Forging Macro-Micro Linkages in the Study of Psychological Well-Being

Carol D. Ryff, William J. Magee, Kristen C. Kling, & Edgar H. Wing

INTRODUCTION

Psychological well-being is a fundamentally micro-level construct that conveys information about how individuals evaluate themselves and the quality of their lives. In this chapter we describe a progression of scientific inquiry that initially tended to ignore social structural influences on well-being, or treat them as "noise" factors to be statistically controlled. More recently, we have incorporated macro-level influences, specifically socio-economic standing, as part of the substantive scientific focus. In so doing, we have carried the study of positive psychological functioning beyond its disciplinary origins into sociological domains.

The ultimate vision guiding our venture is to make clear of the "oversimplified" nature of the person, which assumes that what is in the

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head (i.e., cognitive orientations, coping strategies, intellectual abilities), heart (i.e., emotions, moods, feelings), or actions (i.e., behaviors, choices) of individuals is sufficient to make sense of their well-being. The alternative "over-socialized" conception of the person (Wrong, 1961), also to be avoided, assumes that the "master variables" of the human condition are what is in the social structure, be it the invisible hand of normative guidelines contouring paths of conformity, or the strong arm of power structures controlling resource allocation and governing social organization.

We argue that both perspectives, in and of themselves, are wanting—their inadequacy is evident not only in empirical criteria (e.g., variance explained), but also in terms of theoretical scope and comprehensiveness. Individual and societal level factors are both requisite to a full understanding of human well-being, which inextricably links persons and the broader social world. The central question, thus, is not whether to bridge these realms, but how to do it. Using psychological well-being as the illustrative case, we propose that the study of well-being must simultaneously involve the assessment of social structural and individual-level variables.

More important, such inquiry must provide a conceptual and empirical formulation of the mechanisms that link these macro-micro levels of analysis. Social comparison processes will be advanced as one route through which structural and individual factors can be connected. These comparisons, we argue, follow, in part, from one's location in the social structure, and they have consequences for well-being. As such, social comparisons constitute a bridge linking macro- and micro-levels of analysis.

PSYCHOLOGICAL WELL-BEING: WHAT IS IT AND HOW HAS IT BEEN STUDIED?

We subscribe to a theory-driven, multidimensional formulation of psychological well-being (Ryff, 1989ab, 1995a) that goes beyond absence-of-illness criteria of mental health (e.g., not being depressed or anxious). Key aspects of psychological well-being were derived from life-span developmental theories, which formulate the unfolding tasks and challenges of human growth; clinical accounts of what it means to be self-actualized, mature, fully functioning, or individuated; and formulations of positive criteria of mental health. Collectively, these formulations, sum-

Figure 9.1 Core dimensions of well-being and their theoretical origins.
could be generalized to larger, more diverse groups, wherein assessment procedures were much curtailed.

Longitudinal studies are needed to clarify whether these age patterns represent developmental changes, maturation changes, or cohort/historical influences. However, they are to be interpreted, the findings point to diverse age trajectories in which older cohorts of adults reveal some psychological advantages (e.g., mastery), but also notable disadvantages (e.g., purpose, growth) relative to younger individuals. The replicative consistency of the latter may, in fact, be meaningfully linked to social structural influences (Ryff, 1995a). That is, lower self-ratings on purpose in life and personal growth among the aged may point to micro-level consequences of “structural lag”—namely, that social institutions currently lag behind the added years of life that many individuals now experience (Riley, Kahn, & Powers, 1994).

Gender differences in well-being have also shown replicative consistency. Women, across all studies, score higher than men on positive rela-

Figure 9.2 Age differences in three-item scales of well-being.


Well-Being via Life Experience and Life Transition Studies: Where Is Social Structure?

