

Regulatory Focus and Thinking About the Future Versus Reality

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People oriented toward promotion are concerned with changing (improving) their current state, while those oriented toward prevention are concerned with maintaining (not worsening) their current state (Higgins, 1997). Because a promotion orientation is directed at moving from the reality to a better future, whereas a prevention orientation is directed at keeping the reality, we predicted and found in 4 studies that when thinking about important personal wishes or concerns, promotion-oriented participants focused more on the future (vs. the reality) than prevention-oriented participants. Promotion-oriented participants also viewed the future more positively compared to their reality than prevention-oriented participants. We assessed focus toward the future and reality by asking participants to name and write about an important personal wish or concern and analyzing the content of their written texts. We observed the effects when we manipulated participants' regulatory focus by asking them to generate promotion (vs. prevention) oriented concerns (Studies 1 and 2) and when we measured their chronic regulatory focus (Study 3).

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Lois is concerned with getting a salary increase—she is attending to improving her current state. Peter by contrast is concerned with keeping his job—he is attending to maintaining his current state. How will their two distinct motivational orientations—promotion versus prevention—influence how Lois and Peter think about their future versus their reality? Research on regulatory-focus theory (Higgins, 1997) has investigated the impact of these two orientations on various aspects of goal pursuit such as risk-taking, decision-making, and experienced affect (summary by Cornwell & Higgins, 2018). Here, we explore whether the two orientations also affect people's focus toward the future versus the reality, that is, to what extent people spontaneously focus on the future versus the reality when thinking about their promotion and prevention concerns.

Regulatory-Focus Theory

Regulatory-focus theory is about goal pursuit (Higgins, 1997, 1998). According to the theory, people differ in their strategic

inclinations in goal pursuit. People with a promotion orientation are motivated to approach a better state than their current state (a + 1 gain relative to the current reality) rather than maintaining their current state (a 0 nongain relative the current reality). People with a prevention orientation are motivated to approach maintaining their current state (a 0 nonloss relative to the current reality) rather than worsening their current state (a -1-loss relative to the current reality). In summary, while a promotion orientation is geared toward approaching a future that is different and improved compared to their current state, a prevention orientation is geared toward approaching a future that is the same and not worsened compared to their current state.

The two strategic inclinations (promotion vs. prevention) give rise to different goals that are being pursued. People with a promotion orientation focus on hopes and aspirations to achieve their ideal end state (a + 1 gain); those with a prevention orientation by contrast focus on duties and obligations to achieve their ought end-state (a 0 nonloss). In research on regulatory focus theory, people's strategic inclinations associated with promotion versus prevention are often operationalized by the type of goals that are pursued (Cornwell & Higgins, 2018). That is, measuring or manipulating people's goals (hopes and aspirations vs. duties and obligations) has been used to assess or induce their strategic inclinations associated with promotion versus prevention.

The implications of the two orientations (promotion vs. prevention) have been investigated in a multitude of domains such as self-evaluation (Leonardelli & Lakin, 2009), creativity (Friedman & Förster, 2000), social comparison (Lockwood et al., 2002), unethical behavior (Gino & Margolis, 2011), risk-taking (Cornwell & Higgins, 2018), language use (Semin et al., 2005), persuasion (Cesario

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& Higgins, 2008), and negotiation (Galinsky et al., 2005), among others.

Regulatory Focus and Thinking About the Future and Reality

There is also evidence that the two orientations influence people's temporal perspective in goal pursuit. A promotion (vs. prevention) orientation is related to a greater focus on temporally distant rather than proximal goals (Pennington & Roese, 2003). Moreover, promotion- (vs. prevention-) oriented participants preferred initiating goal-related actions sooner. For example, they preferred starting to prepare their application for a fellowship earlier (Freitas et al., 2002). People with a promotion- (vs. prevention-) orientation also showed greater persistence toward attaining a desired future (Förster et al., 2001). Finally, people with a promotion- (vs. prevention) orientation evinced a greater preference for change over time rather than stability. For instance, they preferred initiating a novel activity rather than continuing a previous activity (Lieberman et al., 1999).

We go beyond this previous research in the following ways. First, rather than investigating goal pursuit in relationship to various dimensions of the future (e.g., pursuit of distal vs. proximal goals, sooner vs. later action initiation), we compare the mental focus on the future versus the reality as it is expressed in the stream of thought. Rather than relying on self-report data (e.g., preferred time of action initiation) or observed persistence in goal pursuit (e.g., time spend on solving anagrams), we unobtrusively observed the focus on the future versus the reality by content-analyzing participants' spontaneous written elaborations about a personally important wish or concern. This approach allowed us to investigate how the two motivational orientations (promotion vs. prevention) manifest themselves not in participants' conscious preferences and behaviors, as was done in previous research, but in their spontaneous stream of thought (i.e., the constant flow of ideas and images that run through a person's mind; James, 1892).

Because people oriented toward promotion are more concerned with change (improving their current state) whereas those oriented toward prevention are more concerned with maintenance (keeping their current state), we suspected that promotion-oriented participants should focus more on the future (vs. the reality) than prevention-oriented participants. Moreover, because promotion-oriented participants are concerned with attaining a future that is better than their current state, whereas prevention-oriented participants are concerned with attaining a future that is similar to their current state, we also suspected that promotion oriented participants should see their future as more positive than their reality. Prevention-oriented participants by contrast should see their future similarly positively as their reality.

We stress that operationalizing people's strategic inclinations associated with promotion versus prevention by the type of goals being pursued (hopes and aspirations vs. duties and obligations) should lead to the same predictions. Hopes and aspirations are something positive that lies in the future, whereas duties and obligations are not necessarily positive and lie in the present and future. Therefore, focusing on hopes and aspirations (vs. duties and obligations) should lead participants to focus more on the future (vs. the reality) and view their future more positively than their reality.

To assess focus on the future versus reality, we used a paradigm that allows differentiating to what extent participants spontaneously elaborate on the future and reality when asked to write about an important personal wish or concern (Sevincer & Oettingen, 2013).

The Present Research

We manipulated and measured regulatory focus. Regulatory focus has been conceptualized as a state, that is, people's orientation toward promotion or prevention may change from one situation to another. There exist various techniques to temporarily alter regulatory focus. One widely used technique is to induce a promotion versus prevention orientation by asking participants to focus on either their hopes and aspirations or their duties and obligations (Freitas & Higgins, 2002). Regulatory focus has also been conceptualized as an individual difference variable, that is, people differ in the degree to which they chronically pursue promotion-oriented or prevention-oriented goals (Higgins et al., 1997). Their chronic orientation toward promotion or prevention can be assessed by questionnaire (Lockwood et al., 2002).

We conducted three studies. In Study 1, we manipulated regulatory focus using the experimental technique named above. Specifically, we embedded the manipulation from Freitas and Higgins (2002) in the measure to assess focus toward the future and reality. We asked participants in the promotion condition to elaborate in writing on a present hope or aspiration, and we asked those in the prevention condition to elaborate on a present duty or obligation. We then content-analyzed their written elaborations, measuring the extent to which they generated statements about the positive and negative future and about the positive and negative reality. Study 1 focused on no specific life domain. Study 2, which we pre-registered, attempted to replicate Study 1 focusing on the interpersonal domain. In Study 3, we measured chronic regulatory focus using the General Regulatory Focus Measure (Lockwood et al., 2002). In all studies, we hypothesized that promotion-oriented participants would generate more statements about the future (vs. the reality) than prevention-oriented participants. We also suspected that promotion-oriented participants would generate more positive statements about the future than about the reality, whereas prevention-oriented participants would generate positive statements about the future and about the reality to a similar extent.

