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Structurally Competent Social Work Research: Considering Research Methods and Approaches that Account for a Recursive Relationship between Individuals and Structures

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Structural competence, recently introduced in the medical literature, has always been present in social work's approach to addressing social problems. To achieve structural competence, in medicine and in social work, an evidence base for the structural determinants of social problems and interventions is needed. Social work researchers have made some strides in developing an evidence base to inform a structurally competent practice by employing structurally competent research methods in the investigation of social problems. This paper argues that Anthony Giddens' structuration theory adds to the medical literature's understanding of structural competence and discusses several research methods and/or approaches that have been and should continue to be employed by social work researchers in developing a structurally competent evidence base to inform practice.

Keywords: structural competence, structuration theory, research methods, multilevel modeling

Introduction

Metzl and Hansen (2014) introduced the concept of structural competence in the medical literature as a clinical practice in which doctors not only identify a patient's presenting problem, but also the upstream factors that may be impacting his or her health. A structurally competent approach to clinical practice requires extensive knowledge regarding the ways in which structural factors—such as neighborhoods, zoning laws, school systems, and/or language barriers—impact client outcomes directly and indirectly. Even though Metzl and Hansen (2014) argue that scientists now have a greater recognition that structures impact health outcomes, they also acknowledge there is less evidence to guide practitioners in imagining structural interventions, and in the face of not knowing, practitioners rarely act to do so (Metzl & Hansen, 2014, p. 130).

To be structurally competent, practitioners in medicine and social work need more than evidence of existing structural relationships; they need evidence-based strategies to address those structures identified as important for client outcomes. Developing this evidence base may require the use of theories and/or research methods/approaches outside of those typically used in medical intervention research. Although social work is not the only discipline to make strides in this area, social work's long history of attempting to intervene on the structures that are impacting vulnerable populations makes it well positioned to contribute to conversations regarding the theories and research methods needed to create such an evidence base. This paper discusses what might be gained by considering: (1) the relationship between structures and individuals as bi-directional; and (2) the research approaches used by social work researchers to investigate bidirectional relationships, such as a multilevel modeling framework, social network analysis, participatory-action research approaches (based on critical dialogue), and in-depth ethnography. The purpose of this paper is to highlight the research methods and approaches that social work researchers presently use in conducting the structurally competent research needed to imagine structural interventions and inform a structurally competent social work practice.

Laying a Theoretical Foundation for Structural Competence

In classic theories of human behavior, there has been a tendency for theorists to favor a structural explanation or an individual explanation, with few theorists integrating both (Kondrat, 2002). Macro theories of human behavior (which tend to favor a structural explanation) have classically defined social structures and institutions as “social regularities and objective patterns external to individual actions, intentions, and meaning” (Kondrat, 2002, p. 436). Sewell (1992) suggests that theories which focus strictly on structures as determinants of human behavior are limited, as they do not explain how structures are created and maintained, and/or changed. According to Baber (1991), theories that focus on human interactions to explain human behavior overlook the influence of structures in shaping behavior. This dualism is not helpful when developing structural interventions designed to change those structures impacting a client’s well-being.

Although some social work frameworks (i.e., ecological systems theory) describe the relationship between individuals and structures, they typically describe the relationship as uni-directional and therefore remain limited in their utility. Other frameworks, such as Giddens’ structuration theory and Lerner’s developmental systems theory, conceptualize the relationships between structures and individuals as bidirectional. Theorizing a bi-directional relationship may be particularly important to consider when assessing structural interventions and the research methods required to develop and test them, as these processes describe pathways through which individuals can change structures. Although Lerner’s developmental systems theory argues the bi-directional relationship between individuals and their contexts are central to human development, individual development remains the primary focus of the theory; consequently, less attention is paid to how individuals change structures (Lerner, 2018). Conversely, in Giddens’ structuration theory, the relationship between individuals and structures is central and dynamic and provides an explanation for how structures are created and maintained (Giddens, 1979, 1984, 1991). These theories do not necessary contradict each other; however, due to the explicit focus on the dynamic creation and re-creation of structures within Giddens’ structuration

theory, it is used in this paper to organize the discussion of structurally competent social work research methods.

Metzl and Hansen (2014) define structures as “the buildings, energy networks, water, sewage, food and waste distribution systems, and highways...diagnostic and bureaucratic frameworks...and assumptions imbedded in language” that impact health (p. 128). In this definition, although not explicitly stated, an individual’s behaviors are determined or constricted by existing structures that simply exist with little explanation of how they came to be. In contrast, Giddens (1984) defines structures as “rules and resources, recursively implicated in the reproduction of social systems” (p. 377). Giddens integrates the theories of structural influences and individual agency by conceptually connecting the everyday life of an individual to larger social structures. Within this theory, social structures are not separate from the individual; rather, they are comprised of individuals that are continuously co-constructing the social regularities that characterize that structure. For example, the structure of a workplace is maintained when the workers agree to come to work and perform the prescribed tasks, and management agrees to impose sanctions when the rules are not followed. If any of the involved parties do not perform according to the rules (i.e., the workers do not show up for work), the structure will no longer exist. Therefore, Giddens argues, social structures are, foundationally, constructed realities with a set of rules that govern behavior—rules that individuals have consciously or unconsciously agreed to abide by. The concept that social reality and social institutions are recursively constructed is central to Giddens’ understanding of the relationship between structures and individuals; it is a particularly useful concept when attempting to imagine structural interventions.

