

## **ESCAPING THE FUTURE: AFFECTIVE FORECASTING IN ESCAPIST FANTASY AND ATTEMPTED SUICIDE**

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When people predict how they will feel in response to future events, they typically overestimate the intensity of both negative and positive affect. These affective forecasting errors influence decision making in the present, but the possibility that they serve an adaptive function has been largely overlooked, as has their potential role in psychopathology. In 2 studies, we examined whether the forecasting error for positive events may serve a self-regulatory function by protecting the individual against maladaptive escape behavior in the face of distress. Blunted affective forecasts for future positive events were associated with greater appeal of escape fantasies but not general fantasies (Study 1), and distinguished suicide attempters' view of the future from that of both healthy controls and individuals matched in depressive symptoms but lacking a history of a suicide attempt (Study 2). Overestimation of future positive affect in healthy individuals may play a role in adaptive cognitive and affective processes promoting perseverance over escape. Interventions with individuals at risk for escape behavior, including suicide, may benefit from increased attention to affective forecasting processes, emotion-cognition interactions, and their relationships with self-defeating behavior.

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When people look ahead to the future, they not only predict what will happen, they also predict their emotional reactions to future events. This process is known as affective forecasting, and a substantial body of work indicates that it is remarkably error-prone (Wilson & Gilbert, 2003). Although people are often able to accurately forecast whether their affect about an event will be positive or negative, and even specific emotions they will feel, they are consistently inaccurate in predicting how intense those emotions will be and how long they will last (Gilbert & Wilson, 2007; Wilson & Gilbert, 2003). People typically overestimate both how bad they will feel if a negative event occurs and how good they will feel if a positive event occurs. This pattern applies to a wide variety of future events, including receiving a grade that is better or worse than expected, one's favorite team winning or losing a football game, or simply the experience of an upcoming holiday (Buehler & McFarland, 2001; Wilson, Wheatley, Meyers, Gilbert, & Axsom, 2000). Because people's behavior is guided not only by what they expect to happen as a consequence of choices, but also by how they expect to feel afterward (e.g., Mellers & McGraw, 2001), accurate affective forecasts would seem optimal for decision making—and indeed, people's erroneous forecasts result in choices that do not optimize their actual post-choice happiness (e.g., Gilbert & Ebert, 2002).

But might overestimation of future affect also serve adaptive functions in the present? In the current studies, we suggest that overestimation of future positive affect helps support adaptive self-regulation in the present, and specifically, that it is protective against maladaptive escape behavior, even extreme behaviors such as suicide attempts. Self-regulatory action depends largely on what a person expects to happen in the future, and how a person expects his or her behavior to influence what happens (e.g., Bandura, 1997; Carver & Scheier, 1998). Because present affect serves as a guide to self-regulation (Baumeister, Zell, & Tice, 2007), and forecasted affect plays an important role in decision making (Loewenstein & Lerner, 2003; Mellers & McGraw, 2001), affective forecasting is likely to influence self-regulation regardless of its accuracy. In fact, if overestimates of affect can serve as especially salient guideposts for goal-relevant behavior in the present, the inaccuracy of forecasts itself may actually be an important component of their role in self-regulation.

If so, the pattern of inaccurate affective forecasting in typical populations—especially for positive events—may be a sort of positive illusion that Taylor and Brown (1988) argue contributes to mental

health, rather than a maladaptive or benign byproduct of cognitive errors. In particular, affective forecasting errors may play an important role in a unique self-regulatory challenge that emerges in the face of overwhelming obstacles—the choice a person makes between persisting on the current path and giving up (i.e., goal disengagement). For example, when a struggling student decides between persevering in her college courses and withdrawing from school, the imagined joy of graduation day can play a functional role in self-regulation, even if graduation day actually turns out to be less pleasurable than she imagines. The affective forecast, naively optimistic though it may be, serves the function of counterbalancing (1) the distress of final exams she expects to encounter on the current path, and (2) the relief she imagines encountering if she quits studying and leaves college. In this way, overly positive forecasts for the current path may protect against impulsive, potentially costly goal disengagement that emotional distress can trigger (e.g., Tice, Bratslavsky, & Baumeister, 2001).