As mentioned above, regulatory focus theory is about goal pursuit. Therefore, when investigating the effect of promotion versus prevention orientation on people's spontaneous thoughts about important personal wishes or concerns, other motivational variables become relevant, among them the two central motivational variables of expectations of success and incentive value (expectancy x value theories; Atkinson, 1957; McClelland, 1985). Expectations refer to people's subjectively estimated probability of successfully solving their concern. People with high rather than low expectations tend to think more positively and less negatively about important personal concerns (Sevincer et al., 2020). Incentive refers to the subjective attractiveness (i.e., importance) of solving a concern, and salient incentives may trigger positive rather than negative spontaneous thoughts (Rice & Frederikson, 2017). Therefore, in all studies, we repeated our analyses controlling for expectations and incentive.

Study 1: Inducing a Promotion Versus Prevention Orientation—Across Life Domains

Method

Participants and Design

Participants were 259 U.S. Americans recruited via Amazon Mechanical Turk (144 male, 113 female, 2 unidentified; $M_{\text{age}} = 38.3$ years, $SD = 10.9$). Because there were no prior studies on the effect of regulatory focus on spontaneous thoughts, we performed power calculations to recruit a large enough sample to detect a small effect ($d = .40$) with 95% power (Faul et al., 2007). Participants learned that the online questionnaire would involve answering some questions about themselves and writing about an important personal issue. To be eligible, they had to be at least 18 years of age. They received \$.50 for participating. This and all following studies were approved by the local ethics committee. We used two experimental conditions: Promotion versus prevention.

Manipulating Promotion Versus Prevention Orientation

To induce a promotion versus prevention orientation, we asked participants to focus on either hopes and aspirations or duties and obligations (Freitas & Higgins, 2002). In the promotion condition, participants read:

Please think about something you ideally would like to do. In other words, please think about a hope or an aspiration you currently have. Please list the hope or aspiration in the space below.

In the prevention condition, the words “hopes and aspirations” were replaced by “duties and obligations”, and the words “ideally would like to do” by “think you ought to do.” For example, one participant in the promotion condition wrote: “move to a bigger apartment.” One participant in the prevention condition wrote: “provide for my family.”

Expectations and Incentive

To examine whether our hypothesized results remain robust over and above participants’ success expectations and their incentive of solving their concern, we measured expectations and incentive. We asked participants in the promotion condition: “How likely do you think it is that you will realize your hope and aspiration?” (expectations) and: “How important is it that you will realize your hope and aspiration?” (incentive). In the prevention condition, the words “hope or aspiration” were replaced by “duty or obligation.” We used 7-point scales ranging from 1 (*not at all*) to 7 (*very*).

Measuring Focus on the Future and Reality

To measure spontaneous focus on the future and reality, we used a method by Sevincer and Oettingen (2013). In the promotion condition, participants read:

Now we would like you to think about your hope or aspiration. You are free to think about any aspects related to your hope or aspiration that come to mind. Let the mental images pass by in your thoughts and do not hesitate to give your thoughts and images free rein. Take as much time and space as you need to describe your thoughts.

In the prevention condition, the words “hope and aspiration” were replaced by “duty or obligation.” Participants typed their thoughts into a designated field. To conclude, they completed a demographic questionnaire.¹ On the final screen, they were fully debriefed.

Content Analysis of Participants’ Written Texts

Five participants did not name or write about a hope or aspiration, or duty or obligation, respectively. Therefore, we excluded those participants. Our final sample thus consisted of 254 participants. We content-analyzed their written texts using the coding procedure by Sevincer and Oettingen (2013). Specifically, we first segmented the texts into statements. A statement was defined as at least one subject-predicate sequence. In the method by Sevincer and Oettingen, the single statements are then coded into several categories (e.g., “future”, “reality”, “other”). The validity of these categories has been confirmed in many studies (e.g., Sevincer et al., 2015, 2017, 2018, 2020).

For the present study, we modified the existing coding scheme. Specifically, we created the following four categories: “positive future,” “negative future,” “positive reality,” “negative reality.” We also used the existing category “other.” Two independent raters, blind to the hypotheses, coded each statement into one of the five categories. A detailed description of the categories with examples from participants’ statements is in the [online supplemental materials](#). Examples of the coding of two participants’ elaborations are in the [online supplemental materials](#) as well. Interrater agreement was 89.0% ($\kappa = .84$). Statements on which the raters disagreed were coded into the category “other.”

We also recorded the number of generated statements. We did this, because to test our hypotheses that promotion (vs. prevention) oriented participants write more about the future (vs. reality) and more about the positive future (vs. positive reality) we calculated difference scores using the absolute number of statements in the relevant categories. Therefore, to assure that the hypothesized results are not due to differences in participants’ writing length, we repeated our analyses controlling for the total number of generated statements.

Validity Check Using LIWC

Because we used a modified version of an existing coding scheme, we tested the validity of the modified coding scheme using computerized content-analyses with the Linguistic Inquiry and Word-Count (LIWC) Program (Pennebaker et al., 2015). Statements we hand-coded as pertaining to the future (the two future-categories: positive future and negative future) contained more LIWC future-tense words and fewer LIWC present-tense words than statements we hand-coded as pertaining to the reality (the two reality categories: positive reality and negative reality). Moreover, statements we hand-coded as having a positive tone (the two positive categories: positive future and positive reality) contained more LIWC positive-emotion words and fewer LIWC negative-emotion

¹In Study 1, we also measured participants’ current mood using the short version of the Positive and Negative Affect Scale (Thompson, 2007). In Study 3, we also measured participants’ implicit theories about their health behavior (adapted from Dweck, 2007), their self-control skills (Tangney et al., 2004), their positive and negative affect (Watson et al., 1988), and their need for cognition (Cacioppo et al., 1984). Because these measures were assessed for exploratory reasons, we did not discuss them here.