Several concepts in Giddens’s theory are important to understand if they are to be applied to structurally competent research. For example, for individuals to consciously work to change structures, they must become aware of the governing rules and their role in maintaining them. Although this may seem simple, the majority of the rules that create and maintain structures are taught to us as children and become habitual, outside of our conscious awareness (Wheeler-Brooks, 2009). For example, the rule that dictates we should say “please” when making a request is not a rule we necessarily identify as

a structure we actively worked to co-create. It is so ingrained in our behavior that we do it with little awareness of a tacit agreement with the rule. Giddens calls this type of knowledge “practical knowledge” (Kondrat, 2002, p. 440). Consequently, for individuals to realize their role in the construction and maintenance of structures, they must be able to observe their behavior and identify the rules—a process that requires reflexivity. If individuals are able to reflexively observe their behavior within a structure, they can build their awareness of the social constructions that govern social structures and then actively work to reshape them.

Giddens does not ignore the unequal distribution of power within the social structure that gives some individuals more power than others in constructing structures. Power, functioning according to the amount of knowledge a person has of the rules that govern social interaction, gives those who have it the ability to actively shape social structures (Wheeler-Brooks, 2009). Within the conception of structures, all that is needed to create change is for individuals with agency to become aware of the rules that govern them. They may then collectively refuse to abide by them, effectively co-creating a new structure with new agreed-upon rules. In structuration theory, Giddens is conceptualizing how social action can take place (Baber, 1991).

Despite its strengths, structuration theory has been critiqued for being a-priori and a-historical, effectuating its failure to adequately account for power differentials and existing structural properties (Archer, 1982; Baber, 1991; Mouzelis, 1989). Although Giddens recognizes the role of knowledge and resources in an individual’s ability to impact structures, his theory has been critiqued for failing to consider other aspects of power that exist based on an individual’s position within the structure, and any pre-existing aspects of the structure (Archer, 1982; Bourdieu, 1979; Mouzelis, 1989). Archer (1982) argues, for example, that some structures may be easily changed, while others may be highly resistant to change, and still others may be unchangeable (i.e., classroom rules, tax law, the constitution, exhausted natural resources). Despite these critiques, Baber (1991) suggests that the connection structuration theory draws between human agency and structures provides an explanation of action largely absent from other theories of human behavior that strive to account for the role of structures. Accordingly, structuration

theory provides some insight into the types of research questions that structurally competent social work research should be addressing, and it suggests that research methods must account for the bi-directional relationship between individuals and structures.

Although the ability of individuals to change structures may vary based on the individual's position/power and the malleability of the structure, the idea that rules can be changed when an individual gains knowledge of them provides a framework for imagining structural interventions (Metzl & Hansen, 2014). By theorizing a bi-directional relationship between structures and individuals, Giddens not only explains the relationship between the two, he also identifies the ways by which individuals can exert their agency to change existing social structures. If social workers were to become aware of the ways they and their clients contribute to the co-construction of structures, they could actively work to change them.

Methods Used in Structurally Competent Social Work Research

To apply these theoretical concepts to structurally competent research, methods are needed to empirically assess the bi-directional relationship between individuals and structures, as opposed to simply relying upon methods that describe one (the individual) or the other (the structure). Although traditional research methods/approaches (i.e., cross-sectional surveys, randomized control trials, OLS regression) may be used to generate evidence that will inform structurally competent social work practice, some research methods/approaches employed in social work research may be more applicable for investigating the bi-directional relationships between individuals and structures as theorized by Giddens.

The remainder of this paper will examine four research methods/approaches that have been used in social work research to account for the bidirectional relationship between individuals and structures outlined in structuration theory (see Table 1). The methods/approaches discussed and the studies that are used to illustrate their application in social work research are not meant to serve as a comprehensive review of the work that is being done to understand the bi-directional relationship between structures and individuals in social work

Table 1. Structuration Theory and Structurally Competent Research Methods/Approaches Used in Social Work Research

