
The American Dream in Russia: Extrinsic Aspirations and Well-Being in Two Cultures

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Recent research in the United States suggests that individuals who strongly value extrinsic goals (e.g., fame, wealth, image) relative to intrinsic goals (e.g., personal growth, relatedness, community) experience less well-being. This study examines such goals in university samples from two cultures—the United States and Russia. Participants (N = 299) rated the importance, expectancies, and current attainment of 15 life goals, including 4 target intrinsic and 4 target extrinsic goals. Results confirmed the relevance of the intrinsic-extrinsic distinction for both samples and that stronger importance and expectancies regarding extrinsic goals were negatively related to well-being, although these effects were weaker for Russian women. Furthermore, for both men and women, perceived attainment of intrinsic goals was associated with greater well-being, whereas this was not the case for perceived attainment of extrinsic goals.

People's values and life-goals reflect, at least in part, the economic and cultural systems in which they live. Accordingly, it has been widely argued that many of the values and goals that are most important to people are contingent on changing economic and social forces and thus vary greatly from epoch to epoch and culture to culture (e.g., Baumeister & Muraven, 1996; Gergen, 1982; S. H. Schwartz, 1992).

Historically, the relative isolation of cultures from one another has allowed for a highly variegated pattern of values for living to evolve across the globe. However, dur-

ing the past decade, market-based economics has swept across formerly distinct political and social boundaries, overtaking cultures where collectivism and central-planning economies once dominated. Such change raises the question of how the values and goals associated with market economies are assimilated by persons in transitional economies and how such goals and values might affect the well-being of individuals within such cultures.

Market economies are widely recognized as encouraging an individualistic "pursuit of happiness," in which a "having" (Fromm, 1976) or extrinsic (Kasser & Ryan, 1996) mode of being is viewed as a key element in successful life courses. Put simply, having wealth, image, fame, and power are often portrayed as the means to "the good life." This view of the good life, based on

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image and acquisition, is often colloquially referred to as the American Dream, perhaps because the United States seems to be the visible leading edge of market economic systems and is the country most often described as embodying an individualistic, materialistic orientation (e.g., Bellah, Madsen, Sullivan, Swidler, & Tipton, 1985; Lasch, 1978).

The causal connections between the dynamics of a market economy and the development of an individualistic orientation that focuses on money, power, image, and fame are complex, but they have been well described by a number of commentators. Most explanations suggest that the competitively based distribution of goods, with its corresponding marketing approach, fosters a commodification of the self and a continuous process of social comparison (e.g., Frank & Cook, 1995; Kohn, 1986; Ryan, 1993; B. Schwartz, 1993).

Many commentators have further questioned whether the pursuit of the American Dream does in fact enhance people's quality of life. For example, B. Schwartz (1994) argues that the values of the market economy erode the "best things in life," and Frank and Cook (1995) suggest that the competitive structures of market economies generally impoverish the life experiences of the people who live in them. Schor (1991) describes how the pressures to work, acquire, and consume lead to an unwitting expenditure of personal energies. An overinvestment in extrinsic, having, or materialistic goals may thus be harmful to well-being, even when individuals feel confident about achieving them.

Despite widespread social debate, psychological research on these issues has only recently begun to appear. For example, Kasser and Ryan (1993) studied individual variability in people's life goals and found that indicators of mental health and well-being were negatively associated with a strong investment in materialistic goals, relative to more intrinsic goals such as interpersonal relatedness, personal growth, and community service. Subsequently, Kasser and Ryan (1996) also showed that the more individuals placed a strong emphasis on other extrinsic goals, such as fame and image (as well as money), the lower was their well-being. Furthermore, Sheldon and Kasser (1995) found that having personal strivings (Emmons, 1986) linked to intrinsic aspirations was predictive of such positive outcomes as greater life satisfaction and positive affect, whereas having strivings linked to extrinsic aspirations was more predictive of negative outcomes.

Research from other investigators points in similar directions. Richins and Dawson (1992) measured people's materialistic orientation and found it to be negatively associated with life satisfaction and prosocial activity. Emmons (1991) found that personal strivings for power (desires to control and/or impress others) were

associated with more distress and negative affect. Cantor et al. (1991) showed that sorority women whose appraisal of life tasks was more outcome focused (i.e., extrinsic) reported less positive affect and emotional involvement in daily life. Together, such research suggests that a strong emphasis on extrinsic goals may yield lower well-being.

One set of explanations for these findings has been offered by self-determination theory (Ryan, Sheldon, Kasser, & Deci, 1996). From this perspective, intrinsic pursuits such as relatedness, growth, and community service, can directly satisfy basic psychological needs for autonomy, relatedness, and competence (Deci & Ryan, 1991; Ryan, 1995). These innate psychological needs are the presumed source of a true sense of personal well-being or "eudaimonia" (Deci & Ryan, 1995; Fromm, 1976; Ryff, 1995; Waterman, 1993). In contrast, placing heavy emphasis on the pursuit of such extrinsic goals as money, image, power, and fame can provide only indirect satisfaction of these basic needs and may actually distract from or interfere with their fulfillment. Furthermore, extrinsic pursuits, when they are a predominant concern for the individual, may entail an ego-involved engagement in activities, with its accompanying pressure and stress (Ryan, 1982; Ryan, Koestner, & Deci, 1991). Finally, developmental research suggests that people may acquire overly strong goals and expectations regarding extrinsic outcomes when they have experienced deficits in the fulfillment of the basic psychological needs. To the extent that individuals have had inadequate experiences of autonomy and relatedness, they are expected to feel less secure in their personal worth and thus more prone to the belief that extrinsic "trappings" will make them worthwhile and esteemable (Deci & Ryan, 1995; Ryan, 1993). Kasser, Ryan, Zax, and Sameroff (1995), for instance, found that adolescents whose maternal care was more cold and controlling placed greater value on extrinsic, materialistic goals, which is consistent with the suggestion that strong extrinsic goals become more central in the context of insecurity about basic needs.

Together, these factors suggest some of the reasons why a relative emphasis on goals that are extrinsic may be associated with lowered well-being, as recent evidence suggests.

The Importance of Cross-Cultural Comparisons

Research on the effects of intrinsic and extrinsic aspirations (e.g., Kasser & Ryan, 1996) and of high versus low materialism (e.g., Richins & Rudmin, 1994) has, to date, been accomplished within U.S. samples. A fundamental concern, therefore, is whether the constructs of intrinsic and extrinsic aspirations show similar structures and meanings across cultures. Furthermore, the theoretical

claim that an emphasis on extrinsic goals yields negative well-being is not culturally specific. However, its generalizability has not as yet been tested. From the self-determination theory viewpoint, the negative effects of too strong an extrinsic orientation should generalize to cultural settings that are sufficiently market-based for these extrinsic aspirations to have meaning (Ryan et al., 1996). Accordingly, one major purpose of this study is to look at the cultural equivalence of intrinsic and extrinsic aspirations and to search for common patterns of effect.

We chose Russia as our focus for this first cross-cultural examination of the generality of the negative effects of extrinsic value orientations for numerous reasons. The first reason is that until a decade ago, as part of the Soviet Union, Russia was organized as a central-planning economy (Woo, 1984). The central-planning model has now been at least partially replaced by a market-economy model, so that individuals within Russia have had to begin to accommodate to the kinds of economic strategies that are prevalent in the United States (Montville, 1995; Shiller, Boycko, & Korobov, 1991). Russia thus provides an engaging opportunity to explore the relations of extrinsic aspirations to well-being because it now has a burgeoning market economy, even though most of its people were not socialized into it.

