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COMMUNITY CONTEXTS OF HUMAN WELFARE

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■ **Abstract** This chapter identifies "context minimization error" as the tendency to ignore the impact of enduring neighborhood and community contexts on human behavior. The error has adverse consequences for understanding psychological processes and efforts at social change. The chapter describes a series of theoretical models of how neighborhoods and community settings are associated with various aspects of human welfare and reviews evidence of associations of contexts with health, psychological distress, risky behaviors, psychological attitudes, and child development. It suggests that many psychological processes may play out differently in different contexts and that contextual factors interact with sociocultural characteristics of individuals in predicting outcomes. People, in turn, can shape community contexts. A more sophisticated understanding of the effects of contexts depends on more sophisticated approaches to assessing them.

CONTENTS

INTRODUCTION

The central thesis of this chapter is that psychologists should pay more attention to the community contexts of human behavior. Conditions in neighborhoods and community settings are associated with residents' mental and physical health, opportunities, satisfactions, and commitments. They are associated with children's academic achievement and developmental outcomes, from behavior problems to teenage childbearing. Contexts also moderate other individual or family processes, suggesting that many psychological theories may not hold across the range of environments in which ordinary Americans live their lives. For example, optimal types of parenting may depend on levels of neighborhood risk. Further, as we show below, contextual effects may masquerade as effects of individual characteristics, leading to flawed inferences.

The tendency of observers to underestimate the effects of immediate social situations and overestimate the effects of individual dispositions is sufficiently pervasive that Ross (1977) labeled it the fundamental attribution error. There is a parallel, less readily identified error of ignoring the effects of more enduring contexts, or where situational and personal characteristics are confounded, of attributing all shared variance to individuals. We dub this "undeniable proclivity to attribute causal influences" on individual outcomes "to individual differences in personality, motivation or intellect" (Earls & Buka 2000) as "context minimization error." This error leads to impoverished theory. It also means that social programs and policies that fail to recognize the complex interplay of individuals and social contexts may fail to resolve the social problems they are intended to ameliorate (Caughy et al. 1999).

Ross (1977) suggested that the fundamental attribution error was a shortcoming of the "intuitive psychologist." However, we suggest that lay people may be less susceptible than psychological researchers to context minimization error. Parents who have sufficient resources invest them in arranging contexts they hope will confer advantages on their children, by moving to a good school district and finding the "right" child care arrangements and extracurricular activities. They look for safe neighborhoods and endeavor to prevent their children from falling in with the "wrong crowd." Adolescents are convinced that the "right" elite college will confer life-long advantages. There is much evidence for this lay perspective. High-quality child care is indeed related to language and cognitive development, social competence and adjustment, and better peer relations (Scarr & Eisenberg 1993). Neighborhoods, as we show below, matter for a variety of outcomes. More selective colleges are associated with higher graduation rates, greater attainment of graduate and professional degrees, and substantially higher earnings, controlling for student and family characteristics (Bowen & Bok 1998).

A comprehensive review of research on contextual effects on human welfare is the work of several lifetimes. The more limited goal of this chapter is to use recent research to illustrate associations of neighborhoods and community settings with individual welfare. We begin by describing different but overlapping models of neighborhood influence and suggest that neighborhood contexts may moderate the effects of lower-level processes that take place within them. Next we examine models of settings' influence on welfare. We suggest that influences of contexts depend on sociocultural characteristics of individuals. Transactions between individuals and contexts are not unidirectional, and we illustrate peoples' efforts to modify social contexts. Finally, because sophistication in theory and method go hand in hand, we consider methodological issues. Most important is how confounding of individual and contextual effects may lead to errors of inference.

Studying contexts is not solely the domain of psychology, so we draw in part on the work of sociologists and economists. Within psychology we emphasize the contributions of community psychology, which since its inception, has been concerned with assessing and modifying "the reciprocal relationships between individuals and the social systems with which they interact" (Bennett et al. 1966, p. 7). Community psychologists (Murrell 1973, Rappaport 1977, Seidman 1988) have emphasized multiple levels of context, with higher levels involving multiple individuals, units with internal structure and social organization, and systematic patterns of social interaction (Shinn & Rapkin 2000). Actions at each level can influence or constrain those at other levels (Bronfenbrenner 1979, 1986). Thus, for example, state child care policies can influence staff:child ratios in day care centers, which in turn influence patterns of caregiver-child interaction and quality of care (Phillips et al. 1992).

In this chapter we focus on the immediate social contexts of human welfare in neighborhoods and public community settings such as schools, religious and voluntary associations, and gathering places. Community settings include what Barker (1968) called behavior settings, or standing patterns of behavior bounded in space and time. They also include larger organizations located in communities (e.g., schools) and many face-to-face settings Bronfenbrenner (1979) called microsystems (e.g., bars), but exclude private microsystems (e.g., families). For reasons of space we also exclude the larger social and political forces that may support or undermine communities (e.g., Warren et al. 2001) and features of the physical environment.

NEIGHBORHOODS

Psychologists, sociologists, and economists have paid increasing attention to neighborhood effects on well-being following Wilson's (1987) examination of concentrated poverty and disadvantage experienced by poor urban African Americans. Several theorists have proposed models for how neighborhood characteristics are associated with mental health (Wandersman & Nation 1998), physical health (Caughy et al. 1999), violence (Sampson et al. 1997), and child maltreatment,

school failure, delinquency, teen childbearing, and positive youth development (Caughy et al. 1999, Coulton 1996, Furstenberg & Hughes 1997, Jencks & Mayer 1990, Leventhal & Brooks-Gunn 2000). These models overlap, and what some theorists describe as independent models, others consider to be mediating processes. We consider compositional models, in which individuals are influenced by the collective characteristics of their neighbors, and models concerned with social disorganization, social stress, social capital, and closely related constructs.

Compositional Models

In a structural or compositional model, included in all theoretical typologies, individuals are influenced by the aggregate demographic characteristics of their neighbors. Research on compositional characteristics has been spurred in part by the availability of Geographic Information System software that allows researchers to link census or other archival data from defined geographical units, such as census tracts, to individual residents. This has permitted inclusion of information about neighborhoods in studies originally designed for other purposes.

Jencks & Mayer (1990) outlined four ways that neighborhoods could affect children. An epidemic or contagion model emphasizes negative peer influences of poor children. A collective socialization model focuses on the positive influence of affluent adults, who serve as role models and supervise neighborhood children. A relative deprivation model points to possible negative effects of successful neighbors or classmates on self-esteem and motivation. A noncompositional institutional model notes that children in affluent and disadvantaged neighborhoods receive different treatment from teachers, police, and other adults from outside the community who work in local institutions.

Leventhal & Brooks-Gunn (2000) reviewed studies of links between child and adolescent outcomes and neighborhood compositional characteristics, such as income or socio-economic status (SES), racial/ethnic diversity, and residential instability measured at the level of the census tract or block group. Their comprehensive review points to the importance of high SES neighborhoods in predicting academic achievement and low SES neighborhoods and residential instability in predicting behavioral and emotional outcomes including externalizing behaviors, conduct disorder, criminal activity, and substance use. (High and low SES are both contrasted with a middle SES group, so are not perfectly negatively correlated.) Sexuality outcomes, including early, teen, or nonmarital sex and childbearing, were also influenced by levels of employment. Effects were generally modest, defined as less than a third of a standard deviation, and explained about 5% of the variance after controlling for individual or family characteristics. Caughy et al. (1999) additionally noted that poor neighborhoods have been associated with health outcomes such as cardiovascular disease, low birth weight, and premature births, again controlling for individual characteristics.