Features of Ecosystems Perspective (Kondrat, 2002)	Research Methods /Approaches	Features of Structuration Theory (Kondrat, 2002)	Research Methods/ Approaches	Examples in social work research	Recommended methodological guides
<ul style="list-style-type: none"> - Uni-directional transaction between micro and macro systems 	<ul style="list-style-type: none"> - OLS regression with robust standard errors - Decomposition of effect in multi-level models 	<ul style="list-style-type: none"> - Recursive relationship between individuals and structures 	<ul style="list-style-type: none"> - Multi-level models with cross level interactions - Longitudinal multi-level models 	<ul style="list-style-type: none"> - Little & Tajima, 2000 - Freisthler & Maguire-Jack, 2015 	<ul style="list-style-type: none"> - Raudenbush & Bryk, 2002 - Aguinis, Gottfredson, & Culppepper, 2013
<ul style="list-style-type: none"> - Unit of analysis: transactions between persons and macros systems 	<ul style="list-style-type: none"> - OLS regression with robust standard errors - Decomposition of effect in multi-level models 	<ul style="list-style-type: none"> - Unit of analysis: the human agent acting in concert with other human agents to create and maintain structures 	<ul style="list-style-type: none"> - Ethnography 	<ul style="list-style-type: none"> - Cunningham & Diversi (2013) - Stanhope (2012) 	<ul style="list-style-type: none"> - Hammersley & Atkinson, 1995
<ul style="list-style-type: none"> - Individuals knowledge of structures are not considered 	N/A	<ul style="list-style-type: none"> - Reflexivity of human actor in role of creating and maintaining structures 	<ul style="list-style-type: none"> - Social network analysis including the examination of how norms spread in networks 	<ul style="list-style-type: none"> - Barman-Adhikari et al., 2016 - Rice et al., 2018 - Scott, 1988 	<ul style="list-style-type: none"> - Borgatti et al., 2009 - Knoke & Yang, 2008
			<ul style="list-style-type: none"> - Ethnography 	<ul style="list-style-type: none"> - See above 	<ul style="list-style-type: none"> - See above
			<ul style="list-style-type: none"> - Participatory Action Research 	<ul style="list-style-type: none"> - Wagaman, 2015 - Schormans, 2010 	<ul style="list-style-type: none"> - Kemmis, McTaggart & Nixon, 2013 - McIntyre, 2007
			<ul style="list-style-type: none"> - Ethnography 	<ul style="list-style-type: none"> - See above 	<ul style="list-style-type: none"> - See above

research; they simply provide a discussion of four methods and approaches, with examples of how they have been applied.

Multilevel Modeling: Testing the Relationship between Individuals and Structures

Structurally competent social work research that builds an evidence base for structurally competent practice (based on Giddens' conception of structures) explicitly investigates: (1) the relationship between structural factors that may be impacting outcomes; and (2) how individuals collectively contribute to the recreation of structures. Some of these structural factors may include agency policies, neighborhood crime rates, school climates, and work-place training opportunities. If, for example, a social worker found evidence that the school climate is impacting their client's attendance, a structurally competent social worker may begin to investigate how the school climate might be changed or what individual characteristics (students, teachers, or administrators) work together to co-construct a school climate that supports or hinders student attendance. In order to establish an evidence base for the relationships between climate and attendance, the social work researcher would need to investigate the relationship across multiple schools, requiring the use of statistical methods that account for clustering. Once the social work researcher concludes that the school climate is related to attendance, he or she may want to investigate if teacher norms are contributing to the school climate and if the difference in teacher norms changes the relationship between school climate and attendance. In order to address these types of structurally competent research questions, social work researchers may use multi-level modeling and test cross-level interactions.

The simplest statistical models used in social work research, such as OLS regression equations, may easily test the relationship between individual-level factors (i.e., school attendance and grades) and structural-level factors (i.e., school suspension rates and the number of teachers in a school across schools). To establish an evidence base for the relationships between climate and attendance, the social work researcher may need to investigate the teachers' and/or students' means across multiple schools. This will require the use of statistical methods that: (1) account for the dependence of observations that occur when

there is clustering; and (2) allow the research to decompose the individual- and structural-level variation.

Multilevel modeling provides researchers the tools to model the relationships between individuals and structures within a regression framework. When examining structural factors using surveys or other forms of measurement, researchers often have multiple participants within one organization, school, or neighborhood, consequently rendering these observations dependent. In order to correct for this violation of assumptions of regression, statistical methods must be used to account for the dependence; researchers can adjust for the clustered standard errors or estimate multi-level models. In these situations, however, it may also be important to understand what amount of variation in individual-level variables can be attributed to structural characteristics and what amount of variation can be attributed to individuals (Duncan, Jones, & Moon, 1998). For instance, we may measure a school's climate by asking students a series of questions about their school. In order to understand how much of this report is a reflection of the school's climate and how much of the response is due to differences in individual experiences, and/or characteristic multilevel models are needed.

Multilevel models position researchers to acknowledge that structures are simply a collection of individuals, allowing the research to model the part of individual experiences are consistent across structures and therefore become characteristics of that structure (Raudenbush & Bryk, 2002). Multilevel models also allow researchers to test cross-level interactions to determine if the impact of structures varies by individual experiences or actions (Duncan et al., 1998). For example, once the social work researcher concludes that the school climate is related to attendance, they may want to investigate if a student's willingness to intervene in fights (individual agency) is contributing to the school climate (characteristics of the structure) and if the differences in a student's willingness to intervene changes the relationship between school climate and attendance.