A second reason for our interest in Russia is that it is a moderately collectivistic culture, whereas the United States represents a prototype of an individualistic culture (e.g., Triandis, 1995). Russia is thus interesting because it now is developing a market economy at the same time that many of its citizens still hold collectivistic values (Shiller et al., 1991). Consequently, Russians who are more extrinsically focused might represent a particularly progressive subset of the Russian citizenry. If so, then they should fare better psychologically than the average citizen because they hold values that are more consistent with the new economic reality. Predicting negative effects for extrinsic values in this context may thus be an especially difficult test of our theoretical generalizations.

Hypotheses and General Expectations

Given that the comparability of constructs in cross-cultural research is such a fundamentally important question, we emphasize at the outset that we test all of our hypotheses using multiple-group mean and covariance structures analyses (MACS) (Little, 1997). MACS analyses are optimal for cross-cultural comparisons because they not only test for group differences but also evaluate the factorial invariance (Meredith, 1993) of each variable's loading and intercept (mean-level) parameters (i.e., the measurement equivalence of a construct). Put differently, MACS analyses test better than many previous techniques whether measures of a con-

struct show similar psychometric properties within measurement models derived from distinct samples. Within the framework of these MACS analyses, our hypotheses were as follows.

First, we hypothesize that the intrinsic versus extrinsic distinction with regard to individuals' life goals will have coherence for both males and females within Russian and U.S. samples. We expect that people in these two distinct cultural settings do not differ in terms of the structure of their responses (i.e., they will be measurement equivalent) (Little, 1997), and assuming that the constructs carry the same psychological meaning in both cultural settings (Grob, Little, Wanner, Wearing, & Euronet, 1996; Little, Oettingen, Stetsenko, & Baltes, 1995), the correlational patterns among the intrinsic versus extrinsic values should be similar.

Second, we hypothesize that the more strongly that individuals emphasize the importance of extrinsic goals within their own configuration of values, the worse will be their well-being. Specifically, we expect that well-being will be negatively related to placing strong relative importance and expectancies on extrinsic life goals relative to intrinsic ones. Indicators of well-being in this study include measures of self-actualization, life satisfaction, self-esteem, and (fewer) symptoms of depression. We use two independent methods for testing this hypothesis. The first was based on a Likert-type survey assessing the importance of intrinsic and extrinsic aspirations. The second was based on a rank-order assessment of the importance of life goals, including those considered to be intrinsic or extrinsic.

Third, prior research by Kasser and Ryan (1996) showed not only that the relative importance of extrinsic versus intrinsic aspirations predicted lower well-being but also that the relative expectancies, or perceived likelihood of attaining, extrinsic versus intrinsic aspirations predicted lower well-being. We expect to replicate this finding in both cultures. Higher expectancies regarding extrinsic life goals relative to intrinsic ones are hypothesized to relate negatively to indicators of well-being in both Russian and U.S. samples.

Fourth, we asked participants to rate their current perceived attainment of both extrinsic and intrinsic life goals. Whereas ratings of personal importance and future likelihood are psychological variables reflecting desires and expectancies, respectively, ratings of current attainment concern the perceptions of what one already has, regardless of whether one values or expects it. A person could, for instance, perceive himself or herself as quite attractive or financially successful yet place no particular value on this status. Therefore, our prediction is somewhat different for this variable: We hypothesize that although the perceived attainment of intrinsic goals

facilitates well-being, the perceived attainment of extrinsic goals neither helps nor hurts well-being. Kasser and Ryan (in press) recently tested this hypothesis for the first time in a study of two U.S. college samples and found support for it. And in a 12-week longitudinal study of goal attainment, Sheldon and Kasser (1998) showed that progress toward intrinsic goals enhanced well-being, whereas progress toward extrinsic goals yielded no positive effects on well-being. Thus, we predict a positive main effect of perceived intrinsic attainment on well-being, no effect for extrinsic attainment, and no interactive effects.

Fifth, we expect main effects of culture on well-being. Comprehensive studies of well-being and life satisfaction across nations indicate that living standards have a significant effect on the average well-being of citizens, with a higher standard of living producing greater life satisfaction (Diener & Diener, 1995; Diener, Diener, & Diener, 1995; Grob et al., 1996). According to Diener et al. (1995), indicators from the period from 1986 to 1990 showed the purchasing power for the average Russian to be 38.7% of the purchasing power for the average American, a discrepancy that may be even greater today. A study by Balatsky and Diener (1993) found that subjective well-being was lower in Russia than the United States. Thus, we expect that our Russian participants will report significantly lower life satisfaction and well-being than the U.S. comparison group, in part because of the lower standard of living in their country (Diener et al., 1995), among other factors.

Comparisons between Russian and U.S. samples on life-goal orientations are also of descriptive interest. We expect that Russian participants, similar to their U.S. counterparts, will generally place their highest values on intrinsic life outcomes, especially interpersonal relationships (intimacy) and personal growth. However, because of their dramatically lower living standards, Russians should now place greater relative emphasis on extrinsic outcomes, especially for financial success. Thus, we expect that even though their rank orderings of goal importance are similar, the mean level of discrepancy between Likert-rated intrinsic versus extrinsic goal importance will be lower for Russians compared to U.S. participants. We also suspect that given both their economic and social uncertainties, Russian participants will be less optimistic about both intrinsic and extrinsic goal attainments in the future, as assessed by their Likert ratings of the future likelihood of goal attainment.

Finally, we have an interest in gender-related comparisons. Prior studies suggest that U.S. female college students express a greater intrinsic orientation than do their male counterparts (e.g., Kasser & Ryan, 1996). Although some literature suggests less gender-related differences in value socialization in Russian culture (see

Stetsenko, Little, Gordeeva, Grasshof, & Oettingen, in press), we have little basis for a strong hypothesis in this regard. Therefore, we explicitly contrast males and females in these cultural settings to replicate past findings for the U.S. sample and to explore for gender effects among our Russian participants.

METHOD

Participants

The total sample consisted of 299 university students: 80 males and 103 females from Russia and 47 males and 69 females from the United States. Because little is known about cultural variation on value dimensions such as the ones examined in this study, we chose samples that would be as comparable as possible so we could test for sociocultural influences while minimizing other effects. We selected cities that were as comparable as possible in terms of relative socioeconomic conditions (a secondary city), urban population (less than one million people in the metropolitan area), and university characteristics (fewer than 5,000 students). Both universities have strong research orientations and attract students of high achievement levels. Although this design provides greater power to detect possible culture-related variability, by controlling for differences related to within-culture factors, our constrained sampling strategy also created some limitations to the generalizability of our findings.

Procedure and Measures

All questionnaires were translated from English to Russian by a Russian psychologist who is fluent in English. Back-translations were done by a bilingual (Russian/English) specialist in linguistics. Independent judges considered the equivalence of the original and back-translated versions of the questionnaires, and final editing of the translated versions was done by the Russian psychologist and a second Russian colleague, after discussions with the American psychologists about any non-equivalences detected by the judges.

Questionnaires were administered in small group sessions. Participants were told that this was a study of personal goals and life experiences, and no mention was made of cross-cultural comparisons.

Demographic variables. Within each culture, participants responded to a single question about their family's annual income using nine ordinal-response categories that covered the range of possible incomes. Similarly, participants rated the highest level of education attained by their parents. For both items, we did not norm the ratings across countries because they were used only as within-country control variables.

