
The Independent Effects of Goal Contents and Motives on Well-Being: It's Both What You Pursue and Why You Pursue It

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The assertion that both the content of goals and the motives behind goals affect psychological well-being has been controversial. Three studies examined this issue directly, showing that both what goals people pursue (i.e., whether they strive for extrinsic vs. intrinsic goal contents) and why people pursue them (i.e., whether they strive for autonomous vs. controlled motives) make significant independent contributions to psychological well-being. The pattern emerged in between-person and within-person studies of cross-sectional well-being and also emerged in a year-long study of prospective change in well-being. Implications for prescriptive theories of happiness are discussed.

Keywords: *extrinsic goals; autonomous motivation; subjective well-being*

One important aspect of motivation concerns why people perform particular behaviors—that is, their perceived reasons or motives for engaging in the behaviors. Self-determination theory (SDT) (Deci & Ryan, 1985; Ryan & Deci, 2000) has argued that it is crucial to distinguish whether people act because they are autonomous and feel volitional in doing the behavior or rather because they are controlled and feel they have to do the behavior. SDT defines autonomy as “endorsing one’s actions at the highest level of reflection” (Ryan, Kuhl, & Deci, 1997, p. 708), and it defines control as feeling pressured to think, feel, or behave in specific ways. Past studies have shown that autonomy and control fall on opposite sides of a motivational continuum (Ryan & Connell, 1989) and that people can be located on this continuum

via a composite measure that weights autonomy positively and control negatively (e.g., Sheldon & Elliot, 1998, 1999; Sheldon & Kasser, 1998, 2001). Research has further shown that this relative autonomy index is positively associated with a variety of performance and mental health outcomes (see Deci & Ryan, 2000, for a review).

During the past decade, SDT also has paid increasing attention to the “what” of individuals’ motivations, that is, to the specific contents, targets, or referents of people’s goals (Ryan & Deci, 2000).¹ In particular, the SDT literature has focused on the distinction between intrinsic goal contents and extrinsic goal contents (Kasser & Ryan, 1993, 1996, 2001; Sheldon & Kasser, 1995, 1998, 2001). Kasser and Ryan (1996) defined intrinsic goals (such as those for personal growth, emotional intimacy, and community involvement) as ones that are inherently rewarding to pursue, presumably because they directly satisfy innate psychological needs such as belongingness (Baumeister & Leary, 1995), effectance (White, 1959), and personal causation (DeCharms, 1968), or what SDT refers to as relatedness, competence, and autonomy (Deci & Ryan, 2000). In contrast, extrinsic goals (such as

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those for financial success, image, and fame) are less directly satisfying of the psychological needs. Of course, extrinsic goals can be instrumental for some satisfaction of the basic needs but SDT maintains that if extrinsic goals become particularly strong such that they are out of balance with intrinsic goals, then negative well-being consequences are likely to result.

Since our initial formulations of the concept of intrinsic and extrinsic goals (Kasser & Ryan, 1993), we have argued that it is crucial to examine the relative importance (Rokeach, 1973) that individuals place on the two types of goals. We have done this in a variety of ways, including (a) having people rate the importance of all the goals being considered and then regressing a person's overall mean for all goals from the extrinsic goals, (b) having goals rank ordered and using the average rank of extrinsic goals, and (c) having goals rated and then subtracting the average importance rating for intrinsic goals from the average rating for extrinsic goals.² Past research concerning the relative strength of extrinsic content, as assessed by these three methods, has established its negative relation to well-being and adjustment outcomes, just as research has established that the relative strength of autonomous motives is positively related to well-being and adjustment (e.g., Kasser & Ryan, 1993, 1996, 2001; Sheldon & Kasser, 1995, 1998).

What has not been clearly established is whether relative extrinsic content predicts variance in well-being independently of the variation accounted for by autonomous motives. Although Ryan, Sheldon, Kasser, and Deci (1996) argued that this should be the case, to date, little research has examined this question.

THE CONTROVERSY

Critics have been skeptical about the possibility that pursuing extrinsic goal contents, particularly financial success, could itself be detrimental to mental health (e.g., Srivastava, Locke, & Bartol, 2001). Carver and Baird (1998) have argued, for example, that the negative relations of extrinsic goal contents to psychological adjustment are a function of the fact that people typically report feeling controlled and insecure while pursuing extrinsic goals. As Srivastava and colleagues (2001) put it, "it's not the money, it's the motives" (p. 959). In other words, these investigators claim that the so-called what (i.e., goal content) effects are entirely reducible to why (i.e., motive) effects. Thus, they would maintain that if one individual were strongly focused on becoming very wealthy or famous and a second were focused primarily on developing meaningful relationships or growing as a person, the well-being of these individuals should be indistinguishable if both have the same level of autonomous motivation for pursuing their goals.

Both Carver and Baird (1998) and Srivastava et al. (2001) provided data relevant to their claims, but there are various problems with their studies and interpretations. In Carver and Baird's study, undergraduates reported the relative importance they placed on the goals of wealth (an extrinsic goal) and community involvement (an intrinsic goal). The findings replicated those of Kasser and Ryan (1993): well-being (i.e., self-actualization) was negatively predicted by the relative importance of wealth aspirations. To assess the motives behind these goals, Carver and Baird applied measures derived from SDT to assess whether participants' reasons for pursuing these goals were autonomous versus controlled. Specifically, they asked participants if they pursued these goals because of the fun, enjoyment, or personal meaning obtained from the goals (autonomous reasons) or because they felt pressured, coerced, or desirous of praise and rewards (controlled reasons).