In its more extreme forms, goal disengagement in the face of such distress can take the shape of highly maladaptive escape behaviors, such as binge drinking, binge eating, or suicide attempts, which people use to escape from aversive self-awareness into emotional numbness and dissolution of self (Baumeister, 1990, 1991; Heather-ton & Baumeister, 1991). In escaping, the individual moves from a state of overwhelming negative affect toward a state of less negative affect, but at a long-term cost (Baumeister, 1990; Heather-ton & Baumeister, 1991). Escape theory emphasizes flight from high to low negative affect in the present. However, because affective forecasting influences decision making (e.g., Mellers & McGraw, 2001), escape should also be driven by anticipated decreases in negative affect or anticipated increases in positive affect as consequences of the escape behavior (e.g., sensory pleasure during a binge). Although empirical tests of escape theory in social psychology have not emphasized this possibility, there is strong suggestive evidence from clinical psychology that how individuals perceive the future plays a significant role in escapist psychopathology.

Clinical research on pathological escape has not emphasized affective forecasting, but clearly indicates that people's view of the future—in terms of what they expect will happen—is indeed critical to escape behaviors. A hopeless view of the future in which negative events are perceived as likely and positive events are perceived as unlikely is associated with suicidal ideation (Sargalska, Miranda, &

Marroquín, 2011), suicide attempt (MacLeod et al., 2005), eating disorders (Godley, Tchanturia, MacLeod, & Schmidt, 2001), substance abuse (Conrod, Pihl, Stewart, & Dongier, 2000), and risky sexual behavior (Broccoli & Sanchez, 2009). Global hopelessness about the future has long been considered a powerful psychological risk factor for suicidal ideation and attempt (e.g., Abramson et al., 1998; Brown, Beck, Steer, & Grisham, 2000). Recent research indicates, however, that expecting few positive events to happen in the future is more fundamental to the suicidal view of the future than expecting many negative events to happen, and that these expectations for the future are not merely attributable to depressive symptoms (e.g., MacLeod et al., 2005; O'Connor, Fraser, Whyte, MacHale, & Master-son, 2008; Sargalska et al., 2011).

Existing work on escape-related psychopathology has focused on what events people expect will happen in the future, and has not emphasized how people forecast those events will make them feel. We would argue that if affective forecasting influences self-regulation and escapist decision making, it should be implicated in not just mundane escape from self-awareness (e.g., losing oneself in a television program after a hard day) but also—especially—in clinical-level escape behavior. Examining this hypothesis may help answer Wilson & Gilbert's (2003) call for evidence on open questions in social psychology regarding adaptive versus maladaptive consequences of affective forecasting errors. At the same time, it can address clinical psychology's need for improved understanding of the relationships between emotion and cognition in suicidal ideation and behavior, and in affective psychopathology more broadly (Dour, Cha, & Nock, 2011; Kring & Sloan, 2010). In line with current empirical work, clinicians' first line of intervention with suicidal patients is often to counter hopelessness by challenging patients' certainty that a bleak future awaits them. But if these patients' view of the future is further characterized by a distinctive pessimism about future affective experience itself, treatment might benefit from increased emphasis on emotion-focused interventions.

In two studies, we examined the association of affective forecasting with escapist fantasy in an unselected sample, and with suicide attempt history in a selected sample. In Study 1, we hypothesized that when people's affective forecasts for the future were more negative for negative events, and less positive for positive events, they would find greater appeal specifically in escape fantasies, but not in positive fantasies lacking an escape component. In Study 2, we

predicted that suicide attempters, who have engaged in an extreme form of escape and are at high risk of repeating attempts in the future (Joiner et al., 2005), would show less positive affective forecasts for positive events than nonattempters, even when accounting for group differences in depressive symptoms and pessimistic expectations of what will happen in the future.