Apart from descriptive questions about age and gender differences, initial studies of well-being also examined variation, or change, in well-being as a function of individuals’ life experiences and their life transitions. Among the experiences we have studied are parenthood (Ryff, Lee, Essex, & Schmutte, 1994; Ryff, Schmutte, & Lee, 1996); health events (Heidrich & Ryff, 1991a, 1996); and community relocation (Kling, Ryff, & Essex, 1997; Ryff & Essex, 1992a; Smidter, Essex, & Ryff, 1996). Across these investigations we also assess “interpretive mechanisms” which probe how people construe and give meaning to their life experiences. People make sense of their life experiences, for example, by comparing themselves to others (social comparison processes); by considering feedback from significant others (reflected appraisals); by identifying the causes of their experiences (attributional processes); by observing their own ruminations (behavioral self-perceptions); and by the importance they attach to particular experiences (psychological centrality) (see Ryff & Essex, 1992b, for conceptual summary).

Collectively, our studies show that considerable variance in well-being is associated not only with such life experiences/transitions but with how they are interpreted. Such assessments have included longitudinal investigations tracking change in well-being following life transitions (e.g., Kling et al., 1997; Smidter et al., 1996). Social structural influences have been largely peripheral in such investigations—sociodemographic variables have typically been employed as “controls” in regression analyses predicting well-being as a function of the more proximal experiential and
interpretive variables. Nonetheless, there have been hints that social structural influences are, in fact, a part of the story. We provide two examples.

Our initial investigation of the parental experience (Ryan et al., 1994) asked whether the psychological well-being of midlife adults is tied to perceptions of how adult children have “turned out.” A sample (N = 215) of parents was asked detailed questions about the accomplishments (educational and occupational) and adjustment (psychological and social) of each of their grown (aged 21+) children. We found, not surprisingly, that multiple aspects of parents’ well-being (e.g., environmental mastery, self-acceptance, purpose in life) were strongly predicted by these assessments of grown children. Consistent with our interest in “interpretive mechanisms,” we asked how parents felt their adult children compared with themselves in these realms of achievement and adjustment. Again, parental well-being was predicted by these comparative assessments, net of the above effects of how well children had turned out. However, contrary to our expectation, (i.e., that parents’ well-being would be enhanced by perceiving that children had done better than themselves), the direction of the social comparison effects was negative. That is, parents who perceived their children had done better than themselves had lower levels of psychological well-being.

The one exception to this pattern pertained to mothers with higher levels of education (i.e., one standard deviation above the mean) compared to mothers with lower levels of education (i.e., one standard deviation below the mean). Specifically, mothers with higher levels of education reported ever higher levels of self-acceptance and purpose in life, as they perceived their children had attained more educationally and occupationally than themselves (see Figure 9.3). Mothers with lower levels of education, however, reported lower levels of acceptance and purpose as they perceived their children had out-achieved themselves. Thus, position in the educational hierarchy appeared meaningfully linked with mothers’ well-being via the perception of how they compared with children. Presumably, mothers with more education were better able to “build in the reflected glory” of their children’s achievements, whereas less educated mothers may have felt more troubled by their own lack of accomplishment and life purpose vis-à-vis marked achievement of their children. Fathers, however, showed no such interactions—those who perceived their children had done better than themselves had lower well-being, regardless of educational level.

A second example of possible social-structural influences again pertains to educational standing and its role in the experience of community relocation (Ryan, 1995b). Our prior findings (Kling et al., 1997; Ryff & Essex, 1992a) document the impact of interpretive mechanisms (e.g., social comparisons, reflected appraisals, psychological centrality) on post-move well-being. Education in these analyses was, however, treated as a control (noise) factor. Alternatively, when viewed as an indicator of socioeconomic standing, education may be meaningfully linked with how individuals negotiate their life transitions. Our general hypothesis was that education would exert generally salutary effects—those with more education were expected to withstand better the stresses of this transition (presumably via their access to relevant knowledge and resources).