A long-term experimental study produced far larger effects than those obtained in correlational designs. In the Gautreaux project, low-income minority families

from public housing projects in Chicago moved either to more affluent suburbs or to low-income neighborhoods in the city in a "quasi-random fashion" with families assigned to housing units on a first-come, first-served basis. Groups were comparable at the start of the study (Rubinowitz & Rosenbaum 2000, p. 77). Short-term effects on schooling were mixed, with children from the inner city having difficulties in suburban schools, but long-term effects on achievement were striking. Children in families who moved to the suburbs were far more likely than children who moved within the city to graduate from high school (86% vs. 33%), attend college (54% vs. 21%), attend 4-year colleges (27% vs. 4%), be employed full-time if not in college (75% vs. 41%), and receive higher pay and job benefits (Rubinowitz & Rosenbaum 2000, ch. 9).

Results of this study spawned the more extensive Moving to Opportunity experiments ongoing in five cities. Very low-income families who lived in public housing or Section 8 project-based housing in high-poverty areas in central cities were assigned via a random lottery to three groups. One received rental vouchers that could be used only in low-poverty neighborhoods, a second received vouchers that could be used anywhere (the "Section 8" group), and a control group continued to receive their current housing assistance. Short-term results across the five sites showed little impact on families' economic self-sufficiency but greater improvements in reported safety, parents' and children's mental and physical health, and youth delinquency and behavior problems for both experimental groups. Many of the effects were small, but a few were substantial. For example, prevalence of injuries and asthma for children in the Boston low-poverty group fell 74% and 65% relative to controls (Del Conte & Kling 2001). Behavior problems for boys and for younger children in both the low-poverty and the Section 8 conditions in New York fell 30–43% relative to controls (Leventhal & Brooks-Gunn 2002). Results were substantial even though only about 40% of families given the opportunity to move actually did so but analyses compared groups as randomly assigned. Effects are already larger than is typical for correlational studies, and if the Gautreaux pattern is followed, small short-term effects may grow larger over time.

Social Disorganization/Norms/Collective Efficacy

Perhaps the best-developed model for how neighborhoods affect behavior draws on Shaw & McKay's (1942) Chicago-school theory of social disorganization, as articulated more recently by Sampson and colleagues (Sampson & Groves 1989; Sampson et al. 1997, 1999). The theory suggests that ethnic heterogeneity, low socioeconomic status, and residential mobility (all compositional variables) interfere with a community's social organization in terms of local friendship networks and participation in organizations (discussed more below as social capital). Social interaction, participation, and cohesion create a set of shared norms and capacity to control adolescent peer groups who may engage in delinquent or criminal behavior. Collective efficacy is defined as social cohesion among neighbors and willingness to intervene to curb disruptions and obtain resources for the common

good. In a study of 343 Chicago neighborhoods (clusters of census tracts), compositional measures of concentrated disadvantage, concentration of immigrants, and low residential stability predicted several indices of violence (perceived violence, victimization, and homicide rates), controlling for individual factors. Collective efficacy mediated a substantial portion of these relationships (Sampson et al. 1997). Later analyses of the same data showed that concentrated affluence and stability were more important than concentrated disadvantage for social exchanges among adults and the extent to which adults interacted with and looked out for neighborhood children (Sampson et al. 1999).

Leventhal & Brooks-Gunn (2000) dubbed this model norms/collective efficacy because of its emphasis on these factors as mediating mechanisms. There is evidence that communities vary with respect to other sorts of norms as well. For example, Caughy et al. (2001) found neighborhood-level differences between descriptive norms for parenting (what adult survey respondents believed mothers and fathers in the neighborhood do) in three neighborhoods (each 6–8 contiguous census tracts). Coulton et al. (1996) found that in Cleveland neighborhoods with high rates of child maltreatment, relative to neighborhoods with low rates, caregivers of young children were more likely to expect retaliation from children or their parents if they intervened to stop child misconduct. Kulik (1998) attributed differences in attitudes toward gender roles and perceptions of gender-typing in occupations among adolescents on a kibbutz and urban adolescents in Israel to the egalitarian orientation of kibbutz culture.

Social Stress, Incivilities

Social stress, including exposure to stressful life events and violence, and incivilities are closely related models of neighborhood influences, whether as independent models (e.g., Coulton 1996) or mediators of compositional effects (Wandersman & Nation 1998). Buka et al. (2001) reviewed evidence that children in cities are exposed to extraordinarily high rates of violence, with about a quarter of urban youth witnessing someone being murdered in their lifetime. Exposure to violence was associated with mental health problems including posttraumatic stress disorder, depression, distress, aggression, and externalizing behavior. Risk for witnessing violence was higher for males and ethnic minorities.

Social stressors extend beyond specific events. Hendryx & Ahern (1997) aggregated perceptions of community problems to the zip code level for over 1800 primarily white residents of 25 zip codes in a northwest urban county. Aggregate perceptions of social problems (domestic violence, homelessness, child abuse, racism, pollution, poverty, unemployment, and other environmental problems) were related to poor mental health, after controlling for individual ratings of these problems.

Griffin et al. (1999) found that neighborhood risk (attitudes about toughness required for survival and perceptions of gang activity and delinquency in the neighborhood) was related to interpersonal aggression in a sample of 452 primarily

African-American sixth-graders at two schools in New York City. Reports of risk-taking behavior significantly mediated the relationship between neighborhood risk and interpersonal aggression. (All measures were collected at the individual level, increasing the possibility of method bias.) Colder et al. (2000) found that perceived neighborhood danger (assessed by parent and child report) was related to aggressive behavior (by child self-report and teacher ratings) in a sample of 732 primarily African-American fifth-graders in ten inner-city and two suburban elementary schools. The relationship was mediated by children's positive beliefs about aggression. Coulton et al. (1996) found that Cleveland neighborhoods with high rates of child maltreatment were also high on mobility, disorder, and threat of victimization.

Cunningham (1999) conducted a longitudinal examination of 384 African-American high school students' perceptions of the resources and constraints in their communities in a Southeastern city. The most common responses to questions about neighborhood conditions that might interfere with reaching life goals were drugs and peer pressure. Perceptions of the seriousness of problems in the neighborhood (including unemployment, gambling, assaults, and poor schools) and the likelihood of a neighborhood teen being the victim of a violent crime increased over 2 years, whereas expectations about getting a stable, well-paying job or completing college decreased.

Social incivilities (e.g., public drunkenness) and physical incivilities (e.g., abandoned buildings, litter) have been linked to fear of crime (Taylor & Covington 1993, Riger 1985) and in turn to anxiety and depression (Wandersman & Nation 1998). Crime and fear have far-reaching consequences for behavior. Furstenberg (1993) and Caughy et al. (1999) drew on qualitative data to describe how parents in dangerous neighborhoods restricted their own and children's ties with the community, monitored children closely, and sought services and social ties outside the community. Danger in the neighborhood even led to restricting positive opportunities such as an after-school program that required returning home after dark (Caughy et al. 1999).

Perkins & Taylor (1996) used three methods to assess disorder for one block in each of 50 neighborhoods in Baltimore. Both residents' perceptions and direct observations of social and physical disorder were aggregated to the block level. Newspaper reports of crime and disorder (e.g., deteriorating housing, racial unrest, prison escapes) were counted for the target neighborhood and adjacent neighborhoods. In hierarchical linear models all three measures of disorder predicted residents' fear of crime (assessed one year after the surveys and observations). Analyses controlled for individuals' perceptions of disorder, the observed disorder of their own homes, and compositional effects of age, race, and gender.

