32

Social Networks and Social Work Practice

Elizabeth M. Tracy and Suzanne Brown

Practitioners recognize that clients are rarely isolated, but tend to be surrounded by social networks that may support, weaken, substitute for, or supplement the efforts of professional helping. This chapter will trace the significance of social networks, and the related concept of social support, to the social work profession and the corresponding development of social network assessment and intervention within contemporary social work practice. We believe that knowledge and skills in assessing and mobilizing social networks are important for every social work practitioner, micro- and macro-practice alike. We begin by defining basic terms and concepts. We next examine how the concept of social networks is closely linked to the origins and mission of social work practice. The development of social network analysis and the entrance of social network assessment and intervention into the profession of social work are described, followed by a presentation of program examples illustrating the range and types of applications of social networks. The chapter ends with a discussion of current issues and challenges for the future.

Central Terms and Definitions

The term *social network* refers to a set of individuals and the ties among them (Wasserman & Faust, 1994). There are two broad sub-fields within social networks (Scott, 2000). One is the study of *whole networks*, examining the pattern of relations within a group bounded by geography or some characteristic, such as all the clients in a treatment program. The second approach, the focus of this chapter, studies *personal social networks*, examining the relations

surrounding a focal person, such as a client in a treatment program. A personal network approach considers the behavior of individuals in the context of the people with whom they directly interact. Personal network variables can be conceptualized as either *compositional* or *structura*l. Compositional network qualities include, among others: (a) size—the total number of people in the network; (b) relationships of network members—friends, family, professionals, etc.; (c) frequency of contact—how often people in the network interact with one another; (d) duration—how long people in the network have known one another; and (e) reciprocity—the amount of give and take between network members. Examples of structural network qualities include: (a) density—the percent of ties that exist out of all possible ties; (b) components—network members who are connected to one another directly or indirectly; (c) multiplexity—network relationships that serve more than one function; and (d) centrality measures—measures of network activity and information flow. Sometimes composition and structure can be combined, such as identifying who is the most structurally central person who provides support.

It is important to distinguish the structural links of the social network from the resources or "supports" exchanged within the network. *Social support* refers to the many different ways in which people render assistance to one another. According to Gottlieb's (1983) empirically derived definition, "social support consists of verbal and/or nonverbal information or advice, tangible aid or action that is proffered by social intimates or inferred by their presence and has beneficial emotional or behavioral effects on the recipient" (pp. 28–29). Social support then consists of a variety of helping behaviors, including advice and guidance, companionship, emotional support and encouragement, and concrete assistance (Barrera & Ainley, 1983; House & Kahn, 1985; Wood, 1984). Social support can be provided spontaneously through natural helping networks of family and friends or can be mobilized through professional intervention.

A *social support network* refers to a set of relationships that provide nurturance and reinforcement for efforts to cope with life on a day to day basis (Whittaker & Garbarino, 1983). Not all social networks are social support networks, nor do all social networks reinforce pro-social behaviors. For example, Freisthler, Holmes, and Wolf (2014), in what they refer to as the "dark side" of social support, demonstrate how parental social companionship networks may serve to increase the risk of child maltreatment. Likewise, larger social networks do not necessarily provide more social support. It is also important to note that supportive ties exist within networks that also contain non-supportive ties (Wellman, 1981). In addition to the actual support received, the *perception* that others would be available to help is a factor in the experience of supportive relationships (see Hobfall, 2009, for a discussion of received versus perceived support). Due to such complexities, social support provided through personal social networks is viewed as a multidimensional construct consisting of social network resources, types of supportive exchanges, perceptions of support availability, attitudes toward help-seeking, and skills in accessing and maintaining supportive relationships (Heller & Swindle, 1983; Marsella & Snyder, 1981). Pierce, Sarason, and Sarason (1996) posit three overlapping and mutually influencing components of social support: support schemata, supportive relationships, and supportive transactions. Sarason and Sarason (2009) point out the bidirectional nature of social support in that support occurs in the context of a relationship between receiver and provider of support.

Historical Significance to Social Work

Almost by definition, social work has recognized the importance of social networks in clients' lives. Social work's traditional focus on the person-in-the-situation and concern with both the individual and the environment have repeatedly brought the profession back to examining natural helping networks. It is helpful to look back at how earlier social workers envisioned and intervened with naturally occurring social resources (Becker, 1963). In essence, the friendly visiting of the Charitable Organization Society workers *was* a social network intervention, in that the social network

of the client was expanded with the addition of a formal helping resource. The friendly visitor was a personal link to the world of resources, and used influence to arrange services through unique personal and professional social network contacts. For example, friendly visitors inquired about job openings among friends and acquaintances and arranged summer holidays for children in the country homes of their personal friends. Friendly visitors were advised to (a) establish "friendly relations," (b) offer practical advice and training, and (c) arrange or procure concrete services (Richmond, 1918). Try as they might, though, friendly visiting could never fully overcome the social class and ethnic differences between the visitor and the family. While the key relationship was neighborly, friendly visiting never approached the mutuality generally associated with informal helping.

One of the basic tenets of friendly visiting was to seek the most natural and least official sources of relief, bearing in mind the ties of kinship, friendship, and neighborliness (Richmond, 1918). Investigation and mobilization of natural sources of help were considered important aspects of coordinated, organized welfare services. The overall purpose of charity work was to develop resources within the family, rendering material relief from the outside unnecessary. Each resource was to be contacted regarding "some definite promise as to what they themselves will do" (Richmond, 1918, p. 188). The movement felt that indiscriminate charity would destroy these natural social network resources.

The social work described by Mary Richmond radiated outward along the lines of the client's social network. Richmond aptly recognized what social workers today have rediscovered—that prior to "social work," there were natural systems of helping. She stated in *What Is Social Casework?* (1922, p. 5):

> Almost as soon as human beings discovered that their relations to one another had ceased to be primitive and simple, they must have found among their fellows a few who had a special gift for smoothing out tangles in such relations; they must have sought, however informally, the aid of these "straighteners."

Richmond (1917) outlined 20 most commonly used resources and the best methods of exploring them, such as practical strategies to enlist cooperation and support, and principles to guide the choice and use of social resources. This approach structured the linking and mobilizing of resources in a manner vastly different from the personal influence of the friendly visitor. Rather than viewing the social network as the *medium* of help, the social network was beginning to be viewed as an *adjunct* to treatment. The worker's task was to identify and mobilize, to act as go-between, to organize resources where none existed, and to re-knit ties long broken. Relatives, for example, were consulted because of the family history they could supply and for their backing and cooperation in the treatment plan.

Origins of Social Network Analysis

The development of social network theory and analysis drew from a variety of disciplines and theoretical perspectives within sociology, anthropology, and psychology. Scott (2000) describes the study of social networks as stemming from three main traditions. One tradition from which contemporary social networks theory draws is the sociometric analysts who, informed by Gestalt theory, sought to depict group dynamics, structure, and the flow of information among group members. For example, Moreno (1934) examined friendship patterns and how psychological well-being was related to what he termed "social configurations." His innovative use of the *sociogram* was a way to depict the properties of these social configurations; by using points to represent people and lines to represent social relationships, the sociogram could visually display how one person influences another, who had multiple connections, and who was isolated within a group.

Another theoretical foundation of social network theory derived from the work of anthropologists and sociologists in the 1930s and 1940s who investigated informal relations and structures within larger systems. For example, Hawthorne's classic study of the Western Electric Company used anthropological fieldwork techniques to construct sociograms to depict the informal organization as distinct from the formal organization of the company (Scott, 2009). Anthropologists began to apply

field work methods to study urban communities, subgroups, and cliques.

The third tradition undergirding social network analysis is seen in the work of British anthropologists. Barnes's (1954) analysis of relationships in a Norwegian fishing village and Bott's (1957) study of marital patterns among London families are generally thought to be the beginning of what is now referred to as *social network analysis*. Mitchell (1969) laid out a set of sociological concepts to explain the structural properties of ego-centered networks—the direct and indirect links to an individual. Mitchell presented concepts such as reciprocity, density, and reachability, among others, as ways to describe relationships within social networks. Granovetter's work (1973) on the strength of weak ties extended these concepts as he studied how people acquire information about jobs and the kinds of links that provide the best sources of information.

