



---

Health Lifestyle Theory and the Convergence of Agency and Structure

Author(s): William C. Cockerham

Source: *Journal of Health and Social Behavior*, Vol. 46, No. 1 (Mar., 2005), pp. 51-67

Published by: [American Sociological Association](#)

Stable URL: <http://www.jstor.org/stable/4147653>

Accessed: 27/01/2015 08:23

---

Your use of the JSTOR archive indicates your acceptance of the Terms & Conditions of Use, available at <http://www.jstor.org/page/info/about/policies/terms.jsp>

JSTOR is a not-for-profit service that helps scholars, researchers, and students discover, use, and build upon a wide range of content in a trusted digital archive. We use information technology and tools to increase productivity and facilitate new forms of scholarship. For more information about JSTOR, please contact support@jstor.org.



American Sociological Association is collaborating with JSTOR to digitize, preserve and extend access to *Journal of Health and Social Behavior*.

<http://www.jstor.org>

# Health Lifestyle Theory and the Convergence of Agency and Structure\*

WILLIAM C. COCKERHAM

*University of Alabama at Birmingham*

Journal of Health and Social Behavior 2005, Vol 46 (March): 51–67

*This article utilizes the agency-structure debate as a framework for constructing a health lifestyle theory. No such theory currently exists, yet the need for one is underscored by the fact that many daily lifestyle practices involve considerations of health outcomes. An individualist paradigm has influenced concepts of health lifestyles in several disciplines, but this approach neglects the structural dimensions of such lifestyles and has limited applicability to the empirical world. The direction of this article is to present a theory of health lifestyles that includes considerations of both agency and structure, with an emphasis upon restoring structure to its appropriate position. The article begins by defining agency and structure, followed by presentation of a health lifestyle model and the theoretical and empirical studies that support it.*

An important but undeveloped area of theoretical discourse in medical sociology pertains to the relative contributions of agency and structure in determining health lifestyles. Medical sociologists have paid little attention to the agency-structure problem, yet it is clearly central to theoretical discussions of health and lifestyles (Pescosolido, McLeod, and Alegría 2000; Williams 1995). No contemporary theoretical perspective denies that either agency or structure is unimportant; rather, the debate centers on the extent to which one or the other is dominant. Proponents of structure emphasize the power of structural conditions in contouring individual dispositions and behavior along socially prescribed lines, while advocates of

agency accentuate the capacity of individual actors to choose their behavior regardless of structural influences. When applied to health lifestyles, the question is whether the decisions people make with respect to diet, exercise, smoking, and the like are largely a matter of individual choice or are principally shaped by structural variables such as social class position and gender?

## THE NEED FOR A HEALTH LIFESTYLE THEORY

It is the purpose of this article to examine the agency-structure debate as a framework for constructing a health lifestyle theory. No such theory currently exists. The need for a health lifestyle theory is underscored by the fact that many daily lifestyle practices involve considerations of health outcomes. Perhaps this is truer today than in the past. Whereas people may have more or less taken their health for granted in previous historical eras, this is presently not the case. Health in late modernity has become viewed as an achievement—something people are supposed to work at to enhance their quality of life or risk chronic illness and premature death if they do not (Clarke et al. 2003). According to Giddens (1991) and Turner (1992), lifestyle

\* An earlier version of this article was presented at the 2003 American Sociological Association meeting in Atlanta, Georgia, and the 2004 joint meeting of the European Society of Health and Medical Sociology and the Italian Society of Health Sociology, Bologna, Italy. The author would especially like to thank Michael Hughes for his considerable insights concerning this article, along with Mark Tausig and three anonymous reviewers for their comments on an earlier version. Address correspondence to William C. Cockerham, Department of Sociology, University of Alabama at Birmingham, 237 Ullman Building, 1530 Third Avenue South, Birmingham, AL 35294-3350 (email: wcocker@uab.edu).

options have become integrated with bodily regimens in late modernity and people have become more responsible for both the health and design of their own bodies.

This situation originates from changes in (1) disease patterns, (2) modernity, and (3) social identities. The first change is the twentieth century epidemiological transition from acute to chronic diseases as the major source of human mortality in most areas of the world. Medicine cannot cure these chronic diseases and negative health lifestyles promote them. The realization that this is a certainty carries with it the revelation that the responsibility for one's health ultimately falls on oneself through healthy living (Crawford 1984). Greater personal responsibility means that achieving a healthy lifestyle has become more of a life or (time of) death option.

The second change is the current era of late modern social alterations creating a "new" modernity (Bauman 1992, 2000; Beck 1992; Giddens 1991). While notions of an absolute break with the past modernity originating with the industrial age are unconvincing, it is nevertheless clear that society is in a transition to a new social form (Pescosolido and Rubin 2000). This is seen in the new world order evolving out of the collapse of Soviet-style socialism, the expanding multiculturalization of Europe and North America, the rise of cultural and sexual politics, the multiplicity of family forms, changing patterns of social stratification, and the increasing use of knowledge as a commodity. In health matters, we see the decline in the status and professional authority of physicians through lessened control over the medical marketplace. We also see greater movement toward the mutual participation model of the physician-patient relationship that has accelerated with the advent of Internet medicine and the diffusion of medical knowledge in the public domain (Hardey 1999; Warren, Weitz, and Kulis 1998). In the still-emerging late modern society, where traditional industrial age centers of power and authority, such as medicine, are weakening, adopting a healthy lifestyle accords people more control over their life situation.

The third change is that there has also been movement in late modernity toward an adjustment in the primary locus of social identity. Previously, work or occupation largely determined social class position and a person's way of life. Beginning in the second half of the twentieth century, lifestyle consumer habits have been increasingly experienced by individuals in

advanced societies as a primary source of their social identification (Bauman 1992; Crompton 1998; Giddens 1991). This situation was made possible by the rise in economic productivity promoting a general improvement in living standards and purchasing power after World War II. The easier acquisition of basic material needs allowed styles of consumption to supersede occupation for signifying social similarities and distinctions for many people (Crompton 1998). Scott (1996), for example, finds that the lifestyles of British manual workers have been altered, with major implications for class identification. He observes that social distinctions in the working class are determined more by consumption patterns than relationships to the means of production.

Therefore, as Crompton (1998) points out, the claim that lifestyles have become more significant in class formation and social identification needs to be taken seriously. This observation is consistent with Giddens's (1991) assertion that lifestyles not only fulfill utilitarian needs, but also give material form to a particular narrative of self-identity. An important lifestyle configuration and the accompanying social marker are those practices affecting health and the distinctions they also contribute to differences in social identities (Annandale 1998). A theory of health lifestyles is needed to advance our understanding of this social phenomenon.

#### THE INDIVIDUALIST PARADIGM: A CRITIQUE

Much of what we know about lifestyles has its theoretical origins in the early twentieth century work of Max Weber ([1922] 1978). However, Frohlich, Corin, and Potvin (2001:782) observe that "the term lifestyle, widely adopted by researchers in health promotion, social epidemiology, and other branches of public health, has taken on a very particular and different meaning from that intended by Weber." Although Weber's methodologies often reflected an individualist and agency-oriented "bottom-up" approach to the study of social structure, he did not view patterns of social action as the uncoordinated practices of disconnected individuals (Kalberg 1994; Sibeon 2004). Instead, he saw social action in terms of regularities and uniformities repeated by numerous actors over time. His focus was on the way in which people act in concert, not individually. The bridge from

agency to structure for Weber was the “ideal type,” consisting of structural entities (e.g., bureaucracy) or processes (e.g., formal rationality), whose construction allowed him to make general statements about collective forms of social behavior (Kalberg 1994). For example, in *The Protestant Ethic and the Spirit of Capitalism*, Weber (1958) emphasized macrostructure in an essentially “top-down” fashion showing how social institutions (Calvinist religion) and widespread belief systems (capitalism) were powerful forces in shaping the thoughts and behavior of individuals (Sibeon 2004).

Yet, as Frohlich et al. (2001:783) point out: “When lifestyle is currently discussed within the socio-medical discourse, there is a decided tendency for it to be used in reference to individual behavioural patterns that affect disease status,” thereby neglecting its collective (structural) characteristics. This approach is an example of Archer’s (1995:4) notion of “upwards conflation,” a term she applies to behavioral models in which individuals monopolize causal power that operates in a one-way, upward direction and seems incapable of acting back to influence individuals. This is seen in the standard approach to research in public health and epidemiology that treats health behavior and lifestyles as matters of individual choice and targets the individual to change his or her harmful health practices largely through education (Lomas 1998; Sweat and Denison 1995). The theoretical models employed in such research, like the Health Belief Model, the AIDS Risk Reduction Model, the Common Sense Model of Illness Danger, and the Stages of Change Model, are based on individual psychology.