As they predicted, Carver and Baird (1998) found that pursuing goals for autonomous motives was positively related to self-actualization, whereas pursuing them for controlled motives was negatively related to self-actualization. When they conducted the crucial analysis, in which they entered both the motives for pursuing wealth and the relative importance placed on wealth into the regression equation, they found that the content effect remained significant ($\beta = -.30$). In fact, it was essentially unchanged from when the content effect was examined alone ($\beta = -.31$). In other words, in Carver and Baird's data, virtually none of the negative effect of the wealth goal was explained by motives. Thus, with respect to monetary goals, Carver and Baird found independent effects for content and motive, despite their argument that the content effect is largely reducible to the motive effect.

Srivastava et al. (2001) took a somewhat different approach to examining the effects of strong financial goals on well-being. In samples of business students and entrepreneurs, they administered a measure of the importance of money relative to four other goals, asking participants to assign a percentile importance rating to financial goals relative to other goals. Despite using this single-item assessment of the critical goal content, they replicated earlier findings (Kasser & Ryan, 1993, 1996): The more importance people placed on accumulating wealth, the poorer was their well-being. The researchers also administered a 51-item scale assessing several classes of motives for pursuing wealth (e.g., pride, market worth, family support, overcoming self-doubt, social comparison, charity). Factor analyses of these items yielded 10 factors, which were later reduced to three higher order factors—termed by Srivastava and colleagues positive motives (e.g., supporting one's family), freedom of action motives (e.g., giving to charity), and

negative motives (e.g., appearing worthy in others' eyes). The researchers reported that after gender, family income, and composites based on all three motives had been entered, the single item measuring the importance of money, although still negatively related to well-being, was no longer significant. In fact, for the entrepreneurs, none of the variables in the equation was significant at this point. This finding was used to conclude that "it's not the money, it's the motives."

We believe the methodology of the latter study clearly stacked the deck against the extrinsic goal content construct (Cooper & Richardson, 1986) because a one-item assessment of financial goal content was pitted against 51 motive items and two demographic variables. Furthermore, the Srivastava et al. (2001) assessment of motives was confounded with goal contents. As an example, they defined "giving to charity" as a motive; however, from the SDT perspective, helping charities is an example of the intrinsic goal content of "community contribution" (Carver & Baird, 1998; Kasser & Ryan, 1996). Given that the purported motive measure assessed contents as well as motives, it is not surprising that when all the variance supposedly attributable to motives was removed, the financial success (content) item fell to nonsignificance as a negative predictor of well-being.

These ambiguities in the methods and results of the Carver and Baird (1998) and Srivastava et al. (2001) studies raise questions about whether the negative relations between extrinsic goal contents and well-being are in fact reducible to the controlled motives that are often associated with such goals. We agree that extrinsic contents and controlled motives share important features; in fact, our earliest theoretical statements predicted a relation between extrinsic contents and controlled motives (Kasser & Ryan, 1993, 1996; Ryan et al., 1996), relations that have been documented several times (Sheldon & Kasser, 1995, 1998, 2001). Thus, negative motives could indeed be part of the reason why extrinsic contents are associated with negative well-being. However, as discussed in more detail elsewhere (Kasser, 2002a; Ryan et al., 1996), there are several other possible explanations for the relation. We briefly review these explanations below.

First, people focused on extrinsic goals typically report less loving, more conflicted relationships with friends and romantic partners (Kasser & Ryan, 2001) and are more competitive (Sheldon, Sheldon, & Osbaldiston, 2000) and Machiavellian (McHoskey, 1999) in their dealings with others, none of which provide the high-quality relationships necessary for happiness (Baumeister & Leary, 1995; Myers, 2000; Ryan & Deci, 2001). Second, those pursuing extrinsic goals may adopt contingencies of self-worth (Kernis, Brown, & Brody, 2000), that is, the belief that they are worthy only

if they can make the next sale or attain the next compliment, leading them to give undue focus to such instrumental behaviors (i.e., making the sale or eliciting the compliment). Third, pursuing and attaining extrinsic goals (such as projecting an attractive image or accumulating material possessions) leads people to make more frequent social comparisons and to do things that may violate their principles or sensibilities. In turn, this may detract from long-term well-being (Ryan et al., 1996). Fourth, time and energy are limited resources and putting much energy into extrinsic goals is likely to "crowd out" the time and energy a person can put into intrinsic goals (Frey & Oberholzer-Gee, 1997), limiting the inflow of need-satisfying experiences.

In sum, there are a variety of processes through which a focus on extrinsic goal pursuits could have a negative effect on well-being, beyond the fact that extrinsic goals often are pursued for controlled motives. Thus, we expect goal contents and motives to explain independent variance in well-being outcomes, even though we also expect them to be associated with each other.

THE PRESENT STUDIES

General Design and Hypotheses

Three studies tested the hypothesis that extrinsic versus intrinsic goal contents would contribute independent variance to the prediction of well-being, over and above the influence of autonomous versus controlled motives. This is an important issue for two reasons: First, psychological well-being is an important outcome, with many implications for mental health and adaptive functioning (Lyubomirsky, King, & Diener, 2003). Second, the "what" and "why" of motivation are two of the most important theoretical and empirical foci of motivation researchers. Thus, finding independent effects would support the broader claim that the content of goals and the dynamic motives underlying them are distinct and separable aspects of motivation.