Theoretical and Conceptual Background and Frameworks

Numerous different theoretical frameworks inform the study and application of social networks within social work practice. *Stress and coping theory* posits that the ability to cope with stress depends on one's personal and social resources (Lazarus & Folkman, 1984). Social support is often conceptualized as *a coping resource* or social "fund" (Thoits, 1995, p. 64) to draw upon in responding to stressful life events. Social network resources may enable people to change the situation, change the meaning attributed to the situation, and/or change their emotional reaction to the situation—all functions of coping responses. Two models have been proposed to explain the process through which being embedded in a social network has a beneficial effect on well-being—the *main* or *direct effects* and the *buffering hypothesis*. The direct effects model argues that social support has a beneficial effect, irrespective of stress level. Direct effects of large social networks are viewed as providing socially rewarding roles, predictability, and sense of self-worth (e.g., Berkman & Syme, 1979). Belonging to a social network may also help people avoid experiences that would otherwise result in physical or psychological distress. The buffering model states that individuals experiencing significant life stress, but with strong social support, they will be protected from symptoms associated with stress. In this model, social networks are important in the stress appraisal process, emotional reactions, and coping behaviors (Cassel, 1974; Cobb, 1976). For example, as applied to the field of substance abuse, research by Longabaugh, Wirtz, Zweben, and Stout (1998) supports both direct positive effects of investing in networks supportive of abstinence, as well as buffering effects of abstinent supporters within substance-using networks.

Additional alternative models have been proposed, including the *stress deterioration* model in which stressful life events are thought to impair social support resources, in turn resulting in more stress (Dean & Ensel, 1982). For example, divorce may result in substantial changes in social network composition that may in turn impact the availability of social support (Wilcox, 1981). Particular life events, such as cancer, may lead to stigma, with resulting loss of social network contact and social support. Another alterative model is the *stress prevention model* (Gottlieb, 1983; Gore, 1981), in which the availability of social networks is thought either to prevent the occurrence of stressful life events in the first place, or the labeling of events as stressful when they do occur.

Social network analysis at this point in time consists of an approach and set of methods, rather than a full body of social theory per se (Scott, 2000). There continue to be discipline-specific diverse approaches to social network analysis—the distinction between whole and ego-centered networks being the most obvious division. In addition to the stress and coping theoretical approach outlined previously and the ecological perspective detailed later, which have received the most attention within social work, social networks have been viewed within the context of exchange theory (Wellman, 1981), rational choice theory (Lin, 1982), and attachment theory (Mikulincer & Shaver, 2009). More recently, the importance of social networks as a form of social capital has been explored (Bottrell, 2009). The perspective of dynamic network theory has also been proposed to

explain how social networks influence goal achievement; this approach posits eight social network role behaviors that explain how social networks assist in goal pursuit (Westaby, Pfaff, & Redding, 2014).

Social Networks' Entry into Social Work

Ecological Perspective

Social work's interest in social networks is firmly rooted in the ecological perspective (Bronfenbrenner, 1979), which focuses on the interface between people and their environments. This approach recognizes that social ecologies—the people, places, times, and contexts in which social interaction occurs—offer both the cause of and solution to problems (Barth, 1986). The implications of the ecological approach have been conceptualized as (1) building more supportive nurturing environments through various forms of environmental helping, and (2) improving client's competencies through the teaching of specific life skills (Whittaker, Schinke, & Gilchrist, 1986). Social network assessment and interventions are compatible with the ecological perspective, given that understanding the potential for growth and stress within the client's social network, the functions of network resources, and obstacles to using network resources are essential parts of an environmental assessment (Gitterman & Germain, 1981).

Drawing from the ecological perspective and following the social network tradition of visual displays of social relationships, Hartman's "ecomap" (Hartman, 1994; see also Mattaini, 1993) is perhaps the most widely used means to visually document the social context of a client's life. First, names of people, groups, and organizations are identified and encircled. The distance between circles indicates closeness of relationships, while lines drawn between the circles represent the quality of the relationship (e.g., stressful, tenuous, or positive). The ecomap has been adapted to a variety of social service settings and helps the worker and client jointly determine available resources, gaps in resources, and direction for intervention.

Linking Formal and Informal Helping

The ecological perspective also drew attention to the fundamental importance of neighborhood and extended family resources. Consequently, the linking of formal and informal helping networks was seen as an important function of social work practice and supported the entrance of social networks into social work. The incorporation of social networks into practice and policy was prominent from the 1980s on. This was evident in Great Britain. The Barclay Report (see Olsen, 1983, for a discussion of social support networks from a British perspective) on the roles and tasks of social workers stressed utilizing and developing close working relationships with informal caregivers and community networks. The term "community social work," as defined in the Report, referred to enhancing informal support networks as well as coordinating the interface between formal and informal care. Within the United States, there was interest in informal helping resources in a variety of social work practice fields. The 1981 White House Conference on Families took up the issue of informal support networks, and how support systems could be strengthened by government policies (Wingspread Report, 1979). Enhancement of social support networks—strengthening existing ties, enhancing family ties, and building new ties—became an important thrust of case-management services for persons with severe mental illness (National Institute of Mental Health [NIMH], 1987). Child welfare policies following the passage of PL 96-272, The Adoption Assistance and Child Welfare Act of 1980, required that supportive services be provided to families as a means to prevent family disruption, to reunite families where separation had been necessary, and to place children in alternative permanent settings.

During this period, there were several key social work educators and researchers who were largely responsible for introducing and articulating the role of informal community helpers in relation to more formal service delivery systems. Maguire (1983) published a concise guide, *Understanding Social Networks,* which presented networking approaches as a

means to "maximize the use of natural helping networks and use professionals more efficiently" (p. 7). Whittaker and Garbarino (1983) published *Social Support Networks: Informal Helping in the Human Services,* a compilation of informal helping strategies across a wide range of client populations and service delivery systems; the preface to this volume stated that the book addressed a "quiet revolution" taking place in human services and declared that the purpose of the volume was to suggest ways in which "formal and informal caregivers can join together in new and creative alliances to offer a more effective and compassionate response to people in need of help" (p. xi). Their volume was the first work to compile the growing research evidence of the role of social networks across many fields of practice within social work, and to draw upon the ecological perspective to present social workers with compelling ways to complement rather than compete with informal social support networks.

In a similar vein, Naparstek, Biegel, and Spiro (1982) described a community empowerment model in *Neighborhood Networks for Humane Mental Health Care* that utilized strengths of city neighborhoods to mobilize support systems and create linkages between professional and informal service systems; in particular, collaborative linkages with friends, neighbors, natural helpers, and clergy were encouraged in order to empower and build upon community strengths. In *Community Support Systems and Mental Health: Practice, Policy and Research,* Biegel and Naparstek (1982) examined the roles of self-help groups, neighborhood networks, and informal helpers in a variety of contexts as a supplement to professional services; in addition, the ways in which professional services might weaken these natural support systems were also examined. Biegel, Shore, and Gordon (1984) in *Building Support Networks for the Elderly* presented a practitioner-friendly introduction to social networks and social network interventions based upon their extensive experience training and preparing resource materials for human service workers; strategies for neighborhood helping, volunteer linking, mutual aid, and community empowerment were outlined. Whittaker (1986) presented a well-developed conceptual framework for integrating formal and informal social care and introduced the social work role of the "network/system consultant" who works "through a preexisting or contrived support systems to aid an individual client or group of clients" (p. 46). Whittaker also examined management and practice implications for formal and informal helping in child welfare services as part of a "paradigm shift" in human services. Taking the then-current social work landscape into consideration, Meyer (1985, p. 291) concluded:

> The research evidence is in: There is a strong relationship between individual physical-social-psychological health and social supports and between social isolation and the breakdown in these areas or functioning. In view of the importance of natural support networks, social workers can do no less than explore the linkages between them and professional intervention.