In their book *Education, Social Status, and Health*, Mirowsky and Ross (2003) indicate that neither individual choice nor structural limitations can be ignored in studies of health behavior and lifestyles. They use the term “structural amplification” to refer to situations where well-educated individuals accumulate advantages and poorly educated persons amass disadvantages that are bundled over time into “cascading sequences” impacting either positively or negatively on health. However, Mirowsky and Ross concentrate more on agency than structure in this book. Their goal is to show that education increases effective agency that, in turn, increases the control that an individual has over his or her life, thereby encouraging and enabling a healthy lifestyle. Mirowsky and Ross (2003:28) state

that no health scientist “has yet invented the drug or written the law that will make individuals do what those individuals must choose to do themselves.”

Consequently, health lifestyles are largely depicted as sets of individually constructed behaviors, with education serving as the critical feature of agency. The elements of a healthy lifestyle are described as having nothing in common with each other except that they improve health. “In seeking health,” state Mirowsky and Ross (2003:199), “individuals weave these disparate habits and practices into a coherent lifestyle designed to preserve and promote health.” While individuals tend to do what others like them do, it is individuals who take “otherwise incoherent or diametric practices allocated by subcultural forces” and coalesce them into a healthy lifestyle (Mirowsky and Ross 2003:53).

While Mirowsky and Ross make an important contribution by highlighting the powerful role of education in the selection of health lifestyles, income and occupational status join education as the major components of social class or socioeconomic status (SES). As Adler et al. (1994) point out, the three variables are interrelated but not identical nor fully overlapping. “The fact that associations between SES and health are found with each of the indicators,” state Adler et al. (1994:15), “suggests that a broader underlying dimension of social stratification or social ordering is the potent factor.” Thus, education can also be viewed in combination with the other components of class to constitute a structural variable that produces top-down distinctions in the quality and form of health lifestyles among individuals, as well as providing a social context for the practice of such lifestyles. Other structural variables such as age and gender also produce distinct patterns in health lifestyles (Cockerham 2000a).

Sociological concepts reflecting literally all theories of social life attest to the fact that *something* (namely structure) exists beyond the individual to give rise to customary patterns of behavior. These concepts range from Durkheim’s ([1895] 1950:13) notion of social facts as “every way of acting, fixed or not, capable of exercising on the individual an external constraint” to Mead’s (1934:155) view of the “generalized other” as the organized attitudes of the whole community and the social process through which “the community exercises control over the conduct of its individual members.”

Structural influences on health lifestyle practices are seen, for example, in the studies of Demers and her colleagues (Demers, Bisson, and Palluy 1999; Demers et al. 2002) on alcohol consumption by married women and university students in Canada. This research shows that class position, the social relationships of the people drinking, and the social context of the drinking situation have substantial effects on alcohol intake and drinking behavior. "It is apparent from our findings," state Demers et al. (2002:422), "that the individual cannot be conceptualized as an autonomous actor making self-governing decisions in a social vacuum."

Another example of structural influences on health lifestyles is the antismoking campaign in the United States. For over 20 years, massive efforts were made to reduce cigarette smoking through educational programs on the hazards of smoking. "These individual approaches to the cessation of smoking encouraged many to stop," conclude Sweat and Denison (1995:S252), "however, not until smoking was banned in many public places did the prevalence of smoking significantly decline." This ban had the effect of labeling smokers as social outcasts and deviants. Antismoking laws, social isolation, and stigma significantly increased smoking cessation "far beyond the results of purely individualistic approaches" (Sweat and Denison 1995:S252).

Whereas these studies show structural influences have a significant effect on health lifestyle practices, there are situations in which structure can be so overwhelming that agency is rendered ineffective. Gareth Williams (2003) reports on the high mortality of a group of Welsh coal miners in the 1930s. These were men "unsung in any chronicle of existence" (cited in Williams 2003:145). Their lives were severely curtailed by their punishing work and diet of beggars. However, the unremitting toll of childbirth and domestic labor impaired the health and shortened the lives of the women as much or more as that of the men. The weight of structural conditions was so heavy that individual capabilities and capacities were ineffective. This situation, comments Williams (2003:146), "provides a salutary reminder of the way in which the balance between agency, context, and structure is itself highly determined by structural forces."

In more recent research investigating contemporary social conditions in a working-class neighborhood in a city in northwest England, Williams observes that the influence of struc-

ture on agency in relation to health lifestyles is still heavy-handed. He finds that assuming people have the freedom to make healthy choices is out of line with what many people experience as real possibilities in their everyday lives. "The respondents," concludes Williams (2003:147), "understood the behavioural risk factors that made ill-health more likely and for which they were in a limited sense, responsible, but they were also aware that the risks they faced were part of social conditions that they could do little to change."

Consequently, the direction of this article will be to bring considerations of both agency and structure into a theory of health lifestyles, with a view to restoring structure to its appropriate position. While agency is important, it will be argued that structural conditions can act back on individuals and configure their lifestyle patterns in particular ways. Agency allows them to reject or modify these patterns, but structure limits the options that are available. This article begins with definitions of agency and structure, followed by presentation of a health lifestyle paradigm and the research literature that supports it.

## AGENCY AND STRUCTURE

The agency-structure issue has been *the* central sociological question since the beginning of the discipline. As Archer (1995:1) explains: "The vexatious task of understanding the linkage between 'structure and agency' will always retain this centrality because it derives from what society intrinsically is." It is crucial to any scenario of *agency* that the actor could have acted otherwise in particular situations, and that social action takes place within a continuous stream of time subject to the continuing possibility of reflexive awareness on the part of the actor (Bhaskar 1998). Emirbayer and Mische (1998) suggest, accordingly, that human agency consists of three different elements: *iteration* (the selective reactivation of past patterns of thought and action), *projectivity* (the imaginative generation of possible future trajectories of action in which structures of thought and action may be creatively reconfigured), and *practical evaluation* (the capacity to make practical and normative judgments among alternative possibilities).

Emirbayer and Mische (1998:970) therefore define agency as "the temporally constructed



engagement of actors of different structural environments—the temporal-relational contexts of action—which, through the interplay of habit, imagination, and judgment, both reproduces and transforms those structures in interactive response to the problems posed by changing historical situations.” Agency can thus be considered a process in which individuals, influenced by their past but also oriented toward the future (as a capacity to imagine alternative possibilities) and the present (as a capacity to consider both past habits and future situations within the contingencies of the moment), critically evaluate and choose their course of action (Emirbayer and Mische 1998:963).

Sewell (1992:19) provides a definition of *structures* as “sets of mutually sustaining schemas and resources that empower or constrain social action and tend to be reproduced by that social action.” Schemas are transposable rules or procedures applied to the enactment of social life. Resources are of two types, either human (e.g., physical strength, dexterity, knowledge) or nonhuman (naturally occurring or manufactured) that can be used to enhance or maintain power. Sewell equates resources with the power to influence action consistent with Giddens’s (1984) notion of the duality of structure as both constraining and enabling. This duality, while correct, nonetheless contains a contradiction. The enabling function suggests resources increase the range and style of options from which the actor can choose, but constraint means that resources invariably limit choices to what is possible. As Bauman (1999) observes, individual choices in *all* circumstances are confined by two sets of constraints: (1) choosing from among what is available and (2) social rules or codes telling the individual the rank order and appropriateness of preferences.

Although agency theorists maintain that agency will never be completely determined by structure, it is also clear that “there is no hypothetical moment in which agency actually gets ‘free’ of structure; it is not, in other words, some pure Kantian transcendental free will” (Emirbayer and Mische 1998:1004). While agency refers to the capacity to choose behavior, structure pertains to regularities in social interaction (e.g., institutions, roles), systematic social relationships (e.g., group affiliations, class and other forms of social stratification), and resources that script behavior to go in particular directions as opposed to others that might be taken.

## A HEALTH LIFESTYLES PARADIGM

Health lifestyles are defined here as collective patterns of health-related behavior based on choices from options available to people according to their life chances (Cockerham 2000a). This definition incorporates the dialectical relationship between life choices and life chances proposed by Weber in his lifestyle concept ([1922:531–39] 1978:926–39). In a Weberian context, life choices are a proxy for agency and life chances are a form of structure. Whereas health and other lifestyle choices are voluntary, life chances—which primarily represent class position—either empower or constrain choices as choices and chances work off each other to determine behavioral outcomes.