Table 1

Studies 1 to 3: M Number of Future and Reality Statements in Each Condition in Experimental Studies 1 and 2 and in Correlational Study 3 (Standard Deviation in Parenthesis)

Condition	N/n	Statements						Other
		Future overall	Positive future	Negative future	Reality overall	Positive reality	Negative reality	
Study 1								
Promotion	135	2.86 (2.58)	2.70 (2.49)	0.16 (0.55)	1.93 (3.23)	0.52 (1.29)	1.41 (2.84)	3.28 (5.44)
Prevention	119	1.54 (2.31)	1.13 (2.07)	0.41 (1.21)	2.59 (2.84)	1.07 (3.21)	1.52 (1.51)	3.71 (4.48)
Total	254	2.24 (2.54)	1.96 (2.43)	0.28 (0.93)	2.24 (3.34)	0.78 (2.40)	1.46 (2.31)	3.48 (5.01)
Study 2								
Promotion	111	1.59 (1.67)	1.51 (1.63)	0.07 (0.32)	1.40 (2.06)	0.20 (0.70)	1.20 (1.88)	1.73 (2.57)
Prevention	111	0.37 (0.93)	0.32 (0.87)	0.05 (0.26)	1.18 (1.70)	0.50 (1.14)	0.68 (1.37)	3.22 (3.18)
Total	222	0.98 (1.48)	0.91 (1.44)	0.06 (0.29)	1.29 (1.88)	0.35 (0.96)	0.94 (1.66)	2.47 (2.98)
Study 3								
Total	233	2.24 (2.34)	1.86 (2.27)	0.38 (0.98)	2.37 (3.29)	0.58 (2.04)	1.79 (2.58)	1.72 (1.88)

words than statements we hand-coded as having a negative tone (the two negative categories: negative future and negative reality). This pattern supports the validity of the modified coding scheme. The analyses are in the [online supplemental materials](#).

Results

Descriptive Analyses

Expectations and Incentive. *M* expectations and incentive were above the midpoint of the 7-point-scales (expectations: $M = 5.83$, $SD = 1.23$; incentive: $M = 6.16$, $SD = 1.06$), indicating that participants named concerns they deemed feasible and important. Expectations and incentive correlated positively, $r = .48$, $p < .00001$. Participants in the promotion condition had lower expectations ($M = 5.56$, $SD = 1.28$) than those in the prevention condition ($M = 6.13$, $SD = 1.10$), $t(252) = 3.79$, $p < .0002$; incentive did not differ between conditions, $t(252) = .74$, $p = .46$. Therefore, we repeated our analyses controlling for expectations and incentive.

Statements. On average participants generated 7.94 ($SD = 6.97$) statements. The average number of statements did not differ between conditions, $t(252) = .38$, $p = .71$. Still, to assure that the hypothesized results are not due to nonsignificant differences in the total number of generated statements between conditions, in this and all following studies, we repeated our analyses controlling for the total number of generated statements (see the [online supplemental materials](#)). Table 1 depicts the mean number of statements from each category in each condition.

Future Versus Reality Within and Between Conditions. To examine whether promotion-oriented participants focused more on the future (vs. reality) than prevention-oriented participants, we first created an index of how much participants elaborated on the future rather than the reality by subtracting the number of statements about the reality from the number of statements about the future.² In the promotion condition, the obtained index was positive and different from zero, $t(118) = 2.99$, $p = .003$, 95% CI [.35, 1.75], indicating that participants induced with a promotion orientation wrote more about the future than the reality. In the prevention condition, the index was negative and different from zero $t(134) = 2.82$, $p = .005$, 95% CI [-.28, 1.57], indicating that participants induced with a

prevention orientation wrote more about the reality than the future. We then compared the obtained index between the two conditions. As predicted, participants in the promotion condition ($M = .93$, $SD = 3.81$) generated more future (vs. reality) statements than those in the prevention condition ($M = -1.05$, $SD = 3.84$), $t(252) = 4.11$, $p = .00005$, 95% CI [1.02, 2.92], $d = .52$.³

Valence: Positive Future Versus Positive Reality Within and Between Conditions. To examine whether participants in the promotion (vs. prevention) condition focus more on the positive future than the positive reality, we first created an index of how much participants elaborated on the positive future rather than the positive reality by subtracting the number of statements about the positive reality from the number of statements about the positive future.

In the promotion condition, the obtained index was positive and different from zero, $t(134) = 2.19$, $p < .001$, 95% CI [1.73, 2.64], indicating that participants induced with a promotion-orientation wrote more about the positive future than the positive reality. In the prevention condition, the index did not differ from zero $t(118) = .18$, $p = .86$, 95% CI [-.28, 1.57], indicating that participants induced with a prevention orientation wrote about the positive future to a similar extent as about the positive reality. When we compared the obtained index between the two conditions, as predicted, participants

² In all studies, we performed analogous analyses using the absolute number of statements in the relevant categories rather than a difference score. Across studies, the pattern mirrored the pattern reported in the main text. Promotion-oriented participants generated more future statements than prevention-oriented participants. The promotion-oriented participants also generated more future than reality statements in the Experimental Studies 1 and 2. We describe the analyses and present the results in the [online supplemental materials](#).

³ In Study 1, the index of future (vs. reality) statements was negatively skewed (skewness = -1.5). According to Leech et al. (2005), the statistical analyses we used to test our hypotheses (*t*-tests) are robust for variables with this skewness. However, to reduce their skewness, we transformed the variables using square-root transformation as recommended by Howell (2012). We then repeated our analyses with the transformed variable. The pattern of results remained the same. In Study 1, participants in the promotion (vs. prevention) condition generated more future (vs. reality) statements, $p < .001$.

in the promotion condition ($M = 2.19$, $SD = 2.67$) generated more positive future (vs. positive reality) statements than those in the prevention condition ($M = .06$, $SD = 3.52$), $t(252) = 5.45$, $p < .001$, 95% CI $[-2.89, -1.36]$, $d = .69$. This pattern of results indicates that participants in the promotion condition elaborated more on the positive future than the positive reality compared to those in the prevention condition (see Figure 1).

Controlling for Expectations, Incentive, and Number of Statements. To examine whether our hypothesized findings remained robust over and above expectations, incentive, and the total number of statements, we repeated our analyses controlling for expectations, incentive, and the number of statements (see the [online supplemental materials](#)). The observed pattern remained robust over and above expectation, incentive, and the number of statements.

Auxiliary Analyses

Looking from a different angle, we also compared the positivity relative to the negativity of the future and the positivity relative to the negativity of the reality, between conditions.

Positive Versus Negative Future Between Conditions. The promotion condition elaborated more (i.e., generated more statements) on the positive relative to the negative future than the prevention condition. The analyses are in the [online supplemental materials](#).

Positive Versus Negative Reality Between Conditions. The promotion and the prevention condition did not differ in how much they elaborated on the positive (vs. negative) reality. The analyses are in the [online supplemental materials](#).

Discussion

As predicted, participants in the promotion condition wrote more about the future compared to the reality than those in the prevention condition. Apparently, promotion-oriented participants focus more

on the future (vs. reality) than prevention-oriented participants when thinking about important personal concerns.

Further, regarding the valence of the future and reality statements, consistent with the idea that promotion orientation involves striving toward a future that is better than one's current reality, whereas prevention orientation involves striving toward a future that is like one's current reality, participants in the promotion condition wrote more about the positive future than the positive reality, whereas those in the prevention condition did not differ in the extent to which they wrote about the positive future versus the positive reality.

Study 1 focused on personal wishes or concerns across life domains. In Study 2, we attempted to replicate the results from Study 1 in the interpersonal domain using preregistration.

