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HOW DO PEOPLE PURSUE HAPPINESS?: RELATING PERSONALITY, HAPPINESS-INCREASING STRATEGIES, AND WELL-BEING*

ABSTRACT. Five hundred ethnically diverse undergraduates reported their happiness strategies – that is, activities undertaken to maintain or increase happiness. Factor analysis extracted eight general strategies: Affiliation, Partying, Mental Control, Goal Pursuit, Passive Leisure, Active Leisure, Religion, and Direct Attempts at happiness. According to multiple regression analyses, these strategies accounted for 52% of the variance in self-reported happiness and 16% over and above the variance accounted for by the Big Five personality traits. The strongest unique predictors of current happiness were Mental Control (inversely related), Direct Attempts, Affiliation, Religion, Partying, and Active Leisure. Gender differences suggest that men prefer to engage in Active Leisure and Mental Control, whereas women favor Affiliation, Goal Pursuit, Passive Leisure, and Religion. Relative to Asian and Chicano(a) students, White students preferred using high arousal strategies. Finally, mediation analyses revealed that many associations between individuals' personality and happiness levels are to some extent mediated by the strategies they use to increase their happiness – particularly, by Affiliation, Mental Control, and Direct Attempts.

KEY WORDS: affiliation, Big Five, factor analysis, goals, happiness, leisure, mediation, mental control, personality, subjective well-being

The inalienable right to the “pursuit of happiness” listed in the U.S. Declaration of Independence illustrates the long-standing American preoccupation with well-being. Continuing to this day, happiness is considered an integral part of a desirable life (King and Napa, 1998) and the subject of most people's daily thoughts (Freedman, 1978). Perhaps as a result of this fixation,

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self-help books about how to become happier have proliferated. Interest in the sources of happiness inspires the age-old problem, “What can people do to become happier?” Embedded in this issue are two fundamental questions: “What specific strategies do people use to try to make themselves happy?” and “Are these strategies effective?” Surprisingly, to our knowledge, little research has addressed these questions directly.

To fill the aforementioned gap in the well-being research literature, the present study aimed to identify the intentional behaviors that individuals engage in to pursue happiness. To that end, the study had three general aims: First, we sought to derive empirically the strategies that people report using to maintain or increase their happiness levels. Second, we aimed to evaluate the predictive power of the individual strategies – that is, determine which strategies are most strongly related to self-reported happiness. Third, we sought to test a process model of long-term happiness by examining the relations among personality traits, happiness strategies, and subjective happiness.

Happiness and Its Sources

Happiness is characterized by the experience of more frequent positive affective states than negative ones (Bradburn, 1969), as well as by the perception that one is progressing toward important life goals (Diener et al., 1999). Judgments of happiness involve global affective self-appraisals and affect ratings, which are inherently subjective (Myers and Diener, 1995). Chronic or long-term happiness, the focus of the present investigation, is the relatively stable level of positive well-being one experiences over a specific time period, such as 3 or 6 months (Lyubomirsky, 2001; Lyubomirsky and Lepper, 1999).

Research investigating the sources of happiness has focused on determining the strongest predictors of happiness and life satisfaction. Three general categories of happiness predictors have been identified: (1) life circumstances and demographics, (2) traits and dispositions, and (3) intentional behaviors (Lyubomirsky et al., 2005).

Circumstances and Demographics

Although circumstantial factors (e.g., income, place of residence, employment, injury) affect temporary mood, their effects tend to dissipate over time and ultimately appear not to have a substantial effect on enduring happiness (e.g., Brickman et al., 1978; Suh et al., 1996). Similarly, demographic variables (e.g., age, gender, ethnicity) are weak predictors of happiness and account for a surprisingly small portion of happiness variance in most populations (see Diener et al., 1999, for a review). Indeed, the meager predictive power of life circumstances and demographic variables has led at least one researcher to conclude that these factors play a “negligible role” in understanding happiness (Kammann, 1983).

Personality Traits

In contrast to demographic and circumstantial variables, personality traits account for a large portion of the variance in individual differences in happiness – as much as 40–50% (Diener et al., 1999) – and appear to be critical to well-being. Traits are biologically-based, enduring dispositions (McCrae and Costa, 1996) that include attitude and behavior complexes, which are consistent across time and situations (Allport, 1955). Research has repeatedly shown that certain personality traits are related to happiness, or subjective well-being (see DeNeve and Cooper, 1998, for a review). For example, McCrae and Costa (1991) documented the relations between the five-factor model of personality and the individual components of subjective well-being – that is, positive affect, negative affect, and life satisfaction.

Researchers have typically focused on the two most robust predictors of happiness and well-being – extraversion and neuroticism. In general, extraverts report being happier than introverts, and neurotic individuals report being less happy than emotionally stable individuals (Costa and McCrae, 1980; Costa et al., 1987; Emmons and Diener, 1985; McCrae and Costa, 1991). Although relatively overlooked in comparison to the closely examined traits of extraversion and neuroticism, agreeableness and conscientiousness have also been found to be positively related to happiness (McCrae and Costa, 1991).

McCrae and Costa (1991) proposed a number of ways that traits might influence happiness, two of which were the focus of the present investigation – namely, the temperamental and instrumental paths. To illustrate the *temperamental* causal path, extraversion leads to positive affect and neuroticism leads to negative affect, and then, in turn, both traits *and* affect influence happiness (Costa and McCrae, 1980; McCrae and Costa, 1991). Experimental evidence supporting the temperamental causal sequence for extraversion and neuroticism has been provided by Larsen and Ketelaar (1989). Similarly, Rusting (1998) proposed that the linkage between traits and moods is such that traits predispose people to process mood-relevant information in a manner congruent with their dispositions. Thus, seeing the world through rose-colored glasses may be considered equivalent to seeing the world through the eyes of an extraverted optimist.

Alternatively, according to McCrae and Costa (1991), the *instrumental* causal sequence is illustrated by the notion of traits establishing conditions that are conducive to happiness or unhappiness. For example, extraverts may frequently seek out social activities and behaviors, which, in turn, influence positive moods, and, eventually, overall happiness. The instrumental perspective can be applied to the study of the relations among self-regulatory behaviors, transient mood, and chronic happiness. To illustrate, traits influence the conscious self-regulatory actions that people take to manage their emotional lives – that is, their happiness-enhancing “strategies.” Traits *and* strategies in turn, influence current mood, and, ultimately, overall happiness level.

Emmons et al. (1986) document just such a trait-behavior-affect linkage. Specifically, they found that extraverts choose to be in social situations more so than did introverts, and that while in their chosen social setting, extraverts are in a better mood than when in an imposed non-social setting. More recently, Moskowitz and Coté (1995) found that it may not be the situation itself that leads to improved moods, but, rather, the behaviors that are elicited and then performed by the person in the situation. In other words, extraverts are happier in social settings because they are *acting* sociably.

These findings highlight how particular volitional behaviors, such as happiness-increasing strategies, can mediate the relation between dispositions and well-being. This process perspective has one fundamental advantage over the study of traits alone with regard to understanding how happiness can be elevated – namely, the fact that intentional behaviors are easier to modify than personality. Consequently, research findings in this area can be directly translated into prescriptive suggestions for boosting well-being.

The Self-Regulation of Moods

Although little research has been conducted on the activities individuals intentionally use to promote chronic, or long-term, happiness, much research has examined activities used to regulate short-term moods – particularly, negative moods (see Morris and Reilly, 1987, for a review). For example, Thayer et al. (1994) catalogued the activities that people use to get themselves out of a bad mood, such as exercising, seeking out friends, and hobbies.

Unfortunately, this body of research suffers from two limitations with regard to our present topic of intentional activities used to promote happiness. First, with the exception of Thayer and colleagues' work (Thayer et al., 1994), much of this research has focused on single behaviors, without attempting to identify the full range of intentional activities that people use to alter their mood states. Second, and more important, the focus of these studies has been the lifting of *negative* moods, not the promotion of *positive* moods or well-being.

Research on the self-regulation of mood does, however, offer one distinct advantage – in some cases, it provides experimental evidence supporting the causal link between intentional behavior and mood change. For example, active distraction in the form of exercise has been found to reduce negative mood (Erber, 1996).

