Saying Goodbye and Saying It Well: Consequences of a (Not) Well-Rounded Ending

Bettina Schwörer
University of Hamburg

Nora Rebekka Krott
New York University

Gabriele Oettingen
New York University and University of Hamburg

Every period in life eventually comes to an often foreseeable end, yet research on how people cope with foreseeable endings is sparse. In 7 studies, we investigated whether people benefit from ending in a well-rounded way, that is, with the feeling that all that could have been done was done and with a sense of closure. Across all studies, we observed that well-rounded endings were associated with positive affect, little regret, and an easy transition into the next life phase. In Studies 1 through 3, the more well-rounded participants recalled a specific ending of a life phase the more they reported positive affect, less regret, and easier transitions into the next life phase. In Studies 4 through 6, we conceptually replicated these results, adjusting for possible memory biases in Studies 1 through 3. In Study 7, participants confronted with a well-rounded ending (vs. a not well-rounded ending) reported more positive affect and experienced an easier transition, as indicated by better performance on a Stroop task. The findings point to the importance of ending in a well-rounded way so as to experience more positive affect, fewer regrets, and easier life transitions.

Keywords: life transitions, well-rounded endings, regret, positive affect, closure

Supplemental materials: http://dx.doi.org/10.1037/mot0000126.supp

All phases of life eventually come to an end (e.g., education, professional life, the time with children living at home), and we must deal with those endings. Some endings are self-imposed; for example, one might decide to end one’s efforts toward and commitment to a previously held goal (e.g., Dunne, Wrosch, & Miller, 2011; Wrosch, Scheier, Carver, & Schulz, 2003). However, other endings are inevitable (e.g., the end of high school, the ending of a wedding reception), and we need to find a way to deal with them.

There is little research on how people deal with foreseeable upcoming endings and how that impacts their affect and the transition into the subsequent phase of life. Research on life transitions has focused on the new beginning: Studies have identified person and context variables associated with adapting successfully to roles, tasks, and challenges of the new life phase (e.g., Baer et al., 2013; Bye & Pushkar, 2009; Cusick, Havlicek, & Courtney, 2012) or investigated the effect of salient life transitions on people’s motivation to reach their goals in the new life phase (Peetz & Wilson, 2013; Peetz, Wilson, & Strahan, 2009). We sought to complement this research by investigating how people deal with a foreseeable ending impacts the transition into the new life phase.

Well-Rounded Ending of a Life Phase

We introduce the concept of a well-rounded ending, which we define as an ending marked by a sense of closure. Specifically, an ending would be described as well-rounded if the person feels that he or she has done everything that they could have done, that they have completed something to the fullest, and that all loose ends have been tied up (i.e., a feeling of closure).

A foreseeable ending has been found to affect people’s pursuit of set goals. For example, people are more likely to run their first marathon when they face the ending of a life decade (e.g., ages 29, 39, 49) than when they are younger or older, and regular marathon runners have been found to run faster when they are 29 or 39 than they do 2 years before or after those ages (Alter & Hershfield, 2014). The impact of an upcoming ending on goal pursuit can also be found in more trivial endings: For example, the likelihood of cashing in a coupon increases just before its expiration date (Inman & McAlister, 1994). Taken together, in the face of a foreseeable ending, people increase their effort to reach their goals within the remaining time.

Upcoming endings also affect the selection of which kind of goals to pursue. Socioemotional selectivity theory differentiates future-oriented goals that serve the purpose of acquiring knowl-
edge and present-oriented goals that serve the purpose of regulating emotional states (Carstensen, 2006; Carstensen, Isaacowitz, & Charles, 1999; Ersner-Hershfield, Mikels, Sullivan, & Carstensen, 2008). When time is perceived as indefinite, people tend to strive for future-oriented and knowledge-related goals. When time is perceived as finite (i.e., in the face of an upcoming ending), people tend to strive for present-oriented and emotionally meaningful goals (Carstensen & DeLiema, 2018; Carstensen et al., 1999; Fredrickson & Carstensen, 1990; Fung, Carstensen, & Lutz, 1999).

We assume that the described patterns of goal selection and goal pursuit in the face of an upcoming ending might reflect the need to end a life phase with a feeling of closure. The need for closure has been described as an “individual’s desire for a firm answer to a question and an aversion towards ambiguity” (Kruglanski & Webster, 1996, p. 264; see also Webster & Kruglanski, 1994). Similarly, after major life events, people strive to obtain a feeling of closure in order to move on with their current life (Gold & Faust, 2001; Shitika, Bauman, & Mullen, 2004). We assume that in the face of a foreseeable upcoming ending, people who end events or life phases with a feeling of closure will experience a well-rounded ending and should experience several beneficial outcomes.

**Well-Rounded Endings and Positive Affect**

Because people have been found to strive for closure before an upcoming ending, we hypothesize that successfully finding closure before a foreseeable ending should be associated with increased positive affect. In line with this hypothesis, Schall, Goetz, Martiny, and Hall (2017) found that people savor positive experiences (i.e., successful performance at a soccer game) more when a task is completed than when it is still in progress. In contrast, low success in finding closure should be associated with negative affect and ruminative thoughts. In line with this hypothesis, Moberly and Watkins (2010) used an experience sampling technique in their study and found that during everyday life, low success in goal completion was associated with negative affect and ruminative self-focus. Thus, we hypothesize that a well-rounded ending is associated with increased positive affect and decreased negative affect.

**Well-Rounded Endings and Regret**

Over the life course, people tend to regret the opportunities that they have failed to seize (i.e., inactions), compared with the mistakes they have made (i.e., actions; Gilovich & Medvec, 1995; Morrison & Roese, 2011). Moreover, participants tend to ruminate more about regretted inactions than regretted actions in daily life (Savitsky, Medvec, & Gilovich, 1997). Zeigarnik (1927) showed that people remember unfinished tasks (i.e., inactions) better than finished tasks (i.e., actions). More recent experimental studies show that people recall inactions more easily than actions because actions are perceived as closed, whereas inactions are open-ended experiences that are psychologically incomplete (Beike, Adams, & Wirth-Beaumont, 2007; Beike & Wirth-Beaumont, 2005). This heightened cognitive accessibility of events that reflect low levels of closure, in turn, prolongs feelings of regret (Beike, Markman, & Karadogan, 2009). Building on these findings, we hypothesized that a well-rounded ending would be associated with low regret.