Ross & Jang (2000) found that in a probability sample of 2482 Illinois households, individuals who perceived their neighborhoods as high in physical disorder (e.g., vandalism, graffiti) and social disorder (e.g., crime, drug use) had higher levels of fear and mistrust. Informal social ties to neighbors buffered the negative association of disorder with fear and mistrust, but individuals who perceived their

neighborhood as highly disordered had fewer ties with neighbors. Results are consistent with social disorganization theory, but with a starting point of perceived disorder rather than poverty, mobility, and heterogeneity.

Similarly, Caughy et al. (1999) found that crime rates, low levels of neighborhood political organization (voter registration, organizational involvement), and lack of resources (retail and service establishments, health care providers, public agencies) in Baltimore neighborhoods were associated with poor pregnancy outcomes such as low birth weight and preterm delivery. Results controlled for individual risk factors and neighborhood economic conditions. Qualitative interviews showed how crime and resultant fear led to stress, limited freedom of movement, and constrained engagement in behaviors such as exercise that foster health.

Several studies have examined both compositional measures and social stress in studies of adolescents, with complex results. Aneshensel & Sucoff (1996) studied a representative multiethnic sample of 877 12- to 17-year-olds in Los Angeles. They cluster analyzed neighborhoods based on compositional measures of SES and race. Low SES was related to high perceived ambient hazards such as crime, violence, drug use, and graffiti. Hazards, in turn, were related to internalizing (depression, anxiety) and externalizing (conduct, oppositional) symptoms. Residential stability (a compositional variable) and perceived cohesion contributed to lower symptoms. The relation of structural variables to mental health was more complex: conduct symptoms were highest in an "underclass" cluster but oppositional defiant symptoms were highest in middle-class and affluent clusters.

Seidman et al. (1998) studied 754 multiethnic 10- to 17-year-olds sampled from New York schools where most children received free lunches. Two cohorts were drawn from the last year of elementary school and the last year of junior high or middle school. Seidman et al. created a measure of structural neighborhood risk (from multiple indicators of poverty and homicide rates) and cluster analyzed neighborhoods based on a larger sample of participants' reports of hassles (similar to Aneshensel & Sucoff's hazards), cohesion, and involvement in constructive activities. Neighborhood clusters that were high on both hassles and cohesion were associated with highest structural risk, whereas one that was high on cohesion but low on hassles and involvement was associated with lowest risk. Surprisingly, structural risk was inversely associated with antisocial behavior for the older cohort only. Each of the three clusters with high hassles was associated with higher antisocial behavior for the younger or the older cohort but not both.

In one of the few studies of rural neighborhoods, Simons et al. (1996) found that for boys in Iowa a composite measure of community disadvantage was related to lower-quality parenting (judged by ratings of videotaped interactions) and increased affiliation with deviant peers, controlling for family SES. These, in turn, were related to conduct problems and distress. Community disadvantage also had a direct effect on distress. Community disadvantage was not related to outcomes for girls, but the proportion of single-parent households in the community was directly or indirectly related to both conduct problems and distress.

These studies suggest that although neighborhood risk is often associated with poor outcomes, both behavioral problems and exposure to violence are not always highest in neighborhoods with highest risk. At least in some cases, as Jencks & Mayer (1990) suggested, the presence of affluent neighbors may put adolescents at risk. We would have more confidence in the conclusions if the replications across studies were more exact. However, it seems clear that we need to understand multiple aspects of neighborhoods (and families) in concert. Different processes may also operate for adolescents of different ages, and in general, neighborhood effects were stronger for older than for younger children.

Resources, Social Capital, and Sense of Community

Another mediating mechanism proposed by Leventhal & Brooks-Gunn (2000) is availability and quality of resources such as social and recreational activities, child care, schools, medical services, and opportunities for employment. Similarly Coulton (1996) used the term social organization (distinct from social disorganization) to describe the formal and informal networks, institutions, and organizations in the area as an independent model of neighborhood effects. For example, Cleveland neighborhoods with low rates of child maltreatment had more facilities for children (e.g., day care centers, playgrounds or parks) and services (e.g., laundromats, supermarkets, banks) than neighborhoods with high rates of maltreatment (Coulton et al. 1996).

The concept of social organization is similar to that of social capital, defined by Putnam (1995) as "features of social organization such as networks, norms, and social trust that facilitate coordination and cooperation for mutual benefit." Another related concept is sense of community, defined by McMillan & Chavis (1986) as consisting of membership, influence, integration and need satisfaction, and shared emotional connections. Researchers have examined predictors and consequences of sense of community. Both structural features (percentage of owner-occupied homes, per capita income, low proportions of people in the work force, and low population density) and social organization (percentage of registered voters, percentage of residents in neighborhood organizations) predicted psychological sense of community in Baltimore neighborhoods (Brodsky et al. 1999). In a qualitative study of a poor community in Caracas, Garcia et al. (1999) found that sense of community was shaped by the history of the community and its development.

Perkins & Long (2002) described sense of community as one aspect of social capital (along with sense of efficacy of organized collective action, informal neighboring, and organizational participation). Sense of community was strongly related to the other constructs at both the individual and the block level in multilevel analyses for blocks in five neighborhoods in New York City. Sampson (2001) also considered social capital (which we discuss below in the contexts of community settings and efforts at social change) as an important precursor of collective efficacy.

Experiences with social services may also foster social capital. Thompson et al. (1996) examined the experiences of families of homicide victims with the criminal justice system. Family members who were informed about the case's progress and the arrest of a suspect reported more satisfaction with the police. Satisfaction was associated with more positive beliefs (safety, esteem, control, and social support), which were in turn associated with lower psychological distress.

Linkages among systems are also important. Campbell (1998) interviewed a national sample of advocates for rape victims to explore victims' experiences with legal, health, and mental health service systems. Women who had relatively positive outcomes with all three systems (defined as actions that fit their desires with a minimum of advocacy effort) were more likely to live in communities with greater resources and better coordination of services. Campbell & Ahrens (1998) interviewed advocates, directors of rape crisis centers, police officers, prosecutors, doctors, nurses, and rape survivors in 44 communities, half with and half without coordinated community-based services for rape. High-coordination communities were more likely to have integrated service delivery programs, bidirectional interagency training programs, and community reform groups that educated the community and promoted policy reform. Campbell & Aherns concluded that coordinated services led to better outcomes for women by ensuring that service providers understood the multiple contexts of service delivery, the needs of women, and the larger context of violence against women. We consider individual community organizations (rather than service systems) in more detail below under community settings.

Moderating Effects of Neighborhoods

In addition to its direct effects on welfare, neighborhood risk may moderate the effects of family characteristics, peer influences, and social services. In a sample of African-American early adolescents, Gonzales et al. (1996) found interactions between neighborhood risk and maternal restrictive control in the prediction of youths' grade point averages one year later, controlling for earlier grades. Risk, in this case, was assessed as maternal and child reports of risky activities engaged in by youths in the neighborhood. In low-risk neighborhoods low levels of restrictive control were associated with better academic outcomes, as would be expected from the literature on authoritative parenting. The situation was reversed in high-risk neighborhoods, where high levels of restrictive control were associated with better academic outcomes. Not only did neighborhood risk affect parenting, as we saw earlier, but optimal types of parenting varied by neighborhood risk. There was a similar interaction of neighborhood risk for peer support and attachment: The positive effects of peer support held only in low-risk neighborhoods.