Research has also shown that people often engage in activities that they *believe* will relieve negative mood, but, in the long term, these activities either have no benefit or, worse yet, serve to make people feel even worse. The most notable example of this maladaptive attempt at mood regulation is drinking alcohol.

Although drinking is a common mood regulatory activity (Hull and Bond, 1986) and may relieve a negative mood in the short term, its continued use leads to depression and other negative consequences in the long term (Anshensel and Huba, 1983).

It is also worth noting that men and women handle their emotions in different ways. For example, women report using social support more frequently than do men to combat negative moods (Thayer et al., 1994). However, the emotional benefits that women gain through affiliation may be undercut by their greater tendency (relative to men) to ruminate about the causes and consequences of their unhappiness (Nolen-Hoeksema, 1991). In contrast, men tend to manage bad moods through pleasurable and distracting activities, such as sports (Thayer et al.). Given these findings, it is likely that men and women also differ in the strategies that they prefer to use to increase or maintain happiness.

Finally, ethnic differences have been reported in the correlates of happiness and well-being (Adams, 1997; Diener, 1984), and some predictors of well-being are stronger in particular cultures than in others. For example, Diener and Diener (1995) found that self-esteem was a better predictor of subjective well-being in nations with individualist cultures than in those with collectivist cultures. In light of these results, we tested whether the derived happiness strategies showed any differences for gender or ethnicity.

Summary

The happiness literature suggests that circumstantial factors such as income and place of residence account for only a small portion of the variance of happiness and are relatively unimportant (Kammann, 1983; Lyubomirsky, 2001). By contrast, dispositional traits account for a large portion of happiness variance (Diener et al., 1999) and are clearly critical. However, up to 40% of the variance in individual differences in happiness is not accounted for by circumstances and dispositions, and may be linked to intentional strategies and behaviors (Lyubomirsky et al., 2005). At the same time, the literature suggests that people use self-regulatory mechanisms to control their mood states (Erber, 1996; Morris and Reilly, 1987). Finally, research reveals

gender and cultural differences in factors associated with happiness and satisfaction (Diener et al., 1999).

Several questions, however, remain unanswered. First, which precise strategies do people report using to maintain their own happiness? Second, are these happiness-increasing strategies effective? And, finally, how do the happiness strategies relate to personality? The current study aimed to address these questions.

The Present Study

The first aim of our exploratory study was to derive the happiness strategies that individuals use to maintain or increase their happiness levels and to explore individual differences in strategy use. We anticipated that the derived strategies would, in general, resemble self-regulatory behaviors used to control transient mood (Erber, 1996; Morris and Reilly, 1987; Thayer et al., 1994). Although gender and ethnic differences in frequency of strategy use were expected, specific hypotheses were not made with regard to these differences.

The second aim was to evaluate the predictive power of the derived strategies, and to identify those strategies with the strongest associations to individuals' current happiness. To this end, the relations between the strategies and happiness levels were assessed. We expected the derived strategies to vary in the strength and direction of their correlations with self-reported happiness.

The third aim of the study was to assess the relations among personality traits, happiness-increasing strategies, and subjective happiness. Taking a process approach, the strategies, traits, and reported happiness levels were subjected to a mediation analysis (Baron and Kenny, 1986; Kenny et al., 1998). We predicted that strategies would partially mediate the relation between the "Big Five" personality traits and long-term happiness.

METHOD

Participants

Five hundred undergraduate students (341 females, 157 males, 2 unknown) participated by completing a questionnaire for course

credit. The sample was ethnically diverse (8% African American, 38% Asian, 23% Caucasian, 19% Chicano/a, and 11% Other), with ages ranging from 17 to 35 years ($M=19.4$, $SD=1.71$).

Procedure

The paper-and-pencil questionnaire was mass-distributed in a large Introductory Psychology class at a state university. Students filled out the questionnaire at home and returned it 1 week later. The questionnaire took less than 45 min to complete.

Measures

Subjective Happiness Scale (SHS; Lyubomirsky and Lepper, 1999)

The SHS is a 4-item measure of subjective, chronic happiness. The first item asks participants the extent to which they identify themselves as a happy person (1 = *not a very happy person*, 7 = *a very happy person*). The second item is a comparative assessment that requires respondents to describe themselves compared to their peers (1 = *less happy*, 7 = *more happy*). The third item asks participants the extent to which a description of a chronically happy person describes *them*: "Some people are generally very happy. They enjoy life regardless of what is going on, getting the most out of everything. To what extent does this characterization describe you?" (1 = *not at all*, 7 = *a great deal*). Lastly, the fourth item, which is reverse coded, describes a chronically unhappy person: "Some people are generally not very happy. Although they are not depressed, they never seem as happy as they might be." Again, participants are asked to judge the extent to which the characterization is accurate in describing them (1 = *not at all*, 7 = *a great deal*). This scale demonstrated very good reliability in this study ($\alpha=0.85$).

Happiness-increasing Strategies

In a pilot study, 70 students completed an open-ended survey in which they were asked to "list things that [they] do to maintain or increase [their] happiness level." The students' responses yielded

a list of 66 happiness-enhancing strategies used in the present study (see Table I) These were the 66 items that were most frequently generated in the open-ended pilot survey. Examples included “pursue life goals,” “study,” “spend time with friends,” and “watch TV.” In the present study, students were asked to rate each of the 66 items on “how frequently [they] use this strategy to increase or maintain [their] happiness” (1 = *never*, 7 = *all the time*).

Big Five Inventory (BFI; John et al., 1991)

The BFI is a 44-item assessment of five primary personality traits – Openness, Extraversion, Agreeableness, Conscientiousness, and Neuroticism. The scale asks respondents the extent to which they agree that a particular characteristic applies to them – that is, “I see myself as someone who is...” Examples include “Is curious about a number of things” (Openness), “Is outgoing, sociable” (Extraversion), “Likes to cooperate with others” (Agreeableness), “Does a thorough job” (Conscientiousness), and “Worries a lot” (Neuroticism). The participants respond on a 5-point Likert-type scale (1 = *strongly disagree*, 5 = *strongly agree*). (Approximately half the items were reverse coded.) Reliability for this study was good: $\alpha = 0.74$ (Openness), $\alpha = 0.83$ (Extraversion), $\alpha = 0.77$ (Agreeableness), $\alpha = 0.77$ (Conscientiousness), and $\alpha = 0.74$ (Neuroticism).

RESULTS

Overview of Statistical Procedures

Consistent with the three aims of the study, three sets of statistical analyses were conducted. First, an exploratory factor analysis was performed to derive happiness-increasing strategies from a larger set of behaviors used to “maintain or increase happiness.” Second, correlational analyses and multiple regression analyses were used to assess the relations between the derived strategies and happiness, and to evaluate the extent to which happiness strategies account for differences among individuals’ happiness levels. Finally, mediation analyses were performed to determine how happiness strategies fit into a process model of happiness. The last set of procedures modeled the paths among the Big Five traits, happiness-enhancing strategies, and long-term happiness.