Contemporary Applications of Social Networks Within Social Work

A social network approach can be useful to both micro- and macro-oriented social workers alike, providing us with a useful lens through which to view the social environment of our clients, and helpful aids in social work assessment and intervention planning. Social workers have made use of social network mapping techniques as an adjunct to social work assessment and intervention (Antonucci, 1986). Hill (2002) offers a useful description of both social network features and methods for assessing social network features. Important features to assess within social networks include the network structure or shape, interactions between network members, social support functions provided by network members, network composition, and diversity (Hill, 2002). Hill (2002) also outlines the following six types of diagrams commonly used to assess personal social networks:

1. The ecomap—identifies important individuals and visually represents their connections to a central person with lines;
2. Concentric circles—visually represent the emotional or geographic distance between individuals and a central person;

3. The genogram—a visual tree that represents relationships between family members;
4. Life-space representations—uses the important locations in the individual's life to represent the individuals and activities central to that person;
5. Life-course changes—uses visual representations of households and houses in which the individual has lived; and
6. Matrices—uses tables to list the individuals and their importance to a central person.

Many tools are currently available for measuring social support and social networks (see Streeter & Franklin, 1992). Tracy and Whittaker (1990) developed a social network map, drawing on the work of Fraser and Hawkins (1984) and Lovell and Hawkins (1988), which enabled the collection of information on the size and composition of the social network and the nature of relationships within the network. Several pilot studies were conducted in a variety of practice settings in which use of the social network map enabled practitioners to identify and assess strains and resources within the social environment, to understand culturally specific patterns of help giving, and to identify others who could participate in network interventions (Whittaker, Tracy, Overstreet, Mooradian, & Kapp, 1994). More-advanced data analysis techniques (e.g., latent class analysis) are now available to determine underlying patterns in the nature and scope of social support (Buckman, Bates, & Morgenstern, 2008). There is also increased interest in measuring social network changes over the life span and in response to life events (Wrzus, Hanel, Wagner, & Neyer, 2013) as well as treatment services (Stone, Jason, Stevens, & Light, 2014). Best and colleagues (2014) report on an innovative method to visually map therapeutic community members in terms of their recovery capital and social identity; they applied the social identity model of identity change to examine the role of social identity and belonging in life transitions.

Current Policy

The importance of both formal and informal social support and personal social networks has been acknowledged in public policy as well as practice. The President's New Freedom Commission report (2003) highlighted multiple areas where improving social network support and linkages could improve the provision of mental health services to adults and children. The report recommends the involvement of consumer's family members and social supports in care coordination and planning. It also calls for the strengthening of linkages between service systems such as medical service systems, mental health service systems, and schools. The commission also advocated the provision of mental health services within the community and schools, where children spend the majority of their time. Internationally, in the area of child civil rights, the United Nations Convention on the Rights of the Child (1990) also acknowledges the importance of informal social and kinship networks in child development. The Convention recommends that decisions regarding adoption and foster care of children prioritize placements that allow the child to maintain established familial, community, and cultural networks over those that necessitate the dissolution of those networks. This priority is further evidenced in child welfare practices that serve to strengthen the social networks of families at risk (Vonk & Yoo, 2009).

Types of Network-Related Interventions

While interventions with social networks are not as fully developed as person-oriented interventions, Kemp, Whittaker, and Tracy (1997) describe four general approaches to social network interventions. These approaches have a number of social work roles and values in common. *Linking* is an essential practice skill underlying social network interventions; this is similar to resource and referrals skills used by many social workers to locate needed resources, establish a linkage between the client and the resource, and ensure that the linkage will be maintained as planned. Linkages capitalize on the strengths between clients and their social networks, so a basic value undergirding social network interventions is the strengths perspective. Finally, collaborative worker–client relationships are typically a hallmark of social network interventions, with the client fully involved in decision-making and action steps.

With these shared foundations, descriptions of approaches to social network intervention follow.

Natural Helping Networks

People often turn to "natural helpers" for advice and support, as these are people who have often "been there," overcoming life challenges and disappointments (Pancoast, Parker, & Froland, 1983). Natural helper interventions develop consultative relationships with key helpers, or gatekeepers in a community, to extend the services of formal agencies, to reach out to hard-to-reach clients, and for prevention and early intervention services. The classic form of this intervention is described by Collins and Pancoast (1976). Some examples of natural helper interventions include:

1. Assistance provided by hairdresser, barbers, apartment managers, and postal workers to elderly people living in the community (Hooyman & Lustbader, 1986)
2. Community asset assessment of indigenous resources in a Puerto Rican community substance-abuse prevention program (Delgado, 1996)
3. Linking low-income neglectful families with a supportive natural helper in the community (Gaudin, Wodarski, Arkinson, & Avery, 1990–1991)
4. Natural mentoring relationships for youth transitioning out of foster care (Munson & McMillan, 2008)

Network Facilitation

Network facilitation mobilizes the social network as a resource and support for a targeted individual or family, based on an assessment of the needs and resources available. This intervention may take the form of supplementing an existing network or creating a new personal network through recruitment and matching of volunteer helpers. Network meetings are a hallmark of this form of intervention (Morin & Seidman, 1986); during such meetings, all participants discuss the client's situation and develop a plan of action. In this way, some network members may be reconnected in meaningful ways, while other network members may learn to take on new helping roles. In this form of intervention, it is important for personal social network members to be connected to one another, both to communicate and support one another, and to avoid duplication of effort. Some examples of network facilitation include:

1. Family group decision making, in which network members are identified and network meetings are convened to creatively plan for meeting child and family safety congruent with the family's culture. Special attention is paid to the manner in which the conference is initiated and structured so that family ownership and leadership is ensured in the conference deliberations. Both family and "like family" network members are invited to participate. This intervention has been used widely in child protection (Crampton, 2007), but it has also been adapted for use in juvenile justice and domestic violence (Pennell & Anderson, 2005).
2. Social skills training is often a component of network meetings so that network members have the skills required to assume new or expanded helping roles. Tracy and Whittaker (1991) described the importance of teaching communications and social skills (such as initiating conversations, appropriate self disclosure, and saying "thank you") in the context of social network facilitation in family preservation services.
3. Volunteer linking programs increase network size and enhance composition along with increasing community connections (Dunn, 1995; German & Gitterman, 1996). For example, Compeer (Skirboll & Pavelsky, 1984) matches community volunteers with persons with mental illness for friendship, modeling of coping skills, and adapting to community life. Other variants match consumers with one another, as often consumers are in the best position to show others how to negotiate complex service delivery systems.
4. The facilitation of mentoring relationships may also function as a network, facilitating intervention. Zippay (1995), for example, presents a case study in which a mentor program was used to improve both social networks and employment skills for adolescent mothers. Young women were matched with

volunteer mentors whose presence in their lives served to diversify their social networks and expanded their knowledge about employment opportunities and skills.
5. Building community-based social networks can help low-income women develop bridging and bonding social networks on their path out of poverty (Freeman & Dodson, 2014).

Mutual Aid Self-Help Groups

Self-help groups mobilize relationships among people who share common tasks or problems (Silverman, 1980; Gitterman & Shulman, 1986). This approach provides respect for clients as partners, an ongoing source of support, as well as advocacy and empowerment (Mehr, 1988). Self-help groups allow people to learn from one another and to realize that they are not alone, nor are they solely responsible for their problems; such groups allow people to see the political aspects of personal problems. While there are hundreds of self-help organizations nationwide, some examples include the following:

1. People First is a self-advocacy rights organization for people with mental retardation working toward greater self-determination (Shapiro, 1994).
2. Cox (1991) describes a self-help group for women welfare recipients advocating for themselves.
3. Lewis and Ford (1991) show how African American women collectively used social support networks to resolve individual and community level problems.
4. Self-help groups are often an important component of community-building in impoverished communities (Weil, 1996).

