correlations between personal life stories and vicarious life stories about mothers and fathers

	Life story characteristics	Mothers' life stories	Fathers' life stories
	Words in chapters	.75**	.77**
Self-rated life story characteristics	Positive tone	.21	.30**
	Negative tone	.27*	.45**
	Positive change	.42**	.34**
	Negative change	.22	.34**
Content-coded life story characteristics	Positive tone	.23	.32**
	Negative tone	.21	.22
	Positive change	.03	.22
	Negative change	.29*	.31**

* $p < .05$; ** $p < .01$

Table 3: Correlations between self-rated life story characteristics and well-being

	SWLS			WHO-5			PANAS-NA		
	Personal	Mother	Father	Personal	Mother	Father	Personal	Mother	Father
Positive tone	.18	.42**	.24*	.30**	.42**	.37**	-.33**	-.19	-.26*
Negative tone	-.18	-.30**	-.20	-.46**	-.45**	-.33**	.44**	.23*	.20
Positive change	.34**	.38**	.20	.36**	.38**	.32**	-.31**	-.22	-.28*
Negative change	-.32**	-.21	-.13	-.35**	-.36**	-.43**	.34**	.22	.38**

* $p < .05$; ** $p < .01$; SWLS = satisfaction with life scale, WHO-5 = world health organization well-being scale, PANAS-NA = negative affect.

Table 4: Correlations between content-coded life story characteristics and well-being

	SWLS			WHO-5			PANAS-NA		
	Personal	Mother	Father	Personal	Mother	Father	Personal	Mother	Father
Positive tone	.31**	.04	-.02	.23*	.00	-.09	-.04	.08	.08
Negative tone	-.13	-.12	-.09	-.30*	-.34**	-.18	.27*	.18	.28*
Positive change	-.03	-.01	-.10	.09	-.05	.07	-.01	.02	-.04
Negative change	-.20	-.20	.13	-.42**	-.34**	.01	.22	.15	-.03

* $p < .05$; ** $p < .01$; SWLS = satisfaction with life scale, WHO-5 = world health organization well-being scale, PANAS-NA = negative affect.

Appendix

Examples of chapters in personal, mother's, and father's life stories (with details changed for anonymization) and with self-reported and content-coded characteristics shown in brackets [...]

Personal chapter (abbreviated)

In my final year of school, I started having problems with my digestion. One of them being that meals made me feel unwell [...]. For many years, I had been very focused on being healthy and slim, so it was a hard blow on me to always look 5 months pregnant. I started my struggle for a healthy stomach. I still struggle, but in a more balanced way. Back then, I tried very strict diets and tons of dietary supplements to reduce my symptoms, but without success. I am still working on not feeling guilty when I eat something that is not good for my digestion, as it is not my fault that my stomach is so easily upset. It does feel like that sometimes, though. After my stomach problems started, I have changed in several ways. I don't go to parties often (since alcohol makes it worse) and I exercise in a different way (because I start feeling unwell if I run for too long). It comforts me to know that other women also suffer from this illness (IBS) and that I feel confident telling my close others about my problems [...] I have learned a lot about food and myself and it has probably made me stronger to have a bit of adversity in an otherwise wonderful life. [self-ratings: 2 = positive emotional tone, 4 = negative emotional tone, 2 = positive person change, and 4 = negative person change; content coding: 1 = positive emotional tone, 1 = negative emotional tone, 1 = positive person change, and 0 = negative person change].

Mother's chapter

My mother was a high-level elite athlete when she was young. She was very active and she often participated in competitions. She spent all her youth training and getting good. It gave her a lot of self-esteem, and even today she is very engaged in sports. The rest of the family tries to keep up.

[self-ratings: 4 = positive emotional tone, 2 = negative emotional tone, 4 = positive person change, and 2 = negative person change; content coding: 2 = positive emotional tone, 0 = negative emotional tone, 1 = positive person change, and 0 = negative person change]

Father's chapter

When my father was a young boy, he lived on a farm with his family. His family very much expected him to help on the farm even if he also wanted to do his homework carefully (he is a very ambitious and hard-working man). I think it was hard for him back then, but today he says it made him who he is, and that it taught him to skip stupid questions and trust his own abilities. [self-ratings: 5 = positive emotional tone, 1 = negative emotional tone, 5 = positive person change, and 1 = negative person change; content coding: 1 = positive emotional tone, 1 = negative emotional tone, 1 = positive person change, and 0 = negative person change].