TABLE I
Factors and loadings of happiness-increasing strategies

Factor	Loading	Factor	Loading
<i>Strategy I: Social Affiliation</i>		<i>Strategy V: Passive Leisure</i>	
Support and encourage friends	0.80	Watch TV/rent a video	0.56
Help others	0.60	Surf the internet	0.52
Savor the moment	0.52	Go out to movies with friends	0.47
Receive support from friends	0.46	Stay home and enjoy quiet times	0.46
Interact/communicate with friends	0.44	Shop	0.42
Focus on maintaining relationships	0.43	Sleep	0.42
Draw	0.40	Read a book	0.38
Clean	0.36	Sing	0.38
Become absorbed in tasks	0.35	Spend quality time with self alone	0.35
Cultivate a sense of humor	0.35	<i>Strategy VI: Active Leisure</i>	
Work on social skills	0.32	Try to maintain health/fitness	0.56
Try to become a better person	0.30	Work on my hobbies	0.52
<i>Strategy II: Partying and Clubbing</i>		Exercise	0.43
Party	0.94	Seek work that uses my talents	0.39
Go out to clubs/bars with friends	0.88	Become absorbed in tasks	0.38
Drink alcohol	0.58	Lower stress level	0.35
Go out to meet people/be entertained	0.53	Go to the movies alone	0.32

Dance	0.48	Try to have self-control	0.31
Take illegal drugs	0.39	<i>Strategy VII: Religion</i>	
Stay home and enjoy quiet times	-0.36	Seek support from faith	0.86
<i>Strategy III: Mental Control</i>		Perform religious activities/pray, etc.	0.81
Try not to think about being unhappy	0.78	Drink alcohol	-0.43
Think about what is wrong with life	0.72	<i>Strategy VIII: Direct Attempts</i>	
Try to look at the positive but fail	0.66	Act happy/smile, etc	0.61
Focus out negative aspects of life	0.41	Get myself into happy mood	0.57
Take life as it is – be content	-0.37	Decide to be happy	0.51
Cultivate a bright outlook	-0.34	Improve social skills	0.36
Go to the movies alone	0.33	Try to have self-control	0.36
Take illegal drugs	0.32	Write in journal	-0.35
<i>Strategy IV: Instrumental Goal Pursuit</i>		Draw	-0.31
Pursue career goals	0.75		
Attempt to reach full potential	0.70		
Study	0.61		
Strive to accomplish things	0.59		
Try to do well academically/raise grades	0.58		
Organize life and goals	0.49		

Factor Analysis: Deriving Happiness-Increasing Strategies

Description of Analyses

A primary focus of this study was to derive empirically the intentional behaviors that people use to make themselves happy – that is, their happiness-increasing strategies. To that end, factor analytic procedures were used to extract 8 interpretable factors from the original set of 66 items.

The exploratory factor analytic procedures followed those outlined by Comrey and Lee (1992). First, factors were extracted using the minimal residual method of extraction (Comrey, 1962). This technique minimizes the residual variance after each factor is extracted. The advantage of this technique is that it does not impose communality estimates that can influence the results; rather, the minimum residual method operates on the off-diagonal elements of the correlation matrix (Comrey and Lee, 1992). When communalities are used, this technique is equivalent to a principal factor solution (Comrey and Lee, 1992).

Next, the results of minimum residual extraction are used in a two-stage tandem criteria orthogonal rotation procedure (Comrey, 1967). In the present study, the factors were then rotated using an oblique rotation procedure. An oblique rotation was chosen because it was expected that the factors would relate to one another; forcing an orthogonal structure thus did not seem appropriate.

Happiness-increasing Strategies

The eight derived factors (happiness strategies), their loadings, and the original items are shown in Table I. These factors were Social Affiliation (or “Affiliation”), Partying and Clubbing (“Partying”), Mental Control, Instrumental Goal Pursuit (“Goal Pursuit”), Passive Leisure and Active Leisure (cf. Csikszentmihalyi and Hunter, 2003), Religion, and Direct Attempts. The factor scores were generated by summing the variables from each factor with a coefficient of 0.4 or greater and then averaging for a single unit-weighted score.¹ A standardized factor score was also tried – that is, the items were standardized before the average was taken. Because the results from the raw and the standardized scores were virtually identical, only the results for the raw scores are presented.

The descriptive statistics for the happiness strategies are presented in Table II. Overall, Social Affiliation and Instrumental Goal Pursuit were the most frequently used strategies (M 's = 5.38 and 5.18, respectively), whereas Partying and Mental Control were the least frequently used strategies (M 's = 3.56 and 3.47, respectively). It is also noteworthy that, for many of the strategies, the reported usage spanned the full range from 1 (*never*) to 7 (*all the time*).

Table II also highlights gender differences. Although not reported in the table, men and women reported similar levels of happiness (M 's = 4.90 vs. 5.00), $t(496) = -1.37$, *ns*. However, they did show significant differences in their uses of happiness-increasing strategies. In sum, women reported using Affiliation, Goal Pursuit, Passive Leisure, and Religion significantly more frequently than did men, whereas men used Mental Control and Active Leisure significantly more than did women.

Table III indicates the ethnic differences found in the frequency of strategy use. Overall, Religious Activities showed the greatest variability with regard to ethnicity. African-American students reported the highest frequency of religious activity

TABLE II
Frequency of strategy use by men and women

Happiness-increasing strategy	Total ($N = 500$)			Gender				t
				Men ($n = 157$)		Women ($n = 341$)		
	M	SD	Range	M	SD	M	SD	
Social Affiliation	5.38	0.97	1.7–7.0	5.12	0.98	5.50	0.95	-4.06***
Partying and Clubbing	3.56	1.38	1.0–7.0	3.50	1.38	3.59	1.38	-0.65
Mental Control	3.47	1.25	1.0–6.5	3.64	1.25	3.39	1.24	2.11*
Instrumental Goal Pursuit	5.18	1.10	1.5–7.0	5.01	1.16	5.25	1.05	-2.28*
Passive Leisure	4.78	0.99	1.3–7.0	4.62	1.05	4.86	0.94	-2.53*
Active Leisure	4.50	1.29	1.0–7.0	4.79	1.34	4.36	1.25	3.43***
Religion	4.48	1.58	1.0–7.0	4.12	1.63	4.64	1.53	-3.46***
Direct Attempts	4.53	1.38	1.0–7.0	4.56	1.38	4.51	1.39	0.39

($M=5.32$), whereas Caucasian students reported the least ($M=3.65$). Ethnic differences were also found for Mental Control and Active Leisure. Asian students attempted to control their thoughts the most ($M=3.71$), compared to Chicano/a ($M=3.35$) and Caucasian ($M=3.09$) students. With regard to Active Leisure, both Caucasian ($M=4.69$) and Asian students ($M=4.56$) used this strategy more often than did Chicano/a students ($M=4.18$).

Intercorrelations of the Happiness-increasing Strategies

The internal consistencies and intercorrelations of the happiness strategies are presented in Table IV. Overall, the strategies showed good reliabilities in most cases, with Cronbach's alphas ranging from 0.86 (Goal Pursuit) to 0.66 (Passive Leisure). With only a few exceptions, all the strategies significantly correlated with one another. Notably, the four strategies of Goal Pursuit, Affiliation, Direct Attempts, and Active Leisure were moderately associated with one another (average $r=0.36$). That is, individuals who report actively pursuing goals also tend to socialize, exercise, and use direct attempts at maintaining or increasing happiness. Passive Leisure and Religion were also significantly related to this group of happiness strategies, albeit, to a lesser degree. Finally, Mental Control was inversely related to all the strategies except for Passive Leisure.

Correlational and Regression Analyses: Evaluating the Happiness-Increasing Strategies

To evaluate the predictive power of the derived strategies, the second aim of the study, we assessed the relations between participants' reported frequency of strategy use and their happiness levels.

Correlational Analyses

The zero-order correlations between the frequency ratings of the strategies and self-rated happiness are found in Table V. The majority of the happiness-increasing strategies (Mental Control and Passive Leisure being the exceptions) were found to be pos-

TABLE III
Means (standard deviations) for frequency of strategy use by ethnic group

Happiness-increasing strategy	Ethnicity					<i>F</i>
	African-American (<i>n</i> = 39)	Asian (<i>n</i> = 188)	Caucasian (<i>n</i> = 117)	Chicano/a (<i>n</i> = 93)	Other (<i>n</i> = 53)	
Social Affiliation	5.36 (0.97)	5.26 ^a (1.00)	5.41 (0.98)	5.46 (0.96)	5.59 ^a (0.90)	1.58
Partying	3.50 (1.25)	3.39 ^a (1.30)	3.81 ^a (1.51)	3.47 (1.42)	3.79 (1.29)	2.22
Mental Control	3.61 ^a (1.41)	3.71 ^b (1.15)	3.09 ^{abc} (1.29)	3.35 ^b (1.29)	3.56 ^c (1.12)	4.89***
Goal Pursuit	5.32 (1.17)	5.14 (1.10)	5.15 (1.16)	5.19 (1.02)	5.32 (1.04)	0.44
Passive Leisure	4.60 (1.00)	4.92 ^a (1.01)	4.51 ^{abc} (0.95)	4.80 ^b (0.85)	4.90 ^c (1.03)	3.77**
Active Leisure	4.38 (1.31)	4.56 ^a (1.30)	4.69 ^b (1.29)	4.18 ^{ab} (1.27)	4.56 (1.16)	2.29
Religion	5.32 ^a (1.41)	4.56 ^{ab} (1.49)	3.65 ^{abcd} (1.49)	4.76 ^c (1.49)	4.98 ^d (1.63)	14.32***
Direct Attempts	4.45 (1.64)	4.63 (1.31)	4.49 (1.47)	4.45 (1.38)	4.50 (1.24)	0.41

Note: *N* = 490. Means within the same row that share a superscript are significantly different at $p < 0.05$ using HSD *post hoc* analyses. *F*-values have been corrected for unequal sample sizes.