Although multilevel modeling gives researchers the tools to test the relationship between structures and individual outcomes, research designs and the types of applicable measures dictate whether researchers can test the unidirectional relationship between structures and individual outcomes alluded to by Metzl and Hansen (2014) or the bidirectional relationships

theorized in structuration theory. Research designs employing multilevel models to test the relationship between structural aspects of society and individual outcomes frequently include observations at one point-in-time. This is a restriction which constrains the researcher's ability to hypothesize or test the directionality of the relationships. In such cases, researchers typically rely on theories to support the argument that associations flow down from structures to individuals. Consequently, researchers rarely test the impact of individuals on structures. Although the use of multi-level models does not inherently indicate that the researcher is testing the relationships between structures and individuals, as theorized by Giddens, it does give researchers a tool for modeling these relationships.

Little & Tajima's (2000) study provides an example that uses cross-sectional data to understand the bidirectional relationship between individuals and structures by explicitly measuring individuals' attributes that may be working to influence structures and by testing their relationship within a multilevel framework. More specifically, Little & Tajima (2000) use multi-level modeling to understand how attributes of social workers (i.e., having Master degrees) might work together to co-create program structures that impact client outcomes. In this study, individual client characteristics, such as substance abuse and stable housing; worker-level attributes, such as job clarity, autonomy, and deficit orientation; and program-level characteristics, such as case load, positive climate, and service intensity, were considered. Although much of the variation in collaboration was observed at the individual level, 13% of the variance in collaboration was attributed to between-worker variation and 4% of the variance in collaboration was attributed to program characteristics. After the variance of cooperation at each level was determined, the authors tested which features of each of these levels accounted for the variation. At the individual level, they found that workers were less likely to collaborate with African-American mothers, and African-American workers were more likely to collaborate with all of their clients. They also found that those workers with a Master's degree were more likely to collaborate with substance-using mothers and those workers who had worked in the child-welfare system for more than a year were less likely to collaborate with families who had severe deficits in child-care skills.

Little & Tajima (2000) also used cross-level interactions to examine the relationship between clients, individual workers, program-level characteristics, and parental engagement in child-welfare programs. Their study provides an example of how concepts in structuration theory can be modeled in a multi-level framework to provide insight that can inform structurally competent social-work practice. Based on these findings, an organization, for example, may decide that hiring masters-level social workers is essential for creating an organizational structure that facilitates client collaboration. This is exactly the type of evidence that is needed for social workers to practice in a structurally competent manner.

In order to explicitly test the bidirectional relationships between structures and individuals, examining longitudinal data within a multilevel framework is needed. Longitudinal data allows the researcher to test the potentially recursive relationship between structures and individuals as theorized in structuration theory. Although it is typically assumed that structures are static over time, structuration theory would argue that is not necessarily the case, and this could be tested over time. In a recent article, Lee and colleagues (Lee, Shapiro, Kim, & Yoo, 2018) outlined how social work researchers can use multilevel structural equation models to understand the direct and indirect effects of teachers and classroom characteristics in youth's healthy development. In their example, they found that variance in the students' social/emotional competence occurring at the classroom level could be explained by the teacher's social/emotional competence and could be mediated by the number of lessons a teacher taught on the subject. Although this use of longitudinal data does not directly model the recursive nature of individuals and structures, it does model how teacher characteristics impact the structure of a classroom—in this case, the lessons being taught that impact youth outcomes. Modeling longitudinal data in a multi-level SEM framework gives social work researchers the tools to test the possible influences of structural change, moving the field toward developing evidence-based structural interventions.

*Social Network Analysis: Understanding
How Rules Support the Creation of Structures*

Social network analysis is another method that social workers have employed to investigate aspects of structuration theory that may inform structurally competent practice. Giddens' assertions that structures are created and recreated through interactions which are governed by agreed-upon rules, leads researchers to question how rules and norms are spread among individuals. If social work practitioners are able to understand how rules are being shared within networks, structurally competent interventions may be designed to disseminate alternative rules, which, in turn, may change the structures themselves. Suppose a social work practitioner endeavored to address the rates of violence within a neighborhood, and he or she knew that the pervasive neighborhood rule of not reporting crimes was contributing to high rates of violence. To intervene in this problem, a structurally competent social worker may aim to change the structure of the neighborhood by changing the rules of the neighborhood to "if you know of a crime taking place, say something." In order to effectively change the old rules (and as a consequence, have the structure impact client outcomes), the social worker would need to understand how the rules are disseminated within the neighborhood's networks. Social network analysis allows social work researchers to investigate how rules and/or norms are shared within structures—information which may lead to social work interventions that are able to change the structures by changing the rules.