Study 2: Inducing a Promotion Versus Prevention Orientation—Interpersonal Domain

Method

Participants and Design

Participants were 260 U.S. Americans (127 male, 108 female, 4 diverse, 21 unidentified, $M_{\text{age}} = 34.67$ years, $SD = 10.93$) recruited via Prolific. We determined sample size in the same way as in Study 1. We preregistered the study on www.aspredicted.com (#45800). Participants learned that the online questionnaire would involve answering some questions about themselves and writing about an interpersonal issue. To be eligible, they had to be at least 18 years of age. They received \$1.00 for participating. The study used the same design (two experimental conditions: promotion vs. prevention) and an analogous procedure focused on the interpersonal domain as Study 1.

Manipulating Promotion Versus Prevention Orientation

We used the same manipulation as in Study 1, this time focused on the interpersonal domain. Specifically, in the promotion condition, participants read:

Please think about something you ideally would like to do in the domain of interpersonal relations. In other words, please think about an interpersonal hope or an aspiration you currently have. Please list the hope or aspiration in the space below.

In the prevention condition, the words “hopes and aspirations” were replaced by “duties and obligations”, and the words “ideally would like to do” by “think you ought to do.” For example, one participant in the promotion condition wrote: “get better at being nice.” One participant in the prevention condition wrote: “make sure my children stay safe.”

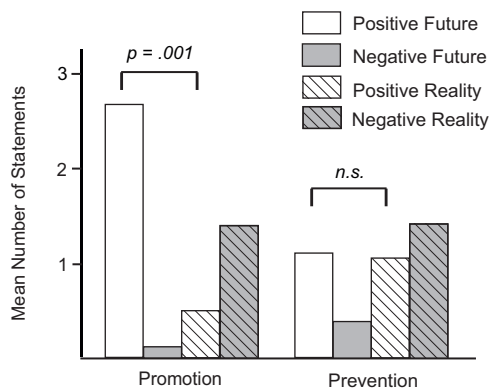
Expectations and Incentive

We used the same items and answer scales as in Study 1.

Measuring Focus Toward the Future and Reality

Participants wrote down their thoughts about their named concern using analogous instructions as in Study 1.

Figure 1
Study 1: Mean Number of Generated Statements in the Four Categories (Positive Future, Negative Future, Positive Reality, Negative Reality) Between the Two Conditions (Promotion Versus Prevention)



Note. Comparisons of the number of statements about the positive future with the positive reality within conditions.

Content Analysis of Participants' Written Texts

Nineteen participants did not name a concern. Therefore, we rejected their data. Additional eighteen participants named an interpersonal concern but did not elaborate it. We excluded those participants as well. Our final sample thus consisted of 223 participants. We used the same content-analytic procedure and coding scheme as in Study 1. Interrater agreement was 85.4% ($\kappa = .79$).

Validity Check Using LIWC

We performed analogous analyses as in Study 1. As in Study 1, statements pertaining to the future contained more future-tense words than statements pertaining to the reality. Contrary to Study 1, we did not find differences in the number of present-tense words between the future statements and the reality statements.⁴ Moreover, as in Study 1, statements with a positive tone contained more positive-emotion words and fewer negative-emotion words than statements with a negative tone.

Results

We conducted analogous analyses as in Study 1.

Descriptive Analyses

Expectations and Incentive. As in Study 1, expectations and incentive were above the midpoint of the 7-point-scales (expectations: $M = 5.61$, $SD = 1.35$; incentive: $M = 6.10$, $SD = 1.03$). Expectations and incentive correlated positively, $r = .56$, $p < .000001$. Also as in Study 1, participants in the promotion condition had lower expectations and tended to have lower incentive than those in the prevention condition, $t(226) = 4.74$, $p = .000004$, and $t(221) = 1.82$, $p = .07$, respectively.

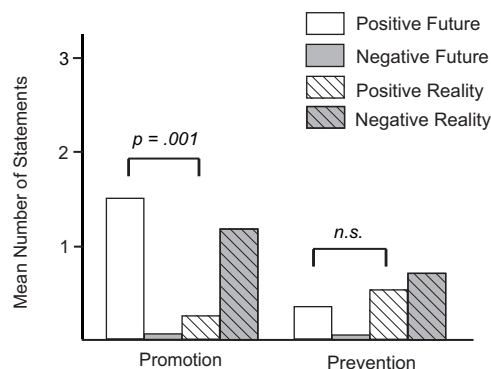
Statements. On average participants generated 4.60 ($SD = 3.42$) statements. The average number of statements did not differ between conditions, $t(221) = .28$, $p = .78$. Table 1 depicts the mean number of future and reality statements in each condition.

Future Versus Reality Within and Between Conditions. As in Study 1, to obtain an index of how much participants elaborated on the future versus the reality, we subtracted the number of reality statements from the number of future statements. Whereas in Study 1 in the promotion condition, the index was positive and different from zero, in Study 2 in the promotion condition, the index did not differ from zero, $t(110) = .70$, $p = .49$, the latter finding indicating that participants induced with a promotion orientation wrote about the future to a similar extent as about the reality. In Study 1, in the prevention condition the index was negative and different from zero, $t(110) = 4.23$, $p = .00005$, 95% CI [.43, 1.19], indicating that participants induced with a prevention orientation wrote more about the reality than the future. When we compared the index between conditions, we replicated the pattern from Study 1 that students in the promotion condition ($M = .19$, $SD = 2.85$) scored higher on the index than those in the prevention condition ($M = -.81$, $SD = 2.02$), $t(220) = 3.02$, $p = .003$, 95% CI [.35, 1.65], $d = .41$.

Valence: Positive Future Versus Positive Reality Within and Between Conditions. As in Study 1, we first created an index of how much participants elaborated on the positive future rather than the positive reality by subtracting the number of statements about the positive reality from the number of statements about the

Figure 2

Study 2: Mean Number of Generated Statements in the Four Categories (Positive Future, Negative Future, Positive Reality, Negative Reality) Between the Two Conditions (Promotion Versus Prevention)



Note. Comparisons of the number of statements about the positive future with the positive reality within conditions.

positive future. As in Study 1, in the promotion condition, the obtained index was positive and different from zero, $t(110) = 1.32$, $p < .001$, 95% CI [.98, 1.65], and in the prevention condition, the index did not differ from zero $t(110) = 1.30$, $p = .20$, 95% CI [−.48, .10]. Moreover, also as in Study 1, and as predicted, participants in the promotion condition ($M = 1.32$, $SD = 1.80$) generated more positive future (vs. positive reality) statements than those in the prevention condition ($M = -.19$, $SD = 1.53$), $t(220) = 6.70$, $p < .001$, 95% CI [−1.95, −1.06], $d = .90$, indicating that participants in the promotion condition elaborated more on the positive future than the positive reality compared to those in the prevention condition (see Figure 2).

Controlling for Expectations, Incentive, and Number of Statements. As in Study 1, we repeated our analyses controlling for expectations, incentive, and the number of statements (see the online supplemental materials). The observed pattern remained robust over and above expectation, incentive, and the number of statements.

Auxiliary Analyses

We performed analogous auxiliary analyses as in Study 1.

Positive Versus Negative Future Between Conditions. As in Study 1, the promotion condition elaborated more on the positive relative to the negative future than the prevention condition (see the online supplemental materials).

Positive Versus Negative Reality Between Conditions. Unlike in Study 1, where the promotion condition and the prevention condition did not differ in how much they elaborated on the positive (vs. negative) reality, in Study 2, the promotion condition elaborated less on the positive (vs. negative) reality than the prevention condition (see the online supplemental materials).