* $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$

TABLE IV
Reliabilities and intercorrelations of happiness-increasing strategies

Happiness-increasing strategy	1	2	3	4	5	6	7	8
1. Social Affiliation	0.81	0.29***	-0.23***	0.45***	0.26***	0.34***	0.28***	0.37***
2. Partying	0.80		-0.01	0.15***	0.29***	0.27***	-0.16***	0.27***
3. Mental Control			0.71	-0.12**	0.13**	-0.07	-0.09*	-0.08
4. Goal Pursuit				0.86	0.18***	0.38***	0.25***	0.37***
5. Passive Leisure					0.66	0.21***	0.10*	0.30***
6. Active Leisure						0.72	0.18***	0.34***
7. Religion							0.70	0.17***
8. Direct Attempts								0.76

Note: $N = 500$. α is bolded on the diagonal.

* $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$.

itively correlated with happiness. The strongest positive relations were found for Social Affiliation ($r=0.45$) and Direct Attempts ($r=0.40$). Passive Leisure was not significantly related to happiness ($r=.07$) and Mental Control was inversely related to happiness ($r=-0.56$).²

Finally, we tested whether the link between happiness and strategy use varied by gender. The only significant gender difference in the relations between strategy use and happiness was found for the strategy of Direct Attempts ($r=0.47$ for males vs. $r=0.36$ for females).

Regression Analyses

Simultaneous regression was used to assess the predictive power of the set of happiness-increasing strategies (i.e., R^2), as well as the unique predictive power of each strategy (i.e., β). Table V displays the results of the regression analyses, which are divided into two parts: The top part reports the results when happiness was predicted by happiness-enhancing strategies only, and the bottom part reports the results when happiness was predicted by strategies *and* traits.

As Table V shows, intentional happiness strategies are important predictors of happiness levels; thus, researchers can reliably predict how happy a person is by knowing how frequently he or she uses these eight types of happiness strategies. When happiness was predicted by happiness strategies alone, strategies accounted for a substantial proportion of variance for happiness ($R^2=0.52$, $p<0.0001$). Mental Control (inversely related) was by far the most robust single predictor of happiness, followed by Direct Attempts, Social Affiliation, Religion, Party-ing and Clubbing, and Active Leisure. Both Passive Leisure and, surprisingly, Instrumental Goal Pursuit failed to uniquely predict happiness in the regression model.

Table V also displays the semi-partial correlations. These values represent the predictive power of the strategy while controlling for the other strategies – that is, the unique relation between the respective strategy and happiness. Overall, many associations dropped in strength once entered into the regression equation with the other variables. The most notable example

TABLE V
 Predicting subjective happiness from frequency of strategy use

Predictor	Regression coefficients			Correlations	
	B	SE B	β	Zero-order	Semi-partial
Happiness Strategies Only					
Social Affiliation	0.22	0.04	0.20***	0.45***	0.16***
Party and Clubbing	0.08	0.03	0.11**	0.22***	0.09**
Mental Control	-0.43	0.03	-0.48***	-0.56***	-0.46***
Goal Pursuit	-0.05	0.04	-0.05	0.26***	-0.04
Passive Leisure	-0.04	0.04	-0.04	0.07	-0.03
Active Leisure	0.07	0.03	0.09*	0.29***	0.08*
Religion	0.08	0.02	0.12***	0.24***	0.11***
Direct Attempts	0.19	0.03	0.24***	0.40***	0.20***
<i>Happiness Strategies and Traits</i>					
Social Affiliation	0.17	0.04	0.15***	0.47***	0.11***

Party and Clubbing	0.04	0.03	0.05	0.23**	0.04
Mental Control	-0.28	0.03	-0.32***	-0.57***	-0.26***
Goal Pursuit	-0.06	0.04	-0.06	0.26***	-0.04
Passive Leisure	0.01	0.04	0.01	0.08	0.01
Active Leisure	0.03	0.03	0.03	0.31***	0.03
Religion	0.10	0.02	0.14***	0.24***	0.12***
Direct Attempts	0.14	0.03	0.18***	0.39***	0.15***
Extraversion	0.30	0.05	0.21***	0.49***	0.17***
Openness	-0.05	0.06	-0.03	0.22***	-0.02
Agreeableness	0.08	0.06	0.05	0.37***	0.04
Conscientiousness	-0.03	0.07	-0.02	0.30***	-0.02
Neuroticism	-0.38	0.05	-0.26***	-0.56***	-0.20***

Note: $R^2 = 0.52$, $F(8, 490) = 65.29$, $p < 0.0001$ for Strategies only. $R^2 = 0.62$, $F(13, 478) = 58.67$, $p < 0.0001$ for Strategies and Traits combined.

* $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$

involved Goal Pursuit, which declined from a zero-order r of 0.26 to a semi-partial r of -0.04 .

As displayed in the bottom of Table V, when traits were added, Mental Control again emerged as the most robust predictor, followed by Neuroticism, Extraversion, Direct Attempts, Social Affiliation, and Religion. The proportion of variance increased by 10% ($R^2=0.62$, $p<0.0001$) when traits were included in the analysis.

Although not reported in Table V, hierarchical regression, using the all-subsets procedure, was also performed to assess the predictive power of the strategies after controlling for the Big Five personality traits. The Big Five accounted for a sizeable portion of the variance ($R^2=0.46$, $p<0.001$) when entered in the model at Step 1. However, happiness strategies accounted for a substantial increase in variance explained even after controlling for personality ($\Delta R^2=0.16$, $p<0.001$).

Mediation Analyses: Towards a Process Model of Happiness

The third aim of the study was to test a process model of happiness. To that end, we examined the relations among personality traits, happiness-increasing strategies, and happiness levels. First, we assessed the correlations between traits and happiness strategies (see Table VI). Next, we used structural equation modeling (SEM) to test the hypothesis that happiness-increasing strategies would partially mediate the relation between personality traits and happiness. One advantage of SEM is that it corrects for measurement error in the constructs of interest – an issue relevant to the present study. Although the reliabilities of the derived factors were good in most cases, there was quite a bit of variability (i.e., α 's ranged from 0.86 to 0.66).

Our approach was to test whether the relation between each of the five personality traits and happiness was mediated by each happiness strategy (see Figure 1). The path c represents the direct relation between the trait and level of happiness when the mediator is not included in the model (the unmediated direct path). The sub-path (c') represents the direct relation between the trait and level of happiness when the mediator is included in the model (the mediated direct path). The difference between

TABLE VI
Correlations between happiness-increasing strategies and the “Big Five” personality traits

Happiness-increasing strategy	“Big Five” personality traits				
	E	O	A	C	N
Social Affiliation	0.37***	0.31***	0.40***	0.29***	-0.22***
Party and Clubbing	0.39***	0.19***	0.03	0.05	-0.13**
Mental Control	-0.28***	-0.16***	-0.29***	-0.28***	0.53***
Goal Pursuit	0.23***	0.14**	0.23***	0.51***	-0.19***
Passive Leisure	0.06	0.04	0.06	-0.05	0.06
Active Leisure	0.26***	0.25***	0.14**	0.23***	-0.28***
Religion	0.02	0.00	0.21***	0.22***	-0.02
Direct Attempts	0.28***	0.10*	0.20***	0.17***	-0.15***

Note: $N = 493$. E = extraversion; O = openness; A = agreeableness; C = conscientiousness; N = neuroticism.
* $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$

the unmediated and the mediated path ($c - c'$) represents the “total reduction in effect” accounted for by the mediator (Kenny et al., 1998, p. 261). The product of the indirect paths a and b (ab) equals the indirect relation from trait, through strategy, to happiness. The reduction in the unmediated direct path and the mediated direct path between trait and happiness is given by $(c - c') = ab$; thus, the percentage of reduction in the direct relation between trait and happiness is given by $\% \Delta c = ab/c$ (Kenny et al., 1998).