Consistent with structuration theory, social network analysis allows researchers to examine how human agents work in concert to create and maintain structures. Social network analysis involves graphing social connections as a series of nodes (actors) and edges (relationships) (Wasserman & Faust, 1994). The shape and patterns found in these connections are called the structure of the network (Wasserman & Faust, 1994. p. 3). Methods have been developed to describe these structures and understand how an actor's position within the structure impacts his or her knowledge, behavior, and norms (Scott, 1988). More specifically, network graphs have been used to map the spread of norms through the networks, the relational structures of organizations, neighborhoods, and classrooms, in addition to understanding

the behavior of the networks based on the characteristics of the actors (Borgatti, Mehra, Brass, & Labianca, 2009). Social network analysis also describes how individuals choose to associate with one another—data that potentially has significant implications for how structures are created and maintained.

Lastly, social network analysis provides a precise definition of the members and non-members of a group—knowledge that can be used to understand the social structures in schools, social service agencies, and/or governing bodies (Neal & Neal, 2013). Due to the importance of networks to the spreading of norms, Rice and Yoshioka-Maxwell (2015) explicitly argue that social work researchers and practitioners should be using this method to develop more effective interventions.

Much of the social work research that has employed social networks simply characterize an individual's egocentric network or the relationship that one individual has with another member of the focal person's social network. In an article that examined the role of a participant's egocentric networks within mental health self-help agencies, social work researchers Hardiman and Segal (2003) found that participants with social networks which consisted of other self-help agency members reported a higher level of organizational empowerment, while valuing less concrete services.

In another example, social work researchers Zakour & Harrell (2004) investigated the cooperative links between social service organizations and the intensity of those links during a disaster condition. The study found there were fewer organizations in high-risk neighborhoods (defined as a high percentage of African-American female-headed households, children under the age of 5, and adults over the age of 75) and fewer cooperative links between these organizations and organizations outside the area. Although these studies did not include the relationships between all members of the network, in both studies the ego-centric networks were used to understand other aspects of the larger structures—organizations in the first example and neighborhoods in the second.

Both of these studies are examples of the use of network analysis to describe the attributes of structures, as defined by Giddens, that impact individuals, and in these cases, the lives of vulnerable individuals. The egocentric networks described, to some degree, imply a recursive relationship, although the roles

of additional actors in the creation and co-creation of these organizations and their collaborative relationships are not examined. The findings of both of these studies are very useful to social workers striving for structural competence. Based on the findings of the first study, a structurally competent social worker may attempt to increase a client's perceptions of organizational features by working to grow the social networks among the members of the self-help agency. Based on the findings of the second study, a structurally competent social worker may actively work to bring more organizations into underserved areas and actively work to build relationships between the organizations.

Socio-metric studies attempt to collect complete social networks to create a social network map that will contain all of the relationships (or lack thereof) between the actors within a closed system. In socio-metric studies, researchers strive to describe the structure of a whole network, including features such as network density and centrality. These measures can be used to: (1) understand how information spreads within a closed system; (2) understand who in the network has the most power; and (3) understand who in the network serves as a bridge between two groups or clusters within the network (see Rice & Yoshioka-Maxwell, 2015, for a more detailed description of these measures).

Barman-Adhikari and colleagues (2016) collected data on two socio-metric networks of homeless youths in California. In this study, researchers used interaction with the drop-in centers to delineate the closed system needed to conduct these types of studies. Using defined boundaries, they were able to describe complete networks and test the relationship between network characteristics and the perceived methamphetamine-use and the methamphetamine-use norms. This study revealed that an individual's location within dense networks (or cohesion) was significantly related to the participant's beliefs regarding a network partner's drug-use norms. From this analysis, they concluded that leaders, or those with the most connections in the community, might not be the most effective at spreading prevention messages and that any intervention attempting to spread prevention messages through social networks should target members of the densely cohesive social groups for maximum coverage. Rice and colleagues (2018) then used this information to create an algorithm to identify individuals within

a network that could spread a prevention message the most efficiently and tested the effectiveness. The researchers found there was significantly more HIV testing and condom use in the group that used the algorithm to identify the people who were trained to spread prevention messages.

Studies such as these provide an efficacious and compelling example of how social networks can be used to better understand structures and how an understanding of those structures can be used to influence individual behaviors. These constructs could be applied to the spread of any idea or norm within a social network, providing a greater understanding as to how individuals create and co-create structures. In addition, any shift in the norms that can change the character of the structures may also become apparent. Findings from these types of studies could be employed in structurally competent social work practice to substantially affect structural change.