Based on a longitudinal sample of 312 women interviewed both before and after their relocation, we found that there were significant changes in psychological well-being after the move, with respondents on average showing gains in multiple aspects of well-being. Going into the move, women with higher levels of education showed higher starting profiles of well-being, particularly self-acceptance, purpose in life, and personal growth (Ryan, 1995b). The longitudinal data also showed dynamics in interpretive mechanisms—namely, that their social comparisons (how they saw themselves relative to others) and reflected appraisals (how they thought others viewed them) also changed over time. Regression analyses were conducted to investigate the influence of these dynamic interpretive mechanisms on respondents’ changes in well-
Figure 9.4 Significant interactions between education and perceived changes (positive, negative) in daily activities and economics in predicting changes (Time 2) in well-being.

advantage. Education may be a plus when life changes are going well, but not when things are going poorly (negative post-move comparisons and reflected appraisals). While these effects were specific to two of five life domains investigated, they suggest that during life transitions, higher educational levels may, paradoxically, magnify the effects of negative life changes on well-being. Higher educational standing may create expectations that one should be in control and able to prevent negative experiences. Mirowsky (1995) documents the close association between education and sense of control. Thus, violation of the general expectation that life should go well because one is knowledgeable, informed, and in charge may render the effects of negative experiences even worse in terms of impact on well-being.

In general, the preceding investigations kept social structure in the background. Its presence, nonetheless, crept in, with occasional evidence that the impact of life experiences and interpretive mechanisms were different for those with higher versus lower levels of education. Moreover, these illustrative examples revealed both benefits and costs linked with higher education. The following section addresses how the well-being agenda has recently been expanded in the direction of social structural influence by intersection with the literature on class and health.

**WELL-BEING IN THE CLASS AND HEALTH AGENDA**

Prior research on subjective well-being has probed a broad array of sociodemographic correlates (class, age, marital status, race, religion, geographic location) of reported happiness and life satisfaction (Bradburn, 1969; Bryant & Veroff, 1982; Diener, 1984; Diener & Fujita, 1993; Veroff, Dowann, & Kukla, 1981). These studies have employed largely atheoreti-
cal, single-item indicators of well-being, and typically examined sociode-
mographic variables in a descriptive manner. Such sociodemographic variables rarely account for much variance in subjective well-being (max-

imally around 10%). What has been distinctly missing from this literature is a formulation of intervening mechanisms and processes that connect social structural and individual levels of analysis.

**SES and Health: Is Psychological Well-Being Relevant?**

A growing body of evidence links socioeconomic standing to a diverse array of health outcomes (Adler et al., 1994; Mirowsky & Ross, 1989).

This literature provides impetus for linking well-being to a particular social-structural variable, namely, location in the socioeconomic hierar-
chy. At first glance, queries about the relationship between class and health agenda seem to do little more than document the obvious: poverty has adverse health consequences. This perception misses a key finding—
namely, that there is a "social gradient" in health across the entire socio-
economic spectrum (Marmot et al., 1991). Thus, class differences in health exist even between those in middle versus upper SES strata. Why these social inequalities in health occur is not well understood.

Most extant research involves physical rather than mental health out-
comes. Moreover, when investigators have gone beyond SES-related assessments of morbidity and mortality, the focus has been primarily on negative indicators of mental functioning, such as anxiety and depression (Dohrenwend & Dohrenwend, 1974; Kessler & Cleary, 1980; McLeod & Kessler, 1990). Few investigators have asked whether the prior class and health linkages also pertain to positive aspects of mental health. Such omission likely reflects the view that optimal functioning (mental or phys-
ical) is not a pressing concern relative to more grave matters of illness, dis-
ease, or dysfunction. However, dimensions of well-being may comprise powerful protective (or vulnerability) factors involved in understanding how socioeconomic status makes its way to a wider array of health out-
comes. That is, the possession of core "life goods" (e.g., positive self-
regard, quality ties to others, mastery, purpose) (see Ryff & Singer, 1998a) may provide critical ingredients that enable people to withstand life chal-
enges and adversity. Moreover, there may be important "physiological substrates of flourishing" (Ryff & Singer, 1998a, 1998b) that also influ-
ence ultimate morbidity and mortality outcomes. The connection of social-
structural factors to intervening biological mechanisms is another realm ripe for study of macro-micro linkages.