**Well-Rounded Endings and Ease of Transition**

An unfulfilled need for closure impacts people’s behavior as they try to resume the previous activity (Ovsiankina, 1928) or engage in compensatory activities (Mahler, 1933). Similarly, memories that come with a feeling of low closure affect the present as they lead to an increase in reparative behavior (Beike, Adams, & Naufel, 2010). Ending a life phase with a feeling of low closure thus should encumber people in the new phase and make them more likely to show reparative behavior to find closure afterward. Conversely, ending with a feeling of closure should result in a feeling of a clean slate, allowing people to move on and to deal with the new tasks that the new episode or life phase imposes. Consequently, we hypothesize that a well-rounded ending is associated with an easy transition into the subsequent phase.

**The Present Research**

Across seven studies (total N = 1,203), we examined whether a well-rounded ending is associated with high positive affect, low negative affect, little regret, and an easy transition into the following phase. In Studies 1 through 3, we tested these assumptions using correlational designs: Participants recalled how well-rounded they had ended idiosyncratic life phases and thereafter rated their affect, feelings of regret, and ease of transition into the following phase. In Studies 4 through 6, we sought to compensate for possible memory biases by having all participants read the same vignette about a well-rounded versus not well-rounded experience. Again, we thereafter assessed participants’ affect, feelings of regret, and ease of transition into the following phase. Finally, in Study 7, we led participants to experience a well-rounded versus not well-rounded ending in a controlled laboratory setting and assessed their affect, regret, and performance on an executive function task as an indicator of ease of transition to the next phase. Specifically, we reason that by ending in a well-rounded way, participants, in the next phase, participants will be able to heighten their selective attention to the task at hand. The ethical review committee of the university approved the procedures and materials of the seven studies.

**Studies 1 Through 3: Recall of an Idiosyncratic Ending**

In Study 1, we asked students who had taken part in an international student exchange program how well-rounded they had ended their visit abroad and measured their affect regarding the ending, feelings of regret, and ease of transition into the next phase. In Study 2, we asked participants who had just finished high school how well-rounded they had ended high school and measured their affect, regret, and ease of transition into the next phase. Finally, in Study 3, we asked participants to recall any idiosyncratic foreseeable ending that they had experienced and thereafter rated their affect, feelings of regret, and ease of transition into the following phase. In Studies 1 through 3, we tested these assumptions across possible memory biases by having all participants read the same vignette about a well-rounded versus not well-rounded experience. Again, we thereafter assessed participants’ affect, feelings of regret, and ease of transition into the following phase. Specifically, we reason that by ending in a well-rounded way, participants will be able to heighten their selective attention to the task at hand. The ethical review committee of the university approved the procedures and materials of the seven studies.
Method

Participants and Design

In Study 1, participants were recruited via Facebook, Twitter, and the ERASMUS alumni newsletter published by a large European university. As no prior research had been conducted on the effects of a well-rounded ending, our sample sizes for Studies 1 and 2 were based on previous research on life transitions and regret (e.g., Beike et al., 2009). In line with that research, we recruited a total of 131 participants (78% female; $M_{age} = 23.32$ years, $SD = 2.15$; minimum = 20, maximum = 35). In Study 2, participants were recruited via Facebook. The final sample consisted of 113 participants (61% female; $M_{age} = 18.22$ years, $SD = 0.70$; minimum = 17, maximum = 20). In Study 3, participants were recruited via the online platform Prolific (https://www.prolific.ac/). Because we aimed to increase the sample size for Study 3, participants received payment for their participation. A total of 255 Prolific workers from the United States (71% female; $M_{age} = 35.27$ years, $SD = 11.23$; minimum = 18, maximum = 71) participated (see the online supplemental material for additional information about the participant samples).

Materials and Procedure

Predictor variable: Well-rounded ending. We asked participants to recall how they ended their time abroad (Study 1) or their high school education (Study 2). To activate a vivid memory of the ending, participants were then asked to describe the ending in detail (i.e., “Please note your thoughts/feelings that come to mind when you think about the ending of . . . ”). In Study 3, participants were asked to name an inevitable ending that they had experienced in their life. Participants named endings such as “the end of university” or “the end of pregnancy.” In Study 3, 17 participants (7%) failed to name an ending and were excluded from further analysis.

To measure the extent to which participants experienced well-rounded endings, we asked them to rate the following six self-generated items: “When I think about the ending of [the named experience], I feel that all loose ends are tied up” (1), “. . . I feel that I have done everything I could have done” (2), “. . . I feel that I have completed something to the fullest” (3), “. . . I have a feeling of completeness” (4), “. . . I have a feeling of closure” (5), and “Considering the end of [the named experience], to what degree does it feel well-rounded?” (6). Participants rated all items on Likert scales, ranging from 1 (not at all) to 7 (very much), which we combined into one scale (Cronbach’s $\alpha$ range = .77–.89). In Studies 2 and 3, we excluded one item (i.e., “I had thoughts with regret”) because the calculations of Study 1 indicated that that item’s exclusion led to negligible change in the scales’ internal consistency (Cronbach’s $\alpha$ range = .81–.80).

Outcome variable: Ease of transition. Participants were asked to answer the following eight self-generated items: “After the ending of [the named experience], how was the transition into the next phase of your life?” “I was able to move on” (1), “I had the feeling that I had a clean slate and could move forward freely” (2), “I had a smooth transition” (3), “I could start new tasks without having any problems” (4), “I had a relaxed transition to the next phase of my life” (5), “I had the feeling that I could start the following period of my life unencumbered” (6), “I didn’t really know what to do” (7; reverse scored), “I had no idea what to do next” (8; reverse scored). The items were rated on Likert scales, ranging from 1 (not at all) to 7 (very much), which we combined into one scale (Cronbach’s $\alpha$ range = .77–.93). In Studies 2 and 3, participants were asked to rate three out of the eight items used in Study 1: “I had the feeling that I had a clean slate and could move forward freely” (1), “I had a smooth transition” (2), “I was able to move on” (3). We excluded the other five items because calculations from Study 1 indicated that the inclusion of these items led to negligible change in the scales’ internal consistency (Cronbach’s $\alpha$ range = .93–.90).