Study 1 was a within-person study in which participants estimated how autonomous (vs. controlled) they would feel if they pursued goals of either an extrinsic or an intrinsic type, and also how happy they would be if they pursued these goals. Study 2 was a between-person cross-sectional study, examining the associations of the rated contents and motives of participants' self-generated goals with self-reports of concurrent well-being. Study 3 was between persons and longitudinal and examined both the contents and motives of college seniors' self-generated postgraduation goals as predictors of change in their well-being during their first postgraduation year. In all three studies, we expected goal contents and goal motives to have independent and distinguishable effects on well-being.

Supplementary Analyses

In addition to testing the general hypothesis by examining the broader category of extrinsic (vs. intrinsic) goals, we also examined, by itself, the extrinsic goal of financial success to establish more direct comparability with the Carver and Baird (1998) and Srivastava et al. (2001) studies, which considered wealth as the only extrinsic goal. We expected to find the hypothesized pattern of results (i.e., independent negative effects on well-being for the wealth relative to intrinsic contents, over and above the effects of motives).

Finally, supplementary analyses unpacked the relative autonomous motivation and relative extrinsic content variables to examine the separate impact of autonomous motives, controlled motives, extrinsic content, and intrinsic content.

STUDY 1

Participants were provided with six personal goal statements: three representing extrinsic content domains (financial success, attractive image, and fame/popularity) and three representing intrinsic content domains (emotional intimacy, community contribution, and personal growth). Researchers have found that these six goals do indeed represent two distinct factors (Kasser & Ryan, 1996). In addition, all six types of goals appear regularly within people's idiographic listings of goals, although extrinsic goals are somewhat less frequently listed and are also somewhat less strongly endorsed (Sheldon & Kasser, 1995, 1998).

Participants first imagined that they were pursuing each goal and then rated how much each of four different reasons for pursuing the goal (two autonomous and two controlled) would contribute to their own motivation for pursuing that goal. Next, they rated how happy they thought they would be in pursuing each goal. Using within-subject regressions, we examined the main effects of extrinsic versus intrinsic content and autonomous versus controlled motivation on the happiness ratings. We expected that contents would predict significant independent variance in happiness ratings after motives were entered into the regression.

*Method**PARTICIPANTS AND PROCEDURE*

Questionnaire packets were administered in large group sessions to 802 introductory psychology students at the University of Missouri. Seven hundred and fourteen of them provided complete data and thus constituted the sample used in the analyses. These included 297 men and 417 women, 90% (643) of whom were Caucasian.

MEASURES

Participants first read a list of six personal goals and were asked to imagine that they were actually pursuing each goal in their own life. Three were intrinsic goals: "Having many close and caring relationships with others" (emotional intimacy), "Being fulfilled and having a very meaningful life" (personal growth), and "Helping to make the world a better place" (community contribution). The three extrinsic goals were as follows: "Being known and/or admired by many people" (fame/popularity), "Looking good and appearing attractive to others" (attractive image), and "Getting a job that pays very well and having a lot of nice possessions" (financial success). The six goals were listed in the following order: emotional intimacy, fame/popularity, attractive image, personal growth, financial success, and community contribution.

Participants were then presented with four different reasons why they might pursue goals, which were derived from self-determination theory (Ryan & Connell, 1989; Sheldon & Elliot, 1998, 1999; Sheldon & Kasser, 1995, 1998). The two autonomous reasons were "because you really identify with the goal" (identified motivation) and "because of the enjoyment or stimulation that this goal would provide you" (intrinsic motivation). The two controlled reasons were "because of the external rewards such as money, grades, or status that the goal may produce" (external motivation) and "because you would feel ashamed, guilty, or anxious if you did not have this goal" (introjected motivation). Using a 5-point scale, participants rated the degree to which they might pursue each of the six goals for the external reason, then for the introjected reason, then for the identified reason, and finally for the intrinsic reason. As in other work (e.g., Sheldon & Elliot, 1998, 1999; Sheldon & Kasser, 2001), a relative autonomy composite was computed for each goal by adding the two autonomous motivation ratings and subtracting the two controlled motivation ratings. This procedure allowed us to evaluate the relative strength of autonomous versus controlled motivation, which has been the focus of many SDT-based studies.

The coefficient alpha in this study was .49 for the composite variable made up of four single-item ratings after reverse coding the external and introjected items. Clearly, this is a low alpha, and it resulted from the fact that the correlation between the external and introjected items was only .10, whereas the correlation between the two autonomy items (identified and intrinsic) was .56. Subsequent to this study, we changed the external item and, as will be seen later, the alphas for the autonomy composite were much higher in Studies 2 and 3. Still, the low alpha in this study highlights the importance of a supplementary analysis in which the autonomy

subscale and the controlled subscale are entered separately in predicting the happiness outcome.

Finally, participants rated “the personal happiness that you believe this goal would provide you,” which served as the dependent variable. All ratings were made on a 1 (*not at all*) to 5 (*very much*) scale.

Results

PRELIMINARY ANALYSES

In all analyses, we focused on individual goals as the unit of analysis, with a sample of 4,284 goals composed of six goals from each of 714 participants. For the hypothesis tests, goal ratings were standardized within participants so person-level differences in scale use would be removed (Sheldon & Elliot, 1998, 2000). Thus, we were able to simultaneously evaluate both the a priori designated content of each goal (extrinsic or intrinsic) and the rated motivation of each goal (autonomous relative to controlled) as predictors of the happiness associated with the goal.