Weber associated lifestyles not with individuals but with status groups, thereby showing they are principally a collective social phenomenon. Status groups are aggregates of people with similar status and class backgrounds, and they originate through a sharing of similar lifestyles. People who wish to be part of a particular status group are required to adopt the appropriate lifestyle. Status groups are stratified according to their patterns of consumption. These patterns not only establish differences between groups, but they also *express* differences that are already in place (Bourdieu 1984). Health lifestyles are a form of consumption in that the health that is produced is used for something, such as a longer life, work, or enhanced enjoyment of one’s physical being (Cockerham 2000a; d’Houtaud and Field 1984). Moreover, health lifestyles are supported by an extensive health products industry of goods and services (e.g., running shoes, sports clothing, diet plans, health foods, club and spa memberships) promoting consumption as an inherent component of participation.

Additionally, as Gochman (1997) points out, positive health lifestyle behaviors are the opposite of risk behaviors. Good nutrition, for example, is the reverse of bad nutrition. The binary nature of health lifestyle practices means that the outcome generated from the interplay of choices and chances have either positive or negative effects on health. Gochman also observes that health lifestyles are intended to avoid risk in general and are oriented toward overall health and fitness. However, while the term health lifestyle is meant to encompass a general way of healthy living, there has been debate over whether or not there is an overall

“health lifestyle.” The best evidence suggests that for many people their health lifestyle can be characterized as either generally positive or negative. Vickers, Conway, and Hervig (1990) found, for example, in a study of U.S. Navy personnel that positive health behaviors clustered along two dimensions, one promoting wellness and the other avoiding risk. More recent research from Finland provides strong evidence that associations between health practices are related, with people who behave unhealthily in one respect doing so in others and vice versa (Laaksonen, Prättälä, and Lahelma 2002). Smoking had the strongest and most consistent associations with other unhealthy lifestyle practices, and multiple unhealthy practices were most common among lower socioeconomic groups. A significant body of research attaches the most positive health lifestyle practices to higher social strata and women and the most negative to lower strata and men (Abel et al. 1999; Blaxter 1990; Cockerham 1997, 1999, 2000a; Grzywacz and Marks 2001; Link and Phelan 2000).

It therefore appears that health lifestyles are not the uncoordinated behaviors of disconnected individuals, but are personal routines that merge into an aggregate form representative of specific groups and classes. While definitions and a general concept of health lifestyles exist in the literature, an overall theoretical paradigm—as noted—is missing. In order to fill this gap and further the development of health lifestyle theory, a preliminary paradigm is presented in Figure 1. The arrows between boxes indicate hypothesized causal relationships.

Beginning with box 1, in the top right-hand box in Figure 1, four categories of structural variables are listed that have the capacity to shape health lifestyles: (1) class circumstances, (2) age, gender, and race/ethnicity, (3) collectivities, and (4) living conditions. Each of these categories is suggested by a review of the research literature.

### *Class Circumstances*

The first category of structural variables is class circumstances, which is likely the most powerful influence on lifestyle forms. The close connection between class and lifestyles has been observed since the nineteenth century when Marx (1960) mentioned lifestyle differences in writing about politics in the 1850s, and Veblen

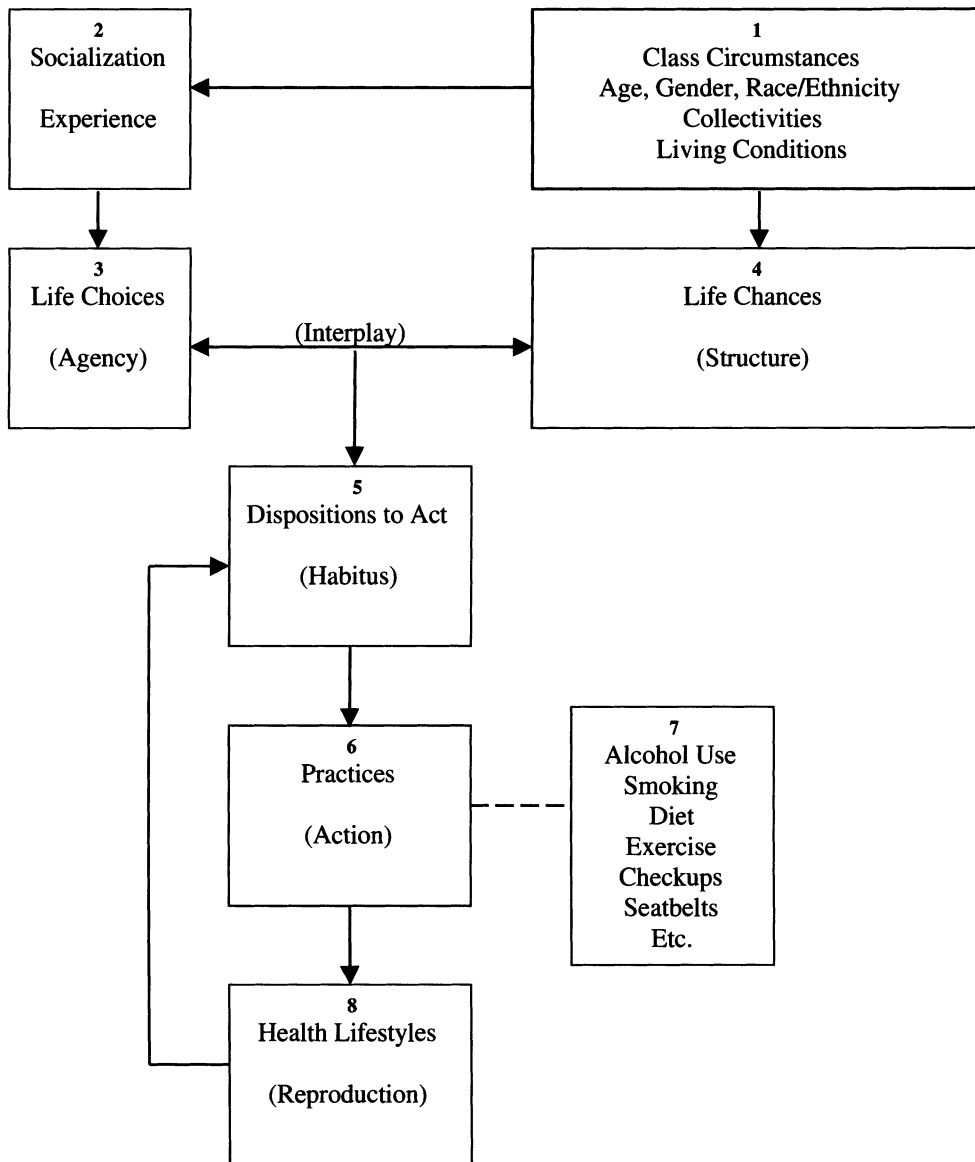
([1899] 1994) used the concept of lifestyles as a basis for his theory of the leisure class. It remained for Weber ([1922] 1978), however, to produce the most insightful account of the link between lifestyles and socioeconomic status. Weber (1946) not only found that lifestyles expressed distinct differences between status groups and their adoption was a necessary feature of upward social mobility, but he also observed that powerful strata were “social carriers” of particular ways of living. These carrier strata were important causal forces in their own right as they transmitted class-specific norms, values, religious ethics, and ways of life across generations (Kalberg 1994).

The seminal study detailing class as the most decisive variable in the determination of health lifestyles is Bourdieu’s (1984) *Distinction* that included a survey of differences in sports preferences and eating habits between French professionals (upper-middle class) and the working class. Bourdieu found the working class to be more attentive to the strength of the male body than to its shape, and to favor food that is both cheap and nutritious; in contrast, the professional class prefers food that is tasty, healthy, light, and low in calories. As for leisure sports such as sailing, skiing, golf, tennis, and horseback riding, Bourdieu noted that the working class not only faces economic barriers to participation, but also barriers in the form of hidden entry requirements of family tradition, obligatory dress and behavior, and early socialization.

Thus, Bourdieu formulated the notion of the “distance from necessity” that emerges as a key explanation of class differences in lifestyles. He points out that the more distant a person is from foraging for economic necessity, the greater the freedom and time that person has to develop and refine personal tastes in line with a more privileged class status. Lower social strata, in turn, tend to adopt the tastes consistent with their class position, in which acquiring items of necessity is paramount.