Aspirations Index. This scale, adapted from Kasser and Ryan (1996), consists of 15 aspiration or life-goal categories, each with three exemplars (45 total). Four of these aspiration categories were a priori specified as intrinsic (personal growth, relatedness, community service, intellectual-aesthetic growth) and 4 as extrinsic (financial success, attractiveness, fame, power). The other 7 aspirations were included on the questionnaire to ensure that participants could not readily detect our focus on these intrinsic and extrinsic values and thus to prevent our results from simply reflecting implicit models of how goals may relate to well-being. These 7 distractors were not included in the analyses. Note that 3 intrinsic (personal growth, relatedness, community service) and 3 extrinsic (financial success, attractiveness, fame) aspirations were used in previous research using this paradigm (e.g., Sheldon & Kasser, 1995), whereas the 4th aspiration in each group was added for this project based on research using other paradigms (e.g., Emmons, 1991). Finally, Kasser and Ryan (1996) included health as an intrinsic aspiration. For a priori reasons, we excluded health from the intrinsic category because although it fits psychometrically into the intrinsic higher-order factor, we wanted only to consider psychologically oriented variables and to maintain a balance between the number of intrinsic versus extrinsic values being contrasted.

For the primary analyses, then, each of the 12 intrinsic (four categories by three exemplars) and 12 extrinsic aspirations was rated along four dimensions on 5-point Likert-type scales (96 total ratings). The first three of these dimensions concerned the importance of the aspiration for the person: (a) how personally important is it, (b) how happy would you be to attain it, and (c) how unhappy would you be not to attain it. These three ratings were combined into a single goal importance score for each aspiration, leading to 12 intrinsic importance ratings and 12 extrinsic importance ratings. Participants also rated each aspiration exemplar for "How likely are you to attain it in the future?" which we used as an index of perceived likelihood of future attainment (i.e., 12 intrinsic future attainment ratings and 12 extrinsic future attainment ratings).

To represent the information from the 12 value ratings of each of these four constructs (intrinsic and extrinsic importance and intrinsic and extrinsic future attainment) in our analytic framework (see below), we aggregated the ratings, following the procedures and rationale for creating domain-representative parcels (Kishton & Widaman, 1994), into three subscales for each construct, with each parcel consisting of four ratings. In other words, for each parcel we randomly

selected 4 of the 12 ratings and averaged them to create a subscale. We created three parcels for each construct in the analysis. Parceling allows one to represent the underlying information contained in the value ratings as latent variables, or constructs, with an optimal set of three indicators for each construct (see Kishton & Widaman, 1994; Little, 1997).

Current perceived goal attainment. Participants completed an additional Likert rating for each goal item in the Aspirations Index. They were asked to indicate the extent to which the goal statement was already attained or "true for them" at the current time. These 45 ratings ranged from 1 (*very little*) to 5 (*very much*). It is important to note that this perceived attainment scale was not anchored by objective ratings of attainment. These ratings were averaged across the three exemplars of each goal type and then averaged for the four intrinsic and four extrinsic goals to create two summary scores, namely, perceived intrinsic and extrinsic current attainment.

Rank order assessment of life goals. Participants also were asked to place all 15 life aspirations in a rank order according to their importance using a procedure similar to that developed by Rokeach (1973) and used by Kasser and Ryan (1996). Their most important life goal was ranked with a 1 and their least important with a 15. After reverse-coding the rankings so that higher numbers reflected greater relative importance, we aggregated the 4 intrinsic aspirations and the 4 extrinsic aspirations. Although rankings are ordinal by nature, aggregating across rankings within each category produces a roughly interval index of the importance of intrinsic versus extrinsic life goals that can be examined quantitatively (see, e.g., Little & Widaman, 1990).

Well-being (mental health). To assess well-being, we used several existing, widely used, and well-validated indices. They included the following: (a) the five-item Satisfaction With Life Scale (Diener, Emmons, Larsen, & Griffin, 1985), which assesses global satisfaction with life and has been used in numerous cross-cultural comparisons; (b) the 15-item Short Index of Self-Actualization (Jones & Crandall, 1986), which assesses one's experienced development and expression of the self (Maslow, 1970); (c) the 10-item Rosenberg Self-Esteem Scale (Rosenberg, 1965), which measures global feelings of self-worth; and (d) the 20-item Center for Epidemiological Studies-Depression Inventory (Radloff, 1977), which assesses how much a participant has experienced each of 20 symptoms of depression in the past week. These scales were presented in a 5-point Likert-type response format to facilitate participants' ease of response. Similar to the value ratings, each of these four outcome constructs was

represented with three randomly determined domain-representative parcels (Kishton & Widaman, 1994).

RESULTS

General Analytic Procedures

To address our theoretical questions, we explicitly compared males and females across the two sociocultural contexts using MACS (Little, 1997) with LISREL (Jöreskog & Sörbom, 1989). A MACS analysis is an extension of standard structural equation modeling (SEM). The critical extension is that MACS analyses assess the mean level relations in the data in addition to the variance-covariance relations. In addition to the basic advantages of SEM, such as correcting for measurement error and explicitly testing the validity relations among the measured variables, MACS analyses explicitly include additional advantages. In particular, MACS analyses directly assess the measurement equivalence of the constructs (i.e., provide evidence that the same underlying dimension is measured with little or no bias for both males and females in both sociocultural contexts). MACS analyses also allow powerful tests of the similarities and differences across the four groups on the error-free (i.e., latent) correlations and variances as well as the error-free (latent) means of the constructs (for a detailed description, see Little, 1997). Although the sample sizes in this study are relatively small, MACS techniques can still be fruitfully applied (e.g., Little & Lopez, 1997). Indeed, these techniques allowed us to document clear differences (see below), indicating that our sample sizes were adequate to test and reject the central hypotheses of interest.

The moderately large degrees of freedom in these MACS models could have biased our statistical indices of model fit (Little, 1997); therefore, we assessed fit using three well-validated alternative measures: the root mean squared error of approximation (RMSEA), the non-normed fit index (NNFI), and the incremental fit index (IFI). For the RMSEA measure, values of less than .05 are desired (Browne & Cudeck, 1993), and for the other two indices, values of about .9 and higher are generally considered acceptable (Marsh, Balla, & McDonald, 1988).

We examined the similarities and differences among the latent mean levels and correlations using nested-model comparisons. Simply stated, a nested-model comparison yields a chi-square value testing whether one or more restrictions to a baseline model leads to a significant loss in fit. This chi-square value is the increase in the chi-square that results when a restriction is added to the baseline model (e.g., restricting the latent means of a construct to be equal across groups or restricting a corre-

lation to be zero in one or more groups). If the increase in chi-square is significant (with the degrees of freedom being the number of restrictions), then the restriction is untenable and the null hypothesis would be rejectable. But if the chi-square test is nonsignificant, the restriction has not decreased model fit and can therefore remain enforced. For these analyses, we first tested for within-group similarities and then proceeded with the cross-group comparisons. If the constraining process led to even a marginally significant drop in overall fit from the baseline model ($p < .20$), then the restriction was deemed inappropriate and was not enforced. During this process, we also examined the estimates, their standard errors, the modification indices, and the fitted residuals to evaluate the tenability of each constraint. For each set of analyses, we report the cumulative chi-square for the set of restrictions. The lack of significance for these reported chi-square values indicate that the set of restrictions is acceptable. One very positive feature of this procedure is that each remaining difference reflects a significant difference ($p < .01$) (for details of this procedure, see, e.g., Little, 1997; Little & Lopez, 1997).

Testing some of our hypotheses required generating different models. To examine both the means of the constructs across each group as well as the correlations among the constructs within each group, we conducted a MACS confirmatory analysis of the four rated-value constructs—two rating types (importance and future attainment) \times two categories (intrinsic versus extrinsic)—and the two ranked-importance constructs across the four groups (two genders \times two cultures). To address the effects of different aspirational emphasis on well-being, we examined the correlational relations between the indices of the relative valuing of intrinsic versus extrinsic aspirations and the four well-being outcomes (life satisfaction, self-esteem, self-actualization, and lack of depression).

