The Effect of Integrated Regulation on Self-Report of Emotion while Recalling Happy and Sad Events

Stacy R. Gurbarg

Angela D. Staples, Geneva Dodson, Steven M. Boker | Department of Psychology, University of Virginia

Introduction

Those who are able to better regulate their feelings and emotions may be better at maintaining positive feelings or quickly recovering from negative feelings. This is important in a mental health setting in terms of treating people with psychological conditions—deficits in this ability have been linked with increased risk of depression and other mood disorders.

Previous research has found that integrated regulation, or one’s awareness and ability to assimilate emotions and act with little inner conflict, has positive mental health consequences. This study sought to extend past findings that found a correlation between one’s ability to regulate emotions and feel a greater sense of happiness and sadness, respectively. We hypothesized that individuals with higher integrated regulation (IR) would report greater happiness and those with better ability to assimilate emotions have a stronger reaction to the environment around them because they can integrate their feelings more soundly. Therefore, these participants may have had stronger reactions to the stories told by their conversational partners and would thus have been more surprised, or astonished, by the memories they heard.

Methods

- Participants:
  - 29 men, 42 women
  - 36 college students (M = 19.5, SD = 2.08 years of age)
  - 35 community volunteers (M = 70.45, SD = 6.47 years of age)
- Videoconference conversations
  - Reminisced alone, with a student and a community volunteer
  - Discussed an angry, happy, and sad memory
- Rated self and partner’s feelings after each conversation
  - Younger dyads (n = 15), mixed-age (n = 26), older (n = 14)
- Variables
  - 16 emotion words (1-very inaccurate to 9-very accurate)
  - Averaged into 4 composites: happy, astonished, sad, irritable
- Analyses
  - R v. 2.15, lme4 libraries
  - Multilevel models accounted for nesting of persons within dyads, within quads
  - Analyses were run separately for each of 4 experienced emotion scales

Results and Figures

Table 1. Unstandardized fixed-effects estimates for self-rated feelings by IR and social context.

<table>
<thead>
<tr>
<th>Variable</th>
<th>Happiness</th>
<th>Astonishment</th>
<th>Anger</th>
<th>Sadness</th>
</tr>
</thead>
<tbody>
<tr>
<td>Intercept</td>
<td>5.44 (0.43)</td>
<td>2.31 (0.60)</td>
<td>1.78 (0.41)</td>
<td>2.58 (0.45)</td>
</tr>
<tr>
<td>Integrated Regulation</td>
<td>0.22 (0.07)</td>
<td>0.25 (0.10)</td>
<td>0.05 (0.07)</td>
<td>0.01 (0.07)</td>
</tr>
<tr>
<td>Actor: Younger</td>
<td>0.23 (0.19)</td>
<td>-0.27 (0.28)</td>
<td>-0.11 (0.18)</td>
<td>-0.08 (0.15)</td>
</tr>
<tr>
<td>Social Context: Younger</td>
<td>0.58 (0.22)</td>
<td>0.45 (0.30)</td>
<td>-0.61 (0.22)</td>
<td>-0.95 (0.24)</td>
</tr>
<tr>
<td>Social Context: Older</td>
<td>0.19 (0.22)</td>
<td>0.41 (0.31)</td>
<td>-0.66 (0.22)</td>
<td>-0.60 (0.25)</td>
</tr>
<tr>
<td>Memory: Sad</td>
<td>-3.89 (0.17)</td>
<td>-0.43 (0.15)</td>
<td>1.00 (0.13)</td>
<td>3.00 (0.17)</td>
</tr>
</tbody>
</table>


Figure 1. Self-reported sadness by participant age and social context.

![Figure 1](image1)

Figure 2. Self-reported anger by participant age and social context.

![Figure 2](image2)

Discussion

As expected, there was a statistically significant effect of participants’ level of IR and their self-reported level of happiness while recalling happy events. These results indicate that integrated regulation of emotions may increase one’s ability to embody their positive emotions and feel them more intensely. For this reason, it may be that people who have better mental health may have more positive emotions, but may just feel a greater sense of happiness from positive events than do those with worse integrated regulation.

Another significant effect of IR was on astonishment, in that participants with higher levels of IR tended to rate themselves as more astonished, irrespective of the type of memory being shared. This could indicate that those with better ability to assimilate emotions have a stronger reaction to the environment around them.

Additionally, participants reported higher levels of happiness when reminiscing with a younger conversational partner compared to when reminiscing alone. These findings could be a result of the content of these conversations, which could have been altered to be more lighthearted for a social setting. Another explanation could be that participants, be they younger or older, fed off of the innate happiness of the college students and thus were happier during these conversations.

However, contrary to the expected, there was no relationship between IR and self-reported irritability or sadness. These results could be due to any natural emotion withholding that may have occurred when participants were conversing with a partner. Because participants were unfamiliar with each other, they may have attempted to screen their negative emotions in order to maintain composure during this part of the study.

Further Information

Contact: Angela D. Staples via email astaples@virginia.edu

This research was supported by the National Institute on Aging (R211AG041035). The content is solely the responsibility of the authors and does not necessarily represent the official views of the NIH/NIA.