In Great Britain, Blaxter (1990) found that important differences in health lifestyles persisted between classes, with the upper and upper-middle classes taking better care of their health than the working and lower classes. Blaxter concluded that socioeconomic circumstances and environment determined the extent to which health lifestyles were practiced effectively. Consequently, living a healthy lifestyle was not simply a matter of indi-

FIGURE 1. Health Lifestyles Paradigm



vidual choice, but to a large extent depended upon a person’s social and material environment for its success. Other research in Britain also found major distinctions in the health lifestyles of the various classes, with less positive lifestyles practiced the lower the rung a person occupies on the social ladder (Adonis and Pollard 1997; Jarvis and Wardle 1999; Reid 1998). A decline in smoking, for example, has been far greater among the affluent, but very little change has been observed among the British poor (Jarvis and Wardle 1999).

Elsewhere, in Russia and Eastern Europe, middle-age male members of the working class have been identified as the major *social carriers* of a particularly unhealthy overall lifestyle featuring heavy alcohol consumption and binge drinking, smoking, high fat diets, and an absence of exercise (Cockerham 1997, 1999, 2000b; Janečková 2001; Ostrowska 2001). This lifestyle pattern, associated with traditional male socializing and limited life opportunities, is normative for many men. The result is high levels of premature male mortality due to increased heart



disease, alcohol-related accidents, and alcohol poisonings. In the United States, the poor have been found to be especially disadvantaged with respect to positive health lifestyles, with greater cigarette consumption, more unhealthy eating and drinking practices, and less participation in exercise across adulthood (Grzywacz and Marks 2001; Snead and Cockerham 2002; Wickrama et al. 1999).

Overall, the lifestyles of the upper and upper-middle classes are the healthiest. Virtually every study confirms this. These classes have the highest participation in leisure-time sports and exercise, healthier diets, moderate drinking, little smoking, more physical checkups by physicians, and greater opportunities for rest, relaxation, and coping with stress (Blaxter 1990; Grzywacz and Marks 2001; Jarvis and Wardle 1999; Robert and House 2000; Snead and Cockerham 2002).

The upper and upper-middle classes are also the first to have knowledge of new health risks and, because of greater resources, are most able to adopt new health strategies and practices (Link and Phelan 2000). The advantaged classes are able to move in a more fluid fashion to embrace new health behaviors, such as adopting low cholesterol and low carbohydrate diets. Advantaged classes were able to reduce their risk of heart disease (which at one time was high relative to lower classes) so that lower class individuals are now at greater risk. While education is obviously a critical factor, it is, as noted, only one dimension of the broader context of class membership that enables members of higher social strata to be healthy.

#### *Age, Gender, and Race/Ethnicity*

Weber did not consider other stratification variables such as age, gender, and race/ethnicity, yet contemporary empirical studies show that these variables influence health lifestyles. Age affects health lifestyles because people tend to take better care of their health as they grow older by being more careful about the food they eat, resting and relaxing more, and either reducing or abstaining from alcohol use and smoking (Backett and Davison 1995). Exercise, however, is one major health lifestyle activity that declines and is often lost with advancing age (Grzywacz and Marks 2001). Yet class can also intersect with age to produce further differences. Youth from lower social strata, for instance, smoke

significantly more than their higher strata counterparts (Jarvis and Wardle 1999). Low income elderly, in turn, have been found to make negative changes in their food habits or to disregard their diet in response to a negatively anticipated future, while older people with sufficient incomes tend to make positive changes with their diet as they age (Shifflet 1987; Shifflett and McIntosh 1986–87). Structural variables (class and age) were the decisive factors in each outcome.

Gender is a highly significant variable in that women eat more healthy foods, drink much less alcohol, smoke less, visit doctors more often for preventive care, wear seatbelts more frequently when they drive, and, with the exception of exercise, have more healthier lifestyles overall than men (Abel et al. 1999; Blaxter 1990; Cockerham 2000a, 2000b; Denton and Walters 1999; Grzywacz and Marks 2001; Roos et al. 1998; Ross and Bird 1994). Furthermore, in adolescence males tend to adopt the health lifestyles of their fathers and females those of their mothers, thereby establishing the parameters for the gender-specific transmission of health lifestyles into adulthood (Wickrama et al. 1999).

Whereas gender is an especially powerful predictor of health lifestyles, its effects can also be moderated by distinctions between classes. There is evidence that people on the higher rungs of the socioeconomic ladder, regardless of gender, participate more in leisure-time exercise, eat healthier foods, and smoke less (Adonis and Pollard 1997; Blaxter 1990; Reid 1998). This is seen in research in the United States, where Ford et al. (1991) found that lower-class women were exceedingly less likely to engage in physical activity (other than housework) than higher strata women or males generally. In Britain, Calnan (1987) found that middle-class women placed a greater emphasis on the need for a balanced diet high in fiber and low in fats and carbohydrates; working-class women were significantly more likely to insist on substantial meals containing meat and two vegetables.

Race and ethnicity are presumed to be important, but there is a paucity of research directly comparing the health lifestyles of different racial and ethnic groups. Black-white comparisons in the United States show that whites often drink, smoke, exercise, and practice weight control more than blacks (George and Johnson 2001; Grzywacz and Marks 2001; Johnson and Hoffmann 2000; Lindquist, Cockerham, and Hwang

1999), but the extent of the differences has not been fully documented. There is evidence that exercise declines more steeply for blacks than whites across the course of adulthood, yet this tendency may be explained by blacks having more functional health problems and living in less safe neighborhoods (Grzywacz and Marks 2001). Most health studies on race address differences in levels of morbidity and mortality rather than specific health practices. These studies often suggest that racial disparities in health are largely but not exclusively determined by class position, with disadvantaged socioeconomic circumstances and the adverse life experiences associated with them promoting poor health (Robert and House 2000; Smaje 2000).

Research is also needed that investigates the relationship between health lifestyles and different ethnic groups, including how to best conceptualize and measure ethnicity (Aspinall 2001). Existing studies of ethnicity, like those of race, have focused more on overall health profiles than health lifestyles. Nevertheless, some of these studies are instructive, as seen in research by Karlsen and Nazroo (2002) on the respective influences of agency and structure on the health of ethnic minorities in Great Britain. Ethnic identity was considered a consequence of agency, even though it is subject to external constraints, because a person's identity is also self-constructed and internally defined. Racial discrimination and harassment, along with class position, were used to measure the effects of structure. "However, our findings suggest," state Karlsen and Nazroo (2002:18), "that ethnicity as identity does not appear to influence health; rather ethnicity as structure—both in terms of racialisation [discrimination/harassment] and class experience—is strongly associated with health for ethnic minority people living in Britain." When it comes to health lifestyles, the effects of race and ethnicity may indeed reside more powerfully in structure than agency.

### *Collectivities*

Collectivities are collections of actors linked together through particular social relationships, such as kinship, work, religion, and politics. Their shared norms, values, ideals, and social perspectives constitute intersubjective "thought communities" beyond individual

subjectivity that reflect a particular collective world view (Zerubavel 1997). The notion of thought communities is akin to Mead's (1934) concept of the generalized other in that both are abstractions of the perspectives of social collectivities that enter into the thinking of the individual. Religion and ideology are examples of collective perspectives that have implications for health lifestyle choices. This is seen in the usual preference of highly religious persons and groups to have positive health lifestyles since their beliefs affect their choices of food and discourage drinking and smoking, while promoting exercise and personal hygiene (Brown et al. 2001). However, the full extent of the relationship between religiosity and health lifestyles is not known because of a lack of relevant studies. This is an important area that needs further research.

Little is known also about ideology and health lifestyles. Research on the effects of the socialist heritage in contemporary Russia show that prosocialists (those who are in favor of a return to socialism as it was before Gorbachev) have less healthy lifestyles than antisocialists, although neither group demonstrated exceptionally positive health practices (Cockerham, Snead, and DeWaal 2002). Prosocialists had a particularly passive approach to health lifestyles that seemed leftover from Soviet times. The choices of individuals in Soviet society were confined to a single social and political ideology (communism) and expected to conform to it. If a person got sick, the state was responsible for taking care of that person as a benefit of state socialism. Individual incentives in health matters were not encouraged. Thus it could be argued that communism was bad for one's health. However, the extent to which ideology generally affects health lifestyles beyond this example has not been determined.