Relative value indices. Recall that from a theoretical perspective, the relative importance and expectancies regarding intrinsic versus extrinsic life goals is the critical predictive dimension. To represent the relative value between the intrinsic and extrinsic ratings derived from the Aspirations Index, we created a relative value score for each rating type (i.e., importance and perceived future attainment). First, for each individual, we subtracted the overall mean of the value ratings from each individual rating (each rating type was done separately). This procedure removed possible confounding of a person's general tendency for higher or lower ratings of all values or life goals. After averaging the 12 intrinsic ratings and 12 extrinsic ratings, we reverse-coded (reflected) the extrinsic rating. Next, a constant of 3 was

added to all ratings to ensure that all scores were positive (and so the duplication of negative signs on either side of our equation would not occur). Finally, we took the product of the intrinsic and reverse-coded extrinsic ratings (once the constant had been added). Both theoretically and interpretively, this relative value index represents a continuous score that reflects the relative relations between intrinsic and extrinsic values. Here, high scores reflect high intrinsic coupled with low extrinsic valuing (i.e., the original extrinsic rating after reverse-coding) and low scores reflect low intrinsic coupled with high extrinsic valuing. This product score is highly correlated with a simpler intrinsic minus extrinsic score that we have used in past research, but the product method provides a greater spread of scores while still retaining its theoretical fit. Importantly, the distributional qualities of these relative product scores were normal and reliable, with reliabilities (alphas) ranging from .91 to .94 for each type of value rating. We also calculated the product of the intrinsic and the reverse-coded extrinsic scores from the rank order assessment to derive an independent assessment of the relative value index.

Perceived Current Attainment (PCA). Our hypotheses concerning PCA do not concern the relative configuration of values, and so this model was somewhat different. Specifically, we hypothesize that the PCA of intrinsic outcomes is associated with greater well-being, whereas extrinsic PCA does not contribute to well-being (positively or negatively). We thus tested these hypotheses using hierarchical regressions among the constructs. Specifically, after controlling for gender, we enter intrinsic PCA, extrinsic PCA, and their interaction. Our model predicts only main effects for intrinsic perceived attainment on well-being, with no effects for extrinsic attainment or intrinsic/extrinsic PCA interactions.

Structure of Intrinsic and Extrinsic Values

To address our first question, we examined the latent structure of the separate value ratings across gender and sociocultural context. Within this section, we first assess the measurement equivalence of the constructs and then examine the mean-level and correlational patterns for similarities and differences.

Comparability, or measurement equivalence, of the intrinsic and extrinsic constructs. As mentioned, in any cross-cultural comparison, construct comparability (i.e., measurement equivalence) is an essential validity condition for exploring possible culture-related differences in the underlying constructs (Little, 1997). Rather than assume comparability, we explicitly tested the measurement equivalence of each construct across each rating type and each group. We found quite strong support for

the comparability of the constructs in these samples (RMSEA = .038, $p = .99$, NNFI = .96, IFI = .97). That is, the fit of this measurement-equivalent model indicates that our comparisons are made on comparable constructs.

Sociocultural differences in the mean-level ratings of the intrinsic and extrinsic values. Given the measurement equivalence of the constructs, we proceeded to compare the mean-levels of the six constructs both within and across the four groups. As shown in Figure 1, both main-effect differences and some Gender \times Culture interactions emerged. The presented pattern of equated and nonequatable means (see Table 1) did not differ from the freely estimated (unconstrained) means, $\chi^2(19, N = 299) = 18.7, p = .48$.

Four notable findings concerning these mean-level patterns were revealed by post hoc analyses. First, intrinsic values were rated as more important than extrinsic values, as predicted. This cross-national main effect pattern was significant ($p < .01$) for each type of assessment. Second, the Russian sample rated both the intrinsic and extrinsic values lower than did the U.S. sample ($p < .01$). The ranked procedure, however, yielded an opposite pattern ($p < .01$). Third, females in the U.S. sample consistently rated the intrinsic values higher than did their male peers, whereas females in the Russian sample consistently rated the intrinsic values lower than did the males (all $ps < .01$). Last, the relative differences between intrinsic and extrinsic ratings were, as predicted, smaller for the Russian participants, particularly the Russian females (see Figure 1).

Finally, we note that neither parental education nor family income (our two within-culture covariates) had a significant effect on either intrinsic or extrinsic goal ratings (all $ps > .05$).

Sociocultural similarities in the correlational relations among the intrinsic and extrinsic values. We found substantial similarity in the correlations among the six constructs across the four groups, $\chi^2(53, N = 299) = 61.2, p = .21$. As shown in Table 2, the few significant differences were only different in terms of magnitudes, and practically speaking, the pattern of relations among the constructs was remarkably similar. This similarity indicates that the psychological meaning that underlies intrinsic and extrinsic values is robust across these four groups and comparable to findings for the relations among other general, culturally equivalent, self-related constructs (e.g., Grob et al., 1996; Little & Lopez, 1997).

Sociocultural similarities in the ranking of values. We predicted that the rank order assessment of goal importance would yield similar orderings across the cultural and gender groupings. Table 3 presents these rank

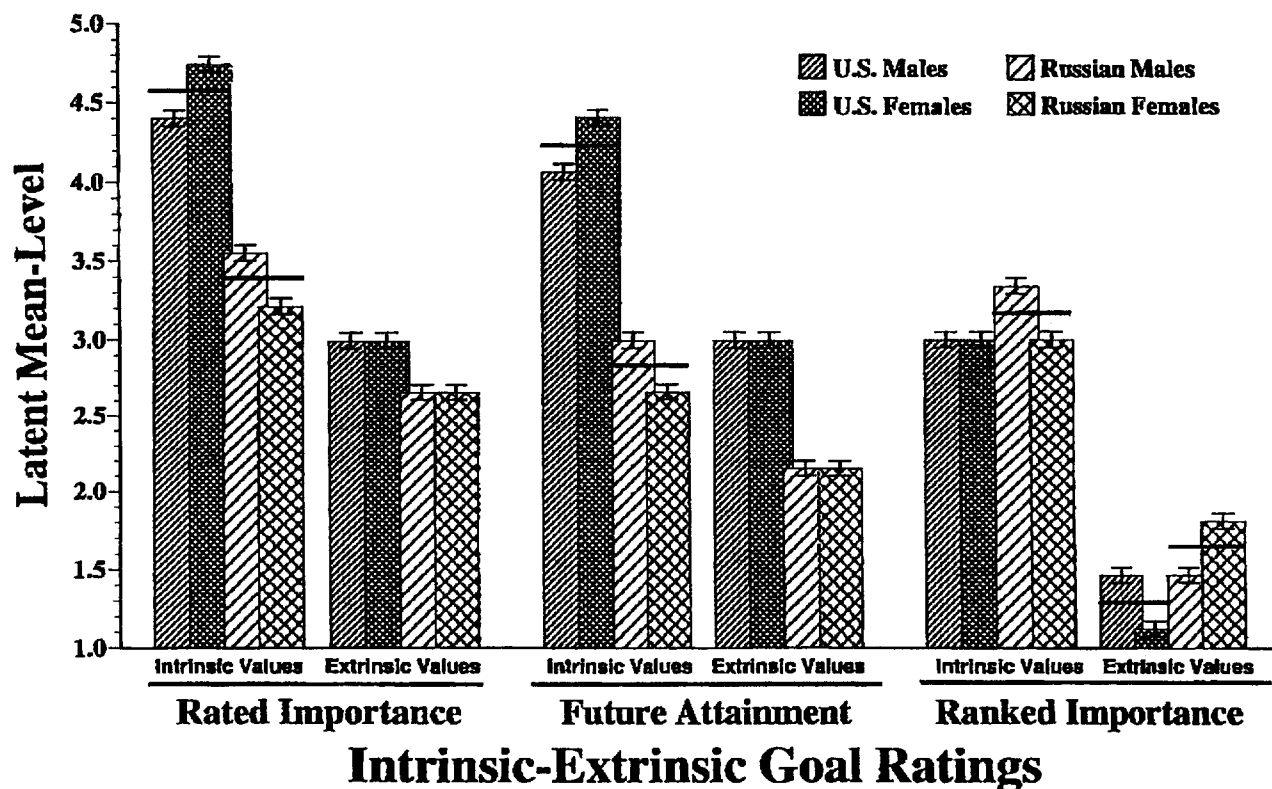


Figure 1 Latent mean-level differences for intrinsic and extrinsic goal ratings.