Potential confounding variables. We assessed several potentially confounding variables, such as participants’ personality traits (Rusting & Larsen, 1997; Smillie, 2013), self-control (Tangney, Baumeister, & Boone, 2004), and emotion-regulation skills (Carver & Scheier, 1990; Gross & John, 2003; John & Gross, 2004; see also Kivetz & Keinan, 2006; Zeelenberg & Pieters, 2007). In Studies 1 and 2, we additionally asked students to

1 In Study 1, additional measures were collected that are not discussed here.
evaluate their social relationships with their peers and teachers (see also Cusick et al., 2012). In Study 3, we additionally assessed participants’ tendency to tenaciously pursue and flexibly adapt their goals (Brandstätter & Renner, 1990; see also Kelly, Wood, & Mansell, 2013). See the online supplemental material for detailed descriptions of all potentially confounding variables measured in Studies 1 through 3.

Results and Discussion

Across the three studies, simple correlations revealed that participants who experienced more well-rounded endings reported more positive affect ($r_{\text{Panass}} > .49$, $p < .001$; $r_{\text{positive PANAS}} > .29$, $p < .01$), less negative affect ($r < -.20$, $p < .025$), feeling less regret ($r < -.35$, $p < .001$), and experiencing easier transitions into the next life phase ($r > .18$, $p < .045$). Multivariate tests showed overall associations among well-roundedness and pleasant positive affect, positive affect PANAS, negative affect PANAS, regret, and ease of transition ($F > 7.78$, $p < .001$, $n_g^2 > .28$).

Well-Rounded Ending and Affect

To test the expected association between a well-rounded ending and positive affect, we conducted three separate two-step multiple regressions. The confounding variables were entered at Stage 1, and participants’ ratings of the well-rounded ending was entered at Stage 2. Across Studies 1 through 3, adding well-roundedness to the regression model explained additional variance in pleasant positive affect (13% to 33%), in positive affect PANAS (6% to 14%), and in negative affect PANAS (2% to 15%). The changes in $R^2$ were significant for pleasant positive affect ($F > 22.18$, $p < .001$), for positive affect PANAS ($F > 7.86$, $p < .01$), and almost significant to significant for negative affect PANAS (Study 1: $F[1, 113] = 2.76$, $p = .099$; Studies 2 and 3: $F > 8.22$, $p < .002$; see Table 1).

### Table 1

<table>
<thead>
<tr>
<th>Predictor variable</th>
<th>Pleasant positive affect</th>
<th>Positive affect PANAS</th>
<th>Negative affect PANAS</th>
<th>Regret</th>
<th>Ease of transition</th>
</tr>
</thead>
<tbody>
<tr>
<td>Well-rounded ending</td>
<td>.35</td>
<td>.06 .51 &lt; .001 .32 .12</td>
<td>.26 .006 −.15 −.09 −.16</td>
<td>.099 −.32 −.06 −.38 &lt; .001 .36 .17 .19 .042</td>
<td></td>
</tr>
<tr>
<td>$R^2$</td>
<td>.10</td>
<td>.12</td>
<td>.12</td>
<td>.30</td>
<td>.11</td>
</tr>
<tr>
<td>$F$</td>
<td>1.59</td>
<td>2.06*</td>
<td>2.00</td>
<td>6.45*** 1.90</td>
<td></td>
</tr>
<tr>
<td>$\Delta R^2$</td>
<td>.21</td>
<td>.06</td>
<td>.02</td>
<td>12</td>
<td>.03</td>
</tr>
<tr>
<td>$\Delta F$</td>
<td>35.47***</td>
<td>7.86**</td>
<td>2.76</td>
<td>25.41*** 4.23*</td>
<td></td>
</tr>
<tr>
<td>Study 1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Well-rounded ending</td>
<td>.45</td>
<td>.10 .43 &lt; .001 .75 .16</td>
<td>.43 &lt; .001 −.50 −.16 −.31</td>
<td>.002 −.21 −.11 −.18 .068 .41 .10 .39 &lt; .001</td>
<td></td>
</tr>
<tr>
<td>$R^2$</td>
<td>.24</td>
<td>.27</td>
<td>.22</td>
<td>.30</td>
<td>.19</td>
</tr>
<tr>
<td>$F$</td>
<td>4.73***</td>
<td>5.38***</td>
<td>4.23***</td>
<td>6.28*** 3.37**</td>
<td></td>
</tr>
<tr>
<td>$\Delta R^2$</td>
<td>.13</td>
<td>.13</td>
<td>.07</td>
<td>.02</td>
<td>.11</td>
</tr>
<tr>
<td>$\Delta F$</td>
<td>22.18***</td>
<td>22.61***</td>
<td>10.08**</td>
<td>3.40</td>
<td>15.55***</td>
</tr>
<tr>
<td>Study 2</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Well-rounded ending</td>
<td>.63</td>
<td>.06 .59 &lt; .001 .68 .10</td>
<td>.38 &lt; .001 −.71 −.11 −.40 &lt; .001 −.47 .05 −.51 &lt; .001 .41 .04 .55 &lt; .001</td>
<td></td>
<td></td>
</tr>
<tr>
<td>$R^2$</td>
<td>.41</td>
<td>.11</td>
<td>.02</td>
<td>.08</td>
<td>.10</td>
</tr>
<tr>
<td>$F$</td>
<td>4.42**</td>
<td>5.77***</td>
<td>1.00</td>
<td>3.86** 4.92***</td>
<td></td>
</tr>
<tr>
<td>$\Delta R^2$</td>
<td>.33</td>
<td>.14</td>
<td>.15</td>
<td>25</td>
<td>.29</td>
</tr>
<tr>
<td>$\Delta F$</td>
<td>129.50***</td>
<td>43.03***</td>
<td>43.44***</td>
<td>85.57*** 110.55***</td>
<td></td>
</tr>
<tr>
<td>Study 3</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Note. Values depict Model 2 of the two-step multiple regressions. All potentially confounding variables were entered at Step 1, and participants’ ratings of the well-rounded ending were entered at Step 2. PANAS = Positive and Negative Affect Schedule.