As a preliminary analysis, we examined whether the two contents of goals (extrinsic vs. intrinsic) would differ in their average levels of relative autonomy. To interpret the means, we used the unstandardized scores. As expected, the extrinsic goals were associated with lower relative autonomy than intrinsic goals, $M_s = 1.25$ vs. 3.10 , $t(4,282) = 23.76$, $p < .01$.

HYPOTHESIS TESTS

The above analysis established that extrinsic goals were associated with relatively more controlled motivation, consistent with the findings of Carver and Baird (1998), Srivastava et al. (2001), and past SDT research (Sheldon & Kasser, 1995, 1998). However, we hypothesized that extrinsic content would explain significant independent variance in happiness ratings despite this overlap. To test this, we used a hierarchical regression strategy in which happiness was first regressed onto motives (autonomous vs. controlled), after which content (extrinsic vs. intrinsic) was entered at the second step. We reasoned that our primary hypothesis would be supported if there were a significant change in R^2 at the second step of the regression.

Table 1 contains the results. As predicted, the analysis revealed a significant main effect for relative autonomy on expected happiness at Step 1 ($\beta = .50$, $p < .01$). More important in terms of the current argument, relative extrinsic content was significant at Step 2 ($\Delta R^2 = .053$, $p < .01$, $\beta = -.26$). At a third step of the equation we tested for an interaction between the two factors and found the interaction term to be nonsignificant ($\Delta R^2 = .001$, $p > .42$).

As a supplemental analysis we examined the effects on happiness of only the financial success goal versus the

TABLE 1: Study 1: Results of Hierarchical Regression Predicting Expected Happiness From Relative Autonomy and Relative Extrinsic Content

	R^2 Change	p Value	Beta	p Value
Step 1	.250	<.01		
Relative autonomy			.50	<.01
Step 2	.053	<.01		
Extrinsic content			-.26	<.01
Step 3	.001	>.40		
Product term			-.02	>.40

three intrinsic goals to test more directly the Srivastava et al. (2001) assertion. In other words, we excluded the fame/popularity and attractive appearance goals, thus reducing the overall number of goals to 2,856. As in the primary analysis, happiness ratings were regressed onto motives at Step 1 and content at Step 2. In this analysis, relative autonomy was again significant at Step 1 ($\beta = .50$, $p < .01$) and relative financial success contributed significantly at Step 2 ($\Delta R^2 = .02$, $p < .01$, $\beta = -.16$). Again, there was no interaction between motives and content ($p > .15$).

As a second supplemental analysis, we entered the autonomous motivation and controlled motivation variables separately to investigate whether one or the other would account for the majority of the variance. In this study, extrinsic and intrinsic content could not be entered separately into the equation because they represent a single dichotomous variable. Autonomous motivation was significant and positive ($\beta = .69$, $p < .01$), whereas controlled motivation was nonsignificant ($\beta = .01$, *ns*). Extrinsic content was again significant and negative at Step 2, as it had been in the primary analysis. Thus, in this study, the effect of the relative autonomy composite was carried primarily by the autonomy items.

Brief Discussion

Study 1 supports the hypothesis that “goal content matters” for well-being, over and above the effects of associated goal motives. Simply put, people expected to be less happy when they pursued goals that were extrinsic rather than intrinsic in content and more happy when they pursued goals for autonomous relative to controlled reasons. Thus, the goals with the highest happiness expectancies were those with both low extrinsic content and high relative autonomous motivation.

It is worth noting that when we separated the autonomy composite into its autonomy and controlled components, it was the autonomy subscales that predicted significant variance in happiness. It is probable that the lack

of prediction of happiness by controlled motivation was a function of the very low reliability within that subscale.

Having seen that estimations of well-being are influenced by both goal motives and contents, we next considered peoples' actual goal pursuits and their actual reported well-being. The question was, "Do the independent content and motive effects of Study 1 generalize to goals that are self-generated (rather than experimenter-supplied), to between-subject effects (rather than within-subject effects), and to the prediction of the person's actual concurrent (rather than estimated) well-being?"

STUDY 2

In this study, we used an idiographic goal-assessment technique (Emmons, 1999; Little, 1993) in which participants first listed their personal goals. A nomothetic rating procedure was then used to assess both extrinsic versus intrinsic contents and autonomous versus controlled motives for participants' goals (Sheldon & Kasser, 1995, 1998, 2001). We then directly assessed participants' well-being at the time of the goal assessments.

Method

PARTICIPANTS AND PROCEDURE

Participants were 221 entering freshmen at the University of Missouri who took part in the study in exchange for course credit and/or monetary compensation. There were 38 men and 183 women; 89% (197) were Caucasian. Participants completed a questionnaire packet containing the idiographic goal elicitation procedure and the nomothetic assessments of goal contents, motives, and subjective well-being.³

MEASURES

Well-being. To assess subjective well-being, we administered the Positive Affect Negative Affect Schedule (PANAS) (Watson, Tellegen, & Clark, 1988). Participants were presented with 20 emotion adjectives, 10 positive and 10 negative, and they indicated the extent to which they generally feel each way using a 1 (*not at all*) to 7 (*very much*) scale. In addition, participants were administered the Satisfaction With Life Scale (SWLS) (Diener, Emmons, Larsen, & Griffin, 1985), which contains five statements such as, "In most ways my life is close to my ideal." Participants indicated their agreement with each item "in general" using a 7-point scale. Diener (1994) has referred to positive affect, the inverse of negative affect, and life satisfaction as the primary components of subjective well-being, and there is precedent in many recent studies to create a composite well-being index from these three components (e.g., Elliot & Sheldon, 1996; Sheldon & Elliot, 1999; Sheldon & Kasser, 2001).