NOTE: Nonoverlapping error bars indicate .01 differences in means. Main-effect means for culture are indicated by a horizontal bar. Each main-effect mean was significantly different, $p < .01$.

TABLE 1: Latent Means for U.S. and Russian Males and Females on Intrinsic and Extrinsic Goal Measures and on Well-Being Outcomes

	United States		Russia	
	Males	Females	Males	Females
Intrinsic aspirations				
Rated importance	4.40 _a	4.74 _b	3.55 _c	3.21 _d
Future attainment	4.06 _b	4.40 _a	2.99 _c	2.65 _d
Ranked importance	2.99 _b	2.99 _b	3.33 _a	2.99 _b
Extrinsic aspirations				
Rated importance	2.99 _a	2.99 _a	2.65 _b	2.65 _b
Future attainment	2.99 _a	2.99 _a	2.14 _b	2.14 _b
Ranked importance	1.46 _b	1.12 _c	1.46 _b	1.80 _a
Well-being outcomes				
Self-esteem	4.00 _a	4.00 _a	3.34 _b	3.14 _c
Self-actualization	4.00 _b	4.18 _a	3.81 _c	3.59 _d
Lack of depression	4.00 _a	4.00 _a	4.00 _a	4.00 _a
Life satisfaction	4.00 _a	4.00 _a	3.34 _b	3.14 _c

NOTE: Means with different subscripts are significantly different ($p < .01$). Standard errors for LISREL estimated means ranged from .047 to .053.

orderings, along with the mean level rank and standard errors. Results show that relatedness is the highest ranked value for all groups and that intrinsic values are generally given high priority. Cultural differences appear on some of the seven filler values. Religion, for example, has had a low emphasis in Russian life for at least the last half century.

Intrinsic Versus Extrinsic Values and Well-Being

In this section, we explore the relations between the relative value indices (i.e., the product score) and the four outcome constructs. As with the first section, we first assess the measurement equivalence of the constructs and then report the mean-level and correlational findings.

Comparability, or measurement equivalence, of the well-being constructs. As with our first model, we found strong support for the comparability of the outcome constructs. Specifically, the tests for measurement

TABLE 2: The Constrained Correlations Among the Life-Goal Ratings and Rankings Across the Four Samples

Construct	Sample	Rated Importance		Future Attainment		Ranked Importance	
		Intrinsic	Extrinsic	Intrinsic	Extrinsic	Intrinsic	Extrinsic
Intrinsic rated importance	U.S. males	1.00					
	U.S. females	1.00					
	Russian males	1.00					
	Russian females	1.00					
Extrinsic rated importance	U.S. males	0.40	1.00				
	U.S. females	0.40	1.00				
	Russian males	0.40	1.00				
	Russian females	0.40	1.00				
Intrinsic future attainment	U.S. males	0.73	0.19	1.00			
	U.S. females	0.73	0.19	1.00			
	Russian males	0.52	0.00	1.00			
	Russian females	0.73	0.19	1.00			
Extrinsic future attainment	U.S. males	-0.14	0.73	0.55	1.00		
	U.S. females	0.19	0.52	0.52	1.00		
	Russian males	0.19	0.52	0.52	1.00		
	Russian females	0.19	0.52	0.52	1.00		
Intrinsic ranked importance	U.S. males	0.40	-0.29	0.28	-0.29	1.00	
	U.S. females	0.28	-0.21	0.28	-0.21	1.00	
	Russian males	0.40	-0.21	0.28	-0.21	1.00	
	Russian females	0.52	-0.21	0.28	-0.21	1.00	
Extrinsic ranked importance	U.S. males	-0.51	0.28	-0.29	0.40	-0.29	1.00
	U.S. females	-0.21	0.40	-0.21	0.28	-0.51	1.00
	Russian males	-0.21	0.28	-0.21	0.19	-0.51	1.00
	Russian females	-0.21	0.28	-0.21	0.28	-0.21	1.00

NOTE: All correlations in this table are significant ($p < .01$). In addition, correlations that are not identical to one another are statistically different in magnitude ($p < .01$).

TABLE 3: Rank Ordering (and mean rank) of Life Goals Within Culture and Gender Groups

U.S. Males	U.S. Females	Russian Males	Russian Females
Relatedness (11.47)	Relatedness (11.37)	Relatedness (12.82)	Relatedness (12.29)
Personal growth (11.04)	Personal growth (11.34)	Personal growth (11.87)	Health (10.76)
Health (10.43)	Self-assertion (11.03)	Health (11.28)	Personal growth (10.69)
Safety (9.89)	Health (10.64)	Group affiliation (10.16)	Financial success (10.44)
Self-assertion (9.75)	Safety (10.24)	Self-assertion (9.93)	Self-assertion (9.94)
Political freedom (9.64)	Political freedom (9.74)	Safety (9.45)	Group affiliation (9.89)
Financial success (8.99)	Community service (8.95)	Financial success (9.08)	Safety (9.83)
Community service (8.40)	Group affiliation (8.72)	Intellectual growth (8.51)	Intellectual growth (7.76)
Group affiliation (7.92)	Financial success (7.92)	Community service (7.74)	Political freedom (7.74)
Intellectual growth (6.60)	Intellectual growth (6.98)	Attractiveness (6.80)	Attractiveness (7.53)
Religion (6.39)	Religion (6.05)	Political freedom (6.76)	Community service (7.02)
Attractiveness (5.99)	Hedonism (5.43)	Hedonism (5.18)	Hedonism (6.10)
Power (5.96)	Power (5.11)	Fame (3.94)	Power (5.50)
Hedonism (4.81)	Attractiveness (4.29)	Power (3.68)	Fame (4.96)
Fame (3.35)	Fame (2.83)	Religion (3.15)	Religion (3.83)

NOTE: Standard errors range from .25 to .59. all goals ranged from 1 to 15 except relatedness, personal growth, and health, which ranged from 2 to 15. Rank orders were reverse-scored.

equivalence revealed quite strong levels of model fit (RMSEA = .035, $p = 1.0$, NNFI = .95, IFI = .97). Again, the fit of these measurement-equivalent models indicate

that our dependent variables of life satisfaction, self-esteem, self-actualization, and depressive symptoms are cross-culturally comparable.