The analyses followed the procedures and criteria for mediation outlined by Baron and Kenny (1986). Because Passive Leisure and Instrumental Goal Pursuit did not relate to happiness in the regression model, they were not included in these analyses.

Table VII presents the results of the mediation analyses. The table is organized into two super-ordinate columns: (1) the Unmediated Model, which includes paths b and c ; and (2) the Mediated Model, which includes paths a , b , and c' . Each super-ordinate column contains the fit indices for its respective model – namely, λ^2 , the goodness of fit index (GFI), and the root-mean-square error of approximation (RMSEA). A λ^2 value roughly equal to the degrees of freedom indicates a reasonably well fitting model ($p \cong 0.50$), whereas larger λ^2 values indicate a poor fit ($p < 0.05$) (Loehlin, 1998). In the present study, the λ^2 values for all models, both unmediated and mediated, demonstrated poor fit (p 's < 0.001). However, with large samples

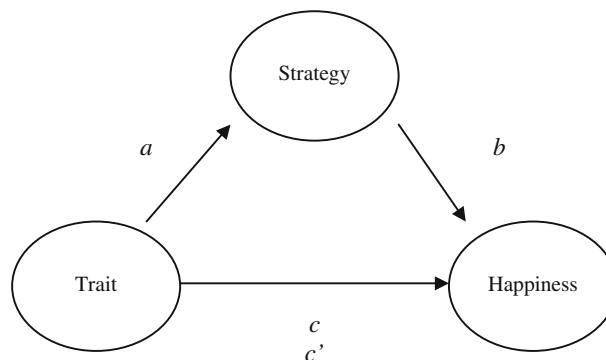


Figure 1. Basic model of the relation of a trait to happiness mediated by happiness-increasing strategy.

TABLE VII
SEM analyses testing the mediation of personality traits and happiness by happiness-increasing strategies

Model	Unmediated model					Mediated model									
	Fit indices					Standardized paths									
	λ^2	<i>df</i>	GFI	RMSEA		λ^2	$\Delta\lambda^2$	GFI	RMSEA	<i>a</i>	<i>b</i>	<i>c'</i>	% Δc	<i>Z</i>	R^2
<i>Extraversion</i>															
Social Affiliation	622.48	133	0.87	0.09		537.87	84.61	0.88	0.08	0.49	0.34	0.38	0.30	4.85	0.39
Partying	618.50	117	0.86	0.09		550.91	67.59	0.87	0.09	0.41	-0.05*	0.57	-0.04	-1.00*	0.31
Mental Control	509.38	102	0.87	0.09		463.87	45.51	0.88	0.09	-0.37	-0.52	0.36	0.35	5.45	0.54
Active Leisure	438.80	88	0.88	0.09		414.33	24.47	0.89	0.09	0.25	0.19	0.50	0.09	3.20	0.34
Direct Attempts	493.46	88	0.87	0.10		456.35	37.11	0.88	0.09	0.34	0.30	0.46	0.18	4.16	0.39
<i>Openness</i>															
Social Affiliation	517.57	168	0.91	0.07		464.90	52.67	0.91	0.06	0.40	0.51	0.06*	0.78	5.14	0.28
Partying	477.62	150	0.90	0.07		464.99	12.63	0.91	0.07	0.19	0.14	0.24	0.10	2.18	0.09
Mental Control	432.26	133	0.91	0.07		418.13	14.13	0.91	0.07	-0.22	-0.62	0.13	0.50	3.52	0.44
Active Leisure	372.28	117	0.92	0.07		354.44	17.84	0.92	0.06	0.23	0.28	0.20	0.24	3.38	0.15
Direct Attempts	384.74	117	0.91	0.07		376.11	8.63	0.92	0.07	0.17	0.43	0.19	0.27	2.72	0.25
<i>Agreeableness</i>															
Social Affiliation	511.07	150	0.90	0.07		414.00	97.07	0.89	0.06	0.54	0.43	0.17	0.57	5.20	0.30
Mental Control	395.81	117	0.91	0.07		354.25	41.56	0.91	0.06	-0.37	-0.58	0.19	0.53	5.25	0.46
Active Leisure	275.37	102	0.93	0.06		268.64	6.73	0.93	0.06	0.13	0.26	0.37	0.09	2.32	0.23
Religion	303.84	102	0.92	0.06		280.05	23.79	0.93	0.06	0.27	0.20	0.36	0.13	3.08	0.21
Direct Attempts	353.98	102	0.91	0.07		326.17	27.81	0.92	0.07	0.30	0.37	0.29	0.28	4.04	0.28

Table VII
(Continued)

Model	Unmediated model				Mediated model									
	Fit indices				Fit indices				Standardized paths					
	λ^2	df	GFI	RMSEA	λ^2	$\Delta\lambda^2$	GFI	RMSEA	a	b	c'	$\% \Delta c$	Z	R^2
<i>Conscientiousness</i>														
Social Affiliation	469.24	150	0.90	0.07	413.81	55.43	0.91	0.06	0.41	0.46	0.17	0.52	5.05	0.30
Mental Control	419.07	117	0.90	0.07	370.77	48.30	0.91	0.07	-0.39	-0.60	0.13	0.64	5.55	0.44
Active Leisure	352.92	102	0.91	0.07	314.11	38.81	0.92	0.07	0.30	0.22	0.29	0.19	3.53	0.17
Religion	318.41	102	0.92	0.07	297.99	2.42*	0.92	0.06	0.24	0.22	0.31	0.14	3.07	0.18
Direct Attempts	365.69	102	0.91	0.07	347.39	18.30	0.91	0.07	0.24	0.39	0.26	0.26	3.59	0.27
<i>Neuroticism</i>														
Social Affiliation	541.65	133	0.89	0.08	514.99	26.66	0.89	0.08	-0.9	0.38	-0.53	0.17	-4.17	0.54
Partying	542.90	117	0.88	0.09	537.97	4.94	0.88	0.09	-0.12	0.12	-0.62	0.02*	-1.66*	0.42
Mental Control	643.80	102	0.87	0.10	441.65	202.15	0.89	0.08	0.74	-0.39	-0.36	0.45	-4.50	0.49
Active Leisure	439.46	88	0.89	0.09	401.68	37.78	0.90	0.09	-0.31	0.15	-0.59	0.07	-2.86	0.42
Direct Attempts	469.59	88	0.88	0.09	460.65	8.94	0.89	0.09	-0.17	0.36	-0.58	0.10	-2.79	0.54

Note: SEM = structural equation modeling. GFI = goodness of fit index; RMSEA = root-mean-square error of approximation. Unless marked with an *, all λ^2 , $\Delta\lambda^2$, standardized paths (a , b , c'), and Z values are significant at $p < 0.05$.

(as was the case in the present study), λ^2 may be an overly sensitive measure of fit (Loehlin, 1998). Therefore, we chose to focus on the two other fit indices – the GFI and the RMSEA. For the GFI, a reasonable fit is indicated by values greater than 0.90 (Brown and Cudeck, 1992). For the RMSEA, values between 0.05 and 0.10 indicate a good fit (Bentler and Bonett, 1980; Loehlin, 1998). According to these indices, all models demonstrated a reasonable, or close-to-reasonable, fit.