**Integrative Evidence From Three Major Studies**

The Whitehall Study of British civil servants documents a social gradient in mortality and morbidity (Marmot, Shipley, & Rose, 1984; Marmot et al., 1991): each grade of employment has higher levels of health problems and death rates than the one above it. A counterpart literature in the U.S. has been slower to accumulate, although similar inverse relationships between socioeconomic status and mortality have been documented here as well (Feldman, Makuc, Kleinman, & Cornoni-Huntley, 1989). Marmot, Ryff, Bumpass, Shipley and Marks (1997) brought together three major
Across these models, there is a clear SES gradient in well-being for both men and women in WLS and NSFH. For Whitehall, the gradient is evident for men, although Model 3 suggests that work environment, health behaviors, etc., account for a good deal of the gradient in well-being. Although Whitehall women did not show a gradient in this indicator, both males and females in the study showed a strong gradient for affect balance (not shown). Similarly, both men and women in WLS showed a strong gradient in self-acceptance (RYT, 1989b) (not shown). Thus, across notably different samples, distinct indicators of SES, and even diverse indicators of well-being, there was clear evidence of a socioeconomic gradient in psychological well-being. Moreover, the findings provide little support for the view that these relationships could be fully accounted for by early background or other individual factors (for example, parents’ education or occupational status, nonfamilial family of origin, mental ability). They suggest rather that well-being is related to adult position in the social structure.

Given the usual focus on negative health outcomes, these results for positive mental health are particularly informative, because they show that lower social position not only increases the likelihood of ill health, it also decreases the chances for psychological well-being. Possessing these features of positive functioning constitutes an important window on quality of life, but more importantly, their presence may provide protective mechanisms in the face of life stresses, and their absence may create vulnerability for depression (Brown, Bifulco, & Andrews, 1990; Lewinsohn, Redner, & Steeley, 1991).

What the findings call for, however, is explanation: namely, how do these relationships come about? What are the processes that account for the fact that those at progressively higher levels in the socioeconomic hierarchy have better health (mental and physical)? Beyond the deprivations associated with poverty are numerous other likely intervening factors (e.g., health behaviors, work conditions, family life, neighborhood environments). Whitehall II has shown the import of some of these for explaining the class and health gradient (Marmot et al., 1997), and a recent U.S. survey points to an array of early background, behavioral, relational, and work characteristics to explain why people of lower socioeconomic status have worse health and lower psychological well-being (Marmot et al., 1993). Beyond life conditions and behavioral actions are the ways in which individuals perceive themselves in their social contexts. Such perceptions, consistent with our prior work, address how individuals interpret themselves vis-à-vis others. These perceptions, we argue, comprise intervening mechanisms that link position in the social hierarchy to individual well-being.

TOWARD MACRO-MICRO INTEGRATION: EDUCATION, SOCIAL COMPARISON, AND WELL-BEING

The class and health agenda has prompted disciplinary exchange and a framework for expanding the study of well-being in new directions. As noted earlier, scholars of subjective well-being had already provided extensive documentation of the SES links of reported happiness and life satisfaction. What that literature neglected, however, was the intervening mechanisms that connect these macro, and micro levels of analysis. In this section, we review two recent investigations, which sharpen the class and well-being nexus by incorporating such intervening processes. Before summarizing relevant findings, we elaborate the rationale for choosing education as the primary indicator of SES standing across our studies. We also elaborate the conceptual rationale for using social comparison processes as key mechanisms of linkage.

Education as a Marker of Socioeconomic Standing

Socioeconomic status is typically defined in terms of three related, but distinct, components: education, income, and occupational status. We target only one of these, education. One reason is that the other aspects of social class (income, occupational status) are, to a great extent, consequences of educational achievement, and therefore may mediate the effects of education (Hauser & Moore, 1985; Sewell & Hauser, 1975, 1980). Sociologically speaking, education thus governs access to important future opportunities and resources. Compared to income or occupational standing, education is also a more person-specific characteristic. Wives, for example, are sometimes classified according to the income or occupational standing of their husbands, but education is a variable reflecting their own SES-related status. Psychologically speaking, we also see education as a defining feature of the self; that is, as an aspect of identity and a domain of personal achievement. In terms of the presentation of self in daily life, educational attainment is a key dimension along which people classify and evaluate.
others and themselves. Such assessments frequently have significant social consequences—those with high school education often exist in different social worlds (at work, at home, in the community) than college graduates. As a marker of personal knowledge and achievement, educational standing is also implicated in coping strategies, problem-solving abilities, and possibly even social supports. Further, when the three SES variables have been disaggregated and their independent influences on psychological distress have been examined, it is education, particularly among women (including homemakers and those in the labor force), that is the most important predictor of psychological distress (Kessler, 1982).