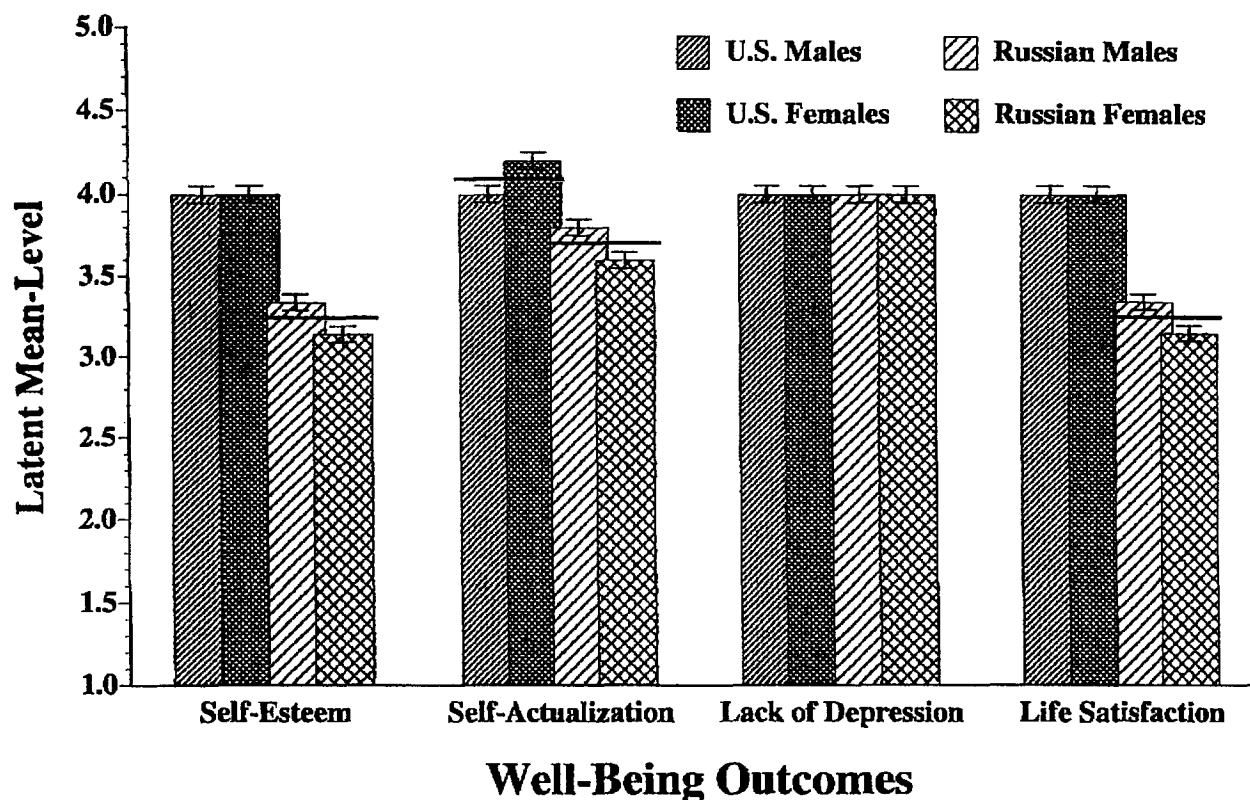


Figure 2 Latent mean-level differences for well-being outcomes.

NOTE: Nonoverlapping error bars indicate .01 differences in means. Main-effect means for culture are indicated by a horizontal bar. Except for lack of depression, each main-effect mean was significantly different, $p < .01$.

Sociocultural differences in the mean levels of well-being. Figure 2 displays the mean-level differences between Russian and U.S. males and females on the four well-being measures, $\chi^2(10, N = 299) = 11.3, p = .33$. Latent mean levels also are reported in Table 1. Three of the four outcomes showed a pronounced cross-national difference, with the U.S. samples reporting greater self-esteem, self-actualization, and life satisfaction than the Russian samples (all $ps < .01$). We found no differences in symptoms of depression. In addition to these main effects, two interactive gender differences emerged. First, Russian men were higher than their female compatriots in reported self-esteem, self-actualization, and life satisfaction (all $ps < .01$). Second, U.S. women reported greater self-actualization than did U.S. men. Finally, neither of the within-culture covariates of parental education or family income had a significant effect on well-being (all $ps > .05$).

Sociocultural differences in the correlations between relative valuing and well-being. Table 4 shows the constrained correlations of intrinsic versus extrinsic goal scores with the four target outcomes. The pattern of equated and

nonequatable correlations does not differ from the unconstrained, or freely estimated, correlations, $\chi^2(42, N = 299) = 33.5, p = .82$.

Recall that a primary hypothesis of the study is that a relative emphasis on intrinsic versus extrinsic goals will be associated with better well-being. Importance ratings from the Aspirations Index show general support for that prediction. Specifically, 14 of the 16 correlations testing this relation were significant and in the predicted direction. The two cases where the relative importance index did not relate to well-being occurred in the sample of Russian women. For the relative perceived likelihood of attainment index, 12 of the 16 correlations were significant and in the predicted direction. Here, for both U.S. men and women and for Russian men, greater perceived likelihood of attainment of intrinsic versus extrinsic goals was associated with greater subjective well-being. However, for Russian women, the relations between perceived likelihood of attainment and well-being were nonsignificant. Finally, the independent rank order method of assessing goal importance showed 13 of 16 correlations as significant and in the predicted

TABLE 4: The Constrained Correlations of Relative Intrinsic Versus Extrinsic Life-Goal Ratings With Well-Being Outcomes

	<i>Rated Importance</i>	<i>Future Attainment</i>	<i>Ranked Importance</i>
U.S. males			
Self-esteem	0.42	0.34	0.34
Self-actualization	0.42	0.34	0.34
Lack of depression	0.34	0.34	0.34
Life satisfaction	0.16	0.25	0.25
U.S. females			
Self-esteem	0.25	0.16	0.25
Self-actualization	0.56	0.42	0.42
Lack of depression	0.16	0.16	0.16
Life satisfaction	0.25	0.34	0.16
Russian males			
Self-esteem	0.34	0.34	0.25
Self-actualization	0.42	0.25	0.25
Lack of depression	0.16	0.16	0.16
Life satisfaction	0.42	0.34	0.34
Russian females			
Self-esteem	0.16	0.03	0.03
Self-actualization	0.34	0.03	0.34
Lack of depression	0.03	0.03	0.03
Life satisfaction	0.03	0.03	0.03

NOTE: All correlations are significant at $p < .01$, except for those reported as .03, which are not statistically significant. In addition, correlations that are not identical to one another are statistically different in magnitude ($p < .01$). Life goal ratings and rankings are calculated such that higher numbers reflect a more intrinsic versus extrinsic emphasis.

direction. The three nonsignificant effects were, again, for the Russian women, representing a multimethod replication of the general pattern obtained.

These findings indicate that although a stronger relative emphasis on intrinsic versus extrinsic values predicts greater well-being, this effect is quite inconsistent among the Russian females. Regarding the cross-national main effects, lower correlations for the Russian women reduced the strength of the links so that the Russian sample as a whole showed consistently weaker links to well-being than did the U.S. sample, although these main effects were still significant in each cultural group when collapsed across gender. Also notable is that none of the correlations that we examined were in the negative direction. That is, a high relative extrinsic orientation was never associated with better well-being. Thus, the preponderance of evidence indicates that stronger valuing of intrinsic goals, relative to extrinsic goals, is related to better subjective well-being, even though the strength of this relation appears to be moderated by gender within Russia.

Effects of the perceived current attainment of intrinsic and extrinsic goals. Our hypothesis regarding the PCA of goals suggested that higher intrinsic PCA would be associated with greater well-being, whereas higher extrinsic PCA

would not contribute to well-being (Kasser & Ryan, 1997). We also did not expect an interaction between intrinsic and extrinsic PCA. To test this simple main effect model, we calculated eight hierarchical regressions among the constructs. In the first four regressions, we predicted each of the four well-being outcomes by entering in four steps the variables of gender, intrinsic PCA, extrinsic PCA, and then (in the final step) all of the interactions between intrinsic and extrinsic PCA and gender. In the second four regressions, we repeated the same hierarchical procedure, except this time we reversed the order of Steps 2 and 3. These regressions allow us to examine how extrinsic PCA predicts well-being above and beyond intrinsic PCA, and vice versa.