## STUDY 1

Participants were 119 undergraduates and members of the community surrounding Yale University (mean age = 19.7 years; 65 female) with no restrictions on eligibility other than age of 18 years or above. Racial/ethnic composition was White (56.3%), Asian/Asian American (16.8%), Hispanic (8.4%), Black/African American (7.6%), Multi-ethnic (7.6%), and other (3.3%). The study was described as being about personality and movie preferences, and the following measures were embedded among a number of filler items supporting that cover story.

## MEASURES

*Likelihood Estimation and Affective Forecasting.* The Future Events Questionnaire (FEQ; Miranda & Mennin, 2007), adapted from research by Andersen and colleagues (Andersen, 1990; Miranda & Andersen, 2008), requires the participant to estimate the likelihood that 17 negative events (e.g., Be rejected by a significant other) and 17 positive events (e.g., Be honored for a major achievement) will happen to him/her in the future. Participants rated likelihood from -5 (certain that it will not happen) to +5 (certain that it will happen). In this study, participants were then presented with each event again and forecasted how each would feel, "assuming that it were to occur at some point in the future," from -5 (extremely sad) to +5 (extremely happy). Likelihood estimation and affective forecasting scores were calculated separately for negative and positive events by averaging ratings across events of each valence. Likelihood estimation scores showed good internal consistency (Negative events  $\alpha = .89$ ; Positive events  $\alpha = .93$ ), as did affective forecasting scores (Negative events  $\alpha = .76$ ; Positive events  $\alpha = .84$ ).

*Appeal of Escape Fantasies.* This novel measure sought to capture Baumeister's (1990) construct of escape from aversive self-awareness, while also distinguishing escape fantasies from more general fantasies. Participants rated each of 12 fantasy events on "how appealing the event would be" from 1 (extremely unappealing) to 7 (extremely appealing). Seven events were designed to capture escapist fantasy (e.g., A remote control is invented that allows you to fast-forward through events you prefer not to experience; Scientists develop a technique to eliminate all negative memories from the past), and 5 events captured positive fantasy *without* an escapist component (e.g., You are offered the freedom to pursue any career you want, and to receive generous pay for it; The President of the United States asks you to join a task force on how best to improve the world). Separate scores for escape and nonescape fantasies were calculated by averaging across constituent items. Exploratory factor analysis supported the orthogonality of the escape and nonescape fantasy scales, which were modestly correlated with one another ( $r = .26$ ).

## RESULTS AND DISCUSSION

Correlations among likelihood estimates, affective forecasts, and appeal of escape and nonescape fantasies are reported in Table 1. Expectations that negative events would happen and positive events would not happen in the future were associated with finding escape fantasies more appealing. Moreover, supporting our hypothesis, as individuals made less positive affective forecasts for positive events, they also evaluated escape fantasies as more appealing. By contrast, lower positive forecasts were associated with finding nonescape fantasies less appealing. In other words, the appeal of positive fantasies without an escape component paralleled affective forecasting for other future positive events, whereas the appeal of escape fantasies showed the reverse pattern. This suggests that low positive affective forecasts are associated not with appeal of fantasy alternatives in general, but with escape fantasy in particular. Contrary to hypothesis, affective forecasts for negative events were unrelated to escape appeal.

These results provide support for the idea that the less positive affect people expect to experience in response to future events, the

**TABLE 1. Correlations of Likelihood Estimates and Affective Forecasts with Appeal of Escape and Non-Escape Fantasies in Study 1 (N = 119)**

	Fantasy Appeal	
	Escape Fantasies	Non-Escape Fantasies
Likelihood Estimation		
Negative Events	.23*	-.15
Positive Events	-.28**	.22*
Affective Forecasting		
Negative Events	.02	-.17
Positive Events	-.18*	.29**

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

more they are drawn to “alternative futures” characterized by escape. However, in this study, participants made affective forecasts for the same abstract events for which they estimated likelihood. Although the nonspecific, abstractly-worded future events in this study were well-suited to capture variance in likelihood estimation, in order to make affective forecasts, individuals have to imagine themselves in a specific event in the future (Wilson & Gilbert, 2003). Thus, in extending our focus to clinical behavior in Study 2, we also used a separate measure of affective forecasts with specific, readily-imagined future events that held likelihood relatively constant.