Turning to the question of educational effects on positive functioning, we also note that our prior findings on parenthood and relocation underscored the importance of educational influences. For the collective reasons described above, the remaining studies described below use educational attainment as the marker of standing in the SES hierarchy. We underscore that these studies do not address more richly textured aspects of social class such as linguistic and moral practices, lifestyles, world-views, and normative expectations (see Chapter 7, this volume).

Why Social Comparison Processes?

One rationale for targeting social comparison processes as a key intervening mechanism is continuity with our prior program of studies. Such comparisons have been included in nearly all of our investigations, although the conceptualization of them has been tied to the interpretations given to proximal life experiences, not to perceived location in the social structure. Further rationale comes from the conceptual underpinnings of our formulation of "interpretive mechanisms" (see Ryff & Essex, 1992a) as well as earlier efforts to link personality and social structure (Ryff, 1987). Rosenberg and Pearlin (1978) offered significant guidance, as their efforts explain the age-related linkage between social class and self-esteem. Their query was fundamentally a challenge in how to integrate macro and micro levels of analysis.

Self-esteem, they stated, shows little connection with social class in childhood; but with age, there emerges a stronger correlation between self-esteem and social class. The reasons for this emerging linkage were tied to the changing social worlds of adolescents and young adults, i.e., transitions from the more homogeneous worlds of early childhood school and neighborhood environments to the more heterogeneous worlds of subsequent educational and occupational pursuits. What such heterogeneity can be considered a changing perception of self, tied fundamentally to how individuals see themselves vis-à-vis others (social comparisons), how they believe they are viewed by others (reflected appraisals), what they observe in their own behaviors (self-perceptions), and what they designate as important to them (psychological centrality). These interpretive mechanisms comprised a theoretical synthesis of numerous social psychological processes that were integrated for the purpose of explaining a particular macro-micro linkage—namely, why basic self-evaluation (self-esteem) becomes linked with SES standing as individuals age.

Of the four mechanisms, we focus primarily on social comparisons and reflected appraisals (Kling et al., 1997; Ryff & Essex, 1992a), although we have also examined psychological centrality (Kling et al., 1997). The extant literature on subjective well-being has also examined comparisons (in income) as one route to explaining variations in reported happiness and satisfaction (Diener, Sandvik, Seidlitz, & Diener, 1993; Veenhoven, 1991; see Chapter 10, this volume).

Despite their conceptual appeal, the assessment of such comparisons is neither simple nor straightforward. When asked directly, individuals frequently deny that they make such comparisons, suggesting a kind of normative climate against explicit comparative judgments. However, social comparisons can be unobtrusively probed with regard to many aspects of life (see Hirdrich & Ryff, 1993b) as well as in terms of numerous referent others, some of whom may be selected, while others are imposed (e.g., friends vs. siblings). The studies we describe below draw on these distinctions to offer various alternatives for probing the social comparison domain. Findings from two investigations, both involving large and diverse samples, are summarized.

Educational Attainment and Comparison With Significant Others in Midlife

Ryff and Magee (1995) used data from the Wisconsin Longitudinal Study (WLS) to examine the linkages between educational attainment and well-being in a sample of midlife men and women. A large literature in sociology has addressed the role of education in social stratification processes; that is, how educational attainment influences subsequent occupational and economic mobility (Sewell & Hauser, 1975), or how schools serve as mechanisms for social selection and social differentiation (Karabel & Hashey, 1977). Educational systems are, depending on one's theoretical position (e.g., functionalist vs. conflict theory), viewed as structures that
offer opportunities for mobility of individuals, or as mechanisms that perpetuate social inequalities (DiMaggio, 1979; Swartz, 1977).