Social Network Skills Training

Based on models of life and social skills training and drawing upon cognitive behavioral interventions, social network skills training teaches people ways of establishing and maintaining supportive interactions with each other (Richey, 1994). The intent is to develop a skilled support system and a client with competency to use that support system effectively. Some examples include the following:

1. A Friendship Group offered to families referred from Child Protective Services taught key interpersonal skills for supportive relationships through information, modeling, and behavioral rehearsal (Lovell & Richey, 1991).
2. A social network training module delivered to parents of children enrolled in Head Start was designed to help parents better understand everybody's need for support, how to identify social network membership and social support needs, and specific strategies to change networks. Ferguson, Tracy, and Simonnelli (1992) describe a menu of interventions: linking up with new people or groups, working on changing relationships, getting new skills or experiences, reestablishing old relationships if positive, and asking others for help. Each participant developed a social network plan in conjunction with a parent partner or buddy.
3. A social worker who meets with his mentally ill client's family members encourages them to identify interests and activities that they might engage in together and assists them in improving communication skills to enhance network functioning. Pinto (2006) describe the importance of engaging natural supports such as family members by improving their interpersonal skills, and mobilizing community members as part of support networks in order for clients with mental illness to maintain their functioning within the community.
4. Pettus-Davis et al. (2015) examined the acceptability of a promising manualized 10-week group training program, Support Matters, delivered to reentering prisoners who came to the sessions with a support partner. The program taught both cognitive and relational skills to improve reentering prisoners' ability to engage in positive social supports.

Examples of Social Network Assessment and Intervention

Family Preservation Services

Child welfare services have shifted over time from an overriding emphasis on child placement

to a focus on family support. Supportive family services consisted of forming a partnership with the family, including extended family members and natural helping networks. The goals of in-home family preservation services, which grew dramatically during the 1980's and 1990's, included, among others, helping the family to use of a variety of formal and informal helping resources (Berry, 2005). The impact of these early programs remains to this day: Even though current child welfare policy places more emphasis on safety, well-being, and timely permanence, family programs work closely with community groups, neighborhoods, extended families, and social networks as a means of fostering healthy communities. Family-centered models in child welfare, such as family group decision-making, incorporate the use of social network assessment to enable the extended family to make decisions regarding child safety (Tracy & Piccola, 2006).

Integrated Dual Disorders Treatment (IDDT)

An evidence-based treatment model for intervention with individuals with co-occurring disorders of substance abuse and mental illness, integrated dual disorders treatment (IDDT) utilizes interventions focused on enhancing social supports within families and communities. Viewing all areas of an individual's life as important to maintaining recovery, IDDT interventions engage consumers' family members in psycho-education and skills-building. In this way, social workers enhance the capacity of the family to engage with and support the consumer. Furthermore, IDDT encourages intervention within the consumer's community, as workers establish linkages between individual consumers and community self-help groups or community activities. In these ways, the natural personal social networks of consumers are enhanced through increasing both density and functions within the consumer's network (Ohio Substance Abuse and Mental Illness Coordinating Center of Excellence [Ohio SAMI CCOE], 2008).

Multisystemic Therapy (MST)

Multisystemic therapy (MST) is a home-based treatment model designed to assist adolescents and their families within their natural settings, and it also incorporates interventions at the level of the family's social network. MST social workers intervene in part by identifying the resources and supports already present in the adolescent's life, including extended-family members, neighbors, school personnel, church members, and community members (Borduin et al., 1995). Once network resources are identified, MST workers help adolescents and families strengthen their connections to these individuals or create linkages between these families and potential network members. The goal in this model is to strengthen linkages between parents and social network members who will reinforce parenting efforts and goals.

Future Directions

Overcoming Barriers to Social Network Interventions

In 1986, Whittaker identified a number of barriers to policy and practice implementation in the area of social networks; unfortunately, many of these barriers remain to this day.

Institutional barriers. These include the organizational and administrative complexities of introducing non-salaried informal helpers into formal service plans; e.g., agency liability, clients' rights to privacy, administrative accountability, and lines of authority and supervision.

Economic. Given changes in the economy and social demographics, there is likely to be a diminishing pool of potential informal caregivers and difficulty funding support services for caregivers.

Professional. There may be resistance to changes in worker's roles and unwillingness to share power and authority with informal helpers.

Conceptual. Multiple meanings of constructs and imprecise definitions of social networks and social support make it difficult to articulate practice steps and policy implications.

In an exploratory study of barriers to social network interventions, Biegel, Tracy, and Song (1995) identified paperwork, high caseload, community stigma, and lack of community

resources as the most frequently reported barriers experienced by mental health case managers. A training strategy (e.g., training practitioners in social network intervention techniques) may not be sufficient to overcome such barriers; administrative system changes as well as community organization strategies to develop new programs and resources may be needed to promote an environment more conducive to social network interventions (Tracy & Biegel, 1994).

A challenge for the future is that there are limitations inherent in social network strategies, and a need to weigh the risks and costs of reliance on social networks. Not everyone has a caring social network, or the inclination to utilize social resources. In fact, those most in need of informal helping may lack social resources, may lack networks with the skills and capabilities to render aid, or live in communities with fewer helping resources (Garbarino & Sherman, 1980). The same stressors or conditions that create the need for increased social support may also deplete the resources of those who would otherwise be available to provide informal care.

There is also stress associated with the provision of informal care. The financial and personal costs of caregiving are already high. It is important that policies favoring utilizing informal care from social networks not overload informal helpers even further, debilitating rather than facilitating their support. A critique of family caregiving strategies also points out that reliance on informal helpers has led to increased stress and strain, primarily on women, who provide a disproportionate amount of informal care and already assume multiple caregiving roles; and the lack of supportive services for care providers, such as financial reimbursements and respite care (Graycar, 1983).

Research Implications for Social Work

Recent research on social networks has examined the role of social networks for diverse groups dealing with a myriad of health, mental health, and life stage issues. White and Cant (2003) used social network analysis to explore the role of instrumental and emotional social support in the lives of HIV-positive gay men. Lewandowski and Hill (2009) utilized the Scale of Perceived Social Support (MacDonald, 1998) to examine the relationship between perceived social support and drug treatment completion for women in a residential drug treatment program. Additionally, the role of perceived social network support in the well-being of same-sex and opposite-sex couples was examined (Blair & Holmberg, 2008). Findings indicated the importance of social support as predictive of relationship well-being for both same-sex and opposite-sex couples. Ali et al. (2013) examined how adolescents increased their social network ties through alcohol consumption, illustrating one motivation behind adolescent drinking.

Recent research has also examined the interactions between attachment history, attachment style, and social support, as attachment experiences may influence individual's ability to both perceive support and identify and mobilize social network supports. For example, one study found that at-risk mothers with insecure attachment styles also reported lower social support than those with secure attachment styles (Green, Furrer, & McAllister, 2007). Additionally, for drug-dependent mothers, early attachment experiences mediated their ability to perceive support from their networks (Suchman, McMahon, Slade, & Luthar, 2005). In examining perceptions of support, Collins and Feeney (2004) found that individuals are predisposed to appraise their support experiences in ways that are consistent with their internal working models of attachment relationships, regardless of the actual support provided from network members. Attachment style may also be an important factor in determining how individuals experience daily life stressors, with implications for the importance of social support, especially for individuals with insecure attachment styles. In a study of HIV-positive individuals, those with insecure or highly anxious attachment styles were more likely to perceive their lives as stressful, and were consequently at higher risk for under-utilizing or alienating available social support (Koopman et al., 2000).

Most researchers and practitioners in the area of social support agree that much more research is needed in experimental manipulations of social networks—the sequence, frequency, and intensity of interventions—in

order to better understand the mechanism or process by which social support "works." We also are in need of more information on how to tailor or adapt network interventions to each stage of treatment or change; one size may not fit all. For example, the type and source of support that are helpful may vary as a function of the stage of treatment of the client (Tracy & Johnson, 2007). In a review of social network interventions, Ertel, Glymour, and Berkman (2009) point out the following limitations of social network intervention research: a focus on method of delivery versus timing of delivery, patient samples versus community samples, and failure to measure changes in social networks over time. In spite of many research studies on social support, Sarason and Sarason (2009) conclude that a clear consensus has not been reached on "the definition of social support, how to assess it, select and implement effective research strategies, and interpret the empirical evidence" (p. 114). The ways in which culture may influence how people make use of their social network also need further clarification (Kim, Sherman, & Taylor, 2008). In addition to research that examines factors moderating the effectiveness of social network interventions, research is needed that examines the requisite organizational structure for social network service delivery, the role of community resources, and the impacts of social networks on organizations and communities.