## STUDY 2

Study 1 supported our hypothesis that blunted positive affective forecasts are associated with the appeal of escape fantasies in an unselected sample. In Study 2, we examined the forecasts of individuals who have versus have not attempted suicide. Attempting suicide represents escape at its most maladaptive extreme (Baumeister, 1990), and is a compelling test case if escape behavior does involve abandoning the impending future for an alternative. Further, suicide attempt history is the best marker of risk for future attempt (Joiner et al., 2005), so this is a high-risk group for future escape behavior. Moreover, of all self-defeating escape behaviors, the importance of future-oriented cognition, including hopelessness, is most clearly established for suicide, but the role of affect has been underexamined.

To rule out the possibility that any relationship between blunted affective forecasts and a history of suicide attempts is simply at-

tributable to current negative affect or clinical correlates of mood disturbance, we included a comparison group equivalent in current depressive symptoms. We hypothesized that dysphoric individuals (i.e., high in depressive symptoms) who had attempted suicide in the past would make low affective forecasts for positive events, compared with both nondysphoric controls and comparably dysphoric individuals who had never attempted suicide. In light of Study 1, we predicted that forecasts for negative events would not differ among groups. Finally, we expected that if blunted positive affective forecasts are specifically linked to escape behavior in the face of distress, they would distinguish suicide attempters from nonattempters beyond any effects of pessimistic likelihood estimation associated with depression.

## PARTICIPANTS AND PROCEDURE

Undergraduates and community members from Yale University and Hunter College ( $N = 422$ ) were recruited for a study ostensibly about personality, mood, and memory based on high or low scores on a depression screener. During the study session, all participants completed the Beck Depression Inventory (BDI-II; Beck, Steer, & Brown, 1996). The BDI is a 21-item measure of depressive symptoms over the last 2 weeks; scores of  $\geq 16$  correspond to mild depression symptoms. Internal consistency in this sample was excellent (Cronbach's  $\alpha = .95$ ). Participants who scored either low in depressive symptoms (nondysphoric;  $\leq 5$ ) or high in symptoms (dysphoric;  $\geq 16$ ) were retained for analysis, resulting in a final sample of 289 individuals. History of suicide attempt was assessed by a yes/no response to the question, "Have you ever, in your whole life, attempted to kill yourself?," adapted from the young adult version of the Diagnostic Interview Schedule for Children (Shaffer, Fisher, Lucas, Dulcan, & Schwab-Stone, 2000). Measures were embedded among several filler measures designed to support the cover story.

The final sample included 27 dysphoric suicide attempters (10 Yale, 17 Hunter), 127 dysphoric nonattempters (67 Yale, 60 Hunter), and 135 nondysphoric controls (81 Yale, 54 Hunter). Dysphoric attempters did not differ significantly from dysphoric nonattempters in symptoms,  $t(152) = 1.48, p = .14$ . The sample included 81 men and 208 women, with an average age of 20.2 years. Racial/ethnic composition was White (42.6%), Asian/Asian American (27.0%), Hispanic

(10.7%), Black/African American (8.3%), Multi-ethnic (6.9%), and other (4.5%).

## FUTURE-ORIENTED COGNITION MEASURES

*Likelihood Estimation.* Participants made likelihood estimates for future events on the FEQ (see Study 1). FEQ scales showed excellent internal consistency (Negative events  $\alpha = .90$ ; Positive events  $\alpha = .92$ ).