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

Well-Rounded Ending and Regret

We conducted the same two-step multiple regression analyses as for affect but entered regret as the outcome variable. Across Studies 1 through 3, the addition of well-roundedness to the regression model explained additional variance in regret (2% to 12%), and the changes in $R^2$ were significant to almost significant (Studies 1 and 3: $F > 18.64$, $p < .001$; Study 2: $F[1, 103] = 3.40$, $p = .068$; see Table 1).

Well-Rounded Ending and Ease of Transition

We conducted the same two-step multiple regression analyses as for affect but entered ease of transition as the outcome variable. Across Studies 1 through 3, adding well-roundedness to the regression model explained additional variance in ease of transition (3% to 29%), and the changes in $R^2$ were significant ($F > 4.23$, $p < .042$; see Table 1).

Across three studies, a well-rounded ending was associated with high positive affect, low negative affect, little regret, and an easy transition into the subsequent phase. In Study 1, our results remained significant when we controlled for how positively participants experienced the beginning of their visit abroad and their visit overall. The association between a well-rounded ending and low negative affect did not remain significant when we controlled for these variables, although it trended in the expected direction. In Study 2, we conceptually replicated our findings regarding a very meaningful ending that happens only once in a life time (i.e., end of high school). Here, the association between a well-rounded
ending and the outcome variables held true even when controlling for participants’ final course grade, as well as their expectations and satisfaction with their final course grade. The association between a well-rounded ending and low regret was significant at the 10% level, after controlling for all potentially confounding variables. With Study 3, we wanted to further extend our findings and generalize them to any idiosyncratic ending. The association between a well-rounded ending and the outcome variables held true even when controlling for participants’ self-control skills, emotion regulation strategies, and tendency for tenacious and flexible goal pursuit.

Conclusion

Across Studies 1 through 3, we showed that a well-rounded ending is associated with high positive affect, low negative affect, little regret, and an easy transition into the next life phase. As memories are fallible (Schacter, 1999; Walker, Skowronski, & Thompson, 2003), we asked participants in Studies 4 through 6 to imagine themselves as the main character in vignettes that described an experience that either ended well-rounded or did not, which allowed us to experimentally induce a well-rounded versus not well-rounded ending in a standardized way.

Studies 4 Through 6: Inducing a Well-Rounded Versus Not Well-Rounded Ending

In Study 4, participants read a vignette about a fictional character who moved away from his or her hometown for a new job position. The vignette depicted either a well-rounded or a not well-rounded ending. As a manipulation check, we assessed participants’ ratings of well-roundedness identical to Study 2 (Cronbach’s α = .96). In Study 5, we asked participants to read the same vignette as in Study 4, but this time we did not include the manipulation check so as to conceal our hypothesis and decrease demand effects.

Finally, in Study 6, participants read a vignette about a fictional character who left the wedding party of a friend in either a well-rounded or a not well-rounded way. As a manipulation check, we asked participants the same questions as in Study 4, except for “To what degree does the ending feel well-rounded?”. We excluded the preceding item to avoid the effects on the outcome variables being driven by making the concept of a well-rounded ending salient. The remaining three items were combined into one scale (Cronbach’s α = .93).

Not ending in a well-rounded way should lead to reparative behavior. Specifically, people should try to make up for the not well-rounded ending to obtain a feeling of closure. To assess participants’ reparative behavior, we gave them the option of sending a text message to their friend. We hypothesized that participants in the well-rounded ending condition would be less inclined to send a text message (i.e., to show reparative behavior) compared with participants in the not well-rounded ending condition. Further, we were interested in whether we would find indicators of our relevant variables (i.e., affect, regret, and ease of transition) in the content of participants’ text messages. We analyzed participants’ text messages with the Linguistic Inquiry and Word Count Program (LIWC; Pennebaker, Booth, Boyd, & Francis, 2015).

Because a well-rounded ending is associated with a feeling of completion, participants in the well-rounded (vs. not well-rounded) ending condition should be less past-oriented (i.e., writing in past tense and referring to past events). Furthermore, we expected them to express more positive emotions, less negative emotions, and less regret in their text. As a well-rounded ending should ease the transition into the subsequent phase, participants should show less cognitive involvement in writing their text messages (e.g., using words like cause, know, ought; Pennebaker et al., 2015). Furthermore, as frequent use of the first-person singular in a written text is associated with reporting stressful life events (Boals & Klein, 2005; Pennebaker & Lay, 2002) and experiencing psychological distress (Boals & Klein, 2005), we expected participants in the well-rounded (vs. not well-rounded) ending condition to write less in the first-person singular.

Method

Participants and design. In Study 4, a total of 100 Mechanical Turk (MTurk) workers (47% female; M_{age} = 33.79 years, SD = 10.15; minimum = 19, maximum = 67) participated; in Study 5, a total of 102 MTurk workers (43% female; M_{age} = 39.01, SD = 10.15; minimum = 19, maximum = 71) participated; in Study 6, a total of 474 Mturk workers participated (58% female; M_{age} = 36.01 years, SD = 11.77; minimum = 18, maximum = 80). Across Studies 4 through 6, participants were randomly assigned to the well-rounded ending condition (Study 4: n = 43; Study 5: n = 54; Study 6: n = 235) or the not well-rounded ending condition (Study 4: n = 57; Study 5: n = 48; Study 6: n = 239; see the online supplemental material for additional information about the participant samples).

Materials and procedure. Participants were asked to read a story about an upcoming ending and then indicated their affect regarding the ending, their levels of regret, and the ease of transition into the next phase. In Study 6, participants had the additional opportunity to engage in reparative behavior (i.e., send a text message).

Studies 4 and 5. All participants read a story about a fictional character who moved away from his or her hometown for a new job position. Participants in the well-rounded ending condition read the following:

Recently, I moved away from my hometown where I grew up because I was offered a new position in another state. It was a once in a lifetime opportunity, so I just had to do it. The move was organized very well, so I was able to complete all tasks and did not have to leave anything unfinished. I managed to throw a goodbye party and therefore got to say goodbye to my friends and coworkers.