⁴In all other studies (Studies 1 and 3), statements pertaining to the future contained fewer LIWC present-tense words than statements pertaining to the reality. This finding speaks for the validity of our modified scheme.

Discussion

Study 2 replicated our finding from Study 1 that, as predicted, participants in the promotion condition wrote more elaborately about the future compared to the reality than those in the prevention condition. Regarding the valence of the future and the reality, we also replicated the pattern that participants in the promotion condition wrote more about the positive future than the positive reality, whereas those in the prevention condition did not differ in the extent to which they wrote about the positive future versus the positive reality.

Studies 1 and 2 manipulated regulatory focus. Study 3 examined whether the observed pattern of results would also emerge when we measure participants' chronic regulatory focus. Moreover, while Studies 1 and 2 focused on no specific domain and on the interpersonal domain, respectively, Study 3 focused on the health domain.

Study 3: Measuring Chronic Promotion Versus Prevention Orientation—Health Domain

Method

Participants and Design

Participants were 258 U.S. Americans recruited via Amazon Mechanical Turk (85 male, 162 female, 11 unidentified; $M_{\text{age}} = 37.1$ years, $SD = 12.6$). We determined sample size as in Studies 1 and 2. Participants learned that the online questionnaire would involve writing about an important personal issue and answering some questions about themselves. To be eligible, participants had to be at least 18 years of age. They received \$.50. The study used a cross-sectional correlational design.

Measuring Promotion Versus Prevention Orientation

To measure participants' chronic regulatory focus, we used the General Regulatory Focus Measure (Lockwood et al., 2002). The scale consists of two subscales with nine items each. One subscale measures chronic promotion focus (e.g., "I frequently imagine how I will achieve my hopes and aspirations"), the other subscale measures chronic prevention focus (e.g., "I am anxious that I will fall short of my responsibilities and obligations"). The subscales ranged from 1 (not at all) to 9 (very much). Following Lockwood et al. (2002), we combined the items of each subscale into one index of participants' promotion orientation ($\alpha = .91$) and one index of their prevention orientation ($\alpha = .86$), respectively. The subscales correlated weakly positively with each other, $r = .13$, $p = .04$.

Health Concern, Expectations, and Incentive

Participants named their currently most important wish or concern from the health domain. They read: "Which personal wish related to your health is presently most on your mind?" We then measured their success expectations and incentive using analogous items and answer scales as in Studies 1 and 2.

Measuring Focus on the Future and Reality

We asked participants to think about the named wish or concern and write down their thoughts using analogous instructions as in Studies 1 and 2.

Content Analysis of Participants' Written Texts

Twenty-five participants did not name or write about a health-related concern. Therefore, we excluded those participants. Our final sample thus consisted of 233 participants. We content analyzed their texts using the same procedure and coding scheme as in Studies 1 and 2. Interrater agreement was 89.0% ($\kappa = .84$).

Validity Check Using LIWC

As in Studies 1 and 2, the pattern supported the validity of the coding system. The analyses are in the [online supplemental materials](#).

Results

Descriptive Analyses

Expectations and Incentive. As in Studies 1 and 2, mean expectations and incentive were above the midpoint of the 7-point-scales (expectations: $M = 4.85$, $SD = 1.59$; incentive: $M = 6.06$, $SD = 1.10$), suggesting that participants named concerns that were feasible and important to them. Expectations and incentive correlated positively, $r = .43$, $p < .00001$.

Statements. On average participants generated 6.34 ($SD = 4.25$) statements. Table 1 depicts the mean number of generated statements in each category.

Future Versus Reality. We created an index of how much participants elaborated on the future versus reality as in Studies 1 and 2. To test whether promotion orientation and prevention orientation predict the number of future (vs. reality) statements, we conducted simple regression analyses. Promotion orientation tended to predict a greater number of future (vs. reality) statements, $B = .37$, $SE B = .13$, $t(231) = 2.01$, $p = .051$, 95% CI $[-.002, .75]$, $r = .13$, $d = .26$. Prevention orientation did not predict the number of future (vs. reality) statements, $B = .28$, $SE B = .10$, $t(231) = 1.35$, $p = .124$, 95% CI $[-.63, .08]$, $r = .07$, $d = .20$. That is, the stronger participants' chronic orientation toward promotion the more they elaborated on the future versus the reality. Their chronic orientation toward prevention was not related to how much they elaborated on the future versus the reality.

Moreover, because chronic promotion orientation and chronic prevention orientation were weakly positively correlated ($r = .13$), to examine the single unique contribution of promotion orientation and prevention orientation, we conducted simultaneous regression analyses with both promotion orientation and prevention orientation entered simultaneously as predictors. Promotion orientation predicted a greater number of future (vs. reality) statements, $B = .40$, $SE B = .14$, $t(231) = 2.07$, $p = .039$, 95% CI $[.02, .77]$, $d = .27$, and prevention orientation tended to predict a lower number of future (vs. reality) statements, $B = -.30$, $SE B = .18$, $t(231) = 1.70$, $p = .093$, 95% CI $[-.65, .05]$, $d = .22$. The stronger participants' chronic orientation toward promotion the more they elaborated on the future versus the reality and the stronger their chronic orientation toward prevention the less they tended to elaborate on the future versus the reality. This pattern suggests that both promotion orientation and prevention orientation contributed to the number of generated future (vs. reality) statements.

Valence: Positive Future Versus Positive Reality. We created an index of how much participants elaborated on the positive

future versus positive reality as in Studies 1 and 2. Simple regression analyses indicated that promotion orientation positively predicted the obtained index, $B = .50$, $SE B = .14$, $t(231) = 3.62$, $p < .001$, 95% CI [.23, .77], $r = .18$, $d = .47$, indicating that the more participants were chronically oriented toward promotion, the more they elaborated on the positive future rather than the positive reality. Prevention orientation tended to negatively predict the index, $B = -.22$, $SE B = .13$, $t(231) = 1.67$, $p = .097$, 95% CI [-.47, .04], $r = .07$, $d = .22$, indicating that the more participants were chronically oriented toward prevention, the less they elaborated on the positive future rather than the positive reality.

Simultaneous regression analyses indicated that chronic promotion orientation predicted a greater number of statements about the positive future (vs. positive reality), $B = .51$, $SE B = .14$, $t(230) = 3.76$, $p < .001$, 95% CI [.24, .78], $d = .37$, and chronic prevention orientation tended to predict a lower number of statements about the positive future (vs. positive reality), $B = -.25$, $SE B = .13$, $t(230) = 1.96$, $p = .051$, 95% CI [-.50, .001], $d = .13$.