### *Living Conditions*

Living conditions are a category of structural variables pertaining to differences in the quality of housing and access to basic utilities (e.g., electricity, gas, heating, sewers, indoor plumbing, safe piped water, hot water), neighborhood facilities (e.g., grocery stores, parks, recreation), and personal safety. To date, there has been little research linking living conditions to health lifestyles but the connection is important. Blaxter (1990) found in her nation-

wide British survey that the conditions within which a person lives has important implications for health-related behavior. Health lifestyles were most effective in positive circumstances and least effective under negative conditions. In the United States, living in disadvantaged neighborhoods has been associated with a less positive health status (Browning and Cagney 2002). Other research, as previously noted, shows that living in less safe neighborhoods significantly contributes to the low participation of adult blacks in vigorous outdoor exercise (Grzywacz and Marks 2001). Consequently, living conditions can constrain (or enhance) health lifestyles.

### *Socialization and Experience*

Class circumstances and the other variables shown in box 1 provide the social context for socialization and experience as depicted by the arrow leading to box 2. This is consistent with Bourdieu's (1977) view that dispositions to act are constructed through socialization and experience, with class position providing the social conditions for this process. The present paradigm, however, adds the additional structural categories depicted in box 1, since they may also influence the social environment within which socialization and experience occur.

Whereas primary socialization represents the imposition of society's norms and values on the individual by significant others and secondary socialization results from later training, experience is the learned outcome of day-to-day activities that comes about through social interaction and the practical exercise of agency. It is through both socialization and experience that the actor acquires reflexive awareness and the capacity to perform agency, but experience—with respect to life choices—provides the essential basis for agency's practical and evaluative dimensions to evolve over time. This is especially the case as people confront new social situations and conditions.

### *Life Choices (Agency)*

Figure 1 shows that socialization and experience (box 2) provides the capacity for life choices (agency) depicted in box 3. As previously noted, the term "life choices" was introduced by Weber and refers to the self-direction of one's behavior. It is an English language trans-

lation of *Lebensführung*, which in German literally means conducting or managing one's life. Life choices are a process of agency by which individuals critically evaluate and choose their course of action. Weber's notion of life choices differs from rational choice theory in that it accounts for both means-ends rationality as well as the interpretive process whereby the potential outcomes of choices are imagined, evaluated, and reconstructed when necessary (Emirbayer and Mische 1998). Weber (1949) maintained that individuals have the capacity to interpret their situation, make deliberate choices, and attach subjective meaning to their actions. All social action in his view takes place in contexts that imply both constraints and opportunities, with the actor's interpretive understanding (*Verstehen*) of the situation guiding behavioral choices (Kalberg 1994).

### *Life Chances (Structure)*

Class circumstances and to a lesser degree the other variables in box 1 constitute life chances (structure) shown in box 4. Weber was ambiguous about what he meant by life chances, but the term is usually associated with the advantages and disadvantages of relative class situations. Dahrendorf (1979:73) finds that the best meaning of life chances in Weber's work is the "crystallized probability of finding satisfaction for interests, wants and needs, thus the probability of the occurrence of events which bring about such satisfaction." Consequently, the higher a person's position in a class hierarchy, the better the person's life chances (probabilities for satisfaction) and vice versa. Dahrendorf (1979:65) adds the following clarification: "For Weber, the probability of sequences of action postulated in the concept of chance is not merely an observed and thus calculable probability, but is a probability which is invariably anchored in structural conditions." Weber's thesis is that chance is socially determined and social structure is an arrangement of chances. Therefore, life chances represent the influence of structure in Weber's oeuvre and this paradigm.

### *Choice and Chance Interplay*

The arrows in Figure 1 indicate the dialectical interplay between life choices (box 3) and life chances (box 4). This interaction is

Weber's most important contribution to conceptualizing lifestyle construction (Cockerham, Abel, and Lüschen 1993; Cockerham, Rütten, and Abel 1997). Choices and chances operate in tandem to determine a distinctive lifestyle for individuals, groups, and classes. Life chances (structure) either constrain or enable choices (agency); agency is not passive in this process, however. As Archer (2003) puts it, whether constraints and enablements are exercised as causal powers is based on agency choosing the practices to be influenced. "Constraints," says Archer (2003:4), "require something to constrain, and enablements something to enable." Consequently, people have to consider a course of action if their actions are to be either constrained or enabled. People therefore align their goals, needs, and desires with their probabilities for realizing them and choose a lifestyle according to their assessments of the reality of their resources and class circumstances. Unrealistic choices are not likely to succeed or be selected, while realistic choices are based upon what is structurally possible.

In this context, choices and chances not only are connected dialectically, but are analytically distinct. Archer (1998:369) articulates this point: "Because the emergent properties of structures and the actual experiences of agents are not synchronized (due to the very nature of society as an open system), then there will always be the inescapable need for a two-part account." Weber provides such a framework. He conceptualizes choice and chance as separate components in the activation and conduct of a lifestyle, and he merges the different functions of agency and structure without either losing their distinctiveness.

### *Dispositions to Act (Habitus)*

Figure 1 shows that the interaction of life choices and life chances produce individual dispositions toward action (box 5). These dispositions constitute a habitus. The notion of habitus originates with Edmund Husserl ([1952] 1989:266–93) who used the term to describe habitual action that is intuitively followed and anticipated. The concept has been expanded by Bourdieu (1977:72–95) to serve as his core explanation for the agency-structure relationship in lifestyle dispositions (Bourdieu 1984:169–225). Bourdieu (1990:53) defines habitus as "systems of durable, transposable

dispositions, structured structures predisposed to operate as structuring structures, that is, as principles which generate and organize practices and representations that can be objectively adapted to their outcomes without presupposing a conscious aiming at ends or an express mastery of the operations necessary in order to attain them." Put another way, the habitus serves as a cognitive map or set of perceptions that routinely guides and evaluates a person's choices and options. It provides enduring dispositions toward acting deemed appropriate by a person in particular social situations and settings. Included are dispositions that can be carried out even without giving them a great deal of thought in advance. They are simply habitual ways of acting when performing routine tasks.

The influence of exterior social structures and conditions are incorporated into the habitus, as well as the individual's own inclinations, preferences, and interpretations. The dispositions that result not only reflect established normative patterns of social behavior, but they also encompass action that is habitual and even intuitive. Through selective perception the habitus molds aspirations and expectations into "categories of the probable" that impose perceptual boundaries on dispositions and the potential for action. "As an acquired system of generative schemes," observes Bourdieu (1990:55), "the *habitus* makes possible the free production of all the thoughts, perceptions, actions, inherent in the particular conditions of its production—and only those."

When Bourdieu speaks of the internalization of class conditions and their transformation into personal dispositions toward action, he is describing conditions similar to Weber's concept of life chances that determine materially, socially, and culturally what is probable, possible, or impossible for a member of a particular social group or class (Swartz 1997:104). Individuals who internalize similar life chances share the same general habitus because, as Bourdieu (1977:85) explains, they are more likely to have similar shared experiences: "Though it is impossible for *all* members of the same class (or even two of them) to have the same experiences, in the same order, it is certain that each member of the same class is more likely than any member of another class to have been confronted with the situations most frequent for members of that class." As a result, there is a high degree of affinity in health lifestyle choices among members of the same class. Bourdieu holds that,



while they may depart from class standards, personal styles are never more than a deviation from a style of a class that relates back to the common style by its difference.

Even though Bourdieu allows agency some autonomy (e.g., agents are determined only to the extent that they determine themselves), his emphasis on structure with respect to routine operations of the habitus clearly delineates a lesser role for agency than the individualist health lifestyles paradigm. Some have argued that Bourdieu strips agency of much of its critical reflexive character (Bohman 1999). Turner and Wainwright (2003:273) disagree and find that Bourdieu gives “full recognition” to “agency through his notions of strategy and practices,” while illustrating the powerful role of institutions and resources “in shaping, constraining, and producing human agency.” Simon Williams (1995) also defends Bourdieu by pointing out that choice is not precluded by the habitus, and he is able to account for the relative durability of different forms of health lifestyles among the social classes.

It can also be argued that the *process* of experience rescues Bourdieu’s concept of habitus from the charge of social determinism. Through experience, agency acquires new information and rationales for prompting creativity and change through the habitus. As Bourdieu (Bourdieu and Wacquant 1992:133) explains, even though experiences confirm habitus, since there is a high probability that most people encounter circumstances that are consistent with those that originally fashioned it, the habitus nevertheless “is an *open system of dispositions* that is constantly subjected to experiences, and therefore constantly affected by them in a way that reinforces or modifies its structures.” Thus the habitus can be creative and initiate changes in dispositions.

Bourdieu (1996) calls for the abandonment of theories that explicitly or implicitly treat people as mere bearers (*Träger*s) of structure. Yet he also maintains that the rejection of mechanistic theories of behavior does not imply that we should bestow on some creative free will the exclusive power to generally constitute the meanings of situations and determine the intentions of others. The dispositions generated by the habitus tend to be compatible with the behavioral parameters set by the wider society; therefore, usual and practical modes of behaving—not unpredictable novelty—typically prevail.