Participants in the not well-rounded ending condition read the following:

Recently, I moved away from my hometown where I grew up because I was offered a new position in another state. It was a once in a lifetime opportunity, so I just had to do it. The move was not organized very well, so I was unable to complete all tasks and had to leave a lot of things unfinished. I did not manage to throw a goodbye party and therefore did not get to say goodbye to my friends and coworkers.
Study 6. All participants read a story about a fictional character that left the wedding party of a friend. Participants in the well-rounded ending condition read the following:

Your best friend asked you to be his best man/her bridesmaid. Today is the day of the wedding. The ceremony went great and people were having a great time. Time flew by, and now it’s already 4:30 in the morning. The party is over, and everyone is leaving. You are very tired. So, you get up from your chair, look for your friend in the crowd of wedding guests, say goodbye, and take the next cab that drives you home.

Participants in the not well-rounded ending condition read the following:

Your best friend asked you to be his best man/her bridesmaid. Today is the day of the wedding. The ceremony went great and people were having a great time. Time flew by, and now it’s already 4:30 in the morning. The party is over, and everyone is leaving. You are very tired. So, you get up from your chair, do not look for your friend in the crowd of wedding guests, do not say goodbye, and take the next cab that drives you home.

Outcome variables: Affect, regret, and ease of transition. The variables affect and regret were measured as in the previous studies. The items measuring affect were combined into one scale for pleasant positive affect (Cronbach’s α range = .93–.98), one scale for positive affect PANAS (Cronbach’s α range = .92–.95), and one scale for negative affect PANAS (Cronbach’s α = .88–.91). The three items measuring regret were combined into one scale (Cronbach’s α = .90–.96). In Studies 4 and 5, ease of transition was measured as in the previous studies and the three items were combined into one scale (Cronbach’s α = .84–.92).

To measure ease of transition in Study 6, we asked participants to rate the following question: “On your way home in the cab, did participants in the not well-rounded ending condition (Study 4: M = 18.42, SD = 2.62) report an easier transition into the next day (vs. not well-rounded) ending condition (for means and standard deviations see Table 2).

<table>
<thead>
<tr>
<th>Dependent variables</th>
<th>Study 4</th>
<th>Study 5</th>
<th>Study 6</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Well-rounded</td>
<td>Not well-rounded</td>
<td>Well-rounded</td>
</tr>
<tr>
<td>Manipulation check</td>
<td>24.28 (3.08)</td>
<td>09.44 (4.77)</td>
<td>16.70 (4.07)</td>
</tr>
<tr>
<td>Pleasant positive affect</td>
<td>18.79 (4.59)</td>
<td>08.58 (4.37)</td>
<td>18.61 (4.12)</td>
</tr>
<tr>
<td>Positive affect PANAS</td>
<td>34.91 (8.62)</td>
<td>23.32 (9.02)</td>
<td>39.30 (7.99)</td>
</tr>
<tr>
<td>Negative affect PANAS</td>
<td>13.09 (3.71)</td>
<td>20.25 (6.71)</td>
<td>15.94 (5.12)</td>
</tr>
<tr>
<td>Regret</td>
<td>06.09 (3.13)</td>
<td>16.86 (3.33)</td>
<td>07.39 (4.30)</td>
</tr>
<tr>
<td>Ease of transition</td>
<td>18.42 (2.62)</td>
<td>10.26 (3.73)</td>
<td>18.07 (3.17)</td>
</tr>
<tr>
<td>Self-reported likelihood of sending a message</td>
<td>14.25 (10.50)</td>
<td>21.79 (13.73)</td>
<td></td>
</tr>
<tr>
<td>Analysis of text message</td>
<td>4.69 (6.41)</td>
<td>8.36 (5.79)</td>
<td>15.18 (11.94)</td>
</tr>
<tr>
<td>Number of words</td>
<td>5.47 (8.58)</td>
<td>7.79 (7.28)</td>
<td>4.87 (5.95)</td>
</tr>
</tbody>
</table>

Table 2: Studies 4 Through 6: Means and Standard Deviations (in Parentheses) for the Manipulation Check and Dependent Variables Affect, Regret, and Ease of Transition
CONSEQUENCES OF WELL-ROUNDED ENDINGS

subsequent phase, which was measured via their self-reported likelihood of sending a text message, $F(1, 472) = 99.67, p < .001$, $\eta_g^2 = .17$. Furthermore, participants in the well-rounded ending condition indicated that they were less likely to want to write a text message, and, indeed, they actually wrote fewer text messages than did participants in the not well-rounded ending condition, $\chi^2(1, N = 474) = 25.93, p < .001$ (well-rounded ending condition: 73% wrote a text message; not well-rounded condition: 91% wrote a text message; see Table 2).

**Study 6: Text analysis.** For participants who wrote a text message (82%, $n = 387$), we conducted a separate MANOVA in which we included the word count variable as a measurement for ease of transition and left out the manipulation check. There was an overall effect of condition, $F(5, 381) = 57.70, p < .001$, Wilks’s $\Lambda = .57$, $\eta_g^2 = .43$. Participants in the well-rounded (vs. not well-rounded) ending condition showed an easier transition into the subsequent phase, indicated by fewer words in their messages, $F(1, 385) = 35.21, p < .001$, $\eta_g^2 = .08$. We conducted an additional one-way MANOVA, with condition as dependent variables and the following LIWC categories: past focus, positive emotions, negative emotions, cognitive processes, and first-person singular as dependent variables. There was an overall effect of condition, $F(5, 381) = 20.36, p < .001$, Wilks’s $\Lambda = .79$, $\eta_g^2 = .21$. Participants in the well-rounded ending condition wrote less about the past, $F(1, 385) = 34.74, p < .001$, $\eta_g^2 = .08$, more about positive emotions, $F(1, 385) = 32.37, p < .001$, $\eta_g^2 = .08$, less about negative emotions, $F(1, 385) = 29.08, p < .001$, $\eta_g^2 = .07$, wrote fewer words indicating cognitive involvement, $F(1, 385) = 8.30, p = .004$, $\eta_g^2 = .02$, and wrote less in the first-person singular, $F(1, 385) = 49.58, p < .001$, $\eta_g^2 = .11$, than did participants in the not well-rounded ending condition (for means and standard deviations see Table 2).