Participatory Action Research Facilitating Discursive Knowledge

Another important aspect of structuration theory is the idea that humans are reflexive human actors, which is to say that they are able to monitor their own social performances and change them to fit existing norms (Kondrat, 2002). The reflexive nature of humans means that individuals have the capacity to become aware of structures that are oppressive and then actively work to change them. Within structuration theory, structures are not something to be overcome; rather, they are a social construction that simply needs to be reconstructed to affect change (Wheeler-Brooks, 2009). Becoming aware of the rules and norms that govern social structures may be challenging, particularly when these rules and norms are implicit, or exist as what Giddens calls practical knowledge (Wheeler-Brooks, 2009, p. 130). Within structuration theory, an individual cannot begin to create new structures until the practical knowledge regarding the rules and norms that heretofore have maintained the old structures are made explicit or become discursive knowledge (Wheeler-Brooks, 2009, p. 130). Participatory research methodologies, such as participatory action research, represent a research approach that facilitates this process and therefore may be useful for social work researchers when building an evidence base of structural interventions (Metzl & Hansen, 2014, p. 130).

In the 1970s, Paulo Freire proposed a method for facilitating the development of critical consciousness and discursive knowledge (popular education) among peasant farmers living in Brazil (Freire, 1970). Participatory action research, based on Freire's approach to popular education, is a research approach that utilizes dialogue as a means for creating consciousness among individuals being negatively impacted by a social structure and working with individuals to co-create a new set of norms, thereby changing the structure. Participatory action research (PAR) engages participants in the co-creation of research which may give them insight into the impact that structures have on them, thereby encouraging them to use that knowledge to advocate for change. Consistent with structuration theory, it assumes that participants have the power (i.e., agency) to change the structures that are impacting their lived experience, and it actively works with participants to develop a reflexive understanding of the structures that are impacting their lives (Akom, Cammarota, & Ginwright, 2008). In PAR, participants can use a variety of data collection methods, providing they serve the goal of collecting information that will yield insight into a problem the group has collectively decided is an issue facing them all. In this approach to research, it is the researcher's job, in the tradition of Freire, to guide the group through a critical dialogue that begins with their own individual experience and results in a collective understanding of social structures that impact their well-being.

In one example illustrating the use of PAR to understand and address structures, social work researcher Wagaman (2015) engaged 15 LGBTQ young people in a research study that examined intracommunity bigotry among the LGBTQ community. In a study detailing the process of conducting PAR, Wagaman (2015) found that participants developed self-awareness, a critical consciousness, and an increased sense of control over systems and structures. The participants developed a willingness to challenge the systems of oppression and to change the commonly held beliefs. They also identified strategies for changing the LGBTQ social service agency with which they were involved.

In another example of PAR, Schormans (2010) engaged a group of individuals with an intellectual disability in a research

project that examined and challenged media portrayals of them. The project began with participants selecting images of intellectually disabled individuals from a large public database and then critically assessing the images based on a series of questions. The group was generally very displeased with how the media portrayed individuals with intellectual disabilities and discussed how the images could be changed to challenge these representations and project a more accurate and positive message. The group then used Photoshop to alter the images, and in some cases, created their own images to portray messages that were compatible with how they preferred to be portrayed by the public. The group then decided that they wanted to display these images in an exhibition and used the exhibition to engage participants in a dialogue regarding the work they had just viewed. After the exhibition, the research participants believed their voices had been heard and they felt empowered.

Both of these studies illustrate how PAR can be used to develop discursive knowledge through reflexivity and how participants can use that acquired knowledge to actively work to change structures. Not only is this a research approach that generates knowledge, it is also a method for creating structural change. Structurally competent social work practitioners may employ this approach to investigate structural factors that are impacting their clients' well-being and help their clients develop the knowledge they need to begin to make structural changes.

Ethnography: Identifying Rules and How They Work to Create Structures

In-depth ethnographies are yet another research method/approach that has been used by social work researchers to investigate the bi-directional relationship between individuals and structures as described in structuration theory. Unlike the previous methods discussed, ethnography allows social work researchers to describe the relationships between participants, the rules they subscribe to, and how these rules function to co-construct structures over a long period of time in a holistic way. In-depth ethnography has its roots in anthropology and is primarily concerned with the "social interactions, behaviors, and perceptions that occur within groups, teams, organizations, and communities" (Reeves, Kuper, & Hodges, 2008,

p. 512). Within this definition, the method's ability to connect human agency (social interactions), rules (behaviors and perceptions) and structures (organizations and communities) is apparent. Ethnographies are conducted by having sustained contact with individuals within the context of their daily lives and aims to respect the complexity of the social world (O'Reilly, 2012). Ethnographies use detailed observations and interviews to gain insight into individual actions and beliefs and the characteristics of the structures in which they live.

In this approach, social work researchers are not testing hypotheses; rather, they are exploring phenomena. In the application of structurally competent social work research, researchers are particularly interested in how participants understand their role in structures, their perception of the rules, and the way in which changes in rules impact the function of the larger structure. In fact, O'Reilly (2012) argues that all ethnographies should be explicitly interested in understanding social life as an outcome of interaction between structure and agency. Ethnography's ability to produce rich case studies of human interactions across context and time makes it a useful research tool for translating theory into insights that can be used in structurally competent social work practice (Floersch, Longhofer, & Suskewicz, 2014).