Sheidow et al. (2001) found interactions between family and community risk factors in predicting exposure to violence in an unusual sample of African-American and Latino male adolescents living in the inner city in Chicago who were selected to be high in teacher-rated aggression. The authors cluster-analyzed

neighborhoods based on both compositional data (including poverty and violent crime) and mothers' and sons' reports of neighborhood social organization and safety. Two clusters had high structural problems but differed on functioning social processes (high social organization and low concern about safety). The third had lower structural problems, low social organization, and low concern about safety. Four family clusters were found based on family relationships and parenting practices. Contrary to previous research, there was no main effect of neighborhood type or family type on exposure to violence in the past year, controlling for earlier exposure to violence, but there was an interaction: The highest increase in exposure to violence occurred for struggling families (poor parenting, structure, cohesion, and beliefs about family) living in inner-city neighborhoods with functioning social processes. Sheidow et al. (2001) suggested that family functioning may be less important in the worst functioning communities, where risk for exposure to violence is widespread, and in communities with a better economic base, where other unmeasured protective practices may be at work.

Caughy et al. (1999) found an interaction between neighborhood risk (low household wealth, high unemployment) and the timing of prenatal care in the prediction of low birth weight. Early prenatal care was indeed protective in low-risk neighborhoods, in accordance with conventional medical wisdom, but not in high-risk neighborhoods. The authors concluded that providing better access to prenatal care to women in poor communities would not ensure improvements in pregnancy outcomes without addressing the other social risks women face.

These studies challenge what we think we know about parenting, peer relationships, and medical care. Seemingly well-established relationships may not be universal. Trickett (1996) points out that a contextualist approach to knowledge means understanding the contexts in which hypotheses hold true. Even hypotheses that have a good deal of support in the psychological literature have often been tested in only limited contexts and may not apply elsewhere.

COMMUNITY SETTINGS

We turn now to the influence of public community settings on human welfare. Indigenous community settings such as churches and local businesses are no doubt influenced by their broader neighborhood contexts. Community-based settings such as libraries, public health clinics, or Head Start centers may also reflect commitment and attention from beyond the immediate neighborhood (Furstenberg & Hughes 1997), are often staffed by people who live elsewhere (Jencks & Mayer 1990), and are sometimes placed in neighborhoods with the explicit goal of countering deprivation. There is also evidence that, especially in resource-poor communities, families seek out and use settings outside their neighborhoods (e.g., Earls & Buka 2000, Furstenberg 1993, Jarrett 1997). For all these reasons, it is important to consider community settings apart from the neighborhoods in which they are located as independent contexts of human welfare.

Community settings are ubiquitous. Barker (1968) catalogued 53,376 occurrences of 884 public behavior settings over the course of a year in a single small town. Community settings include organizations in which people spend substantial portions of time at different life stages: child care centers, schools, colleges, workplaces, retirement homes. They include voluntary organizations, which typically involve less time but may have a major influence such as religious settings, block associations, mutual help groups, and service or recreational clubs. They also include government offices and business locations where consumers or clients go to seek services or goods and often (as in the case of bars, coffee shops, or beauty salons) fellowship.

We consider five models for how community settings influence individual welfare. Unlike neighborhoods, settings are typically created with purposes or instrumental functions that can affect participants' well-being, and they create social roles for participants. Like neighborhoods, settings are sources of social capital, norms, and social stress.

Instrumental Functions

A community setting's purpose may be to provide services or resources that enhance welfare. Doctors' offices provide health care, schools educate, playgrounds offer recreation, shelters give homeless people a place to sleep. Settings with other goals may nonetheless allow individuals to fulfill instrumental needs. The goal of the workplace is to produce widgets, but it allows workers to obtain wages. The simple existence of settings (such as hospitals or businesses that provide jobs) may be important to well-being, and settings that focus on welfare may vary in how well they fulfill their missions. Different types of settings also vary in the dimensions along which they foster individual growth and development. For example, workplaces differ in their emphasis on autonomy, task orientation, and independence; both task-oriented and social groups differ in their focus on independence, learning practical skills, and self-understanding (Moos 2002).

Social Roles

Community settings, like mutual help groups, churches, and volunteer organizations, may also create and shape the roles and sense of identity of individuals. For example, Kingree & Thompson (2000) studied an experimental intervention whereby adult children of alcoholics in treatment for personal substance abuse were assigned to groups for children of alcoholics or substance abuse education classes. Participation in the groups improved self-reported well-being, with improvements mediated by increases in perceived status benefits. The authors concluded that support and discussion in the groups led participants to view their status as an adult child of an alcoholic more adaptively, reducing depression and relapse. The ways members and leaders of Schizophrenia Anonymous groups were viewed, and viewed the referent and expert power of others, depended on the role they played in the groups. These perceptions of power also predicted the perceived helpfulness

of the groups (Salem et al. 2000). In small, qualitative studies, Royce-Davis (2001) and Stein & Wemmerus (2001) described the importance of social roles such as productive member of the workforce, student, or wife in helping individuals with mental illness achieve a "normal life."

Settings may create roles for individuals as workers or volunteers. Stewart & Weinstein (1997) examined volunteer participation in three HIV/AIDS organizations: a suburban setting focused on providing individual support, whereas two urban settings focused on information and referral and social change. They found differences in who volunteered, why they volunteered, the roles they undertook, their political and personal efficacy, and how these constructs related to each other and the setting.

Allen et al. (1990) described a Teen Outreach program that involved seventh- to twelfth-grade youths in structured volunteer community-service activities in which they took on meaningful positive roles as help-givers. The program also had a classroom component. In an experimental evaluation at 25 sites nationwide, rates of pregnancy, course failure, and suspension among Teen Outreach participants were about two fifths of that for the control group despite the fact that the program did not address these outcomes directly (Allen et al. 1997). In additional large-scale studies, program success was related to the intensity of the volunteer component (Allen et al. 1990) and to autonomy, relatedness, and the quality of volunteer experiences for middle school students (Allen et al. 1994).

The structure of community settings may provide greater or lesser encouragement to engage in social roles. A particularly salient dimension identified by Barker and his colleagues (e.g., Barker 1968) is the ratio of participants to social roles. Settings with relatively few participants compared with the number of roles are underpopulated. In such settings (e.g., small high schools) individuals feel more pressure to join in activities, take on more responsible roles, and report greater satisfaction relating to their competence and value than in settings with more participants per role.

Social Capital

Social capital is an attribute of community settings as well as neighborhoods. Social capital measured at the building level in 487 distressed inner-city apartment buildings was strongly related to forms of ownership, with highest levels in tenant-owned cooperatives. Social capital was in turn associated with improved building quality, greater security, and lower levels of crime (Saegert & Winkel 1998). Participation in tenant organizations, tenant pro-social norms, and formal participation in building leadership also predicted future crime in the buildings in prospective analyses (Saegert et al. 2002).

Organizational affiliations such as church membership and informal connections to family and friends are central aspects of social capital with important links to human welfare. Both are consistently related to mortality in prospective studies, controlling for earlier health status (see review by House et al. 1988).

In a nationally representative sample with 18,000 respondents, Snowden (2001) found that African Americans, compared with whites of comparable background, were more likely to be involved in churches, clubs, lodges, and other groups. Both organizational affiliation and patterns of informal support, which varied by both race and gender, were related to lower levels of psychological distress.

Effects of organizational membership on welfare may be mediated by social support. Settings vary in the extent to which support is part of their mission. For example, self-help groups are intentional support systems in which members with a common problem both provide and receive support (e.g., Levy 2000). Settings of a particular type may vary in supportiveness. Moos (2002) argued that the quality and interdependence of relationships is a key dimension along which the social climate of settings varies. Maton (1989) characterized churches, mutual help groups, and senior centers as providing high or low levels of support, based on members' responses to questionnaires. In parallel analyses within each type of setting, settings high in support were directly related to well-being or buffered effects of stress on well-being, controlling for individual perceptions of support.