As an example, participants in the well-rounded condition wrote the following: “Congratulations! I am so happy for you guys! Everything was great. Enjoy the honeymoon!” or “Congratulations! I am so thrilled that I got to be a big part in your day today. May you always be as happy as you were today,” clearly showing positive affect and referring to the transition into the following phase (e.g., the honeymoon). In contrast, participants in the not well-rounded ending condition wrote the following: “Sorry I missed you. You are probably a thousand times more tired than I am. I had a good time and regret I couldn’t find you” or “Sorry I left without saying goodbye. I was extremely worn out and had to get to sleep. Congratulations on the wedding,” showing a higher past focus, feelings of regret, and an overall more negative tone.

In Studies 4 through 6, participants who were asked to take the perspective of a fictional character who experienced a well-rounded (vs. not well-rounded) ending reported more pleasant and positive affect, less regret, and an easier transition into the following phase. Our outcome measures in Studies 4 and 5 were based on self-report. Even though self-report is an often-used and direct measure (Paulhus & Vazire, 2007), self-reported behavior does not necessarily translate into real behavior (Kormos & Gifford, 2014). Therefore, we added a behavioral measure to assess ease of transition in Study 6. Participants in the well-rounded condition indicated that they were less likely to write a text message after leaving their friend’s wedding party. And, indeed, when given the opportunity to write a text message, they were less likely to do so. Furthermore, analyzing the content of the text messages revealed the expected differences between those sent by participants in the well-rounded versus the not well-rounded conditions. Text messages from participants in the well-rounded ending condition (vs. not well rounded ending condition) were less focused on the past, written in a more positive and less negative tone, and were less regretful. Further, they showed less cognitive involvement and less self-focus, pointing to an easier transition into the subsequent phase and lower levels of psychological distress. It should be mentioned, however, that other factors apart from psychological distress could have influenced participants’ use of first-person singular language in their text messages, such as high levels of self-awareness (Davis & Brock, 1975) or authenticity (Tausczik & Pennebaker, 2010). Future studies should use other indicators of distress, such as physiological measures, to investigate the impact of well-rounded (vs. not well-rounded) endings.

One might argue that for Studies 4 through 6, the well-rounded (vs. not well-rounded) endings depicted in our vignettes may reflect a more positive experience. That is, saying goodbye to friends when leaving town or being courteous when leaving a friend’s wedding should entail more positive affect than missing out on those things. However, the results of Studies 1 through 3 speak against the assumption that a positive experience in the well-rounded (vs. not well-rounded) condition alone would lead to the obtained effects. Specifically, in Studies 1 through 3, we found that the well-roundedness of a visit abroad or the time in high school explained additional variance in participants’ positive affect, above and beyond the overall positivity of the previous life phase.

**Conclusion.** Across Studies 4 through 6, participants who were experimentally induced to imagine a well-rounded versus not well-rounded ending reported more positive affect, less negative affect, less regret, and an easier transition into the subsequent phase. In Study 7, we let participants actually experience a well-rounded ending versus a not well-rounded ending in the controlled setting of a lab experiment. We then assessed the behavioral ease with which participants transitioned into the next phase.

**Study 7: Experiencing a Well-Rounded Versus Not Well-Rounded Ending**

In Study 7, we let participants experience a well-rounded ending versus a not well-rounded ending in a conversation and thereafter asked them to complete a Stroop task so we could assess ease of transition. We hypothesized that participants in the well-rounded condition are able to fully concentrate on the Stroop task, whereas participants’ thoughts in the not well-rounded condition should shift away from the demands of a subsequent task to the incomplete task of ending in a well-rounded way (e.g., Klinger, 1975, 1990; Savitsky et al., 1997; Singer, 1966; Smallwood, 2010).

**Method**

**Participants and Design**

In Study 7, we based our sample size on the previous experimental studies (i.e., Studies 4 and 5). A total of 64 students from a large European university took part in the study in return for payment ($8.50/hr [$9.70/hr]). The mean study duration was 41.92
min (SD = 34.72 min). As reaction times (RTs) vary by age (e.g., Comalli, Wapner, & Werner, 1962; Hultsch, MacDonald, & Dixon, 2002; MacLeod, 1991), we set an age limit for the study (18 to 40 years). Two participants did not meet this criterion (i.e., they were 49 and 55 years old) and were excluded from the analysis. The final sample consisted of 62 participants (86% female; M_age = 25.27 years, SD = 4.66; minimum = 19, maximum = 40). Participants were randomly assigned to the well-rounded ending condition (n = 30) or the not well-rounded ending condition (n = 32).

Materials and Procedure

Manipulation: Well-rounded versus not well-rounded ending. After consenting to take part in the study, participants sat in a cubicle and were told that the study’s aim was to investigate how people get to know each other. Therefore, their first task was to get to know another person. The other person was a female confederate who was blind to the condition and hypothesis of the study. The confederates were instructed to get to know the other person and did not receive any further instructions regarding the upcoming conversation. Participants and the confederate sat in separate cubicles and were connected to each other via Skype. Participants were only connected via audio and could not see each other. They were told that they would have 10 min to get to know the other person. Two min before the 10 min ended, participants in the well-rounded ending condition received a message warning them that they had only 2 min left and that they should try to end the call well-rounded. Participants in the not well-rounded ending condition did not receive a warning. The Skype session ended automatically after 10 min.

Manipulation check. As a manipulation check, participants were asked to answer the same four items we used in Study 4, assessing participants’ ratings of well-roundedness (Cronbach’s α = .83).

Outcome variable: Affect. Affect was measured as in Study 4 and combined into one scale for pleasant positive affect (Cronbach’s α = .84), positive affect PANAS (Cronbach’s α = .89), and negative affect PANAS (Cronbach’s α = .83).