Conclusions

Social network approaches are consistent with social work values and practice approaches and are increasingly recognized and incorporated as active components of current treatment packages and practice models. With a longstanding tradition within social work, social network approaches have been applied broadly across a variety of client populations and service delivery systems. A social network approach allows practitioners to assess and intervene in multiple levels of the client's environment and thus may play a role in supporting and maintaining change efforts. As such, these approaches help bridge the unhelpful division between micro- and macro-practice in social work and offer strategies to fulfill the social work profession's primary mission to improve the quality of life for all persons.

References

Ali, M. M., Amialchuk, A., & Nikaj, S. (2013). Alcohol consumption and social network ties among adolescents: Evidence from Add Health. *Addictive Behaviors, 39,* 918–922.

Antonucci, T. C. (1986). Hierarchical mapping technique. *Generations—Journal of the American Society on Aging, 10,* 10.

Barnes, J. A. (1954). Class and communities in a Norwegian island parish. *Human Relations, 7*(1), 39–58.

Barrera, M., & Ainley, S. L. (1983). The structure of social support: A conceptual and empirical analysis. *Journal of Community Psychology, 11,* 133–144.

Barth, R. P. (1986). *Social and cognitive treatment of children and adolescents*. San Francisco, CA: Jossey-Bass Publishers.

Becker, D. G. (1963). Early adventures in social casework: The charity agent, 1880–1910. *Social Casework, 44*(5), 255–261.

Berkman, L. F., & Syme, S. (1979). Social networks, host resistance, and mortality: A nine-year follow-up study of Alameda County residents. *American Journal of Epidemiology, 109,* 186.

Berry, M. (2005). Overview of family preservation. In G. P. Mallo, (Ed.), *Child welfare for the 21st century* (pp. 319–334). New York: Columbia University Press.

Best, D., Lubman, D. I., Savic, M. Wilson, A., Dingle, G., Haslam, S. A., . . . Jetten, J. (2014). Social and transitional identity: Exploring social networks and their significance in a therapeutic community setting. *Therapeutic Communities: The International Journal of Therapeutic Communities, 35*(1), 10–20.

Biegel, D. E., & Naparstek, A. J. (Eds.). (1982). *Community support systems and mental health: Practice, policy, and research*. New York: Springer Publishing Company.

Biegel, D. E., Shore, B. K., & Gordon, E. (1984). *Building support networks of the elderly: Theory and applications*. Newbury Park, CA: Sage.

Biegel, D. E., Tracy, E. M., & Song, L. (1995). Barriers to social network interventions with persons with severe and persistent mental illness: A survey of mental health case managers. *Community Mental Health Journal, 31,* 335–349.

Blair, K. L., & Holmberg, D. (2008). Perceived social network support and well-being in same-sex versus mixed-sex romantic relationships. *Journal of Social and Personal Relationships, 25*(5), 669–791.

Borduin, C. M., Mann, B. J., Cone, L. T., Henggeler, S. W., Fucci, B. R., Blaske, D. M., & Williams, R. A. (1995). Multisystemic treatment of serious juvenile offenders: Long-term prevention of criminality and violence. *Journal of Consulting and Clinical Psychology, 63,* 569–578.

Bott, E. (1957). *Family and social network*. London: Tavistock.

Bottrell, D. (2009). Dealing with disadvantage: Resilience and the social capital of young people's networks. *Youth & Society, 40*(4), 476–501.

Bronfenbrenner, U. (1979). *The ecology of human development.* Cambridge, MA: Harvard University Press.

Buckman, J. F., Bates, M. E., & Morgenstern, J. (2008). Social support and cognitive impairment in clients receiving treatment for alcohol-and drug-use disorders: A replication study. *Journal of Studies of Alcohol and Drugs, 69*(5), 738–746.

Cassel, J. (1974). Psychosocial processes and "stress": Theoretical formulation. *International Journal of Health Services, 4,* 471–482.

Cobb, S. (1976). Social support as a moderator of life stress. *Psychosomatic Medicine, 38,* 300–314.

Collins, A., & Pancoast, D. (1976). *Natural helping networks*: *A strategy for prevention.* Washington, DC: National Association of Social Workers.

Collins, N. L., & Feeney, B. C. (2004). Working models of attachment shape perceptions of social support: Evidence from experimental and observational studies. *Journal of Personality and Social Psychology, 87*(3), 363–383.

Convention on the Rights of the Child. (1990). At www.unicef.org/cre/. Retrieved October 12, 2009.

Cox, E. O. (1991). The critical role of social action in empowerment-oriented groups. *Social Work with Groups, 14*, 77–107.

Crampton, D. (2007). Research review: Family group decision making: A promising practice in need of more programme theory and research. *Child & Family Social Work, 12*(2), 202–209.Dean, A., & Ensel, W. M. (1982). Modelling social support, life events, competence, and depression in the context of age and sex. *Journal of Community Psychology, 10,* 392–408.

Delgado, M. (1996). Community asset assessments by Latino youths. *Social Work in Education, 18*, 169–178.

Dunn, P. L. (1995). Volunteer management. In *Encyclopedia of social work* (19th ed., Vol. 3, pp. 2483–2490). Washington, DC: National Association of Social Workers.

Ertel, K. A., Glymour, M. M., & Berkman, L. F. (2009). Social networks and health: A life course perspective integrating observational and experimental evidence. *Journal of Social and Personal Relationships, 26,* 73–92.

Ferguson, S. A., Tracy, E. M., & Simonnelli, D. (1992). *Parent Network project manual: Training Head Start parent advisors to strengthen the social support systems of low-income parents.* Cleveland, OH: Center for Practice Innovations, Mandel School of Applied Social Sciences.

Fraser, M., & Hawkins, J. D. (1984). Social network analysis and drug misuse. *Social Service Review, 58*(1), 81–97. doi:10.1086/644165

Freeman, A. L., & Dodson, L. (2014). Social network development among low income mothers: Potential for bridging, bonding and building. *Family Relations, 63*(December), 589–601.

Freisthler, B., Holmes, M. R., & Wolf, J. P. (2014). The dark side of social support: Understanding the role of social support, drinking behaviors and alcohol outlets for child physical abuse. *Child Abuse & Neglect, 38,* 1106–1119.

Garbarino, J., & Sherman, D. (1980). High-risk neighborhoods and high risk families: The human ecology of child maltreatment. *Child Development, 51,* 188–198.

Gaudin, J. M., Wodarski, J. S., Arkinson, M. K., & Avery, L. S. (1990/1991). Remedying child neglect: Effectiveness of social network interventions. *Journal of Applied Social Sciences, 15*, 97–123.

Gitterman, A., & Germain, C. B. (1981). Education for practice: Teaching about the environment. *Journal of Education for Social Work, 17*(3), 44–51.

Gitterman, A., & Shulman, L. (Eds.). (1986). *Mutual aid groups and the life cycle*. Itasca, IL: Peacock.

Gore, S. (1981). Stress-buffering functions of social supports: An appraisal and clarification of research models. In B. S. Dohrenwend & B. P. Dohrenwend (Eds.), *Stressful life events and their contexts.* New York: Prodist.

Gottlieb, B. H. (1983). *Social support strategies.* Beverly Hills, CA: Sage.

Granovetter, M. S. (1973). The strength of weak ties. *American Journal of Sociology, 78,* 13–60.

Graycar, A. (1983). Informal, voluntary and statutory services: The complex relationship. *British Journal of Social Work, 13,* 379–393.

Green, B. L., Furrer, C., & McAllister, C. (2007). How do relationships support parenting? Effects of attachment style and social support on parenting behavior in an at-risk population. *American Journal of Community Psychology, 40,* 96–108.

Hartman, A. (1994). Diagrammatic assessment of family relationships. In B. R. Compton & B. Galaway (Eds.), *Social work processes* (pp. 154–165). Pacific Grove, CA: Brooks/Cole.

Heller, K., & Swindle, R. W. (1983). Social networks, perceived social support and coping with stress. In R. D. Felner, L. A. Jason, J. Moritsugu, & S. S. Farber (Eds.), *Preventive psychology: Theory, research and practice* (pp. 87–103). New York: Pergamon.

Hill, M. (2002). Network assessments and diagrams: A flexible friend for social work practice and education. *Journal of Social Work, 2*(2), 233–254.