WLS is well known for its model of status attainment that documents the prominent role of educational attainment in subsequent occupational advancements and earnings (Hauser & Mosse, 1985; Sewell & Hauser, 1975, 1980). The question we add to the inquiry is what are the individual life consequences (e.g., quality of life, mental health) of achieving different positions in the social order? Early WLS findings showed dramatic differences in educational aspirations and achievements, among children of equally high levels of ability, between those having high versus low socioeconomic backgrounds. We consider possible consequences of these different attainment profiles for psychological well-being.

In addition, we examine the influence of social comparisons about educational attainment on respondents' reported well-being. Sample members were asked to compare their own educational attainment with that of two key significant others: namely, their same-sex parent, and a randomly selected sibling. These proximal social comparisons (those within the family) are "inescapable" aspects of self-evaluation. In addition, they provide a marker for mobility processes (upward or downward) relative to one's own parents or siblings. The hypothesis was that such comparisons exert an influence on well-being, net of actual educational attainment, with those achieving more than their significant others expected to report higher well-being. One limitation of the WLS is that although providing longitudinal assessment of educational and occupational attainment, psychological well-being did not become a part of the study until respondents were in midlife. Thus, it is not possible to track changes in well-being as a function of gains in education. However, because information was available regarding respondents' family background and early abilities, it is possible to examine the influence of educational attainment, net of these early starting resources. Parents' income could, for example, translate to material goods that enhance well-being, and selection processes could be operative whereby the more intelligent get more education. Our focus was to assess the effects of education on well-being after these influences were controlled.

All six dimensions of psychological well-being were included in the 1992/93 WLS data collection, each of which was operationalized with a 7-item scales. Social comparisons were assessed with a single-item question in which respondents rated how much better or worse they had done than their same-sex parent (or a randomly selected sibling) in getting an education. The sample for these analyses included 3,129 men and 3,609 women from the WLS on whom data were available regarding the social comparison items and well-being.

Over half of the women in WLS did not receive further education beyond their high school diploma. Another 22.3% obtained vocational training or some college, and 24.2% completed a college degree or more. For men, 34.8% completed no post-secondary education, 29.8% had vocational training or some college, and 35.4% completed a college degree or more. When education was juxtaposed with reported levels of well-being, we found that for all six measures, women with higher levels of education reported higher well-being. All combinations (but one) of mean-level differences comparing different levels of education were significant for men. For there, there were also differences in well-being as a function of educational attainment, but the effects were not as strong. For example, there were no educational differences in men's reported levels of positive relations with others. For the remaining aspects of well-being, significant differences were obtained, sometimes between all groups, and others just between the highest and lowest educational attainment groups.

Tables 9.2 (women) and 9.3 (men) summarize select findings from hierarchical regression analyses that tested the predictive influence of educational attainment and social comparisons on reported well-being. These analyses controlled for respondents' high school IQ, mothers' and fathers' educational, parental income, and fathers' occupational status. Education was coded as a three-level categorical variable, and high school education was the point of comparison. Thus, these analyses indicate whether there are significant differences in the prediction of well-being between those with high school degrees and the other two educational groups. Model 1 examines educational influences on well-being outcomes, net of control variables. Models 2a and 2b then show the effects of adding social comparisons, separately for same-sex parent and the randomly selected sibling.

The findings for women (Table 9.2) show that for three aspects of well-being (extraversion, purpose in life, and personal growth), the educational differences between high school graduates and the two higher educational groups remain significant after controlling for background factors. These effects drop out for environmental mastery (not shown) when background effects have been controlled. For self-acceptance and positive relations (not shown), education remains a significant predictor following controls, but only for the contrast between high school and college respondents. Subjective comparisons with mothers significantly predicted all aspects of well-being, net of actual educational attainment, and in the direction predicted. This is, women who perceived their educational attainment was
### Table 9.2 Education, Social Comparisons, and Well-Being

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All models control for High School EQ, Parental Education, Parental Income, and Father’s Occupational Status. Note: Educational attainment is a three-level categorical variable (high school, vocational training/some college, college degree or higher). High school is the category of contrast.