In an example of ethnography in social work research, Stanhope (2012) followed ten clients and 14 case managers for a year to investigate social interactions that facilitated engagement in a housing-first program. The goal of the project was to understand how structures and context shape interactions. Using ethnographic methods, the researchers aimed to understand the process of the implementation of the evidence-based practice, a process they argued that could be aided or hindered by the agency structure. In this study, two researchers spend 280 hours in the field observing interactions and conducting interviews in a variety of settings, including in the home, in the community, in the office, and during a wide variety of activities. One of the research findings revealed that service engagement was enhanced when caseworkers and clients co-created a shared narrative and the narratives were reciprocal. The creation of a shared narrative revolved around key processes in service delivery—in this case, moving into an independent apartment. Through the shared experience of a client moving

in and setting up a home, the client and the social workers were co-creating the structure of the home, a new structure that could be contrasted with the client's previous structure of street life. The researchers also described the social work offices, and how the structure of the offices, with an open door policy, facilitated interactions between case managers and clients. Based on this structure, the phenomenon of clients popping in became part of the daily routine and therefore worked to create and recreate the structure of the office.

In another example of structuration theory, when the manager suggested that the case managers rotate on-call duties, as all of them did not need to be on-call all the time, the case managers objected, stating that other case managers would not know their clients. This is yet another example of how individuals worked to co-create the structure of the agency through the creation of rules and how the rules worked to support their interactions on a daily basis.

Ethnography easily allows researchers to observe the bidirectional relationship between individuals and structures over time. These in-depth accounts provide structurally competent social work researchers with important insights into how structures impact clients' lives, and also how social workers and clients create and co-create rules that change the very nature of the structures. Although the generalizability of ethnographies may be limited, based on their scope, they may be extremely useful for collecting data essential for designing a structural intervention within a given context. In-depth ethnography may also be used to develop more detailed theories regarding the actions by which individuals can change structures, which can then be tested across contexts using some of the methods that have been described in this paper.

Conclusion

The concepts of structural competence in medical literature has motivated social work to re-assert its continued role in the generation of structurally competent research required to lay the foundation for imagining structural interventions. The social work profession has always considered the role of social structures in social problems a reality that is reflected in the theories that social workers draw upon and in the methods and/or

approaches that social workers use to investigate these relationships. Giddens' theory of structuration, employed in social work research, encourages research beyond the unidirectional understanding of the relationship between individuals and structures to a more nuanced understanding of how social workers and their clients recursively interact with structures to create and maintain them.

An understanding of this recursive relationship may help social work researchers in their continuing efforts to build an evidence base for interventions aimed at modifying those structures inhibiting our clients' well-being. Multilevel modeling, social network analysis, participatory-action research and ethnographies are several research methods and/or approaches that are being employed to generate the evidence base needed to inform structurally competent social work practice. This social work practice will continue to evolve as technology allows researchers to leverage big data, collect data in real time, and model more complex and dynamic relationships. Social work, given its focus on micro and macro approaches to practice, should be an integral aspect of structurally competent research in building an evidence base for structural interventions needed to address social problems.

References

- Akom, A. A., Cammarota, J., & Ginwright, S. (2008). Youthtopias: Towards a new paradigm of critical youth studies. *Youth Media Reporter*, 2(4), 1–30.
- Aguinis, H., Gottfredson, R. K., & Culpepper, S. A. (2013). Best-practice recommendations for estimating cross-level interaction effects using multilevel modeling. *Journal of Management*, 39(6), 1490–1528.
- Archer, B. H. (1982). The value of multipliers and the policy implications. *Tourism Management*, 3(4), 236–241.
- Baber, Z. (1991). Beyond the structure/agency dualism: An evaluation of Giddens' theory of structuration. *Sociological Inquiry*, 61(2), 219–230.
- Barman-Adhikari, A., Rice, E., Bender, K., Lengnick-Hall, R., Yoshio-ka-Maxwell, A., & Rhoades, H. (2016). Social networking technology use and engagement in HIV-related risk and protective behaviors among homeless youth. *Journal of Health Communication*, 21(7), 809–817.
- Borgatti, S. P., Mehra, A., Brass, D. J., & Labianca, G. (2009). Network analysis in the social sciences. *Science*, 323(5916), 892–895.
- Bourdieu, P. (1979). Symbolic power. *Critique of Anthropology*, 4(13–14), 77–85.
- Cunningham, M. J., & Diversi, M. (2013). Aging out: Youths' perspectives on foster care and the transition to independence. *Qualitative Social Work*, 12(5), 587–602.
- Duncan, C., Jones, K., & Moon, G. (1998). Context, composition and heterogeneity: Using multilevel models in health research. *Social Science & Medicine*, 46(1), 97–117.
- Freire, P. (1970). *Pedagogy for the oppressed*. New York: Herder and Herder.
- Freisthler, B., & Maguire-Jack, K. (2015). Understanding the interplay between neighborhood structural factors, social processes, and alcohol outlets on child physical abuse. *Child Maltreatment*, 20(4), 268–277.
- Floersch, J., Longhofer, J., & Suskewicz, J. (2014). The use of ethnography in social work research. *Qualitative Social Work*, 13(1), 3–7.
- Giddens, A. (1979). *Central problems in social theory: Action, structure and contradiction in social analysis*. Berkeley and Los Angeles: University of California Press.
- Giddens, A. (1984). *The constitution of society: Outline of the theory of structure*. Berkeley and Los Angeles: University of California Press.
- Giddens, A. (1991). *Modernity and self-identity: Self and society in the late modern age*. Stanford, CA: Stanford University Press.
- Hammersley, M., & Atkinson, P. (2007). *Ethnography: Principles in practice*. New York, NY: Routledge.