The results are presented in Table 5. This table shows that in every case intrinsic PCA accounts for significant increases in well-being above and beyond the effects of gender and extrinsic PCA. Yet in only one case does extrinsic PCA account for additional variance above and beyond intrinsic PCA. This single exception occurred for life satisfaction among Russian participants, in which both intrinsic and extrinsic PCA contribute unique variance. Furthermore, comparing the two equations shows that with the exception of the one finding concerning life satisfaction in Russians, any positive effects of extrinsic PCA wholly reflect the variance shared by that variable with intrinsic PCA. In addition, interactions involving intrinsic and extrinsic PCA, and/or these variables and gender, had no significant affect on well-being. These analyses support our hypotheses that well-being is largely a function of intrinsic attainments and is not strongly associated with extrinsic attainments, a pattern that was not moderated by gender in either sample.

Our PCA hypotheses concerned within-culture analyses. However, for descriptive purposes, we also compared extrinsic and intrinsic PCA scores across both culture and gender groups. For extrinsic PCA, there were no gender effects but an expectable main effect for culture emerged. Russian participants indicated lower extrinsic perceived attainment than did their U.S. counterparts. Regarding intrinsic PCA, U.S. participants were again higher than their Russian counterparts. Furthermore, whereas U.S. women were higher than U.S. men on intrinsic PCA, the reverse was true for Russian participants, a result that parallels the ratings of intrinsic goal importance and expected future attainment (all $ps < .01$).

DISCUSSION

Human values and goals have their origins both in nature and in culture (Ryan, 1995; S. H. Schwartz, 1992; S. H. Schwartz & Sagiv, 1995). Among those values and goals that can be traced directly to culture are those that reflect the peculiarities of specific economic systems. Economic systems play a critical role in organizing

TABLE 5: Variance (R^2) Accounted for by Hierarchical Regressions of Gender, Intrinsic and Extrinsic Perceived Current Attainment (PCA), and Interactions on Well-Being Outcomes

	<i>Self-Esteem</i>		<i>Self-Actualization</i>		<i>Life Satisfaction</i>		<i>Nondepression</i>	
	<i>United States</i>	<i>Russia</i>	<i>United States</i>	<i>Russia</i>	<i>United States</i>	<i>Russia</i>	<i>United States</i>	<i>Russia</i>
Step 1: Gender	.01	.03*	.03*	.03*	.00	.03*	.00	.00
Step 2: Intrinsic PCA	.12***	.08***	.14***	.19***	.18***	.14***	.04**	.05**
Step 3: Extrinsic PCA	.14	.10	.15	.19	.19	.17*	.04	.06
Step 2: Extrinsic PCA	.01	.03	.09**	.09***	.09***	.12***	.01	.03*
Step 3: Intrinsic PCA	.14***	.10***	.15***	.19***	.19***	.17***	.04*	.06*
Step 4: All interactions	.14	.10	.16	.20	.19	.18	.04	.07

NOTE: Significance test is for incremental variance (R^2) over and above prior step in the regression.

* $p < .05$. ** $p < .01$. *** $p < .001$.

behavior and experience in everyday life and are presumed to influence the content and salience of personal desires and goals. Various commentators have suggested that extrinsic aspirations are integrally tied to the dynamics of free-market economies (Inglehart, 1990; Richins, 1987; B. Schwartz, 1994). Extrinsic life goals include strivings for money, fame, power, and attractiveness—goals often described in popular literatures as befitting the American Dream of success (Kasser & Ryan, 1996).

In this study, we compared college samples from two countries that vary in both their cultural and economic situations—the United States, which has a well-established market economy and has been characterized as highly individualistic in cultural orientation, and Russia, which is in the midst of becoming a market economy and has been characterized as moderately collectivistic. Our focus was on the cross-cultural validity of the distinction between intrinsic and extrinsic values or goals for these two different settings and on the effects of individual differences in the relative strength of extrinsic (vs. intrinsic) values. The main organizing hypotheses of our study concerned whether U.S. and Russian participants would evidence the following: (a) not only construct comparability or measurement equivalence in their ratings of extrinsic and intrinsic life-goals but also similar correlational structures among these ratings, (b) lower well-being outcomes when they placed greater relative importance or expectations on extrinsic versus intrinsic goals, and (c) better well-being as a direct function of intrinsic perceived current attainments but not as a function of perceived extrinsic attainments.

In general, we found support for these hypotheses. First, both the intrinsic and extrinsic life goals (and the well-being outcome measures) showed (a) equivalent measurement properties and (b) similar correlational patterns across gender and culture. Second, and more centrally, we found clear evidence in both the Russian and U.S. samples that the more importance that individuals placed on extrinsic relative to intrinsic goals, the

more likely they were to report lower well-being. This effect was robust in the U.S. sample for both men and women, replicating and extending prior results by Kasser and Ryan (1996). The relationship was comparably strong for Russian men, although it was somewhat weaker for Russian women. Notably, however, we found absolutely no evidence of a positive association in any group between a strong extrinsic orientation and well-being. A similar pattern of findings emerged regarding the perceived likelihood of attaining intrinsic versus extrinsic outcomes. Again, for both U.S. and Russian samples, stronger relative expectancies regarding extrinsic outcomes were negatively related to well-being. However, similar to our findings with goal importance ratings and rankings, this effect was most apparent for U.S. men and women and for Russian men.

Finally, we assessed the relatively unexplored question of how perceived current attainments regarding intrinsic and extrinsic goals affect well-being. Our hypothesis was that perceived intrinsic attainment would be associated with higher well-being, whereas perceived extrinsic attainment would not, and we expected no interactive effects. Regression analyses revealed strong support for this hypothesis. Specifically, perceived intrinsic goal attainment contributed to greater life satisfaction, self-esteem, self-actualization, and lack of depression in both samples above and beyond that predicted by perceived extrinsic attainments. By contrast, in only one case did perceived extrinsic attainment account for unique variance in well-being above and beyond intrinsic attainment. This was the case of life satisfaction among Russians, in which both intrinsic and extrinsic attainment contributed unique variance. That case is quite interesting given the economic uncertainties that Russians face. These effects of perceived current intrinsic attainment also were similar across gender in both cultures.

Although our primary hypotheses received general support, the weaker negative effects of a strong extrinsic orientation among Russian women warrants further

consideration. Stronger relative extrinsic aspirations were associated with lower self-esteem and self-actualization among these women, but that relation did not appear for either life satisfaction or nondepression. Despite our failure to anticipate this pattern, we do not believe these to be chance findings. In attempting to interpret them, we have located many analyses of the current situation for women in Russia (and other Eastern European nations experiencing economic transition) that suggest that they are in a unique position (e.g., Einhorn, 1993; Funk & Mueller, 1993). A notable trend accompanying these economic transitions has been a rapid increase in gender-based inequalities. These inequalities have particularly affected the type of high achieving women who are probably represented in our university samples. And in Russia, public sector funding of functions that formerly supported women's pursuits (both intrinsic and extrinsic), such as child care, maternal leaves, and reproductive rights, have suffered from dramatic cuts.