Hobfoll, S. E. (2009). Social support: The movie. *Journal of Social and Personal Relationships, 26,* 93–101.

Hooyman, N. R., & Lustbader, W. (1986). Taking care: Supporting older people and their families. New York: Free Press.

House, J. S., & Kahn, R. L. (1985). Measures and concepts of social support. In S. Cohen & S. L. Syme (Eds.), *Social support and health* (pp. 83–108). Orlando, FL: Academic Press.

Kemp, S., Whittaker, J. K., & Tracy, E. (1997). *Person-environment practice: The social ecology of interpersonal helping.* New York: Aldine de Gruyter.

Kim, H. S., Sherman, D. K., & Taylor, S. E. (2008). Culture and social support. *American Psychologist, 63*(6), 518–526.

Koopman, C., Gore-Felton, C., Maroup, F., Butler, L. D., Field, N., Gill, M., . . . Spiegel, D. (2000). Relationships of perceived stress to coping, attachment and social support among HIV-positive persons. *AIDs Care, 12*(5), 663–672.

Lazarus, R. S., & Folkman, S. (1984). *Stress, appraisal and coping.* New York: Springer Publishing Co.

Lewandowski, C. A., & Hill, T. J. (2009). The impact of emotional and material social support on women's drug treatment completion. *Health and Social Work, 34*(3), 213–221.

Lewis, E. A., & Ford, B. (1991). The network utilization project: Incorporating traditional strengths of African-American families into group work practice. *Social Work with Groups, 13*, 7–22.

Lin, N. (1982). Social resources and instrumental action. In P. Marsden & N. Lin (Eds.), *Social structure and network analysis.* Beverly Hills, CA: Sage Publications.

Longabaugh, R., Wirtz, P., Zweben, A., & Stout, R. (1998). Network support for drinking, Alcoholics Anonymous and long-term matching effects. *Addiction, 93,* 1313.

Lovell, M. L., & Hawkins, J. D. (1988). An evaluation of a group intervention to increase the personal social networks of abusive mothers. *Children and Youth Service Review, 10*, 175–188.

Lovell, M. L., & Richey, C. A. (1991). Implementing agency-based social support skill training. *Families in Society, 72*, 563–571.

MacDonald, G. (1998). Development of a social support scale: An evaluation of psychometric properties. *Research on Social Work Practice, 8,* 564–576.

Maguire, L. (1983). *Understanding social networks.* Beverly Hills, CA: Sage Publications.

Marsella, A. J., & Snyder, K. K. (1981). Stress, social supports, and schizophrenia: Toward an international model. *Schizophrenia Bulletin, 7,* 152–163.

Mattaini, M. A. (1993). *More than a thousand words: Graphics for clinical practice*. Washington, DC: National Association of Social Workers.

Mehr, J. (1988). *Human services: Concepts and intervention strategies* (4th ed.). Boston: Allyn and Bacon.

Meyer, C. (1985). Social supports and social workers: Collaborators or conflict. *Social Work, 26,* 5–7.

Mikulincer, M., & Shaver, P. R. (2009). An attachment and behavioral systems perspective on social support. *Journal of Social and Personal Relationships, 26,* 7–19.

Mitchell, J. C. (1969). The concept and use of social networks. In J. C. Mitchell (Ed.), *Social networks in urban situations*. Manchester, UK: Manchester University Press.

Moreno, J. (1934). *Who shall survive?* New York: Beacon Press.

Morin, R. C., & Seidman, E. (1986). A social network approach and the revolving door patient. *Schizophrenia Bulletin, 12*, 262–273.

Munson, M. R., & McMillan, J. C. (2008). Nonkin natural mentors in the lives of older youths in foster care. *Journal of Behavioral Health Services, 35*(4), 454–468.

Naparstek, A. J., Beigel, D. E., & Spiro, H. R. (1982). *Neighborhood networks for human mental health care*. New York: Plenum.

National Institute of Mental Health. (1987). *Toward a model plan for a comprehensive community-based mental health system*. Rockville, MD: U.S. Department of Health and Human Services, Public Health Service, Alcohol, Drug, and Mental Health Administration.

Ohio Substance Abuse and Mental Illness Corrdinating Center of Excellence (2008). *Integrated Dual Disorder Treatment: An overview of the evidence-based practice*. (2008). www.ohiosamiccoe.case.edu, Retrieved October 12, 2009.

Olsen, M. R. (1983). Social support networks from a British perspective. In J. K. Whittaker & J. Garbarino (Eds.), *Social support networks: Informal helping in the human services* (pp. xv–xx). New York: Aldine Publishing Company.

Pancoast, D. L., Parker, P., & Froland, C. (1983). *Rediscovering self-help: Its role in social care*. Beverly Hills, CA: Sage.

Pennell, J., & Anderson, G. (Eds.). (2005). *Widening the circle: The practice and evaluation of family group conferencing with children, youths and their families*. Washington, DC: NASW Press.

Pettus-Davis, C., Howard, M. O., Murugan, V., Roberts-Lewis, A., Scheyett, A. M., Botnick, C., & Vance, M. (2015). Acceptability of a social support intervention for re-entering prisoners. *Journal of the Society for Social Work and Research, 6*(1), 51–89.

Pierce, G. R., Sarason, B. R., & Sarason, I. G. (Eds.). (1996). *Handbook of social support and the family*. New York: Plenum.

Pinto, R. M. (2006). Using social network interventions to improve mentally ill clients' well-being. *Clinical Social Work Journal, 34*(1), 83–100.

President's New Freedom Commission Report. (2003). www.mentalhealthcommission.gov. Retrieved October 12, 2009.

Richey, C. A. (1994). Social support skill training. In D. K. Granvold (Ed.), *Cognitive and behavior treatment: Methods and applications* (pp. 299–338). Belmont, CA: Brooks/Cole.

Richmond, M. E. (1917). *Social diagnosis*. New York: Russell Sage Foundation.

Richmond, M. E. (1918). *What is social casework?* New York: Russel Sage Foundation.

Richmond, M. E. (1922). *What is social casework?* New York: Russell Sage Foundation.

Sarason, I. G., & Sarason, B. R. (2009). Social support: Mapping the construct. *Journal of Social & Personal Relationships, 26,* 113–120.

Scott, J. (2000). *Social network analysis—a handbook* (2nd ed.). London: Sage Publications.

Shapiro, J. P. (1994). No pity: People with disabilities forging a new civil right movement. New York Times.

Silverman, P. R. (1980). *Mutual help groups*. London: Sage Publications.

Skirboll, B. W., & Pavelsky, P. K. (1984). The Compeer Program volunteers as friends of the mentally ill. *Hospital and Community Psychiatry, 35*, 938–939.

Stone, A., Jason, L., Stevens, E., & Light, J. (2014). Factors affecting the stability of social networks during early recovery in ex-offenders. *American Journal of Drug and Alcohol Abuse, 40*(3), 187–191.

Streeter, C. L., & Franklin, C. (1992). Defining and measuring social support: Guidelines for social work practitioners. *Research on Social Work Practice, 2,* 81–98.

Suchman, N. E., McMahon, T. J., Slade, A., & Luthar, S. S. (2005). How early bonding, depression, illicit drug use, and perceived support work together to influence drug-dependent mothers' caregiving. *American Journal of Orthopsychiatry, 75*(3), 431–445.

Thoits, P. A. (1995). Stress, coping, and social support processes: Where are we? What next? *Journal of Health & Social Behavior, 35*, 53–79.

Tracy, E. M., & Johnson, P. J. (2007). Personal social networks of women with co-occurring substance use and mental disorders. *Social Work Practice in the Addictions, 7*(1/2), 69–90.

Tracy, E. M., & Piccola, T. (2006). Family preservation. In K. S. Stolley & V. L. Bullough (Eds.), *Adoption* (pp. 223–226). Portsmouth, NH: Greenwood Publishing Group.

Tracy, E. M., & Whittaker, J. K. (1990). The social network map: Assessing social support in clinical practice. *Families in Society: The Journal of Contemporary Human Services, 71*(8), 461–470.