*Affective Forecasting.* A novel affective forecasting task was developed to address limitations of Study 1. Participants made affective forecasts for 36 hypothetical future events, 18 negative (e.g., A friend tells you that you are being really annoying) and 18 positive (e.g., A family friend comes to town and takes you to a fancy dinner), none of which overlapped with likelihood estimation items. Participants were instructed to imagine each event happening a month from today, immerse themselves in the experience of the event, and rate how they would feel on a scale from 1 (unhappy) to 7 (very happy), corresponding to common anchors in existing affective forecasting research. To obscure hypotheses, the affective forecasting task was described as an imagination task and embedded among filler imagination tasks.

Items in the task were written to provide sufficient detail (e.g., adjectives) to facilitate mental experiencing over purely semantic construal, and were presented in the second person, present tense. Items were based on an independent sample of 21 undergraduates who rated an initial pool of 81 items on valence and likelihood; the 36 items selected for the task were those with clear valence and moderate-to-high likelihood. Affective forecasting scores for negative events (AF-Neg) and positive events (AF-Pos) were computed by averaging ratings across the constituent items. Both scales showed good internal consistency (AF-Neg  $\alpha = .80$ ; AF-Pos  $\alpha = .87$ ).<sup>1</sup>

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1. Preliminary analyses indicated differences in affective forecasts by site and sex. Hunter participants forecasted significantly higher positive affect for positive events than Yale participants,  $d = 0.28$ ,  $p < .05$ . Relative to men, women made more negative affective forecasts for negative events,  $d = 0.38$ ,  $p < .01$ , and more positive forecasts for positive events,  $d = 0.30$ ,  $p < .05$ . However, adjusting for site and sex in subsequent analyses yielded no difference in the pattern of results. In multinomial regression analyses depicted in Table 3, in addition to testing site and sex effects, we also tested each of their interactions with AF-Pos. Both were nonsignificant, indicating that relations between AF-Pos and dysphoria/atempter group were not driven by site or sex differences.

## RESULTS AND DISCUSSION

*Group Differences in Future-Oriented Cognition.* Group differences on all future-oriented cognition measures are presented in Table 2. Analysis of variance showed that groups differed significantly in likelihood estimation for both negative and positive events.<sup>2</sup> Planned comparisons employing Bonferroni corrections holding pairwise alpha at .01 revealed that as predicted, dysphoric attempters and dysphoric nonattempters estimated negative events to be more likely and positive events less likely in their future relative to controls, but they did not differ from one another.

Our primary hypothesis was that suicide attempters would forecast less positive affect for positive events than dysphoric nonattempters, followed by controls. This hypothesis was also supported. Both dysphoric attempters and dysphoric nonattempters forecasted lower positive affect relative to controls, and dysphoric attempters made lower positive forecasts compared to dysphoric nonattempters, a difference that represented a medium effect size,  $d = 0.55$ ,  $p < .01$ . There was no difference among groups in their affective forecasts for future negative events.

*Distinguishing Features of Future-Oriented Cognition in Suicide Attempters.* To more precisely test our hypothesis that suicidal escape behavior involves individuals' blunted forecasting for how they will feel in the future, above and beyond what they expect to *happen* in the future, we conducted a hierarchical multinomial regression analysis, examining the relative roles of likelihood estimation and affective forecasting in predicting dysphoria status and attempt history (see Table 3).

Likelihood estimates for negative and positive events were entered in the first step of the regression and provided good fit,  $\chi^2_{\text{model}}(4) = 150.22$ ,  $p < .01$ . Higher estimates for negative events and lower estimates for positive events significantly distinguished dysphoric nonattempters from nondysphoric controls, but likelihood estimation did not significantly distinguish dysphoric attempters from dysphoric nonattempters. Affective forecasts for positive events were added in the second step, and made a statistically significant improvement in model fit,  $\chi^2_{\text{model}}(6) = 156.75$ ,  $p < .01$ ,  $\chi^2_{\text{difference}}(2)$

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2. Levene's test indicated heterogeneous variances among groups on FEQ-Pos and AF-Pos. Welch's statistic, which is robust to the problem of heterogeneous variances with unequal sample sizes, was also calculated and resulted in the same pattern of statistical significance.