Controlling for Expectations, Incentive, and Number of Statements. As in Studies 1 and 2, we controlled for expectations, incentive, and the number of statements. The analyses are in the [online supplemental materials](#). Regarding the extent of elaboration of future and reality, while in Studies 1 and 2, controlling did not make any difference, in Study 3, the relationship between promotion orientation and the number of future (vs. reality) statements became nonsignificant ($p = .29$) when using simple regression analyses and ($p = .24$) when using simultaneous regression analyses. When we performed follow-up analyses to examine which of the three control variables (expectations, incentive, or number of statements) were responsible for the missing relationship, we found that expectations alone were responsible (simple regression: $p = .37$ simultaneous regression: $p = .30$). The relationship remained marginally significant when controlling for incentive alone ($p = .105$ and $p = .08$, respectively) and it remained significant when controlling for the number of statements ($ps = .02$). For valence of positive future versus positive reality, the pattern remained robust when controlling for expectations, incentive, and the number of statements.

Discussion

The stronger participants' self-reported chronic promotion orientation, the more statements about the future (vs. the reality) they generated when writing about an important health-related wish or concern. The stronger their prevention orientation, the fewer statements about the future (vs. reality) statements they generated when considering the single unique contribution of promotion orientation and prevention orientation using simultaneous regression analyses. When using simple regression analyses, prevention orientation was not related to the number of future (vs. reality) statements.

Moreover, regarding the valence of the future and reality statements, the stronger participants' promotion orientation the more statements they generated about the positive future compared to the positive reality. This pattern also mirrors the pattern in Studies 1 and 2. The stronger their prevention orientation, the fewer statements they generated about the positive future compared to the positive reality. This pattern is different from Studies 1 and 2 in that in Studies 1 and 2 prevention-oriented participants generated

a similar number of statements about the positive future and the positive reality.

General Discussion

In three studies we investigated the relationship between regulatory focus and participants' thinking about the future (vs. the reality) when asked to elaborate on an important personal wish or concern. Specifically, we induced promotion (vs. prevention) orientation (Studies 1 and 2) suggesting causal effects of regulatory focus on thinking about the future and we measured chronic promotion (vs. prevention) orientation (Study 3). We looked at wishes or concerns from no specific domain (Study 1), from the interpersonal domain (Study 2), and from the health domain (Study 3).

Future Versus Reality

Regarding participants' extent of writing about the future compared to the reality, in the experimental Studies 1 and 2, participants in the promotion condition either wrote more about the future than the reality (Study 1) or wrote about the future and reality to a similar extent (Study 2). Those in the prevention condition wrote more about the reality than the future (Studies 1 and 2). Also, and as predicted, participants in the promotion condition wrote more about the future (vs. the reality) than those in the prevention condition (Studies 1 and 2). In the correlational Study 3, the stronger participants' chronic promotion orientation was, the more they tended to write about the future (vs. reality). The stronger participants' chronic prevention orientation was, the less they tended to write about the future vs the reality (when considering the single unique contribution of promotion orientation and prevention orientation using simultaneous regression analyses). The average weighted effect size across studies for the relationship between regulatory focus and focus on the future (vs. reality) was $d = .39$ (the analyses are in the [online supplemental materials](#)).

This pattern is in line with the idea that because promotion-oriented persons are more concerned with change (leaving their current state behind) whereas prevention-oriented persons are more concerned with maintenance (keeping their current state), promotion-oriented (vs. prevention-oriented) persons in their spontaneous elaborations are more focused toward the future than the reality.

Valence: Positive Future Versus Positive Reality

Moreover, we consistently found in all three studies, that promotion-oriented participants elaborated more on the positive future than the positive reality. The prevention-oriented participants by contrast elaborated on the positive future and the positive reality to a similar extent (Studies 1 and 2) or elaborated more on the positive reality than the positive future (Study 3). The average weighted effect size across studies for the relationship between regulatory focus and focus toward the positive future (vs. positive reality) was $d = .48$.

This pattern is in line with the theory that promotion-oriented individuals are concerned with attaining an improved future (a + 1 gain relative to their current state) whereas prevention-oriented persons are more concerned with maintaining their current status (a 0 nonloss relative to their current state).

When, in the two experimental studies (Study 1 and Study 2), we performed auxiliary analyses to compare the positive (vs. negative) future and positive (vs. negative) reality between conditions (the analyses are in the [online supplemental materials](#)), we found that consistently in both studies, participants induced with a promotion-orientation elaborated more on the positive (vs. negative) future than those induced with a prevention-orientation. As for the positive (vs. negative) reality, a mixed pattern emerged. In Study 1, there was no difference between the promotion condition and the prevention condition in how much participants elaborated on the positive (vs. negative) reality, suggesting that promotion-oriented and prevention-oriented participants saw their reality similarly—and differed only in how they view the future. However, in the other experimental study (Study 2), participants in the promotion condition elaborated less on the positive (vs. negative) reality than those in the prevention condition, suggesting that promotion-oriented and prevention-oriented persons saw their reality differently—either as something deficient that needs to be improved (promotion) or as something good enough that needs to be preserved (prevention). In summary, the pattern of findings suggests that the observed differences between the promotion and prevention orientation are mainly due to promotion-oriented participants seeing their future as more positive than prevention-oriented participants. More research is needed to examine whether and under which conditions promotion- and prevention-oriented participants differ in how they see their reality.

Expectations, Incentive, and Writing Length

The patterns that promotion-oriented participants focused more on the future rather the reality and that promotion-oriented participants (but not prevention-oriented participants) focused more on the positive future than the positive reality remained robust when controlling for participants' expectations of successfully solving their concern (in Studies 1 and 2 but not in Study 3) and their incentive of solving their concern (in all three studies). Expectations and incentive are two key factors in predicting cognitions related to motivation (Atkinson, 1957; McClelland, 1985). The pattern also remained robust in all three studies when controlling for the overall number of generated statements. This latter finding suggests that the observed pattern cannot be explained by differences in participants' absolute writing length.

Limitations and Future Directions

Several limitations provide directions for future research. First, we conducted our studies with participants from the United States, a Western culture. People from Western cultures (i.e., those with an independent self-concept) are more inclined to a promotion (vs. prevention) orientation (Lee et al., 2000) and more illusionary optimism (Rose et al., 2008) than those from Eastern cultures (i.e., those with an interdependent self-concept). Future research may test whether people from Western cultures focus more on the positive (vs. negative) future than those from Eastern cultures.

Second, in Study 3, we used the General Regulatory Focus Measure (GRFM; Lockwood et al., 2002) to assess individual differences in chronic promotion/prevention orientation. The promotion subscale and the prevention subscale of the GRFM have been previously found to correlate moderately positively with approach

and with avoidance motivation, respectively (measured by the BIS/BAS scale; Carver & White, 1994). This finding suggests that promotion versus prevention orientation as measured by the GRFM overlaps with approach and avoidance orientation, respectively, even though, theoretically, promotion should be unrelated to approach, and prevention should be unrelated to avoidance (Summerville & Roese, 2008). Therefore, the observed pattern should be interpreted with caution. Future research should examine whether the results from Study 3 emerge when using another questionnaire to assess regulatory focus, respectively—the Regulatory Focus Questionnaire (Higgins et al., 2001).

Third, building on our finding that persons with a promotion (vs. prevention) orientation focus more on the future (vs. the reality), future work may also test the relationship between regulatory focus theory and fantasy realization theory (Oettingen & Sevincer, 2018). Fantasy realization theory explicitly distinguishes between future- versus reality-focused modes of thought. According to the theory, mentally contrasting a desired future with present reality helps people to fulfill feasible wishes as compared to indulging in the desired future or dwelling on the reality. Research should test whether promotion-oriented (vs. prevention-oriented) persons are more inclined to spontaneously use future-focused modes of thought (indulging and mental contrasting) rather than reality-focused modes of thought (dwelling and reverse contrasting: elaborating the reality before the future).