Luke et al. (1991) painstakingly coded behavioral interactions in 510 meetings of 13 groups belonging to a single mutual-help organization. Then they cluster-analyzed groups, based on the frequency of different types of interactions, into four "phenotypes." The phenotypes were reliably related to degree of change experienced by 111 newcomers to the groups (as rated by observers). New members changed most in the groups characterized by relatively high levels of personal questions and self-disclosure and low levels of sharing impersonal information, agreement, small talk, and interpretation. In later research with the same organization, Roberts et al. (1999) found that overall receipt of help was related to adjustment only among individuals who experienced a high degree of group integration. Recent research has examined the nature of postings to on-line mutual-help groups for depression (Salem et al. 1997) and drinking problems (Klaw et al. 2000), although these studies did not relate on-line interactions to individual outcomes. New forms of communication mean that "community" contexts are increasingly divorced from geographic neighborhoods.

Psychological sense of community, which we have discussed as an element of social capital, has often been considered an attribute of community settings as well as geographic locations. Lounsbury & DeNeui (1996) found that among college students, students at smaller schools and those who lived on campus or were members of fraternities or sororities had a greater sense of community. A program that emphasized cooperative learning and a child-centered approach to teaching and classroom management fostered a greater sense of community in three suburban elementary schools, relative to comparison schools (Solomon et al. 1996). Sense of community was related to student outcomes such as liking for school, empathy, and self esteem. Further, it was related to greater acceptance of the different norms and values of the classrooms in the two groups of schools. Sense of community in program classrooms appeared to reflect environments of independence, student influence, fairness, and personal responsibility and in comparison classrooms was related to student acceptance of norms of teacher direction and student compliance.

Hirsch et al. (2000) used qualitative data collected at four Boys and Girls Clubs to show how the clubs fostered a sense of community or sense of "club as home," particularly for early adolescent girls. They noted the importance of attachment to the club, formation of positive peer, adult, and sibling-like ties, and creation of safe spaces for self-expression in promoting girls' self-esteem.

Other consequences of sense of community have included organizational citizenship behavior (Burroughs & Eby 1998) and organizational attachment, job satisfaction, role clarity and lower role strains, psychological distress, and intentions to leave among workers at a research firm (Royal & Rossi 1996). In three high schools students' sense of community was related to less disruptive behavior, less class-cutting and fewer thoughts of dropping out (Royal & Rossi 1996).

A continuing question in this literature is whether sense of community is best thought of as a contextual variable or simply an individual attitude. Interestingly, in the study by Solomon et al. (1996) students' perceptions of sense of community were associated with observational measures of related constructs such as provision for student autonomy and input in the classroom, and classrooms accounted for a substantial portion of the variance in sense of community. Another question concerns the causal direction of relationships.

Setting resources are another aspect of social capital. Kelly et al. (2000) noted that settings often have more resources than members recognize. These may include personal resources such as a school secretary or janitor who connects with children and solves problems. System resources include information, money, influence, and the ability to connect with others outside the system to exchange resources or engage in joint action. Resources also include "traditions, customs, and observances" (Kelly et al. 2000, p. 137) that foster integration and sense of community. Adaptation is the setting's ability to alter its own structures and processes and respond to demands in the external environment. Seidman (1988) described social regularities (social relationships or interdependencies that persist over time) as important characteristics of settings and of links among settings. Kelly et al. (2000) similarly described "processes" of reciprocity, networking, and communication within settings and boundary spanning or establishing relationships with outside systems. The inside-outside distinction is similar to Warren et al.'s (2001) distinction between bonding and bridging forms of social capital. Moos (2002) suggested that dimensions of system maintenance and change, along with relationship dimensions and personal growth dimensions, are key enduring dimensions of environmental systems. These theoretical formulations focus on the complex dynamics of social systems and transactions between people and settings (see also Altman & Rogoff 1987).

Norms

Settings are often characterized by distinct descriptive or injunctive norms (what people do or what they think is acceptable), and both have been related to individual behavior. Allison et al. (1999) collected information on descriptive norms for substance use (both low-level and "hard" drugs) among 283 adolescents at six

schools. Norms were defined by self-reported use averaged across all respondents except the target respondent at that school. After controlling for demographic factors, educational placement (e.g., special education), and participants' perceptions of substance use by their parents and peers, school norms were significantly related to participants' own substance use for both classes of substances.

Henry et al. (2000) examined associations of both descriptive and injunctive norms regarding aggression with individual aggressive behavior among 614 ethnically diverse elementary school students in 45 classrooms in 14 economically disadvantaged urban and suburban schools (and later replicated results with students from 21 classrooms in 16 schools). They did not find effects of descriptive norms (aggressive behavior of others in the classroom, as rated by teachers). However, other children's normative beliefs about the appropriateness of aggression were associated with children's behavior both directly and indirectly via associations with children's own beliefs, controlling for both earlier beliefs and earlier aggressive behavior. The authors further assessed the extent to which norms against aggression were made salient by peers (i.e., children's aggression was related to lower peer ratings of popularity and higher peer ratings of rejection) and teachers (i.e., teachers were observed to reprimand aggressive behaviors). Children in classrooms in which both teachers and peers made norms against aggression salient had smaller increases in aggression over a 2-year period than children in classrooms where only teachers or only peers made norms salient.

While norms operate psychologically to affect individual behavior, they also affect human welfare in nonpsychological ways. In a school with norms against aggression, a child is less likely to be victimized. In a gay bar with high norms for condom use, individuals are unlikely to find others willing to engage in unprotected sex, and individuals with poor negotiation skills will have less trouble persuading partners to use condoms. Further, to the extent that condom use reduces the prevalence of HIV infections, even individuals who engage in unsafe practices are less likely to be infected.

Stress

Community settings, like neighborhoods, can be loci for stress. Sandler et al. (2000) described "the ecology of stressful experience" including major life events and cascading experiences that follow from them, more mundane hassles, and chronic stressors. Many of these involve relationships of individuals to settings. Stressful life events include loss of roles, such as employment. Unemployment and job loss have been linked to adverse outcomes such as violence, alcohol abuse, and depression, with effects largely mediated by economic hardship (Price 2000). Seidman et al. (1995) suggest that hassles frequently pertain to particular settings such as neighborhood and school.

Chronic stressors frequently entail hardships, challenges, and conflicts associated with roles in social settings such as school or work (Pearlin 1983) and may fall differentially on different groups. Hughes & Dodge (1997) examined perceptions of interpersonal prejudice at work and institutional discrimination (biased distribution of salaries, benefits, job assignments, and opportunities) for a

sample of African-American women. Both forms of race-related job stress were more strongly related to dissatisfaction with the job than were standard measures of work conditions (workload, skill discretion, support from the supervisor). Respondents in lower primary jobs (e.g., clerical or sales) reported more institutional discrimination, and those who worked with fewer other African-Americans reported higher levels of both racial job stressors.