### *Completing the Paradigm*

Figure 1 shows that dispositions (box 5) produce practices (action) that are represented in box 6. The practices that result from the habitus can be based on deliberate calculations, habits, or intuition. Bourdieu (1984) helps us recognize that practices linked to health lifestyles can be so integrated into routine behavioral repertoires that they can be acted out more or less unthinkingly once established in the habitus. Bourdieu observes that people tend to adopt generalized strategies (a sense of the game) oriented toward practical ends in routine situations that they can habitually follow without stopping to analyze them. As a routinized feature of everyday life, it is therefore appropriate to view health lifestyles as guided more by a practical than abstract logic (Williams 1995).

The four most common practices measured in studies of health lifestyles are alcohol use, smoking, diet, and exercise. These are shown in box 7 along with other practices such as physical checkups and automobile seatbelt use that comprise typical forms of action taken or not taken. The practices themselves may be positive or negative, but they nonetheless comprise a person’s overall pattern of health lifestyles as represented in box 8. It is important to note that these practices sometimes have a complexity of their own. Smoking tobacco in any form is negative, but moderate alcohol use reduces the risk of heart disease more so than heavy drinking (which promotes it) and abstinence (Klatsky 1999). Eating fruits and vegetables is positive, but consuming meat can be either positive or negative depending on how it is cooked and its fat content. Relatively vigorous leisure-time exercise has more health benefits than physical activity at work because the latter is subject to stress from job demands and time schedules, while walking and other everyday forms of exercise have some health value (Dunn et al. 1999). However, measures of leisure-time exercise may not fully represent the physical activities of women who take care of children and do housework (Ainsworth 2000). It is therefore necessary that researchers take the multifaceted features of health lifestyle practices into account when analyzing them.

Action (or inaction) with respect to a particular health practice leads to its reproduction, modification, or nullification by the habitus through a feedback process. This is shown in Figure 1 by the arrow showing movement



from box 8 back to box 5. This is consistent with Bourdieu's (1977, 1984) assertion that when dispositions are acted upon they tend to reproduce or modify the habitus from which they are derived. As conceptualized by Bourdieu, the habitus is the centerpiece in the health lifestyle paradigm.

## MEASURING HEALTH LIFESTYLES

Although individuals make health lifestyle choices, the aggregate influence of collective entities and conditions on these choices also needs to be measured if the reality of everyday life is to be captured. This strategy presents methodological issues since approaches emphasizing the effects of structure on individuals may overlook the creativity of social agents. Conversely, microsociological approaches that concentrate on individuals may underestimate the effects of structure on personal choices. Qualitative methods such as participant observation have to be alert to patterned health practices and the collective basis for those patterns. However, as Sibeon (2004) observes, there are limits to what can be achieved by microlevel methods in addressing agency-structure questions, since such methods are not equipped theoretically or methodologically to measure macrophenomena.

Bourdieu (1984) selected correspondence analysis for his lifestyle research. Correspondence analysis is a method to organize data, investigate similarities and differences between categories of variables, and graphically depict relationships (Greenacre and Blasius 1993). It is similar to cluster analysis, but it identifies complex patterns of behavior in relation to sociodemographic variables more efficiently and quickly, while reducing the potential for instability by using a fixed algorithm. Correspondence analysis produces plots showing how dependent variables (e.g., lifestyle practices) cluster in particular relationships with independent variables (e.g., structural variables such as class, age, gender, and race), and it also illustrates the relative strengths and weaknesses of those relationships according to their spatial distance from each other. Bourdieu (1984) formulated his concept of "social space" as a structure using correspondence analysis to merge a "space of social positions" and "space of lifestyles" into one space that can be displayed and interpreted simultaneously.

A limitation of correspondence analysis is that it can be used only for displaying relationships, not hypothesis testing. Since many variables that have been discussed are interrelated, statistical techniques are required for testing hypotheses that measure the relationships that have predictive power exclusive of the effects of the other variables. Several statistical models (e.g., regression analysis, path or structural equation modeling) exist that can accomplish this.

However, determining the effects of structure on health lifestyle practices requires the construction of independent variables having collective properties indicative of such structures. Measuring class effects is a challenge because the usual socioeconomic variables of income, education, and occupational prestige can also be depicted as individual characteristics. One approach is to apply class categories to the family/household rather than the respondent/individual. The status of the person (or perhaps persons) in the family/household with the highest level of labor-market participation can be conceptualized as providing a master social status to the household representing its collective position vis-à-vis the marketplace (Erickson and Goldthorpe 1992). This outcome is evident when the parents' social standing is passed to their children and the household as a whole is accorded a particular social position in the community. Education can also be measured with respect to the prestige of the institution attended, so that the status associated with an individual's education can be considered a reflection of the institution rather than the individual. An index of living conditions can be constructed from the percentage of households in particular neighborhoods or census tracts with basic utilities, indoor plumbing, and hot water, as well as the percentage of parks, recreational facilities, restaurants, and grocery stores. Variables such as these are not the properties of similar individuals, but those of structures that constrain or enable individuals in their health lifestyle choices.

In order to determine the relative effects of individual and structural characteristics on a dependent variable, multilevel analysis using various hierarchical regression techniques (e.g., multilevel regression models, HLM, VARCL, MLn) is required (Luke 2004). Briefly stated, multilevel analysis examines the interaction between variables that describe individuals at one level (level 1), structural entities at the next

(level 2), and sequentially higher levels, if necessary, depending on the variable's conceptual position in a structural hierarchy. By comparing changes in the regression equations, the relative effects of each level of variables on health lifestyle practices can be simultaneously determined.

## CONCLUSION

A central theme of this article is that the individualistic paradigm of health lifestyles is too narrow and unrealistic because it fails to consider structural influences on health lifestyle choices. In order to correct this course and formulate a theory where none currently exists, a health lifestyle model is presented that accords structure a role that is consistent with its influence in the empirical world. There are times when structure outweighs but does not negate agency and other times when structure overwhelms agency, and these situations need to be included in concepts explaining health lifestyle practices. A macrosocial orientation does not mean that action is structurally predetermined; rather, it recognizes that social structures influence the thoughts, decisions, and actions of individuals (Sibeon 2004).

The theoretical paradigm presented in this article is strongly influenced by Weber and Bourdieu. Although Bourdieu, in particular, has his critics, his notion of habitus nevertheless represents a novel and logical conceptualization of the internalization of external structures in the mind and perceptual processes of the individual. The result is a registry of dispositions to act in ways that are practical and invariably consistent with the socially approved behavioral pathways of the larger social order or some class or group therein.

The theoretical model of health lifestyles presented here states that four categories of (1) structural variables, especially (a) class circumstances, but also (b) age, gender, and race/ethnicity, (c) collectivities, and (d) living conditions, provide the social context for (2) socialization and experience that influence (3) life choices (agency). These structural variables also collectively constitute (4) life chances (structure). Choices and chances interact and commission the formation of (5) dispositions to act (habitus), leading to (6) practices (action), involving (7) alcohol use, smoking, diet, and other health-related actions. Health practices

constitute patterns of (8) health lifestyles whose reenactment results in their reproduction (or modification) through feedback to the habitus. This theory is an initial representation of the health lifestyle phenomenon and is subject to verification, change, or rejection through empirical application. It is a beginning for theoretical formulations concerning a major aspect of day-to-day social behavior for which no other theory now exists.