Tracy, E., & Biegel, D. E. (1994). Preparing social workers for social network interventions in mental health practice. *Journal of Teaching in Social Work, 10,* 19–41.

Tracy, E., & Whittaker, J. K. (1991). Social network assessment and goal setting in intensive family preservation services practice. In E. M. Tracy, J. Kinney, D. Haapala, & P. Pecora (Eds.), *Intensive family preservation services: An instructional sourcebook*. Cleveland, OH: Mandel School of Applied Social Sciences.

Vonk, M. E., & Yoo, S. Y. (2009). The family in the community. In A. C. Kilpatrick and T. P. Holland (Eds.), *Working with families* (5th ed.). Boston, MA: Pearson Publishers.

Wasserman, S., & Faust, K. (1994). *Social network analysis methods and applications*. New York: Cambridge University Press.

Weil, M. (1996). Community building: Building community practice. *Social Work, 41*, 481–501.

Wellman, B. (1981). Applying network analysis to the study of support. In. B. H. Gottlieb (Ed.), *Social networks and social support* (pp. 171–200). Beverly Hills, CA: Sage.

Westaby, J. D., Pfaff, D. L., & Redding, N. (2014). Psychology and social networks: A dynamic network theory perspective. *American Psychologist, 69*(3), 269–284.

White, L., & Cant, B. (2003). Social networks, social support, health and HIV-positive gay men. *Health and Social Care in the Community, 11*(4), 329–334.

Whittaker, J. K. (1986). Integrating formal and informal social care: A conceptual framework. *British Journal of Social Work, 16*(Suppl), 39–62.

Whittaker, J. K., & Garbarino, J. (1983). *Social support networks: Informal helping in the human services*. New York: Aldine Publishing Company.

Whittaker, J. K., & Schinke, S. P., & Gilchrist, L. D. (1986). The ecological paradigm in child, youth, and family services: Implications for policy and practice. *Social Service Review, 60*, 483–503.

Whittaker, J. K., Tracy, E. M., Overstreet, E., Mooradian, J., & Kapp, S. (1994). Intervention design for practice: English social support for high risk youth and families. In J. Rothman & E. J. Thomas (Eds.), *Intervention research: Designing and developing human service interventions* (pp. 195–212). New York: Haworth.

Wilcox, B. L. (1981). Social support, life stress, and psychological adjustment: A test of the buffering hypothesis. *American Journal of Community Psychology, 9*, 371–386.

Wingspread Report. (1979). *Strengthening families through informal support systems*. Racine, WI: The Johnson Foundation.

Wood, Y. R. (1984). Social support and social networks: Nature and measurement. In P. McReynolds & G. J. Chelvne (Eds.), *Advances in psychology assessment* (Vol. 6 ed., pp. 312–353). San Francisco, CA: Jossey-Bass.

Wrzus, C., Hanel, M., Wagner, J., & Neyer, F. (2013). Social network changes and life events across the life span: A meta-analysis. *Psychological Bulletin, 139*(1), 53–80.

Zippay, A. (1995). Expanding employment skills and social networks among teen mothers: Case study of a mentor program. *Child and Adolescent Social Work Journal, 12*(1), 51–69.

33

Social Work Practice in the Time of Neuroscience

Robert J. MacFadden

For decades, social work has committed itself to a biopsychosocial perspective, but, with some exceptions, there is very little evidence of the profession's embracing the biological side of this perspective (Saleebey, 1992). Most of the focus in both practice and education has been on the psychological and social dimensions.

The emerging knowledge through neuroscience and neurobiology has recently caught the attention of social workers, and there is interest and beginning efforts to incorporate this perspective into our professional knowledge base, research, and practice (Applegate & Shapiro, 2005). Rosemary Farmer (2009), a social worker, has identified this focus on the brain as the "missing link" for our profession. This new knowledge promises to balance out our professional perspective with an increased focus on and knowledge of neuroscience.

A neuroscience perspective is one of the most important new paradigms for social workers in this century. It promises to provide a common language and understanding that links our profession more closely with other professions, especially those in the allied health sector. Neuroscience's emphasis on the mind, body, brain, and relationships offers a holistic orientation that is appealing to a systemically based profession such as social work.

Focusing on the brain reminds us that all our perceptions, feelings, thoughts, and behaviors have a basis in the brain. An understanding of the brain, how it evolved and how it functions, provides insight into our basic human nature, including the promises and the challenges.

The "social" part of the term "social worker" underscores our profession's recognition of the essential nature of relationships to our existence. Neuroscience, similarly, has revealed how fundamental relationships are to our brains, mind, and bodies. Human connections help shape neural connections. Our brains at birth are immature and require considerable "home assembly." Relationships essentially sculpt our brains. When we are infants, our parents help grow our brain through interactions that also help define our self-worth and the value of others. Like a prosthetic, parents' own brains assist infants in controlling their emotions until their own regulatory systems become active.

Thus the brains of others help our own brains mature. As a species we are "wired to connect" (Dekoven Fishbane, 2007). Louis Cozolino (2010) asserts that there are no single brains, and that the brain, besides its genetic component, is a "social organ" developed through interaction with others.

Daniel Siegel's (2012a, p. 2) seminal definition of the mind, emerging out of an interdisciplinary collaboration, reflects the importance of nature and nurture, of brain and relationships: "A core aspect of the mind is an embodied and relational process that regulates the flow of energy and information." Relationships are being seen as essential in sculpting the brain.

As example of this is the knowledge emerging from recent discoveries such as the existence of "mirror neurons," which are neural components designed to pay attention to the behaviors, feelings, and intentions of others and to provide this information to our brains. This is a type of social wi-fi. When we watch others, the mirror neurons pick up these cues, and through the collaboration of other brain components such as the insula, this information flows throughout our body and brain. Aspects of our body resonate with this information and change parts of our own physiology. These changes are sent up the insula and into our prefrontal cortex, which perceives these changes as a "feeling." Thus, in watching others, we resonate, and our bodies change to attune and to reflect these states in others. We are able to feel empathy for the other. The mirror neuron system in others senses the change in our bodily states and resonates with these changes, and the other "feels felt" by us. These are the neural dynamics of social connection. The therapeutic alliance, a major source of influence in therapeutic change, depends on this empathic connection to have an impact.

Findings in neuroscience research have deepened our understanding of how the fundamental dynamics of attachment work. Siegel, in his book *The Developing Mind* (Siegel, 2012a), describes in detail how attachment is developed and the importance of relationships that offer resonance, attunement, and empathy in developing who we are.

Therapeutic relationships are viewed as forms of attachment relationships that create the conditions for optimal change. Interpersonal relationships involve biochemical changes that result in many things, including new neural connections and learning. This new perspective views social workers as physical change agents involved in stimulating new neural connections. Daniel Siegel (2012b) refers to the acronym SNAG, which stands for Stimulate Neural Activation and Growth.

Evolving neuroscience insights have added new perspectives to how we view human nature and relationships. The following are some examples of these insights.

Besides being social organs, our brains are also historical organs. Our brains and nervous systems have developed over millennia, and many of our current characteristics are a function of what our challenges and environments were like over this large time span.

We have survived by being vigilant and cautious. A central brain component called the "amygdala" is sensitive to situations that are novel and that potentially are dangerous. When a threat is perceived, the amygdala helps activate the stress response, which prepares us to fight, flee, or freeze. A cascade of biochemicals floods our interior quickly, preparing our muscles, digestion, heart, breathing, and other body parts to manage the threat. Part of these biochemicals include cortisol, which helps activate these internal body responses. This sympathetic nervous system involvement is an historical lifesaving process.

Yet modern life does not typically involve threats that can be handled by fighting, fleeing, or freezing. Most of our threats do not involve survival, yet they activate this historic

stress process, and we end up "stewing in our juices." The influence of prolonged and chronic stress impacts some important neural components such as the amygdala and the hippocampus, heavily involved in conscious memory. For instance, children in continuing abusive situations may experience shrinking of the hippocampus and hyper-activation of the amygdala. This can lead to post-traumatic stress disorder (PTSD) symptoms of hypervigilance, and difficulty focusing, thinking, paying attention, and learning. Excessive cortisol dosing can weaken the neural components such as the prefrontal cortex, the anterior cingulate cortex (ACC), and the hippocampus that act as brakes to help us emotionally regulate.