DIVERSE INDIVIDUALS AND DIVERSE CONTEXTS

The study by Hughes & Dodge (1997) highlights the interaction of sociocultural diversity with diversity of ecological contexts (Trickett 1996). Transactions between individuals and contexts depend on characteristics of both. Leventhal & Brooks-Gunn (2000) noted that in their review the benefits of high SES neighborhoods appear to be greater for European-American than for African-American children. They suggested that this may be because African-American children in affluent neighborhoods are likely to be in closer geographic proximity to less affluent neighborhoods (Sampson et al. 1999). Alternatively, affluent neighbors may interact more with European-American children than with African-American children in their neighborhoods, or the professional roles that the affluent neighbors model may seem more attainable to children burdened by poverty, but not racism. Coulton et al. (1996) also found differential associations of neighborhood features with risk for child abuse in African-American and white neighborhoods. For example, block club activities and neighborhood facilities were more strongly associated with low risk in African-American neighborhoods and, having a name for the neighborhood was more positive in white neighborhoods. Perhaps more formal mechanisms for participation are important when informal mechanisms are blocked, or identification of a neighborhood by name has mixed valence where neighborhood boundaries are enforced by segregation.

Diverse groups may feel differentially accepted and supported in the same setting. Waldo (1998) surveyed 1927 students at a university regarding campus climate for gay, lesbian, and bisexual students. Heterosexual students reported experiencing greater acceptance and respect on campus in general and with regard to sexual orientation than lesbian, gay, and bisexual students. Perceived climate for lesbian, gay, and bisexual students also varied by race, gender, religion, fraternity or sorority membership, and undergraduate versus graduate student status. Chesir-Teran (2002) defined heterosexism as the assumption that "heterosexual power and privilege are normal and ideal" along with social regularities or contextual norms that privilege heterosexuality over homosexuality. Drawing on the conceptual framework of Moos & Lemke (1996), he examined four forms in which heterosexism is manifested in high schools. First are physical and architectural features, such as locker rooms that provide privacy between but not within gender, on the assumption that all sexual attraction is heterosexual. Second are policy and program features, such as the existence and enforcement of antidiscrimination and harassment policies, the presence of support groups, such as gay-straight alliances, links with community resources, integration of positive images of homosexuality

in the curriculum, and availability of relevant books in school libraries. Third are compositional characteristics such as the numbers of students and faculty who are "out" and aggregate attitudes towards homosexuality. Last are social or behavioral regularities in public expressions of same- and opposite-sex affection, partners who are brought to dances, and use of pejorative language.

Morris et al. (1999) found that 13 police commands (precincts) differed in the extent to which commanders set the tone for integrating diverse police officers, as assessed by officers' ratings of the commander's support and his fairness and sensitivity to diversity. There were differences in ratings by demographic groups of officers (white men, minority men, women) and interactions of groups by command, suggesting that the different groups had systematically different experiences. Further, correlation patterns of these ratings with other variables differed by group. Among women and minority men, perceptions of the commander's sensitivity to diversity were positively related to perceptions of the fairness of rewards in the command; for white men, the correlation was reversed. Aggregate perceptions of the commander (means by subgroup within precinct) were related to individual officers' organizational commitment to the police force, controlling for their own individual perceptions.

Clearly, a single physical setting can be viewed differently and have different associations with outcomes for different individuals. We have focused on sociocultural diversity, but differences in cognitive and developmental status and various personal resources are also important (Moos 2002). Shinn & Rapkin (2000) discussed three forms of person-environment fit. The first form is similarity of the individual to others in the setting on demographic or attitudinal variables. Although there are many advantages to diversity, it can also be a source of strain. Second is match between individual needs and environmental supplies or environmental demands and individual personality or skills. In a classic study, Kelly (1979) showed that high school boys who were "high explorers" (active, involved, assertive) were better adapted than low explorers to a school with a high annual turnover of students and made more friends there; the reverse was true in a school with low turnover. Third is congruence between environmental features and personal preferences. All three forms can be expressed as person-setting interactions, and there is some evidence linking all forms to well-being.

INDIVIDUAL AND COLLECTIVE EFFORTS TO CHANGE COMMUNITIES AND COMMUNITY SETTINGS

Although most of the research we have reviewed emphasizes contextual influences on individuals, community psychologists are also concerned with how individuals and groups can change neighborhoods and community settings to foster human welfare. Past *Annual Review* chapters have been devoted entirely to social and community interventions. Here we highlight only a few recent efforts by community members to change their own communities as well as interventions by social scientists to improve welfare by changing contexts.

A recent book on social capital and poor communities (Saegert et al. 2001) described a number of efforts at social change by community members that both built on and enhanced social capital. African-American women who returned to a southern community with attitudes and skills acquired in the north created organizations that reached out to help others in the community and built external links to bring child care resources to the community (Lopez & Stack 2001). A coalition of Boston ministers brought the police and the community together to combat youth violence, and a similar church-police collaboration developed trust and created zones of safety in Chicago (Sampson 2001). A partnership between community organizations and health provider organizations worked to mobilize community organizations, members, and resources to promote health (James et al. 2001). Congregation-based organizations built on the social capital of religious organizations to develop leaders, social networks, and interorganizational linkages to address social problems (Foley et al. 2001).

Similarly Venkatesh (1999) examined community-based efforts to address gang activity in the Chicago area. A grass-roots agency acknowledged and worked with the leadership of a powerful gang to set up a "community court" where residents could air grievances and address disputes with gang members. The same agency attempted to unite gang members and community residents to work on common concerns such as exploitative grocery store prices, insufficient school funding, and voter registration. In a separate effort, local pastors worked with a female gang to address sexually abusive behaviors by a male gang and increase public safety.

Wandersman & Florin (2000) reviewed the literature on individual and environmental characteristics that promote citizen participation in neighborhood and community development organizations. They also reviewed evidence that such organizations make a difference in reducing physical deterioration and crime, promoting social services, enhancing informal neighboring, and influencing individual attitudes such as trust, confidence, experience of personal and political efficacy, and sense of community. Community organizations influence not only people's psychological sense of empowerment but actual power and decision-making in communities.

Interventions undertaken by social scientists typically have more limited targets. Several researchers have collaborated with community members to reduce underage smoking or drinking. Wagenaar et al. (1999) mobilized communities via education campaigns to monitor alcohol sales and change drinking policies at community events. Biglan et al. (1996) and Jason et al. (1999) worked to enforce bans on sales of tobacco. Teenage testers attempted to purchase the forbidden products from merchants, who faced warnings, fines, or loss of license if they sold the product and rewards if they did not. All three interventions decreased both sales to and use by minors over time or in relation to comparison communities. Lichtenstein et al. (1996) described a consultative intervention that succeeded in changing tobacco control policies in 20 Northwest Indian tribes. This effort was complicated by traditional use of tobacco and the importance of income from tobacco sales for many tribes. Altman & Goodman (2001), Revenson & Schiaffano

(2000), and Reppucci et al. (1999) described additional community-based interventions to improve health.

Intervention efforts may also address specific settings. For example, Miller et al. (1998) used a model developed by Kelly et al. (1991, 1992) based on diffusion of innovation theory to change norms for unsafe sex in three gay hustler bars. Training opinion leaders, identified by bartenders, to disseminate information about condom use led to lower involvement in and frequency of paid unsafe sex by bar patrons. Changes were mediated by frequency of attendance at the bars, suggesting either a dose-response effect or one dependent on degree of attachment to the setting. Black patrons were unaffected, perhaps because the opinion leaders were largely white and Latino. Surprisingly, although behavior changed, descriptive norms (how patrons perceived that "others in the bar" behaved) did not, perhaps because of an overly broad definition of "others," or the use of descriptive rather than injunctive norms.

The studies we have described used rich qualitative data and clever research designs such as multiple baselines, staggered introduction of interventions, and nonequivalent comparison groups to make plausible causal inferences with small numbers of settings that could not always be randomly assigned to conditions. They call attention to the sociocultural diversity of settings, and the importance of working collaboratively with community members of the setting (from religious leaders, to police, to gang leaders, to tribal elders, to natural opinion leaders in bars) in changing community contexts.