**TABLE 2. Group Differences in Depressive Symptoms and Future-Oriented Cognition in Study 2**

	Nondysphoric Controls		Dysphoric Nonattempters		Dysphoric Attempters		<i>F</i> (2, 286)
	Mean	<i>SD</i>	Mean	<i>SD</i>	Mean	<i>SD</i>	
BDI	1.9 <sup>a</sup>	0.2	23.6 <sup>b</sup>	0.6	25.8 <sup>b</sup>	1.7	629.37**
FEQ-Neg	-0.94 <sup>a</sup>	1.56	1.14 <sup>b</sup>	1.45	1.70 <sup>b</sup>	1.43	77.33**
FEQ-Pos	3.01 <sup>a</sup>	1.11	1.53 <sup>b</sup>	1.58	1.17 <sup>b</sup>	1.54	45.49**
AF-Neg	2.36 <sup>a</sup>	0.44	2.29 <sup>a</sup>	0.51	2.31 <sup>a</sup>	0.53	0.71
AF-Pos	6.09 <sup>a</sup>	0.45	5.95 <sup>b</sup>	0.56	5.62 <sup>c</sup>	0.76	8.94**

*Notes.* Means with different superscripts differ significantly at  $p < .01$ ; BDI = Beck Depression Inventory; FEQ = average likelihood estimates for negative and positive events on Future Events Questionnaire; AF = average affective forecasts for negative and positive events on affective forecasting task. \*\* $p < .01$

= 6.53,  $p < .05$ . Specifically, blunted positive forecasts significantly distinguished dysphoric attempters from dysphoric nonattempters, whereas they did not help distinguish dysphoric nonattempters from nondysphoric controls.<sup>3</sup> Thus, although each of the three groups differed from the others in positive affective forecasts, affective forecasting only made a unique contribution beyond likelihood estimation in distinguishing dysphoric suicide attempters from dysphoric nonattempters. These findings are consistent with our hypothesis that low affective forecasting for positive events is more uniquely characteristic of suicide attempters, and that although dysphoria is also associated with blunted forecasting, pessimistic likelihood estimation more directly characterizes the view of the future in dysphoria.

## GENERAL DISCUSSION

In two studies, blunted affective forecasting for positive events was associated with finding escape fantasies appealing (Study 1) and with clinical-level escape behavior in the special case of suicide attempters (Study 2). These studies suggest that, just as forecasted affect is known to be implicated in decision making in general (Mellers & McGraw, 2001), blunted positive affective forecasting is specifically associated with escapist cognition and behavior. More-

3. Models including affective forecasts for negative events were also tested, but consistent with the lack of group differences on negative forecasts, the term was nonsignificant and did not change the overall model fit, and was thus excluded.

**TABLE 3. Multinomial Regression Predicting Dysphoria Status and Suicide Attempt History from Likelihood Estimation and Affective Forecasting in Study 2 (N = 289)**

	Predictor	<i>b</i>	SE	Wald $\chi^2$	OR	95% CI
<b>Distinguishing Dysphoric Nonattempters from Nondysphoric Controls<sup>a</sup></b>						
Model 1	FEQ-Neg	0.77	0.12	42.89**	2.15	1.71–2.71
	FEQ-Pos	-0.57	0.12	21.63**	0.56	0.44–0.72
Model 2	FEQ-Neg	0.76	0.12	42.37**	2.14	1.70–2.69
	FEQ-Pos	-0.58	0.13	19.46**	0.56	0.43–0.73
	AF-Pos	0.08	0.33	0.06	1.08	0.56–2.07
<b>Distinguishing Dysphoric Attempters from Dysphoric Nonattempters</b>						
Model 1	FEQ-Neg	0.26	0.16	2.73	1.30	0.95–1.77
	FEQ-Pos	-0.11	0.14	0.61	0.90	0.68–1.18
Model 2	FEQ-Neg	0.32	0.17	3.83*	1.38	1.00–1.91
	FEQ-Pos	0.02	0.15	< 0.001	1.00	0.75–1.35
	AF-Pos	-0.92	0.36	6.57**	0.40	0.20–0.81