Also found in the Mediated column are (1) the change in λ^2 when path a is included vs. when a is not included ($\Delta\lambda^2$ [1]); (2) the standardized path coefficients (a , b , c'); (3) the percentage of change in the direct path due to the mediator ($\%\Delta c$); (4) a test of significance of the indirect paths (Z),³ and (5) the amount of variance in happiness accounted for by the model (R^2).⁴

Table VII shows that only one model met the criteria for complete mediation – that is, Openness was completely mediated by Social Affiliation. However, many models demonstrated partial mediation as evidenced by the following criteria: (1) the fit indices – particularly the $\Delta\lambda^2$ (a $\Delta\lambda^2$ [1] of greater than 3.84 [$p < 0.05$] suggests that the mediated model is a better fit to the observed data than the unmediated model); (2) the percent change in the direct relation between the trait and happiness level; and (3) the significant indirect path from the initial variable (trait) through the mediator (strategy) and to the outcome (happiness).

To illustrate, the strategy of Social Affiliation partially mediated the relation between Extraversion and happiness. Specifically, Extraversion predicted Affiliation (0.49), which, in turn, predicted happiness (0.34). Overall, the mediated model fit the data reasonably well (GFI=0.88, RMSEA=0.08); the addition of path a significantly decreased λ^2 ($\Delta\lambda^2$ [1]=84.61, $p < 0.001$); and the combined indirect paths (ab) were significant ($Z=4.85$, $p < 0.001$). Moreover, the inclusion of Affiliation accounted for 30% of the initial relation between Extraversion and happiness ($\%\Delta c=0.30$). Finally, the combination of Extraversion and Social Affiliation accounted for a sizeable proportion of the variance of happiness ($R^2=0.39$).

Similar results with regard to Extraversion are shown for Mental Control ($\Delta\lambda^2 [1]=45.51, p<0.001; Z=5.45, p<0.001; \% \Delta c=0.35$) and Direct Attempts ($\Delta\lambda^2 [1]=37.11, p<0.001; Z=4.16, p<0.001; \% \Delta c=0.18$). In sum, the relation between Extraversion and happiness is partially mediated through happiness-enhancing strategies – namely, Social Affiliation, Mental Control, Direct Attempts, and Active Leisure (albeit to a lesser extent).

In general, the majority of mediation models showed a significant improvement in fit based on the single degree of freedom $\Delta\lambda^2$. Additionally, nearly all of the indirect paths were found to be statistically significant (with the exception of the two indirect paths for Partying and Clubbing marked with an asterisk). These findings indicate that these paths are important and, consequently, should be included in the model. Taken together, the mediated models tended to provide a better explanatory representation of the relations between the constructs than the unmediated models.

Most noteworthy were the observed percentage drops in the relation between traits and happiness after the mediator was included in the model. The largest proportion of change was for Openness and Social Affiliation (78%) and the least was for Extraversion and Partying/Clubbing (–0.04). For the latter, it appears that the relation between Extraversion and happiness may actually be undercut by Partying.

Notably, Neuroticism showed the most direct predictive power – that is, it was the trait *least* mediated by strategies. The only strategy that accounted for a sizeable proportion of the relation between Neuroticism and happiness was Mental Control (45%).

DISCUSSION

The present study sought to identify the strategies that people employ to maintain or increase their chronic happiness. To that end, we empirically derived eight reported happiness-enhancing strategies – namely, Social Affiliation, Partying and Clubbing, Mental Control, Instrumental Goal Pursuit, Passive Leisure, Active Leisure, Religion, and Direct Attempts at happiness. Our

findings suggest that these self-regulatory happiness-boosting strategies are inter-related with personality traits, such that traits predict the use of certain happiness-increasing strategies, and both traits and happiness strategies jointly predict happiness levels.

The Derivation and Evaluation of Happiness-Increasing Strategies

Factor-analytic techniques were used to detect underlying similarities among the responses generated from a pilot open-ended survey of what people do to enhance happiness. In this manner, specific self-reported happiness-enhancing behaviors were integrated into more general happiness strategies. Interestingly, many of the strategies resembled mood regulatory behaviors (Thayer et al., 1994; see Morris and Reilly, 1987 for a review), suggesting that a large component of happiness maintenance involves mood regulation.

The second aim of the study was to determine which strategies are most closely linked to happiness. As anticipated, the strategies' relations to happiness varied greatly. Thus, our findings, combined with past research evidence, suggest that the effectiveness of the strategies is also likely to vary. Although no definitive conclusions can be made based on the present correlational data, we would be remiss for not discussing the strategies' potential effectiveness.

What do People do to Make Themselves Happy?

Social Affiliation

Characterized by such items as "helping others" and "communicating with friends," the first factor and the most frequently used strategy that emerged was Social Affiliation. Importantly, Affiliation showed a strong positive relation to happiness, even after controlling for the other strategies. This finding is supported by studies showing a link between social activities and happiness. For example, research shows that people are happier while in the presence of others (Csikszentmihalyi and Hunter, 2003; Pavot et al., 1990), and social affiliation is rated as an effective strategy in combating dysphoria (Thayer et al., 1994) and stress (Cohen and Wills, 1985). Furthermore, experiments

that have manipulated social activity have produced increases in happiness (Fordyce, 1977, 1983; Lyubomirsky et al., 2005). It is also noteworthy that affiliation was related to other strategies – namely, Instrumental Goal Pursuit, Direct Attempts, Active Leisure, and Religion, as well as to Partying and Clubbing.

Partying and Clubbing

The second strategy to appear, and the second least used one, was Partying and Clubbing. On the surface, this strategy appears to involve the maintenance of present good moods. Indeed, the behaviors that make up this strategy suggest a celebratory aspect (e.g., party, dance, go out to clubs). However, the frequency of Partying was only moderately correlated with happiness levels. Furthermore, when Partying was included in the mediation analysis with Extraversion, its predictive power dropped to non-significance. However, Partying was closely related to Extraversion in the same analysis. Together, these findings suggest that Partying is more closely akin to Extraversion than to happiness directly.

Mental Control

In contrast to the other strategies that emerged, Mental Control appears to be associated with *unhappiness* – particularly, with unhappy moods, thoughts, or unpleasant matters. To illustrate, items that reflected this strategy included “Try not to think about unhappy thoughts” and “Think about what is wrong with life.” Notably, a certain ambiguity characterizes this factor. Specifically, some items demonstrate an attempt to eschew negative thoughts, whereas other items reflect an attempt to contemplate negative themes. However, it is clear that this strategy is characterized by the experience of negative thoughts or feelings and the person’s focus of attention on those negative experiences.

The strategy of Mental Control was inversely related to happiness even after controlling for the other strategies. The inverse relation between the reported frequency of this strategy and happiness levels suggests that the use of this strategy to promote happiness is less than optimal. Research supports the futility of controlling or suppressing feelings and thoughts. For example, the suppression of emotional expression appears to be an inef-

fective way of controlling emotions and is negatively related to well-being (Gross and John, 2003). Indeed, research suggests that thought suppression may intensify and prolong *unhappiness*. For example, when individuals attempt to inhibit unwanted thoughts directly, the unwanted thoughts may actually be *maintained* (Wegner, 1994; Wenzlaff et al., 1991). Additionally, research shows that focusing on the causes and consequences of a negative mood is maladaptive, because it serves to maintain and exacerbate negative affect (see Lyubomirsky and Tkach, 2004, for a review).

Instrumental Goal Pursuit

The next strategy that emerged was labeled Instrumental Goal Pursuit because the individual items suggest that the person using this strategy is acting as an agent attempting to change her situation (e.g., “Strive to accomplish things”) or herself (e.g., “Attempt to reach full potential”). Notably, the nature of the individual items comprising this factor varied in a distinctively hierarchical manner. For example, the items ranged from abstract, meta-goals (e.g., “Organize life and goals”) to specific daily tasks (e.g., “Study”). Given that the sample was comprised of college students, it is not surprising that using Goal Pursuit was one of the most frequently used strategies. It also appears to be one of the most effective strategies. The commitment to and attainment of personal goals has been linked in many studies to positive moods and well-being (e.g., Carver and Scheier, 1981; Emmons, 1986; Emmons and Diener, 1986; Sheldon and Elliot, 1999).

Passive Leisure

In contrast to the high-motivation nature of Goal Pursuit, the strategy of Passive Leisure is characterized by idleness. Items that loaded on this factor included “Watching TV,” “Playing video games,” and “Sleep.” Although these activities seem to be relaxing and pleasurable, frequent use of the strategy of Passive Leisure was not related to happiness. This finding was not surprising. Past experimental studies show that, although performing vigorous activities (e.g., exercise) lifts negative moods,

passive activities (e.g., watching a video of someone else exercise) have no effect on moods (Erber, 1996).