The SWB Cronbach's alpha, computed after reverse coding negative affect, was .69 (negative affect correlated $-.29$ with positive affect and $-.38$ with life satisfaction; life satisfaction correlated $.61$ with positive affect). It is notable that Kahneman, Diener, and Schwarz (1999) considered the concept of subjective well-being to be essentially interchangeable with happiness, thus suggesting that the composite dependent variable in Study 2 was comparable to the dependent variable used in Study 1.

Personal goals. Goals were defined as "projects that we think about, plan for, carry out, and sometimes (though not always) complete or succeed at." After being shown examples, participants were asked to list eight goals of their own that would last "at least through the end of the semester." Actual goals listed by participants included "Get involved in campus organizations," "Get good grades," "Get to know more people," "Don't gain weight," and "Call my parents once a week."

Motives. Participants then rated how much they were pursuing each goal for each of four reasons, using a 1 (*not at all*) to 5 (*very much*) scale. The reasons were the same as in Study 1 except that the external reason was changed to read "because somebody else wants you to or because the situation seems to compel it" rather than "because of the external rewards such as money, grades, or status that the goal may produce." It is noteworthy that with this change, the correlation between the external and introjected subscales, was considerably higher than in Study 1 ($r = .44$). As in Study 1, a relative autonomy score was computed for each participant by summing the identified and intrinsic ratings and subtracting the external and introjected ratings. The alpha coefficient, computed after reverse coding the controlled motive ratings, was $.76$ for the 32-item variable.

Goal contents. Participants also rated the extent to which each goal might help to bring about six "possible futures" using a 1 (*no help*) to 9 (*very much help*) scale. These possible futures mapped directly onto the six goal contents employed in Study 1: three represented intrinsic values (meaningful relationships, personal growth, and societal contribution) and three represented extrinsic values (financial success, popularity and fame, and attractive physical image). As in past research (Sheldon & Kasser, 1995, 2001), we computed a relative extrinsic content score by summing the linkages to the three extrinsic possible futures across personal goals and then subtracting the linkages to the intrinsic possible futures. The resulting score represents the extent to which the students' personal goals concern extrinsic rather than intrinsic contents. Coefficient alpha, computed after reverse coding the intrinsic ratings, was $.77$ for the 48-item variable.

Results

PRELIMINARY ANALYSES

First, we correlated the relative extrinsic content variable and the relative autonomy variable. They were negatively correlated ($r = -.23, p < .01$), indicating once again that people's motives tend to be more controlled when they pursue goals with more extrinsic content.

HYPOTHESIS TESTS

To test our hypothesis that goal contents would make independent contributions to well-being over and above goal motives, we used a hierarchical regression strategy similar to that in Study 1. Table 2 contains the results. At Step 1, relative autonomy was significant ($\beta = .29, p < .01$). Consistent with our hypothesis, at Step 2, relative extrinsic content also was significant ($\Delta R^2 = .02, p < .05, \beta = -.14$). Entering the product of these two variables at Step 3 once again revealed no significant interaction ($p > .25$).

As a supplementary analysis we focused only on the "financial success" aspect of the extrinsic content variable, the construct focused on by Carver and Baird (1998) and Srivastava et al. (2001). Relative autonomy was again positive and significant at Step 1. More important for the current argument, the association of goals with financial success was negative and significant at Step 2 ($\Delta R^2 = .02, p < .05, \beta = -.14$). There was no interaction between the two variables ($p > .10$). Thus, once again, it appears that the negative effects of monetary strivings are not reducible to the motives underlying them.

As a second supplementary analysis, we entered autonomous and controlled motives separately at Step 1 and extrinsic and intrinsic content separately at Step 2. At the first step, both autonomous motivation ($\beta = .32, p < .01$) and controlled motivation were significant ($\beta = -.15, p < .05$); at the second step, extrinsic content was significant ($\beta = -.21, p < .05$) but intrinsic content was not ($\beta = .06, ns$). Thus, in this study, the effect of the relative autonomy composite was carried by both the autonomy and controlled components and the effects of the relative extrinsic content composite were carried primarily by extrinsic rather than intrinsic content.

Brief Discussion

Study 2 provided additional support for our primary hypothesis by showing the predicted relations using participants' self-generated (rather than experimenter-supplied) goals, by using reports of actual current (rather than hypothetical) well-being, and by using a between-subjects (rather than a within-subjects) design. Again, we found that motives and contents contributed independent variance to well-being, such that the indi-

TABLE 2: Study 2: Results of Hierarchical Regression Predicting Concurrent Well-Being From Relative Autonomy and Relative Extrinsic Content

	R^2 Change	p Value	Beta	p Value
Step 1	.086	<.01		
Relative autonomy			.29	<.01
Step 2	.018	<.05		
Relative extrinsic content			-.14	<.05
Step 3	.005	>.25		
Product term			-.16	>.25

viduals with the highest well-being were those who pursued intrinsic rather than extrinsic goals and who pursued goals for autonomous rather than controlled reasons. In this study, the external motivation item in the autonomy composite was modified and yielded a much higher alpha. Accordingly, both the autonomy and controlled facets of the composite predicted independent variance in well-being.