Other Theories of Goal Pursuit and Focus on the Future Versus Reality

Future research may also test the relationship between other theories of goal pursuit than regulatory focus theory and focus on the future and reality.

Action Versus State Orientation

People differ in the degree to which they are action-oriented or state-oriented (Kuhl & Beckmann, 1994). After setbacks, action-oriented persons are better able to focus on their current goal (i.e., a desired future) and take up action toward goal attainment again. State-oriented persons by contrast tend to ruminate about their current emotional state and have difficulties taking up action again. Mentally contrasting future with reality helps state-oriented (vs. action-oriented) persons to take up action after setbacks (Friedrichs et al., 2020). Future work may explore whether one reason why state-oriented persons have difficulties in action initiation is that because, after setbacks, they are less likely to focus on the future than reality in their spontaneous thoughts.

Regulatory Mode Theory

Regulatory mode theory (Kruglanski et al., 2000) distinguishes between two aspects of self-regulation: locomotion and assessment. Locomotion is concerned with motion and progress from state to state; assessment is concerned with critical evaluation of goals and means. Locomotion is generally associated with a greater focus toward the future (e.g., more long-term planning; Kruglanski et al., 2018). Therefore, research may test whether locomotion (vs. assessment) is also associated with a stronger focus on the future in people's spontaneous thoughts.

Social-Cognitive Model of Achievement Motivation

Finally, people who think their ability is malleable (incremental theorists) emphasize improving their ability for the future. Therefore, they should focus more on the future. By contrast, people who think their ability is fixed (entity theorists) emphasize demonstrating their ability in the present (Dweck, 2007). Therefore, they should focus more on the reality. Indeed, when given the choice to elaborate on the desired future or present reality of an important achievement concern, incremental theorists chose the future more often than the reality, whereas entity theorists chose the future and reality about equally often (Sevincer et al., 2014). Future research should investigate whether incremental (vs. entity) theorists also elaborate more on the future (vs. reality) in their spontaneous thoughts.

Conclusion

Going back to the example at the beginning, our findings suggest that Lois, who is thinking about getting a salary increase, focuses more on the future than the reality as compared to Peter who is thinking about keeping his job. Lois also sees her future of getting a higher salary brighter than the reality of her current salary. By contrast, Peter sees the future of keeping his job about equally bright as his current reality. Our findings provide a window into people's minds by showing that whether people are oriented toward promotion versus prevention shapes the content and the tone of their spontaneous thoughts about important personal wishes or concerns.

References

- Atkinson, J. W. (1957). Motivational determinants of risk-taking behavior. *Psychological Review*, 64(6, Part 1), 359–372. <https://doi.org/10.1037/h0043445>
- Cacioppo, J. T., Petty, R. E., & Kao, C. F. (1984). The efficient assessment of need for cognition. *Journal of Personality Assessment*, 48(3), 306–307. https://doi.org/10.1207/s15327752jpa4803_13
- Carver, C. S., & White, T. L. (1994). Behavioral inhibition, behavioral activation, and affective responses to impending reward and punishment: The BIS/BAS scales. *Journal of Personality and Social Psychology*, 67(2), 319–333. <https://doi.org/10.1037/0022-3514.67.2.319>
- Cesario, J., & Higgins, E. T. (2008). Making message recipients “feel right”: How nonverbal cues can increase persuasion. *Psychological Science*, 19(5), 415–420. <https://doi.org/10.1111/j.1467-9280.2008.02102.x>
- Cornwell, J. F. M., & Higgins, E. T. (2018). Where I ideally want to be versus where I ought to be. In G. Oettingen, A. T. Sevincer, & P. M. Gollwitzer (Eds.), *The psychology of thinking about the future* (pp. 127–149). Guilford Press.
- Dweck, C. S. (2007). *Mindset: The new psychology of success*. Random House.
- Faul, F., Erdfelder, E., Lang, A. G., & Buchner, A. (2007). G*Power 3: A flexible statistical power analysis program for the social, behavioral, and biomedical sciences. *Behavior Research Methods*, 39, 175–191. <https://doi.org/10.3758/BF03193146>
- Förster, J., Grant, H., Idson, L. C., & Higgins, E. T. (2001). Success/failure feedback, expectancies, and approach/avoidance motivation: How regulatory focus moderates classic relations. *Journal of Experimental Social Psychology*, 37(3), 253–260. <https://doi.org/10.1006/jesp.2000.1455>
- Freitas, A. L., & Higgins, E. T. (2002). Enjoying goal-directed action: The role of regulatory fit. *Psychological Science*, 13(1), 1–6. <https://doi.org/10.1111/1467-9280.00401>
- Freitas, A. L., Liberman, N., Salovey, P., & Higgins, E. T. (2002). When to begin? Regulatory focus and initiating goal pursuit. *Personality and Social Psychology Bulletin*, 28(1), 121–130. <https://doi.org/10.1177/0146167202281011>
- Friederichs, K. M., Kees, M. C., & Baumann, N. (2020). When tough gets you going: Action orientation unfolds with difficult intentions and can be fostered by mental contrasting. *Personality and Individual Differences*, 161, 109970. <https://doi.org/10.1016/j.paid.2020.109970>
- Friedman, R. S., & Förster, J. (2000). The effects of approach and avoidance motor actions on the elements of creative insight. *Journal of Personality and Social Psychology*, 79(4), 477–492. <https://doi.org/10.1037/0022-3514.79.4.477>
- Galinsky, A. D., Leonardelli, G. J., Okhuysen, G. A., & Mussweiler, T. (2005). Regulatory focus at the bargaining table: Promoting distributive and integrative success. *Personality and Social Psychology Bulletin*, 31(8), 1087–1098. <https://doi.org/10.1177/0146167205276429>
- Gino, F., & Margolis, J. D. (2011). Bringing ethics into focus: How regulatory focus and risk preferences influence (un)ethical behavior. *Organizational Behavior and Human Decision Processes*, 115(2), 145–156. <https://doi.org/10.1016/j.obhdp.2011.01.006>
- Higgins, E. T. (1997). Beyond pleasure and pain. *American Psychologist*, 52(12), 1280–1300. <https://doi.org/10.1037/0003-066X.52.12.1280>
- Higgins, E. T. (1998). Promotion and prevention: Regulatory focus as a motivational principle. In M. P. Zanna (Ed.), *Advances in experimental social psychology* (Vol. 30, pp. 1–46). Academic Press. [https://doi.org/10.1016/S0065-2601\(08\)60381-0](https://doi.org/10.1016/S0065-2601(08)60381-0)
- Higgins, E. T., Friedman, R. S., Harlow, R. E., Idson, L. C., Ayduk, O. N., & Taylor, A. (2001). Achievement orientations from subjective histories of success: Promotion pride versus prevention pride. *European Journal of Social Psychology*, 31(1), 3–23. <https://doi.org/10.1002/ejsp.27>
- Higgins, E. T., Shah, J., & Friedman, R. (1997). Emotional responses to goal attainment: Strength of regulatory focus as moderator. *Journal of Personality and Social Psychology*, 72(3), 515–525. <https://doi.org/10.1037/0022-3514.72.3.515>
- Howell, D. C. (2012). *Statistical methods for psychology*. Cengage Learning.
- James, W. (1892). *Psychology: The briefer course*. Henry Holt. <https://doi.org/10.1037/11060-000>
- Kruglanski, A. W., Chernikova, M., & Jasko, K. (2018). The forward rush. On locomotors' future focus. In G. Oettingen, A. T. Sevincer, & P. M. Gollwitzer (Eds.), *The psychology of thinking about the future* (pp. 405–422). Guilford Press.
- Kruglanski, A. W., Thompson, E. P., Higgins, E. T., Atash, M. N., Pierro, A., Shah, J. Y., & Spiegel, S. (2000). To “do the right thing” or to “just do it”: Locomotion and assessment as distinct self-regulatory imperatives. *Journal of Personality and Social Psychology*, 79(5), 793–815. <https://doi.org/10.1037/0022-3514.79.5.793>
- Kuhl, J., & Beckmann, J. (Eds.). (1994). *Volition and personality: Action versus state orientation*. Hogrefe & Huber.
- Lee, A. Y., Aaker, J. L., & Gardner, W. L. (2000). The pleasures and pains of distinct self-construals: The role of interdependence in regulatory focus. *Journal of Personality and Social Psychology*, 78(6), 1122–1134. <https://doi.org/10.1037/0022-3514.78.6.1122>
- Leech, N. L., Barrett, K. C., & Morgan, G. A. (2005). *SPSS for intermediate statistics: Use and interpretation*. Psychology Press.
- Leonardelli, G. J., & Lakin, J. L. (2009). The new adventures of regulatory focus: Self-uncertainty and the quest for diagnostic feedback. In R. M. Arkin, K. C. Oleson, & P. J. Carroll (Eds.), *The uncertain self: A handbook of perspectives from social and personality psychology* (pp. 249–265). Erlbaum.
- Liberman, N., Idson, L. C., Camacho, C. J., & Higgins, E. T. (1999). Promotion and prevention choices between stability and change. *Journal of Personality and Social Psychology*, 77(6), 1135–1145. <https://doi.org/10.1037/0022-3514.77.6.1135>