Active Leisure

Unlike Passive Leisure, the strategy of Active Leisure was a strong predictor of happiness, even after controlling for the other strategies. The three items that loaded most strongly on this factor were “Try to maintain health and fitness,” “Work on hobbies,” and “Exercise.”

A number of studies support the link between exercise and well-being (see Dubbert, 2002, for a review). In contrast to the maladaptive control of unwanted thoughts, distraction – or the focus of attention away from the self – appears to be a very adaptive self-regulatory behavior (Erber, 1996; Nolen-Hoeksema, 1991; Thayer et al., 1994). Corroborating this conclusion is research documenting that exercise is related to lower levels of stress, anxiety, and depression (Salmon, 2000), improved mood (Rejeski et al., 1995), and greater likelihood of flow (Csikszentmihalyi, 1990). Furthermore, people self-report exercise as an effective strategy to fight negative moods (Thayer et al., 1994). Even more convincing is experimental evidence showing that exercise serves to reduce negative affect (Erber, 1996). Thus, not surprisingly, the present findings show a strong relation between distracting behaviors, such as Active Leisure, and self-reported happiness.

Religion

The strategy of Religion (e.g., “Praying” and “Performing religious ceremonies”) was one of the least frequently used methods to boost happiness. Although it was not a popular strategy, it may have been an effective one – that is, a strong predictor of happiness. Moreover, a sizeable body of research supports the link between faith and well-being (see Gartner et al., 1991; Myers, 2000, for a reviews), likely because religious activity provides increased social connectedness, as well as a sense of life purpose. The strong negative loading of “drinking alcohol” on this factor also highlights how this strategy could have an indirect influence on long-term happiness. Specifically, research shows that those individuals who routinely perform

religious behaviors abstain from partaking in maladaptive behaviors such as drug and alcohol abuse (Batson et al., 1993).

Direct Attempts

In contrast to the relatively inactive strategy of Passive Leisure, the strategy of Direct Attempts is proactive and direct in nature (e.g., “Smile,” “Act happy”). This moderately common strategy was found to be an excellent predictor of happiness, supporting Morris and Reilly’s (1987) argument that expressive behavior can lift negative moods. Of course, the causal direction of these behaviors is unknown in the present study. That is, expressive behaviors could be the outward manifestation of already experienced happiness, rather than a consequence of a conscious happiness-increasing strategy; consequently, the discussion of this factor as a “happiness-enhancing strategy” may be premature at this time.

Nevertheless, the participants reported these expressive behaviors as intentional happiness-increasing strategies, and the findings suggest that Direct Attempts at happiness are strongly related to experienced happiness. Moreover, since the time of Darwin (1859/1872) and James (1890/1890), the expression of emotion has been thought to heighten the intensity of emotional experience. More recently, experiments in which participants have been assigned to physically express happiness, anger, fear, or sadness show that simply acting out the behaviors associated with particular emotions serves to intensify or even trigger that emotion (e.g., Duclos et al., 1989; Strack et al., 1988). So, by acting happy, it may be possible to make oneself happy.

Gender Differences

Although the men and women in our sample reported being equally happy, gender differences did emerge in the frequency of using particular happiness-enhancing strategies. Men reported attempting to boost happiness with Active Leisure (e.g., exercise) and Mental Control (e.g., try not to think about unwanted thoughts) more frequently than did women. Except for exercise, which could involve social interaction, these activities are relatively solitary in nature. Women, in contrast to men, tended to use Social Affiliation (e.g., focus on maintaining

relationships), Instrumental Goal Pursuit (e.g., study and pursue career goals), Passive Leisure (e.g., watch TV, rent video, shopping), and Religion (e.g., perform religious activities). These differences are not surprising given the long-standing evidence that women prefer social affiliation more than do men (Chodorow, 1978). Overall, the gender differences found in the present study are consistent with the gender differences reported for behaviors used to combat bad moods (Thayer et al., 1994).

Ethnic Differences

Overall, few ethnic differences were observed in the use of happiness-enhancing strategies. However, the ethnic differences that did emerge highlight the theoretically important features of happiness-boosting strategies and of happiness, in general. For example, in contrast to their Asian and Chicano(a) peers, White students reported Partying and participating in Active Leisure most frequently, and used Passive Leisure and Mental Control least frequently. These findings are consistent with research documenting that members of individualist cultures prefer high-arousal positive emotions (e.g., excitement and enthusiasm), whereas members of collectivist cultures prefer low-arousal emotions (e.g., tranquility and calm) (Tsai et al., in press). In sum, these ethnic differences suggest that an individual's choice of happiness-enhancing strategies may depend on what aspects of happiness he or she values most. That is, how one pursues happiness depends on one's "ideal" beliefs regarding the experience of happiness.

Evaluating the Full Set of Happiness-Increasing Strategies

We also evaluated the happiness strategies as a set of predictors. As expected, regression analyses showed that happiness-increasing strategies accounted for a sizeable portion of the variance in individual differences in happiness levels. Indeed, happiness strategies accounted for more variance (52%) than did the Big Five personality traits (46%). Moreover, happiness strategies continued to account for a substantial portion of the variance of happiness (16%) even after controlling for the

contribution of personality. Such empirical evidence supports the usefulness of studying intentional behaviors as important determinants of happiness.

The best predictors of happiness, after controlling for the effect of the other strategies, were Mental Control (inversely related), Direct Attempts, Social Affiliation, Religion, Partying, and Active Leisure (in that order). When placed in the multiple regression model, Passive Leisure and Instrumental Goal Pursuit failed to predict happiness.

Although the findings for Passive Leisure were not surprising given past research (e.g., Erber, 1996), the lack of predictive power for Instrumental Goal Pursuit was unexpected and somewhat equivocal. Whereas the bivariate correlations showed a strong relation between Goal Pursuit and happiness, the multiple regression did not. One possible reason for this discrepancy is the strong association between Social Affiliation (a strong predictor of happiness) and Goal Pursuit. The high correlation between these two strategies and a perusal of their items suggests some construct overlap. For example, Affiliation items such as “maintaining relationships” and “helping others” can also be considered social goals. This construct overlap may thus be driving down the unique relation between Goal Pursuit and happiness. Alternatively, the six items that were used to represent goals may not adequately represent this construct, and different facets of goal pursuit not captured by our instrument may strongly predict happiness even within the context of other strategies. Finally, it may be that the pursuit and attainment of goals promotes aspects of well-being not captured by our subjective happiness scale.

Traits and Happiness-Increasing Strategies: Towards a Process Model of Chronic Happiness

The final aim of this study was to assess the relations among happiness-increasing strategies, personality traits, and chronic happiness. Overall, our findings reveal a number of complex relationships.

First, not surprisingly, we found that people use different happiness-enhancing strategies depending on their personality.

For example, extraverts are more likely to use the strategy of Social Affiliation (support and encourage friends) than are introverts. Similarly, highly conscientious people tend to use Instrumental Goal Pursuit (e.g., study and pursue career goals); agreeable people are inclined to use Social Affiliation, presumably to go along with the crowd (e.g., interact/communicate with friends); and neurotics tend to use maladaptive Mental Control (e.g., try not to think about unhappy thoughts).

Next, we found that intentional happiness-increasing strategies partially mediated the relation between personality traits and happiness levels. This finding supported our prediction that at least part of the relation between traits and happiness is not direct, but passes through behaviors that aim to elevate happiness. For example, extraverts are happier than introverts. However, the relation between extraversion and happiness is not an entirely direct one. Rather, a more complex process seems to be at work, such that extraversion is related to the use of the Social Affiliation strategy, which, in turn, is related to happiness. Although, no causal conclusions can be drawn based on this observational study, other investigations corroborate our findings. For example, in a daily experience sampling study, extraverts chose to be in social situations more than did introverts, and reported being in better moods in those chosen social situations than while in imposed solitary situations (Emmons et al., 1986).