## REFERENCES

- Abel, Thomas, Esther Walter, Steffen Niemann, and Rolf Weitkunat. 1999. "The Berne-Munich Lifestyle Panel." *Sozial- und Präventivmedizin* 44:91-106.
- Adler, Nancy E., Thomas Boyce, Margaret A. Chesney, Sheldon Cohen, Susan Folkman, Robert L. Kahn, and S. Leonard Syme. 1994. "Socioeconomic Status and Health: The Challenge of the Gradient." *American Psychologist* 10:15-24.
- Adonis, Andrew and Stephen Pollard. 1997. *A Class Act: The Myth of Britain's Classless Society*. London: Penguin.
- Ainsworth, Barbara E. 2000. "Issues in the Assessment of Physical Activity in Women." *Research Quarterly for Exercise and Sport* 71:37-50.
- Annandale, Ellen. 1998. *The Sociology of Health and Medicine: A Critical Introduction*. Cambridge, United Kingdom: Polity Press.
- Archer, Margaret S. 1995. *Realist Social Theory: The Morphogenetic Approach*. Cambridge, United Kingdom: Cambridge University Press.
- . 1998. "Realism and Morphogenesis." Pp. 356-81 in *Critical Realism*, edited by Margaret Archer, Roy Bhaskar, Andrew Collier, Tony Lawson, and Alan Norrie. London: Routledge.
- . 2003. *Structure, Agency and the Internal Conversation*. Cambridge, United Kingdom: Cambridge University Press.
- Aspinall, Peter J. 2001. "Operationalising the Collection of Ethnicity Data in Studies of the Sociology of Health and Illness." *Sociology of Health and Illness* 23:829-82.
- Backett, Kathryn C. and Charlie Davison. 1995. "Lifecourse and Lifestyle: The Social and Cultural Location of Health Behaviours." *Social Science and Medicine* 40:629-38.
- Bauman, Zygmunt. 1992. *Intimations of Postmodernity*. London: Routledge.
- . 1999. *In Search of Politics*. Stanford, CA: Stanford University Press.
- . 2000. *Liquid Modernity*. Cambridge, United Kingdom: Polity Press.
- Beck, Ulrich. 1992. *Risk Society: Towards a New Modernity*. Translated by Mark Ritter. London: Sage.

- Bhaskar, Roy. 1998. *The Possibility of Naturalism*. 3d ed. London: Routledge.
- Blaxter, Mildred. 1990. *Health and Lifestyles*. London: Routledge.
- Bohman, James. 1999. "Practical Reason and Cultural Constraint: Agency in Bourdieu's Theory of Practice." Pp. 129–52 in *Bourdieu: A Critical Reader*, edited by Richard Shusterman. Oxford, United Kingdom: Blackwell.
- Bourdieu, Pierre. 1977. *Outline of a Theory of Practice*. Translated by Richard Nice. Cambridge, United Kingdom: Cambridge University Press.
- . 1984. *Distinction*. Translated by Richard Nice. Cambridge, MA: Harvard University Press.
- . 1990. *The Logic of Practice*. Translated by Richard Nice. Stanford, CA: Stanford University Press.
- . 1996. *The Rules of Art*. Translated by Susan Emanuel. Cambridge, United Kingdom: Cambridge University Press.
- Bourdieu, Pierre and Loïc J. D. Wacquant. 1992. *An Introduction to Reflexive Sociology*. Chicago, IL: University of Chicago Press.
- Brown, Tamara L., Gregory S. Parks, Rick S. Zimmerman, and Clarend M. Phillips. 2001. "The Role of Religion in Predicting Adolescent Alcohol Use and Problem Drinking." *Journal of Studies on Alcohol* 65:696–706.
- Browning, Christopher and Kathleen A. Cagney. 2002. "Neighborhood Structural Disadvantage, Collective Efficacy, and Self-Rated Physical Health in an Urban Setting." *Journal of Health and Social Behavior* 43:383–99.
- Calnan, Michael. 1987. *Health and Illness*. London: Tavistock.
- Clarke, Adele E., Janet K. Shim, Laura Mamo, Jennifer Ruth Fosket, and Jennifer R. Fishman. 2003. "Biomedicalization: Technoscientific Transformations of Health, Illness, and U.S. Biomedicine." *American Sociological Review* 68:161–94.
- Cockerham, William C. 1997. "The Social Determinants of the Decline of Life Expectancy in Russia and Eastern Europe: A Lifestyle Explanation." *Journal of Health and Social Behavior* 38:131–48.
- . 1999. *Health and Social Change in Russia and Eastern Europe*. London: Routledge.
- . 2000a. "The Sociology of Health Behavior and Health Lifestyles." Pp. 159–72 in *Handbook of Medical Sociology*, 5th ed., edited by Chloe Bird, Peter Conrad, and Allen M. Fremont. Upper Saddle River, NJ: Prentice-Hall.
- . 2000b. "Health Lifestyles in Russia." *Social Science and Medicine* 51:1313–24.
- Cockerham, William C., Thomas Abel, and Günther Lüschen. 1993. "Max Weber, Formal Rationality, and Health Lifestyles." *The Sociological Quarterly* 34:413–35.
- Cockerham, William C., Alfred Rütten, and Thomas Abel. 1997. "Conceptualizing Contemporary Health Lifestyles: Moving beyond Weber." *The Sociological Quarterly* 38:321–42.
- Cockerham, William C., M. Christine Snead, and Derek F. DeWaal. 2002. "Health Lifestyles in Russia and the Socialist Heritage." *Journal of Health and Social Behavior* 43:42–55.
- Crawford, Robert. 1984. "A Cultural Account of Health: Control, Release, and the Social Body." Pp. 60–103 in *Issues in the Political Economy of Health Care*, edited by John McKinley. New York: Tavistock.
- Crompton, Rosemary. 1998. *Class and Stratification*. 2d ed. Oxford, United Kingdom: Polity Press.
- Dahrendorf, Ralf. 1979. *Life Chances*. Chicago, IL: University of Chicago Press.
- Demers, Andrée, Jocelyn Bisson, and Jézabelle Palluy. 1999. "Wives' Convergence with Their Husbands' Alcohol Use: Social Conditions as Mediators." *Journal of Studies of Alcohol* 60:368–77.
- Demers, Andrée, Sylvia Kairouz, Edward M. Adlaf, Louis Glickman, Brenda Newton-Taylor, and Alain Marchand. 2002. "Multilevel Analysis of Situational Drinking among Canadian Undergraduates." *Social Science and Medicine* 55:415–24.
- Denton, Margaret and Vivienne Walters. 1999. "Gender Differences in Structural and Behavioral Determinants of Health: An Analysis of the Social Production of Health." *Social Science and Medicine* 48:1221–35.
- d'Houtaud, A. and Mark G. Field. 1984. "The Image of Health: Variations in Perception by Social Class in a French Population." *Sociology of Health and Illness* 6:30–59.
- Dunn, Andrea L., Bess H. Marcus, James B. Kampert, Melissa E. Garcia, Harold W. Kohl III, and Steven N. Blair. 1999. "Comparison of Lifestyle and Structural Interventions to Increase Physical Activity and Cardiorespiratory Fitness." *Journal of the American Medical Association* 281:327–34.
- Durkheim, Emile. [1895] 1950. *The Rules of Sociological Method*. New York: Free Press.
- Emirbayer, Mustafa and Ann Mische. 1998. "What Is Agency?" *American Journal of Sociology* 103:962–1023.
- Erickson, Robert E. and John H. Goldthorpe. 1992. *The Constant Flux: A Study of Class Mobility in Industrial Society*. Oxford, United Kingdom: Clarendon Press.
- Ford, Earl S., Robert K. Merritt, Gregory W. Heath, Kenneth E. Powell, Richard A. Washburn, Andrea Kriska, and Gwendolyn Halle. 1991. "Physical Activity Behaviors in Lower and Higher Socioeconomic Status Populations." *American Journal of Epidemiology* 133:1246–56.
- Frohlich, Katherine L., Ellen Corin, and Louise Potvin. 2001. "A Theoretical Proposal for the Relationship between Context and Disease." *Sociology of Health and Illness* 23:776–97.
- George, Valerie A. and Paulette Johnson. 2001.

