Abstract

Possible selves are specific images of the self in the future (Markus & Nurius, 1986). They can be positive (hoped-for) or negative (feared). First-year university students disintegrate from adolescent social circles that anchor identities; start making decisions about their lives independently. Important life stage for behavioral change, especially in the health domain. Possible self-based interventions are hypothesized to impact behavior. We aim to test the effectiveness of several interventions in September 2016. Last spring, we conducted a pilot study to examine: 1. efficacy of interventions in facilitating the generation of possible selves; 2. validity of our measures.

Correlations

Validity of future self measures (N = 19)

<table>
<thead>
<tr>
<th>Connection to FS</th>
<th>Similarity to FS</th>
<th>Caring FS</th>
<th>Liking FS</th>
<th>Frequency FS</th>
<th>Clarity FS</th>
</tr>
</thead>
<tbody>
<tr>
<td>to FS</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
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<td>to FS</td>
<td>N/A</td>
<td>N/A</td>
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<td>Connection to FS</td>
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<td>to FS</td>
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<tr>
<td>Similarity to FS</td>
<td>N/A</td>
<td>N/A</td>
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<td>to FS</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
</tr>
<tr>
<td>Caring FS</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
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<tr>
<td>Liking FS</td>
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<td>N/A</td>
<td>N/A</td>
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<tr>
<td>Frequency FS</td>
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<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
</tr>
<tr>
<td>Clarity FS</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
</tr>
</tbody>
</table>

Bold numbers indicate significant correlations at the .05 level.

Future self characteristics - outcome variables (N = 10-19)

<table>
<thead>
<tr>
<th>Perceived Stress</th>
<th>Smoking</th>
<th>Alcohol Use</th>
<th>Exercise</th>
<th>Mod. Exercise</th>
<th>Walking</th>
</tr>
</thead>
<tbody>
<tr>
<td>to FS</td>
<td>-.23</td>
<td>-.46</td>
<td>-.25</td>
<td>.18</td>
<td>.39</td>
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<tr>
<td>Similarity to FS</td>
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<td>-.01</td>
<td>-.01</td>
<td>.00</td>
<td>-.07</td>
</tr>
<tr>
<td>Liking FS</td>
<td>-.38</td>
<td>-.44</td>
<td>-.20</td>
<td>.04</td>
<td>.16</td>
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<tr>
<td>Frequency FS</td>
<td>.06</td>
<td>-.23</td>
<td>-.10</td>
<td>.24</td>
<td>.17</td>
</tr>
<tr>
<td>Clarity FS</td>
<td>.50</td>
<td>.50</td>
<td>.50</td>
<td>.12</td>
<td>.14</td>
</tr>
</tbody>
</table>

Bold numbers indicate significant correlations at the .05 level.

Entire academic year: Sept 2016 - July 2017
8 measurements 4 weeks apart; 4 semester
Large panel of first-year students; Dutch and international separated.

Conclusion

Participants followed instructions closely and were able to generate possible selves as intended, but large differences in the level of detail provided.

Future self measures appear valid: all correlations are positive as expected - but: some correlations very low - suggestive of multiple constructs. Caring about, similarity to, connectedness with and clarity of future self appear related to health behavior.

Background

Possible or future selves have been extensively studied in health psychology and in the context of behavioral change. A possible self is an image of the self in the future as they might possibly be (Markus & Nurius, 1986). They can be hoped (what one would like to be in the future) or feared (what one would dread to be). The perceived link between the current and the future self varies greatly between individuals. This link influences the image of the future self, and the perceived long-term benefits of behavioural change of the current self (Hershfield et al., 2009). Future selves vary greatly in characteristics like clarity and frequency of recall, which, we hypothesize, also influence the degree of change behavior of the current self.

Example responses

**Hoped**
- I would love to have a nice house, it doesn't even have to be that big, just big enough for my family and my future wife. I don't even have to be rich, just enough to support my family and that I don't have money problems and go on holidays. I wouldn't mind taking care of the household and the kids while my wife is at work.
- Winning the lottery and travelling the world with a large yacht and a nice girl.

**Feared**
- "Always and miserable. No job, so I'm just on benefits without a family or a wife. I lost all my friends and too depressed to do something about it. Also addicted to alcohol and just wasting my life." (sic)
- To always stay depressed: I'm scared that I'll never get better, that I'll keep relapsing and I'll always stay depressed. I fear that I won't be able to work normally and my partner leaves me if things don't get any better. I fear that therapy won't work for me, and that medication also won't help." (sic)

Conditions

3 intervention conditions:
1. Narrative condition: write a short description of a hoped-for or feared self.
2. Graphic condition: upload one or more pictures describing a hoped-for or feared self.
3. Combination condition: write a short description and upload one or more pictures describing a hoped-for or feared self.

Control condition: write a short description and upload one or more pictures about music genres you like or dislike.

Characteristics

Online questionnaire:
- 19 participants, 13 the intervention, 4 completed follow-up.
- Participants were asked to freely generate hoped-for and feared selves, then select up to 3 of both to describe in detail (in accordance with Cross & Markus, 1991).

Baseline measures: clarity of PS, similarity of thought about PS, connectedness to PS, similarity to PS, degree of caring about PS, degree of liking PS.

Outcomes: exercise, smoking, drinking, adjustment to college, grades, time spent studying.

Correlations

Similarity to FS: N/A
Connection to FS: N/A
Caring FS: -.01
Liking FS: .03
Frequency FS: -.46
Clarity FS: .24

Possible selves as intended, although responses varied greatly in their level of detail. Measures correlated as expected: participants who feel connected with their future self, think about their future self more frequently. Future study will take place in the academic year of 2015-2017 and consist of 8 measurement points.

- Same instruments as used in the pilot
- Various properties (e.g., clarity, frequency) of possible selves will be assessed, as well as perceived stress, grades and adjustment to university.

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Participants followed instructions closely and were able to generate possible selves as intended, but large differences in the level of detail provided.

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Upcoming study

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Ideas