Notes. <sup>a</sup>The multinomial model compares each group against the dysphoric nonattempter group. Dysphoric nonattempter vs. control statistics are expressed with controls as the reference group for ease of interpretation. FEQ = average likelihood estimates for negative and positive events on the Future Events Questionnaire. AF = average affective forecasts for positive events on affective forecasting task. \**p* < .05; \*\**p* < .01

over, they are consistent with the notion that the intensity overestimation in affective forecasting in typical populations, often viewed as a byproduct of cognitive biases (Loewenstein & Lerner, 2003; Wilson & Gilbert, 2003), could actually play an adaptive role in self-regulation. Echoing the literature on escapist psychopathology, both studies also provided evidence for a unique role of affective forecasting for positive events, and not negative events.

Wilson and Gilbert (2003) have discussed the open question of whether people’s typical overestimation of future affect serves an adaptive function, and have recommended research with atypical populations to answer this question. The present findings show that at least the lack of such overestimation for positive events is associated with a relatively unambiguous marker of maladaptiveness. Whereas there is some evidence that overestimating future *negative* affect carries more costs than benefits (Golub, Gilbert, & Wilson, 2009), our results support the notion that overestimates of future *positive* affect could act more functionally. The allure of escape seems to depend not just on its own affective appeal, but also on the affective qualities of the impending future being escaped. Existing conceptualizations emphasize escape behavior as movement away from the *current* aversive affective state to an imagined escape state

(e.g., Baumeister, 1990), but our findings suggest that when escaping, a person may also move away from a bleak affective simulation of what the *future* holds if escape is not taken.

Our emphasis on the view of the future in escapist decision making is consistent with clinical research on hopelessness in escapist psychopathology—including the specific role of positive versus negative events. Clinical research, however, has not examined what people expect the future to feel like, as opposed to what they expect will happen. To our knowledge, this is the first study to show that suicide attempters' affective forecasts differ from those of nonattempters, extending past work on future-oriented cognition in suicide attempters (MacLeod et al., 2005). Our findings that these differences are attributable neither to depressive symptoms alone, nor to what events individuals expect to actually occur in the future, suggest some specificity of affective forecasting as a mechanism underlying suicidal escape. In addition to foreseeing a future filled with negative events and lacking positive events, suicide attempters also seem to envision less happiness even if positive events were to occur. If the future is therefore less valuable, then forsaking it in the face of distress carries less of a cost—especially if escape fantasies become relatively more attractive, as our findings suggest.

It is worth noting that the present studies did not measure accuracy of affective forecasts. We cannot determine whether suicide attempters' or dysphoric nonattempters' forecasts were more or less accurate for the individual than controls' forecasts (cf. Alloy & Abramson, 1979; Strunk, Lopez, & DeRubeis, 2006). For the present purposes, our focal interest was in the role of future-oriented cognition on escape in the present, and we therefore set aside the separate question of accuracy about the future. Our novel affective forecasting task captured individual differences in views of the future, defined broadly and hypothetically, rather than forecasts specific to upcoming events, which are emphasized in the basic affective forecasting literature (Wilson & Gilbert, 2003).

Although our findings suggest that blunted affective forecasting for positive events plays a role in escape, further research is needed to support the argument that it drives escapist behavior *per se*. The present studies did not examine a causal role of affective forecasting in actual escapist decision making or behavior in response to acute distress or challenge. Moreover, the present studies are also constrained by their cross-sectional nature, which limits our ability to determine whether low positive forecasts fuel escape, or escap-

ism decreases positive forecasts. Future experimental studies might examine whether individuals who make blunted positive forecasts are especially willing to incur long-term costs to the self in order to achieve immediate relief or pleasure in the face of such distress. Finally, our use of a single-item measure of suicidality in Study 2 represents an important limitation on our claims regarding escapist behavior at the clinical extreme. Without measuring other correlates of suicide attempt (e.g., chronicity of depressive symptoms; personality disorder symptoms; suicide attempt characteristics such as lethality and intent), we cannot conclude that the role of forecasting is independent of other established risk factors.