- "Weight Loss Behaviors and Smoking in College Students of Diverse Ethnicity." *American Journal of Health Behavior* 25:115–24.
- Giddens, Anthony. 1984. *The Constitution of Society: Outline of the Theory of Structuration*. Berkeley: University of California Press.
- . 1991. *Modernity and Self-Identity: Self and Society in the Late Modern Age*. Stanford, CA: Stanford University Press.
- Gochman, David S. 1997. "Health Behavior Research, Cognate Disciplines, Future Identity, and an Organizing Matrix: An Integration of Perspectives." Pp. 395–425 in *Handbook of Health Behavior*, vol. 4, edited by David Gochman. New York: Plenum.
- Greenacre, Michael and Jörg Blasius, eds. 1993. *Correspondence Analysis in the Social Sciences*. London: Academic Press.
- Grzywacz, Joseph G. and Nadine F. Marks. 2001. "Social Inequalities and Exercise during Adulthood: Toward an Ecological Perspective." *Journal of Health and Social Behavior* 42:202–20.
- Hardey, Michael. 1999. "Doctor in the House: The Internet as a Source of Lay Knowledge and the Challenge to Expertise." *Sociology of Health and Illness* 21:820–35.
- Husserl, Edmund. [1952] 1989. *Ideas Pertaining to a Pure Phenomenology and to a Phenomenological Philosophy*. Translated by R. Rojcewicz and A. Schuwer. London: Kluwer Academic.
- Janečková, Hana. 2001. "Transformation of the Health Care System in the Czech Republic—A Sociological Perspective." Pp. 347–64 in *The Blackwell Companion to Medical Sociology*, edited by William Cockerham. Oxford, United Kingdom: Blackwell.
- Jarvis, Martin J. and Jane Wardle. 1999. "Social Patterning of Individual Health Behaviours: The Case of Cigarette Smoking." Pp. 240–56 in *Social Determinants of Health*, edited by Michael Marmot and Richard G. Wilkinson. Oxford, United Kingdom: Oxford University Press.
- Johnson, Robert A. and John P. Hoffmann. 2000. "Adolescent Cigarette Smoking in the U.S. Racial/Ethnic Subgroups: Findings from the National Education Longitudinal Study." *Journal of Health and Social Behavior* 41:392–407.
- Kalberg, Stephen. 1994. *Max Weber's Comparative-Historical Sociology*. Chicago, IL: University of Chicago Press.
- Karlsen, Saffron and James Y. Nazroo. 2002. "Agency and Structure: The Impact of Ethnic Identity and Racism on the Health of Ethnic Minority People." *Sociology of Health and Illness* 24:1–20.
- Klatsky, Arthur L. 1999. "Moderate Drinking and Reduced Risk of Heart Disease." *Alcohol Research and Health* 23:15–23.
- Laaksonen, Mikko, Ritva Prättälä, and Eero Lahelma. 2002. "Sociodemographic Determinants of Multiple Unhealthy Behaviours." *Scandinavian Journal of Public Health* 30:1–7.
- Lindquist, Christine, William C. Cockerham, and Sean-Shong Hwang. 1999. "Drinking Patterns in the American Deep South." *Journal of Studies on Alcohol* 60:663–66.
- Link, Bruce and Jo Phelan. 2000. "Evaluating the Fundamental Cause Explanation for Social Disparities in Health." Pp. 33–47 in *Handbook of Medical Sociology*, 5th ed., edited by Chloe E. Bird, Peter Conrad, and Allen M. Fremont. Upper Saddle River, NJ: Prentice-Hall.
- Lomas, Jonathan. 1998. "Social Capital and Health: Implications for Public Health and Epidemiology." *Social Science and Medicine* 47:1181–88.
- Luke, Douglas A. 2004. *Multilevel Modeling*. Thousand Oaks, CA: Sage.
- Marx, Karl. 1960. *Politische Schriften* [Political Writings]. Edited by H. Lieber. Stuttgart, Germany: Enke.
- Mead, George Herbert. 1934. *Mind, Self and Society*. Chicago, IL: University of Chicago Press.
- Mirowsky, John and Catherine E. Ross. 2003. *Education, Social Status, and Health*. New York: Aldine de Gruyter.
- Ostrowska, Nina. 2001. "In and Out of Communism: The Macrosocial Context of Health in Poland." Pp. 334–46 in *The Blackwell Companion to Medical Sociology*, edited by William Cockerham. Oxford, United Kingdom: Blackwell.
- Pescosolido, Bernice A., Jane McLeod, and Margarita Alegria. 2000. "Confronting the Second Social Contract: The Place of Medical Sociology in Research and Policy for the Twenty-First Century." Pp. 411–26 in *Handbook of Medical Sociology*, 5th ed., edited by Chloe Bird, Peter Conrad, and Allen M. Fremont. Upper Saddle River, NJ: Prentice-Hall.
- Pescosolido, Bernice A. and Beth A. Rubin. 2000. "The Web of Group Affiliations Revisited: Social Life, Postmodernism, and Sociology." *American Sociological Review* 65:52–76.
- Reid, Ivan. 1998. *Class in Britain*. Cambridge, United Kingdom: Polity Press.
- Robert, Stephanie A. and James S. House. 2000. "Socioeconomic Inequalities in Health: An Enduring Sociological Problem." Pp. 79–97 in *Handbook of Medical Sociology*, 5th ed., edited by Chloe E. Bird, Peter Conrad, and Allen M. Fremont. Upper Saddle River, NJ: Prentice-Hall.
- Roos, Eva, Eero Lahelma, Mikko Virtanen, Ritva Prättälä, and Pirjo Pietinen. 1998. "Gender, Socioeconomic Status and Family Status as Determinants of Food Behaviour." *Social Science and Medicine* 46:1519–29.
- Ross, Catherine E. and Chloe E. Bird. 1994. "Sex Stratification and Health Lifestyle: Consequences for Men's and Women's Perceived Health." *Journal of Health and Social Behavior* 35:161–78.
- Scott, John. 1996. *Stratification and Power: Structures of Class, Status, and Command*. Cambridge, United Kingdom: Polity Press.
- Sewell, William H. 1992. "A Theory of Structure:



- Duality, Agency, and Transformation." *American Journal of Sociology* 98:1–29.
- Shifflett, Peggy A. 1987. "Future Time Perspective, Past Experiences, and Negotiation of Food Use Patterns among the Aged." *Gerontologist* 27:611–15.
- Shifflett, Peggy A. and William A. McIntosh. 1986–87. "Food Habits and Future Time: An Exploratory Study of Age-Appropriate Food Habits among the Elderly." *International Journal of Aging and Human Development* 24:1–17.
- Sibeon, Roger. 2004. *Rethinking Social Theory*. London: Sage.
- Smaje, Chris. 2000. "Race, Ethnicity, and Health." Pp. 114–28 in *Handbook of Medical Sociology*, 5th ed., edited by Chloe Bird, Peter Conrad, and Allen M. Fremont. Upper Saddle River, NJ: Prentice-Hall.
- Snead, M. Christine and William C. Cockerham. 2002. "Health Lifestyles and Social Class in the Deep South." *Research in the Sociology of Health Care* 20:107–22.
- Swartz, David. 1997. *Culture and Power: The Sociology of Pierre Bourdieu*. Chicago, IL: University of Chicago Press.
- Sweat, Michael D. and Julie A. Denison. 1995. "Reducing HIV Incidence in Developing Countries with Structural and Environmental Interventions." *AIDS* 9:S251–S257.
- Turner, Bryan S. 1992. *Regulating Bodies: Essays in Medical Sociology*. London: Routledge.
- Turner, Bryan S. and Steven P. Wainwright. 2003. "Corps de Ballet: The Case of the Injured Dancer." *Sociology of Health and Illness* 25:269–88.
- Veblen, Thorstein. [1899] 1994. *Theory of the Leisure Class*. New York: Dover.
- Vickers, Ross R., Terry L. Conway, and Linda K. Hervig. 1990. "Demonstration of Replicable Dimensions of Health Behaviors." *Preventive Medicine* 19:377–401.
- Warren, Mary Guptill, Rose Weitz, and Stephen Kulis. 1998. "Physician Satisfaction in a Changing Health Care Environment: The Impact of Challenges to Professional Autonomy, Authority, and Dominance." *Journal of Health and Social Behavior* 39:356–67.
- Weber, Max. 1946. *From Max Weber: Essays in Sociology*. Translated and edited by Hans Gerth and C. Wright Mills. New York: Oxford University Press.
- . 1949. *The Methodology of the Social Sciences*. Edited by Edward Shils and H. Finch. New York: Free Press.
- . 1958. *The Protestant Ethic and the Spirit of Capitalism*. Translated by Talcott Parsons. New York: Scribners.
- . [1922] 1978. *Economy and Society*. 2 vols. Translated and edited by Guenther Roth and Claus Wittich. Berkeley: University of California Press.
- Wickrama, K. A. S., Rand D. Conger, Lora Ebert Wallace, and Glen H. Elder, Jr. 1999. "The Intergenerational Transmission of Health-Risk Behaviors: Adolescent Lifestyles and Gender Moderating Effects." *Journal of Health and Social Behavior* 40:258–272.
- Williams, Gareth H. 2003. "The Determinants of Health: Structure, Context, and Agency." *Sociology of Health and Illness* 25:131–54.
- Williams, Simon J. 1995. "Theorising Class, Health and Lifestyles: Can Bourdieu Help Us?" *Sociology of Health and Illness* 17:577–604.
- Zerubavel, Eviatar. 1997. *Social Mindscapes*. Cambridge, MA: Harvard University Press.

**William C. Cockerham** is professor of sociology, medicine, and public health and co-director of the Center for Social Medicine at the University of Alabama at Birmingham. He is the 2004 recipient of the university's Ireland Prize for Scholarly Distinction.