- Hardiman, E. R., & Segal, S. P. (2003). Community membership and social networks in mental health self-help agencies. *Psychiatric Rehabilitation Journal*, 27(1), 25–33.
- Kemmis, S., McTaggart, R., & Nixon, R. (2013). *The action research planner: Doing critical participatory action research*. New York, NY: Springer Science & Business Media.
- Knoke, D., & Yang, S. (2008). *Quantitative application in the social sciences: Vol. 154. Social network analysis*. Thousand Oaks, CA: Sage Publications.
- Kondrat, M. E. (2002). Actor-centered social work: Re-visioning “person-in-environment” through a critical theory lens. *Social Work*, 47(4), 435–448.
- Lee, J., Shapiro, V. B., Kim, B. E., & Yoo, J. P. (2018). Multilevel structural equation modeling for social work researchers: An introduction and application to healthy youth development. *Journal of the Society for Social Work and Research*, 9(4), 689–719.
- Lerner, R. M. (2018). *Concepts and theories of human development* (4th ed.). New York, NY: Routledge.
- Little, J. H., & Tajima, E. A. (2000). A multilevel model of client participation in intensive family preservation services. *Social Service Review*, 74(3), 405–435.
- McIntyre, A. (2007). *Participatory action research (Qualitative Research Methods Series 52)*. Los Angeles, CA: Sage Publications.
- Metzl, J. M., & Hansen, H. (2014). Structural competency: Theorizing a new medical engagement with stigma and inequality. *Social Science & Medicine*, 103, 126–133.
- Mouzelis, N. (1989). Restructuring structuration theory. *The Sociological Review*, 37(4), 613–635.
- O’Reilly, K. (2012). *Ethnographic methods*. New York, NY: Routledge.
- Neal, J. W., & Neal, Z. P. (2013). Nested or networked? Future directions for ecological systems theory. *Social Development*, 22(4), 722–737.
- Raudenbush, S. W., & Bryk, A. S. (2002). *Hierarchical linear models: Applications and data analysis methods* (2nd ed.). Thousand Oaks, CA: Sage.
- Reeves, S., Kuper, A., & Hodges, B. D. (2008). Qualitative research methodologies: Ethnography. *BMJ*, 337(7668), 512–514.
- Rice, E., & Yoshioka-Maxwell, A. (2015). Social network analysis as a toolkit for the science of social work. *Journal of the Society for Social Work and Research*, 6(3), 369–383.
- Rice, E., Yoshioka-Maxwell, A., Petering, R., Onasch-Vera, L., Craddock, J., Tambe, M.,...& Wilson, N. (2018). Piloting the use of artificial intelligence to enhance HIV prevention interventions for youth experiencing homelessness. *Journal of the Society for Social Work and Research*, 9(4), 551–573.
- Scott, J. (1988). Social network analysis. *Sociology*, 22(1), 109–127.

- Sewell Jr., W. H. (1992). A theory of structure: Duality, agency, and transformation. *American Journal of Sociology*, 98(1), 1–29.
- Schormans, A. (2010). Epilogues and prefaces: Research and social work and people with intellectual disabilities. *Australian Social Work*, 63(1), 51–66.
- Stanhope, V. (2012). The ties that bind: Using ethnographic methods to understand service engagement. *Qualitative Social Work*, 11(4), 412–430.
- Wagaman, M. A. (2015). Changing ourselves, changing the world: Assessing the value of participatory action research as an empowerment-based research and service approach with LGBTQ young people. *Child & Youth Services*, 36(2), 124–149.
- Wasserman, S., & Faust, K. (1994). *Social network analysis: Methods and applications* (Vol. 8). Cambridge University Press.
- Wheeler-Brooks, J. (2009). Structuration theory and critical consciousness: Potential applications for social work practice. *Journal of Sociology & Social Welfare*, 36(1), 123–140.
- Zakour, M. J., & Harrell, E. B. (2004). Access to disaster services: Social work interventions for vulnerable populations. *Journal of Social Service Research*, 30(2), 27–54.