Yet another approach to changing contexts is the creation of alternative settings with different structures, goals, and values from existing settings (Sarason 1972). Cherniss & Deegan (2000) reviewed factors associated with success in creating settings and maintaining their alternative vision.

METHODOLOGICAL ISSUES IN ASSESSING COMMUNITY CONTEXTS

In any empirical discipline, theoretical understanding and methodological sophistication go hand in hand. Psychologists have devoted far more time and energy to assessing individual attributes than to assessing the contexts of human behavior or transactions between people and contexts, and lack of appropriate measurement contributes to context minimization error. Thus, we turn to important approaches and challenges in measuring the effects of community contexts. Analysis of contextual and multi-level data is also a critical issue, but beyond the scope of this chapter.

Confusion Between Characteristics of Individuals and Contexts

Characteristics of individuals are naturally correlated with characteristics of social contexts (particularly when contexts are defined in terms of the aggregate characteristics of individuals who reside within them). The confounds, which are known as selection effects (e.g., Tienda 1991), may be due to choice or to constraints:

Immigrants often choose to reside in neighborhoods with other immigrants where language, cultural values, foods, and many other aspects of life are familiar and social networks are available. Poor people tend to live in poor neighborhoods because they cannot afford housing in wealthier communities, and members of minority groups suffer ongoing discrimination and segregation (Massey & Denton 1993). Membership in or attendance at community settings also depends on attraction of individuals to settings, attrition of those who do not find what they are looking for, and often selection among applicants by the settings themselves (Levy 2000, Shinn & Rapkin 2000). Effects of selection, attraction, and attrition often mimic the effects of the settings on behavior. For example, a selective college may both admit more talented students and develop their talents better than a less selective school.

Because of confounding between characteristics of individuals and settings, researchers typically control statistically for individual or family characteristics in estimating the effects of contexts but worry that such controls are insufficient owing to inadequate or incomplete measurement (Duncan et al. 1997). However, to the extent that associations between contextual characteristics and individual behaviors are causal, the attribution of all shared variance to the individual level may over- rather than undercorrect. Similarly, to the extent that neighborhoods influence families or parenting, controlling for family characteristics in studying children's outcomes may overcorrect (Duncan et al. 1997). The possibility of overcorrection is suggested by the larger effect sizes in the Gautreaux and Moving to Opportunity experiments, in which confounds between individuals and neighborhoods were eliminated, than in correlational studies, in which individual characteristics were controlled. Further, in the Gautreaux study neighborhood effects were strongest on educational attainment, employment, and earnings, exactly the types of individual characteristics that are typically controlled. Effects may also be larger in experimental than in correlational studies owing to extreme group designs or poor measures of neighborhood conditions in correlational studies. We return to the latter possibility below. Thus, even well-designed, multilevel correlational studies may fall prey to context minimization error.

Of course, most studies in the psychological literature pay no attention to community contexts but do report associations of individual characteristics, such as race, with outcomes. However, as Wilson (1987) pointed out, poor African-Americans are far more likely to live in neighborhoods of concentrated poverty than are comparably poor white Americans. For example, in a nationally representative sample of 10- to 13- year-old-children, 23.2% of blacks and 0.3% of whites lived in a neighborhood where at least 40% of neighbors were poor (Duncan & Aber 1997). As Leventhal & Brooks-Gunn (2000) showed, neighborhood affluence and poverty are associated with variables such as academic achievement, teen birth rates, and delinquency, even after controlling for family characteristics. Thus, effects of neighborhoods may masquerade as effects of individual characteristics, such as race, with which they are confounded.

Where contexts are not completely ignored, they are often measured in simplistic ways. Simply controlling for neighborhood poverty may underestimate

the degree to which the inner-city neighborhoods in which some poor African-Americans reside represent different "ecological niches" for development with respect to education, jobs, marriage opportunities, and opportunities for sustained interaction with mainstream society (Wilson 1987, p. 60). Racial disparities extend beyond the immediate neighborhood, as Sampson et al. (1999) showed in Chicago. Collective efficacy depended not only on characteristics of the immediate neighborhood (defined as clusters of census tracts numbering about 8000 people) but also on collective efficacy in surrounding neighborhoods. Predominantly white neighborhoods were more likely to be high in efficacy than predominantly black neighborhoods. Further, white neighborhoods that were not high in efficacy were far more likely than comparable black neighborhoods to be "spatially advantaged" by being adjacent to neighborhoods with higher efficacy. High-efficacy black neighborhoods were far more likely than comparable white neighborhoods to be "spatially vulnerable" owing to contiguity with low-efficacy neighborhoods. Thus, black youths were doubly disadvantaged by their own neighborhoods and by others nearby.

Even where characteristics of individuals are not confounded with characteristics of contexts, contextual restraints may be confused with individual traits. Examples of this form of context minimization error abound in the case of homelessness, in which the most basic error is to look only at individual causes of homelessness, ignoring information about affordability of housing (Koegel et al. 1996). Characteristics of individuals may also be confused with restrictions of service systems (Shinn & Weitzman 1996). For example, researchers have concluded that homeless families are unusually likely to be headed by single mothers and are nomadic, based on studies in shelters that exclude men and have 30-day limits on stays. They conclude that substance abusers cannot maintain housing based on studies of housing programs that evict anyone found using substances.

Selecting Contexts to Measure

As Bronfenbrenner (1979, 1986) has pointed out, individuals can be influenced indirectly by settings they do not enter. Typically such influences are mediated by more local contextual influences. For example, African-American parents' experience of racism in the workplace influenced the ways they socialized their children to issues of race (Hughes & Chen 1997). Thus, most research focuses on immediate contexts of behavior.

IDENTIFYING BOUNDARIES One critical issue in assessing contexts is determining their boundaries. In compositional studies neighborhoods are typically defined by census tracts or smaller block groups. This is not a bad starting point. Census boundaries are drawn in consultation with local communities to reflect important physical features and social and ethnic divisions (e.g., Leventhal & Brooks-Gunn 2000). However, people's definitions of their neighborhoods do not necessarily conform to census boundaries. In a small study in one city, Coulton et al. (2001)

found that residents' self-defined neighborhoods were close in size to census tracts but typically included portions of at least two census tracts and three block groups. Further, on average, only 43% of a resident's self-defined neighborhood overlapped with neighborhoods delineated by a majority of other residents of the same block group. Rank order correlations between social indicators calculated for census tracts and for resident-defined neighborhoods were as low as .3.

Even residents' definitions, which may be influenced by neighborhood names or generally acknowledged boundaries, may not reflect the geographic areas that affect them. Areas where residents spend time or through which they travel en route to school, work, shopping, religious services, or recreational activities may be more influential. Thus, family members residing at the same address might have different functional neighborhoods. Smaller areas than census tracts may be important. For example, the area viewed from an apartment window was found important to feelings of safety and adjustment by Kuo et al. (1998). The relevant size of a neighborhood may vary systematically with a person's age, health, or employment status. Tienda (1991) argued that relevant neighborhoods should not be defined in geographic terms at all but in terms of patterns of social interaction. Grannis (1998) showed that linkage of neighborhoods along tertiary streets (small streets designed for pedestrian traffic) was more important than geographic proximity for explaining racial segregation. Given these considerations, it is surprising that neighborhood variables explain as much variance as they do.