Consistent with this picture, our results show that female Russian students had lower expectations about future attainment of all goals, intrinsic and extrinsic, than did the other groups. These results are convergent with findings by other researchers about pessimism (e.g., Kotik, 1996). Russian women also displayed lower mean intrinsic and extrinsic importance ratings, the latter perhaps reflecting a defensive accommodation. That is, in light of a pessimistic outlook, one may "decathect" or disengage from one's life goals, perhaps as a secondary control strategy (Heckhausen, 1997) and/or a way to protect self-esteem in a circumstance of threat (Steele & Aronson, 1995). Lower general investment in goals may have contributed to the fact that Russian women also had the lowest mean level discrepancies between intrinsic and extrinsic aspirations. Finally, Russian women reported the lowest levels of life-satisfaction, self-esteem, and self-actualization, which supports the idea that they are facing particularly difficult personal times. These factors may together account for the somewhat weaker pattern of findings regarding importance and expectancy ratings among Russian women. Nonetheless, it is important to recall that like our other subsamples, including U.S. women, Russian women did show some negative effects of an extrinsic emphasis, and in no case did they show positive effects from a more extrinsically oriented configuration of goals.

Along with the examination of our primary hypotheses, several other issues were explored. First, we predicted and found that the general rank ordering of life-goal importance is similar in both U.S. and Russian samples and for both males and females. Generally speaking, in an absolute ranking, most individuals will place intrinsic life goals, such as relatedness and personal growth, at

the top of their priority lists, with extrinsic goals following these. Similar results have been obtained in the more comprehensive cross-national studies of values rankings done by S. H. Schwartz and colleagues (e.g., S. H. Schwartz, 1992). This is entirely consistent with the idea that intrinsic goals are better at fulfilling basic psychological needs and thus are salient and central to most individuals. It is also an important aspect of understanding cross-cultural differences in motives—despite human diversity, there are some common needs that emerge with regularity as having prime importance (Ryan, 1995).

Second, our results showed lower levels of life-satisfaction, self-esteem, and self-actualization among our Russian participants compared to their U.S. counterparts. This finding is consistent with the work of Diener and colleagues (e.g., Diener et al., 1995), who have argued that there is a relation between the wealth of nations and the life satisfaction of their citizens. This prior research, as well as the current data, suggests that the generalized cultural conditions associated with a national standard of living may have a direct impact on well-being. Thus, poorer nations have more obstacles to goal pursuits of all kinds, both intrinsic and extrinsic. However, we did not find any evidence of within-culture differences in well-being as a function of the individual's family income or parental education. This is not surprising given the generally inconsistent evidence relating within-culture indices of wealth to well-being, an issue that is still controversial (Diener, 1984; Inglehart, 1990; Richins & Rudmin, 1994).

Furthermore, our results suggested that when perceived intrinsic and extrinsic attainment are considered, high levels of perceived extrinsic attainment neither helped nor hindered well-being, whereas intrinsic goal attainment had direct positive effects. More research is clearly required to resolve the issues of how actual intrinsic and extrinsic outcome attainments influence well-being within cultures and how they relate to goal-related values and perceived goal attainment. Nonetheless, whether research ultimately finds effects of economic wealth and well-being within cultures, we believe that it is not the possession of wealth per se that detracts from well-being but rather an excessive personal focus on financial success, materialism, and other extrinsic goals relative to intrinsic pursuits.

Among the limitations of our study, three stand out as primary. First, we restricted our samples to similar university settings within the two nations. Although this had the advantage of ensuring some comparability in the comparisons, the generalizability of these findings to all segments of the population, and to persons in other developmental epochs, is clearly unknown. Some commentators (e.g., Inglehart, 1990) have indeed high-

lighted how different age cohorts within modern societies can be characterized by different value orientations, thus suggesting a need for caution concerning cross-age generalizations. Second, we examined a specific set of values that we derived from our thinking (and previous research) concerning intrinsic versus extrinsic orientations. This is among the first studies to assess the impact of these orientations on well-being outside of the United States (see also Schmuck, Kasser, & Ryan, in press). Accordingly, other cultures still need to be examined before any generality of this pattern can be claimed. We think our findings may be most applicable to cultures in which market economies predominate, whereas other extrinsic goals may better describe the alternatives to intrinsic foci in cultures dominated by other types of economic structures. Comprehensive cross-national studies by S. H. Schwartz and his colleagues (see, e.g., S. H. Schwartz, 1992; S. H. Schwartz & Bilsky, 1990) suggest that there may indeed be some generality to the types of inherent value conflicts that humans face. For example, they found that in most nations, values for benevolence were relatively antagonistic to those for power and achievement. Future research might fruitfully examine how the specific values we have assessed fit within the broader structural dimensions that S. H. Schwartz and colleagues have identified. A final limitation is that we assessed both aspirations and well-being outcomes via self-report. Future studies might incorporate more objective measures of well-being, such as clinical ratings like those used by Kasser et al. (1995), or reports by knowledgeable others. In addition, there are more non-reactive ways to measure value and goal orientations that could be used in future research (see, e.g., Richins, 1994).

Our focus on life goals and well-being grows out of a general concern with the social conditions that optimize human development. An essential element of our thinking, which is based in self-determination theory (Deci & Ryan, 1991), is the distinction between desires or motives whose gratification leads to momentary pleasure or ego boosts versus those that are congruent with fundamental psychological needs and thus lead to optimal development in both individuals and communities (Ryan, 1995; Ryan et al., 1996). Intrinsic goals are expected to satisfy basic human needs in a relatively direct manner and are thus presumed to be conducive to optimal development and well-being in any cultural setting. In contrast, extrinsic behaviors and goals are thought to be either unrelated or negatively associated with the satisfaction of these basic needs. Although we focused here on the extrinsic goals of money, fame, image, and power—goals that have been associated with market-economic socialization—we also suspect that within every economic and cultural system, one could

identify particular extrinsic goals whose emphasis contributes to lower well-being if they encroach on the fulfillment of more basic needs. Such goals would be organized around those outcomes perceived by group members as potentially bestowing a special status on the individual and could range from conformity and obedience to acquisitiveness or physical prowess. This is only to say that goal contents and their dynamic effects on well-being must be understood within their particular cultural and historical context.

Research on life-goal configurations is only one forum for examining basic questions about goals, social contexts, and human needs. Other approaches have included (a) the study of within-person fluctuations in momentary well-being as a function of day-to-day changes in basic psychological need fulfillment (e.g., Reis, Sheldon, Ryan, & Roscoe, in press; Sheldon, Ryan, & Reis, 1996), (b) the interactive effects of need congruence with short-term goal attainment in predicting changes in well-being (e.g., Sheldon & Kasser, 1995, 1998), (c) the experimental study of needs affecting intrinsic motivation and integrated internalization (e.g., Deci, Eghrari, Patrick, & Leone, 1994; Vallerand, 1997), and (d) other convergent lines of evidence (Ryan, 1995; Ryan, Deci, & Grolnick, 1995). The notion that basic human psychological needs are universal is controversial in an age of extreme relativism and postmodern epistemological approaches. However, investigating the necessary nutrients for human growth, whose specific cultural forms of fulfillment may be varied, is a critical problem for a general psychology.

The current data comparing U.S. participants with those from a moderately collectivist country experiencing great social change provides at least some support for these broad claims. Despite the widely discrepant economic and cultural backdrops within which our participants were embedded, a general pattern did emerge. In both countries, there was a negative relation between a strong investment in extrinsic relative to intrinsic goals and indicators of well-being. In addition, there was evidence in both countries that one's perceived current attainment of intrinsic goals is associated with enhanced well-being, whereas perceived extrinsic attainments make little or no contribution to well-being. It appears, then, that as the world becomes smaller in the face of globalization and the expanding reach of market economies, further attention to the universal and culture-specific characteristics that optimize well-being should, indeed, become a larger concern.

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