Our finding regarding Extraversion and Social Affiliation is not surprising, given that Extraversion is, by definition, linked to social interactions. However, Extraversion was also partially mediated, albeit to a lesser degree, by Mental Control, Direct Attempts, and Active Leisure. Together, these findings suggest that the strong relation between Extraversion and happiness is a function of a number of happiness-enhancing behaviors.

Notably, a similar pattern emerged across the traits – indeed, all the personality traits were to some extent mediated by happiness-enhancing acts. Together, these findings support McCrae and Costa's (1991) contention that traits have an *instrumental* influence on happiness. Specifically, particular traits appear to predispose people to choose certain situations and self-regulatory

behaviors, and these behaviors, in turn, influence their happiness levels. The best mediators were Social Affiliation, Mental Control, Direct Attempts, and, to a lesser degree, Active Leisure.

Also noteworthy is that not all traits were *completely* mediated by happiness-enhancing behaviors – specifically, Neuroticism was the least mediated of the personality traits. This finding supports McCrae and Costa’s (1991) argument – at least with regard to the trait of Neuroticism – for a *temperamental* influence of traits on happiness. Past experimental evidence supports the notion that traits may predispose individuals to pay attention to, interpret, and biologically react to the environment in a prescribed manner. For example, dispositionally pessimistic individuals tend to have an unconscious attention bias for negative stimuli, whereas optimists show the reverse bias (Segerstrom, 2001). Moreover, while viewing negative stimuli, pessimists have faster skin conductance rates than optimists (Segerstrom, 2001). Similar results have been reported for Neuroticism – individuals high in Neuroticism tend to react more intensely to negative events than those low in Neuroticism (Larson and Ketelaar, 1989).

Conclusion

Although no causal conclusions can be reached concerning the present study’s findings, they are consistent with McCrae and Costa’s (1991) arguments for both an instrumental and temperamental influence of traits on well-being. Our findings highlight the interaction between traits and behaviors as central to happiness maintenance and well-being.

LIMITATIONS AND SUGGESTED AREAS FOR FUTURE RESEARCH

Causal Direction

Inherent to a correlational design is the failure to know for certain the direction of causality of the variables under investigation. Indeed, the direction of causality between happiness-increasing strategies and happiness levels is open to question. An argument can be made that causality runs in the reverse direction, such that an individual’s happiness may be the

global disposition that influences both his personality and the strategies he chooses to undertake. However, our lack of certainty regarding the causal direction of these findings is offset by numerous past supportive studies that have used experimental designs. Ultimately, to reach causal conclusions, experimental designs in which participants are encouraged to implement particular happiness strategies should be used in future investigations.

Interpretation of Factors

Central to all exploratory factor analytic endeavors are issues of factor purity and interpretation. In the present study, the most notable concerns pertain to the strategies of Mental Control and Direct Attempts. Both contain ambiguities, leading to only tentative interpretation at this stage. Future research efforts are needed to validate the strategies and render them more unequivocal. Overall, however, we are encouraged by the similarity of our findings to past research, and the fact that the emerged factors related to the other constructs in the study in a theoretically meaningful way.

Superficial Coverage

Another limitation concerns our wide, yet superficial, investigation of the complex processes involved. This mile-wide-inch-deep study undoubtedly missed factors that might serve to moderate the proposed relations. For example, the pursuit and attainment of goals is related to well-being (Emmons, 1986; Emmons and Diener, 1986), but only when the person is intrinsically motivated to pursue the goal (Kasser and Ryan, 1996) and when the goal is concordant with her interests and values (Sheldon and Elliot, 1999). Future studies may need to assess such factors. However, we felt that this broad investigation was necessary in the initial research stages, and is offset by several advantages. First, the value of this study lies in its exploratory nature, as its findings are expected to provide utility for further research. Second, the wide coverage of happiness strategies allowed us the opportunity to evaluate the entire array of intentional behaviors used to promote personal happiness. The analyses reveal the predictive power of individual happiness-

increasing strategies, happiness strategies taken as a set, and happiness strategies while controlling for traits. Finally, and most important, this study takes a step toward investigating the complex interplay between traits and well-being. Overall, the study highlights the importance of the behaviors that people use to bolster happiness and suggests that theories of happiness should take personality traits and intentional activities into account.

A further limitation is our use of the Subjective Happiness Scale (Lyubomirsky and Lepper, 1999) as the sole criterion of the happiness strategies' effectiveness. However, we are encouraged by findings that employing the Satisfaction With Life Scale (Diener et al., 1985) as the criterion yielded very similar results. Future studies should assess the potential benefits, other than happiness and satisfaction, gained by engaging in happiness-enhancing strategies – for example, social rewards, academic and career success, wisdom and insight, and psychological growth and maturity (see Lyubomirsky et al., in press, for a review).

Self-Report Biases

All studies that involve subjective ratings face concerns about the interpretations made by the respondents. For example, we cannot know *exactly* how the participants made their judgments regarding the frequency of their happiness-promoting behaviors. Students were asked to rate how often they performed the specified strategy on a scale ranging from *never* to *all the time*. This judgment is inherently subjective. For those who are low in motivation, *all the time* could have meant that they consciously performed the strategy once a week. In contrast, highly motivated students could have interpreted *all the time* as meaning several times a day. Future research could address this issue by providing more objective anchors for the responses – for example, a scale ranging from *never* to *more than once a day*. Ultimately, what is needed is to objectively quantify actual behaviors and assess how they relate to happiness. It is hoped that the present study can provide a guide to which behaviors should be targeted for future research.

Another concern is that we cannot be certain whether the respondents interpreted “happiness” as a global, enduring condition with long-term implications, or as a fleeting mood. A perusal of the items drawn from the pilot study suggests that the term happiness was interpreted as both. For example, the items “study” and “work” undoubtedly imply that the respondents were considering long-term benefits, rather than short-term affect boosts. By contrast, the strategies of “partying” and “drinking alcohol” appeared to be directed at temporary mood change and not lifelong happiness.

Finally, because participants were questioned about what they did to “maintain or increase” their happiness, we do not know which strategies they were using in order to *maintain* or preserve their happiness vs. to *promote* or maximize it. To address this limitation, future researchers could ask both sets of questions separately or, alternatively, consider using experience sampling methodology to assess brief, sequential moments of mood and behavior.

Sampling Issues

Although the study’s sample was ethnically diverse, it was drawn from a population of students that is relatively homogeneous with regard to age, socioeconomic status, and occupational status; consequently, generalization of our findings is necessarily limited. Future researchers might consider recruiting more heterogeneous samples. We expect, however, that, although the specifics of happiness-increasing strategies may differ across segments of the population, the overall strategies would take a similar form. For example, a truck driver from Montana is unlikely to list “study” and “get good grades” as ways to boost his happiness. Nevertheless, he may list other activities that correspond to Instrumental Goal Pursuit.

A related priority for future research should be to investigate happiness-increasing strategies in different cultures. Research suggests that the very nature of “ideal” happiness may vary across cultures (Lyubomirsky, 1997; Tsai et al., in press). Consequently, strategies used to promote happiness may differ in their character and frequency of use in diverse cultural contexts.

CONCLUDING REMARK

We believe the take-home message of this research to be a positive one. The findings show that traits alone do not fully account for levels of happiness. People are *not* genetically destined to experience a predetermined amount of happiness, volitional behaviors do matter, and finding happiness may be as simple as finding the right happiness strategy.

NOTES

¹ The one exception to this rule was that “draw” was excluded from the average for Social Affiliation on theoretical grounds.

² Although not reported, parallel correlation and regression analyses were performed with the Satisfaction With Life Scale (Diener et al., 1985) as the criterion. The results were similar to those found for the SHS, with one exception – Instrumental Goal Pursuit was a better predictor of life satisfaction than of happiness.

³ Z was calculated using Baron and Kenny’s (1986) formula.

⁴ Prior to performing the SEM analyses, univariate analyses revealed that only three items were skewed – the largest skew equaling -1.55 (kurtosis = 3.07). Following transformation, parallel analyses were performed on the transformed data. The results were nearly identical to those with the untransformed data; thus, the untransformed results are presented here.

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