Indeed, we would rather expect that such variables would contribute to affective forecasting processes, and vice versa, in a more complex way than we sought to capture presently. Although we regard this as a limitation, these studies serve as a novel first step in linking affective forecasting with both escapist cognition in general, and with suicidal escape in particular. We recommend more fine-grained investigation into related mechanisms, and more comprehensive assessment of suicidality, to improve clinical applicability and generalizability. Relatedly, although our dysphoric attempter and nonattempter groups did not differ significantly in depressive symptoms, attempters did endorse more symptoms. Future work should examine whether processes underlying depressive psychopathology influence forecasting differently among individuals at low versus high risk for suicide. Even in the context of a similar affective and symptomatic state as nonsuicidal depression, the ability of people at risk for suicide to forecast positive emotion may be uniquely affected by characteristics such as over-relying on state affect during future-oriented cognition (e.g., by ruminating; Surreance, Miranda, Marroquín, & Chan, 2009), cognitive inflexibility (Miranda, Bauchner, Gallagher, Vaysman, & Marroquín, 2012), processing organized around suicide schemas (Rudd, 2006), and unique difficulties in emotion regulation (Linehan, 1993).

If affective forecasting plays a role in underlying escape mechanisms, future work should also examine the role of affective forecasting in other clinically-relevant forms of escape, such as substance abuse and binge eating. It will be important for such work to examine affective forecasting about both the impending future and the imagined escape future in the broader context of self-regulation. Emotional distress leads to impulsive behavior when people prioritize short-term affect regulation over longer-term goals (Tice et

al., 2001). The influence of affective forecasts on escape (which can be impulsive or not) thus probably depends on competing self-regulatory concerns other than affect regulation. Not all fantasies for alternative futures activate goal-relevant behavior (e.g., Oettingen & Mayer, 2002), and regulating in a context-sensitive manner appears to be a hallmark of psychological health (Kashdan & Rottenberg, 2010). Future research on affective forecasting in clinical and nonclinical escape should consider the surrounding context of competing self-regulatory demands and availability of self-regulatory resources.

The present findings are relevant not only to open empirical questions about escape behavior and the adaptive versus maladaptive nature of forecasting inaccuracy in typical populations, but also to clinical intervention in at-risk populations. Our findings align with existing work on suicide that emphasizes the desire to die as only one element of suicidal decision making in the context of other vulnerabilities (e.g., the acquired ability to harm oneself; Joiner, 2005), and suggest that affective forecasting for the future may be related to such a desire to escape. Moreover, blunted affective forecasting for positive events may contribute to the sense of defeat and entrapment associated with suicide (e.g., Williams, 2001). Clinicians and patients may benefit from augmenting traditional cognitive interventions on hopelessness (e.g., challenging patients' fortune-telling distortions) with interventions on core affective processes in at-risk individuals, consistent with third-wave interventions that emphasize the relation between emotion, cognition, and behavior in the service of improving adaptive self-regulation (e.g., acceptance and commitment therapy, Hayes, Strosahl, & Wilson, 2003; dialectical behavior therapy, Linehan, 1993). In light of the basic literature on decision-making processes, it may be important for both therapeutic technique and for the therapeutic relationship to acknowledge that even if clinician and patient come to successfully dispute a hopeless view of what will happen in the future, the two individuals may be perceiving those events as markedly different in terms of emotional and motivational value.

Affective forecasting is a basic process of human cognition, but important questions in social psychology remain regarding its adaptive versus maladaptive relationship with self-regulation. The present studies suggest that what at first appears to be a frustrating truth about the future—we expect good things to feel better than it turns out they do—may also be a blessing in the present. Indeed,

they lend initial support to the idea that the absence of such overestimation is implicated in the interplay of cognitive and emotional processes that facilitate self-defeating escape in its most dangerous form.

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