### Table 9.3 Education, Social Comparisons, and Well-Being

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<td>Parent Comp</td>
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<td>Sib Comp</td>
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<tr>
<td>Total R²</td>
<td>.04</td>
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All models control for High School EQ, Parental Education, Parental Income, and Father’s Occupational Status. Note: Educational attainment is a three-level categorical variable (high school, vocational training/some college, college degree or higher). High school is the category of contrast.
better than their mothers' had higher well-being. Moreover, such compar-
sions revealed mediation influences for all outcomes (except environmen-
tal mastery); i.e., effects of education in Model 1 were reduced (some to nonsignificance) when social comparisons were added to the model. Social comparisons with siblings were also significant predictors of well-being, but showed less mediating influences.

Similar but less pronounced effects were evident for men (Table 9.3). For self-acceptance and personal growth, educational differences between high school graduates and the two advanced educational groups remained significant after control variables were entered. For purpose in life, it was only the contrast between high school and those with college degrees that remained significant. Environmental mastery (not shown) revealed a sim-
lar pattern; no effects were evident for positive relations or autonomy. For all outcomes except personal growth, prior educational influences on well-
being were fully mediated by social comparisons with fathers—men who percieved that educational attainment was better than their fathers' had higher levels of well-being. Comparisons with siblings were also signifi-
cant predictors, but showed mediating influences only for self-acceptance. The range of variance accounted for across these models for men and women was small (1% to 10%).

In summary, these analyses from the Wisconsin Longitudinal Study elaborate the linkages between educational attainment and well-being for middle-age men and women, even after controlling for background and early ability influences. Moreover, the data clarify that social comparisons, par-
ticularly with parents, are an additional influence on reported well-being, in many instances providing evidence that it is through these social com-
parisons that educational attainment has its influence (i.e., mediational processes). While our analyses were restricted to comparisons with sig-
nificant others in one's family, such effects may also be evident in com-
parison with one's high school friends, or same-aged peers in adulthood.

In general, the findings were stronger for women than men, perhaps underscoring the historical changes occurring in these cohorts regarding educational opportunities for women. That is, the women of the WLS
case of adult age in an era in which opportunities for continued education were expanding. Some were able to partake of these new possibilities, but many were not. Thus, the women who were able to move beyond their family of origin in educational standing may have experienced particular psychological benefits, perhaps because of the contrasts in opportunity structures available to their mothers (or their same-sex peers). Our final analysis addresses the import of educational attainment on diverse dimen-
sions of well-being in a national sample and with an assessment of social comparisons not specific to significant others in one's family.

Education, Well-Being, and the Role of Perceived Inequalities

Wing and Ryff (1998) recently examined distributions of psychological well-being in a national survey of adults (aged 25–74, N = 3,032) con-
ducted by the MacArthur Foundation Research Network on Midlife Development. These data provided an opportunity to examine the linkages between social class (marked by educational attainment) and well-being in a more representative sample. As such, the work elaborates the social gradients in health documented by Marmot et al. (1997). That study, how-
ever, had not addressed intervening mechanisms in the class/health link-
age. Following on the social comparative theme, Wing and Ryff explored an interpretive process explicitly linked with social class; namely, the notion of "perceived inequalities".

The study of perceived inequalities follows from the observation that individuals live in social worlds that are thick with conspicuous symbols of class standing (e.g., occupation, car, clothing, home, leisure activities). In addition, individuals have recurrent first-hand experience of how edu-
cation and income are decisive factors determining culturally valued opportunities (e.g., for interesting work, for travel, for what one can pro-
vide to one's children). The perception that one has less of the socially desired goods than others is a more expansive comparison than those that may occur with family members. Fundamentally, "perceived inequalities" probe the extent to which individuals have an awareness of an unequal distri-
bution of life resources.

We asked about such perceptions in three life domains: how individu-
als compare their work opportunities with others (e.g., "Most people have more rewarding jobs than I do"); their ability to provide for their children (e.g., "I believe I have been able to do as much for my children as most other people"); and their living environments (e.g., "I live in as nice a home as most people"). Perceived inequalities in work, family, and home domains were tapped by three separate, 6-item scales.