Boundaries of community settings may appear easier to define. However, many people who are formally members of churches, mutual-help groups, or fitness centers may never in fact attend. Experience sampling methods can examine people's exposure to settings. For example, Larson et al. (2001) found that European-American children in Chicago suburbs spent more time in school than African-American children in urban Chicago, and both groups spent far less time than middle class youths in Korea and India, because of the length of school days. An important research question is whether weighting environments by the proportion of time people spend in them would enhance their explanatory power, although weighting at the individual level would introduce selection effects.

SAMPLING Quantitative studies of associations of context with individual outcomes must have a large enough sample of sufficiently variable contexts, and sufficient numbers of individuals within contexts (e.g., Leventhal & Brooks-Gunn 2000). Stratification, for example by race/ethnicity and SES (Sampson et al. 1997), can maximize power to understand effects of potentially confounded variables and purposive samples, such as Coulton et al.'s (1996) sample of neighborhoods high and low in child abuse, can maximize variation on key variables. Contexts change and should be sampled over time to understand processes of change.

Approaches to Measurement

Several theorists have described different approaches to assessment of ecological contexts. Linney (2000) divided these into participant perceptions, more-objective

indicators, and measures of social regularities. Livert & Hughes (2002) focused on assessment of contexts and transactions between people and contexts. Shinn & Rapkin (2000) focused on whether the assessment involves aggregating information from or about lower-level units (e.g., people) or takes place at the ecological level of the context itself. Aggregation requires attention to the measurement properties of aggregate measures (Raudenbush & Sampson 1999). We review several approaches to assessing social contexts.

COMPOSITIONAL MEASURES BASED ON ARCHIVAL DATA Recently, most neighborhood studies have used archival information collected by the census about demographic characteristics of individuals and aggregated them to geographic units such as census tracts. Census data are often employed because they are available and expedient, but the census was not designed to assess aspects of neighborhoods that influence residents, and census variables are relatively distal from behavior (e.g., Earls & Buka 2000). Studies using census data frequently combine multiple variables into indices (Leventhal & Brooks-Gunn 2000) in ways that are inconsistent from one study to the next and are often only loosely linked with theory. Studies rarely correct for systematic biases in the census, such as undercounts of poor and immigrant populations, and census data, which are collected every 10 years, may not represent the current status of changing neighborhoods.

Coulton & Hollister (1998) discussed additional archival data sources to assess other features of communities including housing (e.g., reports of housing code violations), the economy (e.g., unemployment insurance records), safety (e.g., police records, juvenile court filings), education (e.g., public school attendance records), health (e.g., vital records), social services (e.g., public assistance files), and community resources and participation (e.g., community directories). Linney (2000) described the use of archival data to assess social regularities. Archival sources have their own biases and threats to validity (e.g., Coulton & Hollister 1998, Linney 2000, Webb et al. 1981) but could productively be used more widely.

COMPOSITIONAL MEASURES OF PERCEPTIONS Individual perceptions are frequently used to characterize community settings. Individuals can report on their own attitudes or values, which can be aggregated to create setting-level norms (e.g., Henry et al. 2000), or on characteristics of the setting itself. The social climate scales developed by Moos and colleagues (Moos 1994) assess dimensions of relationships, personal growth, and system maintenance and change in many types of settings. Conceptualizing aggregate perceptions as measures of context may require inter-rater agreement, mean differences among settings, and meaningful relationships of aggregate perceptions with other variables, controlling for individual perceptions (e.g., Shinn & Rapkin 2000). We need to understand how agreement comes about (selection, attraction, attrition, socialization) and understand systematic variation in perceptions.

OBSERVATIONAL INVENTORIES The conceptual anchors participants use to rate environments are probably shaped by the limited set of comparison environments to which they have been exposed. Trained observers may be better able to evaluate a wide range of environments with a constant metric (e.g., Perkins & Taylor 1996). Inter-rater reliability is crucial but may be easiest to establish for relatively permanent environmental features. Patterns of social interaction are likely to vary by day and time, and for outdoor settings, by weather and season, thereby making sampling of observational periods as important as sampling of locations. Observational measures may miss conditions with high impact, such as drug dealing or violence, which participants have reason to hide or which have low base rates. Linney (2000) described a number of observational inventories for specific settings.

SETTING REGULARITIES Settings differ in the behaviors they encourage, tolerate, and proscribe. The Multiphasic Environmental Assessment Procedure (Moos & Lemke 1996) systematically assesses program policies in addition to physical and architectural features, collective socio-demographic characteristics of residents and staff, and the social climate of residential facilities such as nursing homes. Multiple instruments measure both stated policies and views of staff who implement them. Both are important and need not match. Linney (2000) called attention to differences between formal policies (such as school desegregation) and social regularities within systems (such as resegregating classes by tracking students).

QUALITATIVE AND DESCRIPTIVE METHODS Qualitative data can provide rich descriptions of ecological processes that are difficult to capture in other ways (e.g., Caughy et al. 1999, Furstenberg 1993, Plas & Lewis 1996). Potential drawbacks are small samples and questionable reliability and representativeness of findings. Integration of approaches, for example by using quantitative data to select representative contexts for qualitative investigation, is likely to yield greater understanding (e.g., Campbell & Ahrens 1998). The Project on Human Development in Chicago Neighborhoods used stratified random sampling of neighborhoods. Within neighborhoods it employed a variety of assessment techniques including interviews with key informants: Business owners, school administrators, religious leaders, police, and elected officials were systematically sampled from rosters of each of these groups. In addition, people with reputations as leaders were selected by a consensus of nominations from the other groups (Earls & Buka 2000). Qualitative and ethnographic approaches may be particularly useful in understanding social regularities and processes within settings.

CREATIVE APPROACHES Researchers have used a variety of creative methods for particular purposes. Perkins & Taylor (1996) did a content analysis of newspapers for crime stories in predicting fear of crime. Campbell & Ahrens (1998) analyzed linkages among legal, mental health, and health systems in predicting outcomes

for rape victims. Chesir-Teran (2002) proposed a multifaceted analysis of school environments with respect to heterosexism. Crafting measures to capture the theoretically important features of contexts continues to be a challenge.

Ethical Issues

Research in community contexts raises important issues that are not well recognized by the American Psychological Association's code of ethics (e.g., Snow et al. 2000, Trickett 1996, Trickett & Levin 1990). Researchers must take account of differing values, goals, and power held by diverse individuals, groups, organizations, and communities and the complex interactions among them, as well as their own values in undertaking research and interventions (Prilleltensky 2001, Snow et al. 2000). Interventions may have effects, not all of them positive (e.g., Levine & Perkins 1997), that radiate beyond the people and settings that gave consent or participated in planning. Aggregation of information to characterize neighborhoods or settings involves applying information to collectivities, when only individual participants have given consent. Because of these dilemmas, community psychologists frequently call for both community sanction for research and community collaboration in setting a research agenda, designing studies, and determining how information will be used, in the spirit of "nothing about us, without us" (e.g., Nelson et al. 1998). However, identifying appropriate representatives of the community or developing consensus in diverse communities is not always straightforward. Ethical issues, like conceptual and methodological ones, will continue to challenge researchers who attempt to understand the contexts of human welfare.

CONCLUSION

We have argued that community contexts matter for human welfare in ways that psychologists too often ignore. Fruitful conceptual models for understanding links between contexts and behavior include social capital, norms, and social stress. For neighborhoods, compositional effects, mediated by variables such as collective efficacy, are important. For community settings, both instrumental functions and social roles also matter. Context minimization error leads to an impoverished understanding of developmental and other psychological processes, perpetuation of stereotypes, and missed opportunities for intervention. Better psychological theory, more accurate inferences, and successful social change efforts require attention to reciprocal relationships between people and contexts and the ways contextual influences play out for diverse populations.

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