Although Study 2 added further support to our primary hypothesis, there is still an important question that has not been addressed, namely, whether the negative association between relatively strong, extrinsic goal strivings and well-being can be explained by stable individual differences rather than by people's ongoing behaviors and experiences. For example, strong extrinsic values are typically associated with higher insecurity, lower self-esteem, and lower cooperativeness, all of which are associated with poorer well-being (see Kasser, 2002a, for a review). A "third variable" explanation of the goals-to-well-being association would suggest that adopting extrinsic goals does not itself bring about diminished well-being but, rather, is just a symptom of stable personality factors that produce both the extrinsic orientation and the negative well-being. If this were true, then it might be inappropriate or irrelevant to give people recommendations concerning the kinds of goals to pursue to enhance their well-being.

To examine this issue, Study 3 employed a two-wave longitudinal design in which Time 1 goal contents and motives were used to predict change in well-being throughout the year from Time 1 to Time 2. Because Time 1 well-being was removed from Time 2 well-being, any effects of stable individual difference variables on well-being would have been removed. As such, we could assess whether characteristics of the set of goals specified by participants at Time 1 might have causal influence on changes in well-being from Time 1 to Time 2, presumably by affecting the quality of participants' experiences

during that year-long period. Consistent with the earlier studies, we predicted that relative extrinsic content would have significant effects on changes in well-being, even after the effects of relative autonomous motives had been removed.

STUDY 3

A sample of second-semester college seniors listed five important postgraduation goals that they would be pursuing over the next couple of years. They were told that they would be asked about these goals again a year after they graduated. As in Studies 1 and 2, participants rated their autonomous and controlled reasons for pursuing each of their personal goals and, as in Study 2, they rated the linkage of each goal to the three intrinsic and the three extrinsic content domains. They also rated their current well-being at Time 1 and Time 2, allowing us to predict changes in well-being.

In addition, at Time 2, participants were reminded of the goals they had specified just before graduation and were asked how committed they were to these goals. This allowed us to determine whether the goals remained important for them at Time 2.

Method

PARTICIPANTS AND PROCEDURE

Participants were 244 graduating seniors at the University of Rochester (169) and Knox College (75). One hundred and fifty-six were women, 84 were men, and 4 did not list their gender. Again, a large majority of participants were Caucasian. One hundred and fifty-nine Time 1 participants provided complete Time 2 data 1 year later and thus constitute the final sample. Attrition analyses revealed that these 159 participants did not differ significantly on any of the Time 1 study variables from the 85 participants who dropped out of the study (all $ps > .13$), suggesting that the final sample is an adequate representation of the original sample.

At Time 1, participants completed several measures of well-being as well as some personality scales not relevant to this article. Then, they generated postgraduation personal goals and rated them both for autonomous and controlled motives and for linkages to intrinsic and extrinsic possible futures. The Time 2 assessments, conducted 1 year later, were mailed to participants at addresses they provided at Time 1. These packets contained the same well-being measures that were given at Time 1. In addition, participants were given a list of the goals they specified at Time 1 and were asked to rate their commitment to these personal goals. Participants received a \$10 incentive for providing Time 1 data and a \$15 incentive for providing Time 2 data.

Measures

Well-being. As in Study 2, we employed the PANAS and the SWLS, although in Study 3 they were administered twice, 1 year apart. As in Study 2, we created an aggregate well-being score by summing positive affect and life satisfaction and subtracting negative affect. The alpha coefficient for the measure at Time 1 was .72 (negative affect correlated $-.34$ with positive affect and $-.38$ with life satisfaction; life satisfaction correlated $.56$ with positive affect). Alpha for the measure at Time 2 was .75 (negative affect correlated $-.35$ with positive affect and $-.52$ with life satisfaction; life satisfaction correlated $.63$ with positive affect).

Personal goals. During the first assessment, participants generated five postgraduation goals, defined as "behavior patterns you will try to establish in your daily life, things you will try to accomplish for yourself, or kinds of circumstances you will try to bring about." We asked participants to brainstorm a wide variety of possible goals before settling on the five that were most likely to remain important to them throughout the next year or two.

Motives and contents. Participants then used a 9-point Likert-type scale to rate their motives for these five goals using the same four reasons employed in Study 2. Again, a relative autonomy score was created for each participant by averaging the scores for each reason across the five goals and then adding the autonomous-reason averages and subtracting the controlled-reason averages (coefficient alpha, computed after reverse coding the controlled ratings, was $.76$ for this 20-item measure). Participants also rated the extent to which each goal would be helpful for attaining the same six "possible futures" employed in Study 2 using a 1 (*no help*) to 9 (*very much help*) scale. As in Study 2, we computed a relative extrinsic content score by subtracting the three intrinsic linkage variables from the sum of the three extrinsic linkage variables (coefficient alpha, computed after reverse coding the intrinsic content ratings, was $.62$ for this 30-item measure).

Goal commitment. To assess the continuing relevance of the goals, at Time 2, we provided each participant with a list of the five goals they had specified as their most important goals at Time 1. We then asked how committed they were to each goal: "Thinking back over the past year, how committed have you been to each of these goals?" The five responses were averaged as an indicator of whether these goals remained important to the participants over their 1st year after graduation.