Our prediction was that individuals of lower SES standing would have higher levels of perceived inequalities in all of the above domains. We also expected that perceived inequalities would constitute a key intervening process in the linkage of class and well-being. The findings showed that for five of the six dimensions of well-being (all scales except autonomy), those with higher levels of education reported significantly higher levels
of well-being. In addition, as predicted, those with less education reported greater perceived inequalities across the domains of work, family, and home. Women also reported greater perceived inequalities in each of these domains than men.

Table 9.4 shows results of the regression analyses for the two selected dimensions of well-being: self-acceptance and purpose in life. Numerous background factors (gender, age, race, marital status, number of children, employment status, parietal education, economic background, and chronic health conditions) were included as control variables. Education is entered in Model 1, and Model 2 contains the perceived inequality variables (with analyses reported separately for each life domain). Sample sizes vary across these domains, depending on whether respondents were employed, or had children. These analyses show that education is a strong, significant predictor of both dimensions of well-being, and that the perception of inequalities across each of the three domains is also a significant predictor of self-acceptance and purpose. While the addition of perceived inequalities did not fully mediate the prior educational influences, tests of change in the size of the SES regression coefficient from the Model 1 to Model 2 were significant (see Wing & Ryff, 1998, for details). Similar effects (not shown) were found for personal growth and environmental mastery (although only for the home domain in the latter). There was no evidence that these effects differed by gender. Parallel analyses using income as the macro-level SES variable were also conducted, and in general, these revealed that education was a stronger predictor of well-being than income.

In summary, these results from a nationally representative sample add further evidence that position in the socioeconomic hierarchy is linked with differential levels of reported well-being and underscore the role of psychosocial construal processes in bridging these macro and micro levels of analysis. The emphasis on perceived inequalities provides a more-specific operationalization of how individuals interpret their social worlds by probing the degree to which they see inequalities in their share of valued life resources relative to others. Importantly, perceived inequalities are both predicted by SES, and predictive of well-being, thereby sharpening the conceptual and empirical understanding of their role as a linking mechanism. Underscoring the importance of a multidimensional framework for the study of well-being, these findings clarify that not all aspects of positive functioning appear class-linked. Individuals' perceptions of their own autonomy (capacity to choose for themselves) is not, for example, linked to their educational attainment. Similarly, once control variables were added to the regression model, neither education nor income was a significant predictor of well-being.
CONCLUSIONS AND FUTURE DIRECTIONS

Our objective in this chapter is to use the study of psychological well-being as an illustrative case for how a realm of scientific inquiry that began largely as a micro-level enterprise has been expanded to incorporate macro-level questions. We have shown that variations in well-being stem from multiple influences, including age, gender, and proximal life experiences (parenthood, health events, relocation) as well as from one’s standing in the socioeconomic hierarchy, operationalized via educational standing. In addition, we have provided evidence that social comparison processes and perceived inequalities constitute intervening social psychological mechanisms that bridge the class and well-being realms.

The obtained findings were sometimes restricted to particular dimensions of well-being and reflected a primary focus on only one of three prominent components of socioeconomic standing. Neglected were thus the more complex lifestyle, world-view, linguistic meanings of social class. While the findings generally convey a message of the mental health advantages of higher educational standing, there was also evidence that having more education may sometimes hazardous, perhaps when related to a priori expectations for effective management of difficult life transitions.

The social comparison results also underscored the psychological advantages of seeing one’s self doing well relative to others. However, as the work on perceived inequalities made clear, individuals with life levels of education frequently do not have access to the life opportunities or resources that enable such positive comparisons. The study of well-being could fruitfully incorporate other intervening social psychological mechanisms (e.g., goal-setting and -seeking, coping strategies, problem-solving, optimism) that may also connect social structural influences with individual mental health outcomes.

Given the explicit aging focus of the present volume, an important future question is the extent of the cumulative impact of these structural influences and intervening mechanisms on later life health and well-being.

REFERENCES


Socioeconomic Structure and the Self