- Lockwood, P., Jordan, C. H., & Kunda, Z. (2002). Motivation by positive or negative role models: Regulatory focus determines who will best inspire us. *Journal of Personality and Social Psychology*, 83(4), 854–864. <https://doi.org/10.1037/0022-3514.83.4.854>
- McClelland, D. C. (1985). How motives, skills, and values determine what people do. *American Psychologist*, 40(7), 812–825. <https://doi.org/10.1037/0003-066X.40.7.812>
- Oettingen, G., & Sevincer, A. T. (2018). Fantasy about the future as friend and foe. In G. Oettingen, A. T. Sevincer, & P. M. Gollwitzer (Eds.), *The psychology of thinking about the future* (pp. 127–149). Guilford.
- Pennebaker, J. W., Boyd, R. L., Jordan, K., & Blackburn, K. (2015). *The development and psychometric properties of LIWC2015*. University of Texas at Austin.
- Pennington, G. L., & Roese, N. J. (2003). Regulatory focus and temporal distance. *Journal of Experimental Social Psychology*, 39(6), 563–576. [https://doi.org/10.1016/S0022-1031\(03\)00058-1](https://doi.org/10.1016/S0022-1031(03)00058-1)
- Rice, E. L., & Fredrickson, B. L. (2017). Do positive spontaneous thoughts function as incentive salience? *Emotion*, 17(5), 840–855. <https://doi.org/10.1037/emo0000284>
- Rose, J. P., Endo, Y., Windschitl, P. D., & Suls, J. (2008). Cultural differences in unrealistic optimism and pessimism: The role of egocentrism and direct versus indirect comparison measures. *Personality and Social Psychology Bulletin*, 34(9), 1236–1248. <https://doi.org/10.1177/0146167208319764>
- Semin, G. R., Higgins, T., de Montes, L. G., Estourget, Y., & Valencia, J. F. (2005). Linguistic signatures of regulatory focus: How abstraction fits promotion more than prevention. *Journal of Personality and Social Psychology*, 89(1), 36–45. <https://doi.org/10.1037/0022-3514.89.1.36>
- Sevincer, A. T., Kluge, L., & Oettingen, G. (2014). Implicit theories and motivational focus: Desired future versus present reality. *Motivation and Emotion*, 38(1), 36–46.
- Sevincer, A. T., & Oettingen, G. (2013). Spontaneous mental contrasting and selective goal pursuit. *Personality and Social Psychology Bulletin*, 39(9), 1240–1254. <https://doi.org/10.1177/0146167213492428>
- Sevincer, A. T., Mehl, P. J., & Oettingen, G. (2017). Well self-regulated people use mental contrasting. *Social Psychology*, 48(6), 348–364. <https://doi.org/10.1027/1864-9335/a000322>
- Sevincer, A. T., Musik, T., Degener, A., Greinert, A., & Oettingen, G. (2020). Taking responsibility for others and use of mental contrasting. *Personality and Social Psychology Bulletin*, 46(8), 1219–1233. <https://doi.org/10.1177/0146167219898569>
- Sevincer, A. T., Schlier, B., & Oettingen, G. (2015). Ego-depletion and the use of mental contrasting. *Motivation and Emotion*, 39(6), 876–891. <https://doi.org/10.1007/s11031-015-9508-8>
- Sevincer, A. T., Tessmann, P., & Oettingen, G. (2018). Demand to act and use of mental contrasting. *Social Psychology*, 49(6), 344–359. <https://doi.org/10.1027/1864-9335/a000353>
- Sevincer, A. T., Wagner, G., & Oettingen, G. (2020). Positive fantasies and negative emotions in soccer fans. *Cognition and Emotion*, 34(5), 935–946. <https://doi.org/10.1080/02699931.2019.1703649>
- Summerville, A., & Roese, N. J. (2008). Self-report measures of individual differences in regulatory focus: A cautionary note. *Journal of Research in Personality*, 42(1), 247–254. <https://doi.org/10.1016/j.jrp.2007.05.005>
- Tangney, J. P., Baumeister, R. F., & Boone, A. L. (2004). High self-control predicts good adjustment, less pathology, better grades, and interpersonal success. *Journal of Personality*, 72(2), 271–324. <https://doi.org/10.1111/j.0022-3506.2004.00263.x>
- Thompson, E. R. (2007). Development and validation of an internationally reliable short-form of the Positive and Negative Affect Schedule (PANAS). *Journal of Cross-Cultural Psychology*, 38(2), 227–242. <https://doi.org/10.1177/0022022106297301>
- Watson, D., Clark, L. A., & Tellegen, A. (1988). Development and validation of brief measures of positive and negative affect: The PANAS scales. *Journal of Personality and Social Psychology*, 54(6), 1063–1070. <https://doi.org/10.1037/0022-3514.54.6.1063>

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