Income. Finally, we asked participants to indicate their current income at the Time 1 and Time 2 assessments with a scale ranging from 1 ($< \$15,000$) to 7 ($> \$150,000$).

This enabled us to examine whether changes in participants' income influenced the effects of goal contents and motives on changes in well-being; that is, it allowed us to examine and control for the possibility that strong, extrinsic, postgraduation goals might lead to higher incomes, which could influence well-being (Diener & Biswas-Diener, 2002).

Results

PRELIMINARY ANALYSES

A paired-sample *t* test revealed a significant increase in well-being, $M_s = 6.89$ versus 6.50 , $t(158) = 2.42$, $p < .05$, throughout the year-long period. Follow-up analyses revealed that this was due to significant samplewide decreases in negative affect between the end of the senior year and the assessment 1 year later. It appears that the end of these students' undergraduate careers was a stressful time compared to their lives 1 year later.

We next correlated relative autonomy with relative extrinsic content. Consistent with the results of Studies 1 and 2, they correlated negatively ($r = -.26$, $p < .01$). Once again, it appears that people tend to pursue extrinsic goals for less autonomous and more controlled reasons.

Finally, we calculated the mean for people's ratings of how committed they were to the original goals a year after specifying the goals. The mean of 6.84 on this 9-point scale was well above the midpoint of 5, suggesting that these goals in fact remained important for the participants throughout this year-long period.

HYPOTHESIS TESTS

To evaluate the relative effects of motives and content on well-being, we again used a hierarchical regression approach. At Step 1, we regressed Time 2 well-being on Time 1 well-being (to index change in well-being) and on a dummy variable representing participant subsample (0 = Rochester, 1 = Knox). At Step 2, we entered relative autonomy, and at Step 3, we entered relative extrinsic content. Finally, at Step 4, we entered a Motive \times Content product term to probe for an interaction.

Table 3 contains the results. Step 2 revealed that relative autonomy was significant, as expected ($\Delta R^2 = .014$, $p < .05$, $\beta = .13$). Step 3 revealed that relative extrinsic content was significant, as expected ($\Delta R^2 = .022$, $p < .01$, $\beta = -.16$). Finally, Step 4 revealed no significant interaction between content and motives ($\Delta R^2 = .002$, $p > .50$).

As a supplemental analysis, we examined the "financial success" facet of the extrinsic content construct by itself, again to be more directly comparable to the Carver and Baird (1998) and Srivastava et al. (2001) studies that examined financial success as the only extrinsic goal. At Step 3, financial success content was significant ($\Delta R^2 = .016$, $p < .05$, $\beta = -.13$), as expected. The interaction was not significant.

TABLE 3: Study 3: Results of Hierarchical Regression Predicting Changes in Well-Being From Relative Autonomy and Relative Extrinsic Content

	R^2 Change	p Value	Beta	p Value
Step 1	.540	<.01		
Sample			-.10	<.10
Time 1 well-being			.72	<.01
Step 2	.014	<.05		
Relative autonomy			.13	<.05
Step 3	.022	<.01		
Relative extrinsic content			-.16	<.01
Step 4	.002	>.50		
Product term			-.12	>.50

As a second supplementary analysis, we repeated the procedure, entering autonomous motivation and controlled motivation separately at Step 2 and also extrinsic content and intrinsic content separately at Step 3. At Step 2, controlled motivation was significant ($\beta = -.13$, $p < .05$) and autonomous motivation was nonsignificant ($\beta = .03$, *ns*). At Step 3, extrinsic content was significant ($\beta = -.15$, $p < .01$) and intrinsic content was marginally significant ($\beta = .11$, $p < .07$).

Finally, we controlled for the effects of changes in income by entering both Time 1 and Time 2 income into the above equations at Step 1. Neither the content nor the motive coefficients were altered in these analyses, indicating that the goal effects were independent of income. Income had no significant effects of its own.

Brief Discussion

Study 3 again demonstrated independent effects for both goal motives and goal contents on well-being using a very stringent test in which the Time 1 goal variables predicted prospective year-long change in well-being. As such, the study helps to rule out the possibility that associations among goal motives, contents, and well-being are merely a function of stable individual difference variables. Instead, results are consistent with our hypothesis that both the motives and the contents of the goals people adopt may have a causal impact on their subsequent well-being.

When we examined the separate components of the relative autonomy composite and the relative extrinsic content composite, we found that controlled motivation was significant, although autonomous motivation was not, and that extrinsic content was significant and intrinsic content was marginal. Thus, as in Study 2, both controlled motives and extrinsic contents were significant negative predictors of well-being. Autonomous motivation had been predictive of well-being in Studies 1 and 2,

but not in this study. Finally, whereas intrinsic content was not a predictor of well-being in Study 2, it was marginally significant in this study.

GENERAL DISCUSSION

Summary of Results

Previous research has shown, across varied samples with varied indicators of well-being, that the strong valuing of extrinsic (relative to intrinsic) goals is negatively associated with well-being (Kasser & Ryan, 1993, 1996; Sheldon & Kasser, 1995). In other words, people for whom it is highly important to amass wealth, present an attractive image, and become popular or famous tend to report ill-being, including greater anxiety, depression, narcissism, psychosomatic symptoms, conduct disorder, and high-risk behaviors, as well as poorer self-actualization, self-esteem, vitality, and social functioning (see Kasser, 2002b).