Outcome variable: Regret (anticipated). Participants answered the three items we used in Study 4 and one additional item. The items were adapted to assess how participants thought they would feel in the following hours (i.e., “Think about the next hours—how much do you agree with the following statements”: “I will think remorsefully about the end of the conversation (additional item),” “I will think about what I could have done differently,” “I will wish that I could go back in time to end the conversation differently,” “I will be upset that I couldn’t finish the conversation”). The four items were answered on Likert scales, ranging from 1 (not at all) to 5 (very much), which we combined into one scale (Cronbach’s α = .62).

Outcome variable: Ease of transition (anticipated). Participants answered three items in which they were asked to think about the following hours and to imagine how they would feel (i.e., “Think about the next hours—how much do you agree with the following statements”: “I will have the feeling of leaving something unfinished and therefore feel an emotional drain while working on the next tasks,” I will think of the conversation even if I am actually busy with something else,” and I will move on to the next item on my agenda without thinking further about the conversation”). The three items were answered on Likert scales, ranging from 1 (not at all) to 5 (very much), which we combined into one scale (Cronbach’s α = .56).

Outcome variable: Ease of transition (Stroop task). To obtain a measure of participants’ behavioral transition into the subsequent phase, they were given a Stroop task (MacLeod, 1991; Stroop, 1935). Participants indicated the color of a word stimulus (i.e., red, green, blue, and black) as quickly as possible by using one of four response keys (i.e., D, F, J, K). The word’s meaning was compatible with its color in congruent trials (e.g., blue was written in blue ink) and incompatible in incongruent trials (e.g., blue was written in red ink). The stimulus words were written in capital letters and presented on a white background. They were presented until participants responded; the intertrial interval was 200 ms. Before participants started the Stroop task, they took one test trial. They completed four blocks with a break after two blocks. Each block consisted of 80 trials with 40 congruent and 40 incongruent trials. The order of presentation was random; stimuli repetition was possible. Eleven trials with response times shorter than 150 ms and RTs that were greater than the three interquartile range of the median (Tukey, 1977) were excluded to avoid invalid outliers.

As a longer RT is an indicator of a higher cognitive load (Brinken, Steinbacher, Plass, & Leutner, 2002), we expected participants in the well-rounded ending condition to show shorter RTs in the Stroop task (MacLeod, 1991; Stroop, 1935) than participants in the not well-rounded ending condition. Furthermore, one indicator for the mental shift away from a task at hand to one’s thoughts is participants’ RT coefficient of variability (RTCV; Bastian & Sackur, 2013). We calculated an overall RTCV score (standard deviation/mean) for the four blocks (Flehmig, Steinborn, Langner, Scholz, & Westhoff, 2007). Higher RTCV reflects higher fluctuations in performance. We expected participants in the well-rounded ending condition to show lower RTCV scores than participants in the not well-rounded ending condition. At the end of the study, participants were thoroughly debriefed and thanked for their participation.

Results and Discussion

We conducted a one-way MANOVA, with condition as the independent variable and manipulation check, pleasant positive affect, positive affect PANAS, negative affect PANAS, anticipated regret, anticipated ease of transition, and overall RT and RTCV as dependent variables. There was an overall effect of condition, F(8, 53) = 2.30, p = .034, Wilk’s Λ = 0.74, η²p = .26.

Manipulation Check

Participants in the well-rounded ending condition reported a more well-rounded ending of the conversation (M = 0.30, SD = 0.96) than did participants in the not well-rounded condition (M = −0.28, SD = 0.97), F(1, 60) = 5.70, p = .020, η²p = .09. For example, when ending the conversation, participants in the well-rounded condition summarized the conversation and emphasized exciting aspects, such as common interests. Further, they tended to say goodbye in a friendly tone. In contrast, participants in the not well-rounded ending condition did not summarize their conversation and thus oftentimes abruptly said goodbye.
Affect, Regret, and Ease of Transition

As expected, participants in the well-rounded condition reported higher pleasant positive affect, \( F(1, 60) = 6.47, p = .014, \eta^2_p = .10 \), and higher positive affect PANAS, \( F(1, 60) = 7.23, p = .009, \eta^2_p = .11 \). There was no effect of condition on negative affect PANAS, \( F(1, 60) < 0.01, p = .949, \eta^2_p < .01 \), anticipated regret, \( F(1, 60) = .11, p = .746, \eta^2_p < .01 \), or anticipated ease of transition, \( F(1, 60) < 0.01, p = .99, \eta^2_p < .01 \). Importantly, however, there was a difference between the conditions regarding the behavioral measure of ease of transition: Participants in the well-rounded ending condition showed shorter overall RTs, \( F(1, 60) = 4.66, p = .035, \eta^2_p = .07 \), and lower RTCV scores, \( F(1, 60) = 7.64, p = .008, \eta^2_p = .11 \), compared with participants in the not well-rounded ending condition (for means and standard deviations, see Table 3).

In Study 7, participants who were given a chance to end a conversation well-rounded (vs. not) reported more positive affect. Contrary to the previous studies there was no significant difference between the two groups regarding negative affect, anticipated regret and anticipated ease of transition. Anticipated emotions can be inaccurate in both directions—people may overestimate or underestimate them (Dorval et al., 2000; Loewenstein & Schkade, 1999; Wilson & Gilbert, 2005). Therefore, this result may reflect people’s difficulties projecting themselves into the future. Importantly, Study 7 showed that a well-rounded versus not well-rounded ending affected participants’ behavioral transition into a new phase. Participants who experienced a well-rounded conversation performed better on the subsequent Stroop task, as indicated by shorter and more consistent RTs. Thus, they were better able to fully concentrate on the Stroop task. Possibly, their thoughts were less likely to shift away from the demands of the task to the previous conversation. This finding supports our assumption that a well-rounded ending allows a person to start unencumbered into the new phase.