Critics of the research on extrinsic goals have argued that the negative effects of extrinsic goal content are reducible to the motives people tend to have for pursuing extrinsic goals such as monetary success (e.g., Carver & Baird, 1998; Srivastava et al., 2001). These two research teams have argued that extrinsic goals are not themselves problematic for well-being, except in cases where people pursue them for the wrong reasons (e.g., with a sense of pressure, insecurity, or control). As described in the introduction, however, their reported data are equivocal, so we conducted three studies to provide a more systematic examination of this important issue.

Consistent with our primary hypothesis, all three studies found independent effects of goal contents on well-being after controlling for the effect of goal motives (effects that also were significant). This was true when we used three extrinsic goal contents (wealth, fame, and image) together or when we used only financial goal contents alone, as had been done by Carver and Baird (1998) and by Srivastava et al. (2001).

When we examined the components of the relative autonomy composite separately, we found that controlled motives significantly predicted well-being in Studies 2 and 3 but not in Study 1, where its measurement was not reliable. Autonomous motives significantly predicted well-being in Studies 1 and 2 but not in Study 3, which was the most stringent test because it focused on change in well-being rather than well-being assessed at one point in time. Thus, there is evidence that both components of the autonomy composite are meaningfully involved in predicting well-being. When we examined the components of the relative extrinsic content composite, which could be done only in Studies 2 and 3, we found that the negative relation between extrinsic contents and well-being was stronger than the positive rela-

tion between intrinsic contents and well-being. This is consistent with our theoretical focus on the issue of whether extrinsic goals are out of balance with intrinsic goals and the proposition that it is the overvaluation of extrinsic goals that produces reduced well-being.

Earlier, we discussed several possible factors that could account for the unique effects of extrinsic goals on well-being, including the fact that when people strongly pursue extrinsic goals they tend to have more superficial relationships, operate with contingent self-worth, engage in more frequent social comparisons, and allow extrinsic pursuits to crowd out enjoyable and satisfying activities (Kasser, 2002a). These are all bottom-up explanations of well-being in the sense that they refer to ongoing behaviors and experiences that accumulate over time to influence global well-being (Diener, 1994; Sheldon, Ryan, & Reis, 1996). In contrast, another possible explanation for the negative relation between extrinsic goals and well-being is more top-down because it concerns stable personality factors influencing both goal importance and well-being; that is, invariant traits such as high insecurity, low self-esteem, or low cooperativeness (Kasser, 2002a) might account for both strong extrinsic goal orientations and diminished well-being.

Although more research is needed to sort out these explanations, the results of Study 3 suggest that the stable-personality-factor hypothesis is not the full story. The longitudinal design of Study 3 allowed us to remove the individuals' baseline well-being such that individual differences were controlled for and only processes occurring during the year of the study would be expected to influence Time 2 well-being. The fact that Study 3 found significant effects of extrinsic goal contents on changes in well-being (over and above the significant effect for autonomous motives) supports the idea that the less-satisfying quality of ongoing experience resulting from the strong pursuit of extrinsic goals helps explain the negative association of such goals with well-being. In other words, it does appear that people's choice of goals causally affects their subsequent well-being.

Limitations and Conclusions

Limitations of the current studies include the facts that only college student samples were employed and only self-report measures of well-being were obtained. In addition, participants were American, predominantly Caucasian, and predominantly middle class. Future research will need to investigate the extent to which goal contents and goal motives both predict well-being in samples of different ages, ethnicities, nationalities, and socioeconomic statuses.

In conclusion, the current research provides clear evidence that "its both what you pursue *and* why you pursue it" when it comes to predicting people's well-being, just

as Ryan et al. (1996) suggested. This finding has important implications for theories of motivation because it indicates that the directive focus of goals (i.e., contents) and the dynamic processes underlying goals (i.e., motives) each makes a difference in people's lives. The finding also has important implications for theories of well-being, suggesting that people seeking greater well-being would be well advised to focus on the pursuit of (a) goals involving growth, connection, and contribution rather than goals involving money, beauty, and popularity and (b) goals that are interesting and personally important to them rather than goals they feel forced or pressured to pursue.

NOTES

1. Other researchers also have related goal contents to well-being using alternative theoretical formulations such as power versus intimacy motivation (Emmons, 1991), spiritual versus material goal content (Emmons, 1999), self-centered versus other-centered goal contents (Salmela-Aro, Pennanen, & Nurmi, 2001), and agency versus communion goal contents (Pohlman, 2001). Thus, self-determination theorists are not alone in suggesting that the content of the goals people pursue can influence their psychological health.

2. Because we are focusing on the relative strength of one quantity compared to another, it would be possible to score and talk about the resulting measures either way (i.e., in terms of the relative strength of intrinsic content or in terms of the relative strength of extrinsic content; these are exactly reciprocal). We will refer to the relative strength of extrinsic content throughout as befits the "controversy" outlined in the next section. In addition, we will refer to the relative strength of autonomous motivation as befits standard practice in self-determination theory (SDT). The first variable is expected to have a negative effect on well-being and the second to have a positive effect.

3. Data from this sample were reported by Sheldon and Houser-Marko (2001). Although they employed the goal-autonomy variable, they used it as a predictor of prospective goal attainment rather than as a predictor of concurrent well-being.

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