General Discussion

Across seven studies, we found that a well-rounded ending is associated with high positive affect, little regret, and an easy transition into the subsequent phase. Studies 1 through 3 showed in correlational designs that the more well-rounded students experienced the end of a visit abroad, their high school graduation, or an idiosyncratic ending, the more positive was their affect, the less negative was their affect, the less regret they reported, and the easier was their transition into the subsequent phase. Studies 4 through 6 replicated the findings of Studies 1 through 3 by providing all participants with a vignette of either a well-rounded or a not well-rounded ending. Additionally, the results of Study 6 showed that the association between a well-rounded ending and ease of transition could also be found for a behavioral measure. Finally, Study 7 complemented Studies 1 through 6 by letting participants experience (instead of recalling or imagining) an ending (i.e., a conversation) that was either well-rounded or not well-rounded. Ending a conversation well-rounded led to more positive affect and an easier and effective transition into the subsequent phase, indicated by a better performance on the subsequent task.

The seven studies were methodologically diverse—we used correlational as well as experimental designs—which speaks to the convergent validity of our overall findings. Studies 1 through 6 were conducted online, and Study 7 was conducted in a controlled laboratory setting. We obtained the expected results regarding two meaningful life transitions (i.e., the end of spending a visit abroad and the end of high school) and regarding smaller endings (i.e., moving away, end of a party, end of a conversation), and we found the expected effects in a European sample (Study 1), in German samples (Studies 2 and 6), and in samples from the Unites States (Studies 3 to 5), across different ages ranging from 17 to 80 years.

Limitations and Future Research

Future research could complement our findings with studies using a longitudinal design. The well-roundedness of an ending could be measured (e.g., with an ambulatory assessment) right after a life phase comes to an end, and the variables affect, regret, and ease of transition may be assessed continuously over the following weeks. Endings in childhood (e.g., end of primary school) as well as in older age (e.g., end of professional life) should be investigated. Making such endings salient (vs. not) is especially important for identity development across the life span because such salience helps people to differentiate the present self from the future self and thereby spurs motivation to attain future-oriented goals (Peetz & Wilson, 2013). Our research adds to previous work by showing that succeeding to end the phase prior to those landmarks in a well-rounded way helps people to create a clean slate and to effectively move on with the upcoming life phase.

Many of the endings we experience in our lives include other people (e.g., end of high school). Therefore, future studies could investigate the role of attachment style (Ainsworth, Blehar, Waters, & Wall, 1978; Bowlby, 1969, 1973, 1980) in ending situations to shed a more differentiated light on the role that social relationships and specific interpersonal interactions play in how people deal with endings.

Although we controlled for the overall positivity of the previous life phase in Studies 1 and 2 when investigating the relation between a well-rounded ending and affect, regret, and the ease of transition, we cannot completely rule out that the well-rounded (vs. not well-rounded) endings in our studies (e.g., saying goodbye when leaving a friend’s party) reflected per se more positive experienced endings, expressed in more positive affect. However,
in the example of leaving a party, people might feel more comfortable and positive in the moment when leaving without saying goodbye, as they do not want to hurt the host or interrupt ongoing conversations at the party. That is, a person who feels comfortable leaving a party without saying goodbye might thereafter still experience regret about not having said farewell or about not having been polite to the host. Future studies should try to disentangle more thoroughly the positivity of the ending as experienced during the ending from its well-roundedness. As an example, future research might focus on negative experiences next to positive and neutral experiences and investigate whether ending well-rounded (vs. not well-rounded) would lead to more positive affect, less regret, and an easier transition into the next life-phase.

Further, at first sight, one might argue that a well-rounded ending (defined as the feeling of having done everything one could have done and the feeling of having completed something to the fullest) and the experience of then having no regret are overlapping concepts. However, we argue that regret is a distinct variable that is not encompassed in this definition of a well-rounded ending. On the basis of the literature on goal striving and goal attainment, even if a person succeeds to end in a well-rounded way by adjusting his or her previously set goal to the limited time frame and attains this adjusted goal, he or she can still regret actions as well as inactions. Thus, the well-roundedness of an ending may contribute to subsequent levels of regret, rather than well-roundedness and regret being part of the same concept. Indeed, in Studies 4 through 6, participants in the well-rounded (vs. not well-rounded) ending condition subsequently experienced less regret.2

After life events that do not end well-rounded, people tended to engage in reparative behavior (e.g., sending a text message to a friend when leaving his or her party). Future research should investigate whether this reparative behavior can counteract the negative effects of a not well-rounded ending. For example, future studies could manipulate whether participants have the opportunity to engage in reparative behavior and investigate how this influences affect and regret.

Implications

As we deal with foreseeable upcoming endings repeatedly, we should support people in dealing with them so that they benefit in affect and ease of transition to the next phase. Such support may be relevant in several life domains. For example, educators could prepare their students for their upcoming graduations focusing on a well-rounded ending. We found effects of well-rounded endings. Those endings might be very meaningful, such as ending high school or retiring from a job; or they might be smaller, such as ending a fun night out with friends or ending a vacation. Using the remaining time to end well-rounded is a good practice to increase positive affect, decrease regret, and ease the transition into the subsequent life phase. Future research should examine ways to support people in finding a well-rounded ending.

Conclusion

Throughout our lifetime, we have to deal with various upcoming endings. Those endings might be very meaningful, such as ending high school or retiring from a job; or they might be smaller, such as ending a fun night out with friends or ending a vacation. Using the remaining time to end well-rounded is a good practice to increase positive affect, decrease regret, and ease the transition into the subsequent life phase. Future research should examine ways to support people in finding a well-rounded ending.

2 For the data of Study 1, we additionally performed a principal axis factor analysis with oblique rotation (direct oblimin) on the six items measuring the concept of a well-rounded ending and the four items measuring regret. The analysis retained two factors which, in combination, explained 58.26% of the variance. As expected, the structure matrix revealed six items loading on the first factor (i.e., a well-rounded ending) and four items loading on the second factor (i.e., regret). This analysis thus corroborates the assumption of a well-rounded ending and regret being distinguishable constructs.

References


CONSEQUENCES OF WELL-ROUNDED ENDINGS


CONSEQUENCES OF WELL-ROUNDED ENDDINGS


Received May 4, 2018
Revision received October 31, 2018
Accepted November 1, 2018

E-Mail Notification of Your Latest Issue Online!

Would you like to know when the next issue of your favorite APA journal will be available online? This service is now available to you. Sign up at https://my.apa.org/portal/alerts/ and you will be notified by e-mail when issues of interest to you become available!