We are beginning to realize the extent to which fear and anxiety are a fundamental part of being human and account for so many of the problems we encounter in maintaining well-being. Hanson and Mendius (2009) describe the brain as having a "negativity bias" that constantly looks for, reacts to, and stores negative experiences, which accounts for much of our pessimism, fear, anxiety, and depression. Hanson depicts the brain as "Velcro" for negatives and "Teflon" for positives. If ten positive things and two negative things happen to us in a day, we tend to focus on the two negative events and overlook the positive experiences.

Neuroscience is refocusing social work into becoming more knowledgeable about the stress process and learning how to help clients manage stress, and to prevent excessive levels that can cause such damage. Cozolino (2010) describes clinicians as needing to become "amygdala whisperers," helping create a safe, secure, and accepting therapeutic relationship that can help reduce fears, decrease vulnerabilities, and build new positive narratives.

Stephen Porges's revolutionary work on the polyvagal theory has expanded our understanding of the sympathetic and parasympathetic systems and how our brain and body connect to regulate our physiological states. He has identified a more evolutionarily recent addition to the way we respond to threats. Porges asserts that our human nervous system is in a constant quest for safety (Porges, 2011). Through the subconscious system of neuroception, we are constantly monitoring threats from internal and external sources, such as our bodies and the environment. Porges describes a hierarchical defense system of neural circuits that can help us restore homeostasis when we become threatened. The first to be employed is the newest, the "social engagement system," whose complexity is a reflection of how our social brain has expanded in sophistication and size to cope with our increasingly social world. We are wired to connect, and we first engage with others to help us manage stress and to develop a sense of safety. The value of social and emotional support from others who resonate and attune and help us "feel felt" is crucial in emotional regulation. If this fails, we mobilize into a "fight or flight" circuit, which readies us to fight off or to flee from a threat. If this fails to restore our homeostasis, our oldest and most primal system becomes activated, the immobilization or freeze system. From Porges's work, we understand why helping clients build a sense of safety is essential for their well-being. Porges notes, for example, that ensuring that clients feel safe about where they are sitting in a room, using a supportive, prosodic voice, ensuring there is no unnecessary noise, especially low-frequency sounds like air conditioners and traffic, can help turn defense systems off (Porges, 2004). Social workers need to regularly check with clients to see how comfortable and safe they feel, since this will affect the quality of the therapeutic relationship.

Besides understanding the centrality of fear and anxiety, and the bias towards negativity, neuroscience is also underscoring how essential positivity is to our existence. A movement associated with the third wave in psychology, called *positive psychology* (Seligman, 2011), is highlighting how positive emotions and optimism fuel well-being. The research work of John Gottman and colleagues (2000, 2004) over three decades of working with couples has also underscored the fundamental importance of positivity in relationships that last. A strong predictor of enduring relationships that promote well-being is the ratio of 5:1, positives to negatives. Couples that have fulfilling, long-term relationships have significantly more positive than negative interactions.

Rick Hanson, in *Hardwiring Happiness* (2013), remarks how unwilling the mind is to

give the gift of a positive experience to itself. Clients would benefit from becoming aware of this gift and identifying and savoring these positive experiences. This includes collecting them and continuing to marinate in them. Hanson uses the acronym of HEAL to suggest the ways to do this: First H-ave and notice the positive experience; E-nrich it through staying with it, increasing the intensity and duration and magnifying its importance; A-bsorb it through visualizing, sensing it and building on it; and, if desired, L-ink these positive experiences gradually with some painful thoughts and feelings, as doing so can act as a natural antidote to these negative thoughts and feelings.

In a startling homage to Sigmund Freud, neuroscience is highlighting the significance of the unconscious in our mental life. It is estimated by some that over 95% of our mental activity is unconscious (Jensen, 2008; Materna, 2007). However, the neuroscience understanding of the unconscious is not the same image that Freud postulated. The unconscious is made up of many different neurocomponents or nuclei that are distributed across the brain. It is estimated that our five senses are receiving more than 11 million pieces of information per second. It is believed we can handle about 40 pieces of information per second consciously (Wilson, 2002). Our unconscious helps us select what is important and what to ignore. It also helps us automatically maintain our fundamental life systems such as breathing, heart rate, body temperature, and immune system. Although important, our consciousness is substantially limited in what it can process and how quickly it can process stimuli.

The systems that make up the unconscious are ready at birth and possibly at some point in utero. At birth, the amygdala is fully formed and allows the infant to react to stimuli. It also is involved in the earliest of memories that capture much of the experience and learning of early life. Unconscious memory forms our earliest knowledge base. It does not require the focal attention that conscious memory requires. Unconscious memory is created through experiences and uses neurotransmitters associated with emotion to stamp experience as positive for survival (remember) or negative (don't remember). Unconscious memory is powerful, quickly retrieved, contains no time and date information, and is difficult to change. These essentially are the biases or knowledge that are stored deep in memory. These biases are mostly positive, helping us decide things quickly, based on what has worked and what we have learned. However, these biases can also be faulty and lead us to make mistakes. Prejudice and stereotyping, as examples, can be contained in this implicit knowledge base. This is knowledge that is learned early, not accessible to consciousness, and can exert important influences on us. A social worker, for example, could work in social justice causes throughout her life and still harbor unconscious biases that are polar opposite to her conscious life and values. As another example, a child welfare worker involved in assessing homes for foster children may unconsciously hold a bias against same-sex parents which may impact her ability to conduct a fair assessment (MacFadden & Schoech, 2010).

Researchers from Harvard and the University of Washington have been working for over a decade, identifying implicit biases of this type, and they have developed a computerized way of identifying both the direction and strength of specific unconscious, implicit biases. Their website allows visitors to assess this: https://implicit.harvard.edu/implicit/.

A focus on emotion has been a hallmark of the social work profession historically, although there has been minimal research in this area by social workers. Neuroscience and research-informed practice have been moving towards a new appreciation of the significance of emotion and its impact on thinking, relationships, decision-making, and learning.

Emotion is now being viewed as a fundamental factor in our thinking and behavior. One of the leading U.S. neuroscientists, Antonio Damasio, describes emotion as a part of the edifice or foundation of reason. He indicates that human beings are not thinking machines. We are feeling machines that think (Damasio, 2001). Schore refers to the paradigm shift in therapy from cognition to emotion, paralleled by a shift from the left hemisphere to the right hemisphere (Schore, 2012; Schore, 2003).

A distinction is made between emotion and feelings. Emotions are unconscious and reflect early decision-making processes. They occur

within the theatre of the body—we can usually see emotions in people's faces and other physiology. Information about these bodily changes is transmitted through the insula to the prefrontal cortex, and these changes are experienced as a feeling—a conscious awareness. Feelings are within the theatre of the mind and reflect an experiencing of a self. As an example of the differences, an individual who sustains a stroke that damages a certain part of the brain may be able to experience an emotion such as anger—you may see a furrowed brow, a flushed face, and tight fists—but information about these changes is blocked from flowing to the prefrontal cortex, and the individual does not experience a feeling of this emotion.

Emotion regulation is increasingly being viewed as central to our well-being, psychologically and socially. Parents pass on the skill for this in the early years. Siegel states that the communication of emotion may be the primary way attachment relationships shape the mind, and that emotion is a central organizing process within the brain that shapes the ability of the mind to integrate experience and to adapt to future stressors (Siegel, 1999). Couples in relationships that last help each other manage their emotions. Susan Johnson (in Fosha, 2009, p. 279), co-founder of emotionally focused therapy, calls emotion "the most powerful force in human behavior."

Emotion regulation can be enhanced by strengthening centers of the brain such as the prefrontal cortex, the anterior cingulate cortex, and the hippocampus. These three parts, along with others, help put the brakes on the amygdala, which helps limit the stress response and the arousal that entails.

Daniel Siegel (2010), a psychiatrist, attachment researcher and founder of an approach to psychotherapy called *interpersonal neurobiology*, researched the role of the middle prefrontal cortex in our mental life and well-being and found that this area of the brain was responsible for nine critical functions: bodily regulation, emotion regulation, intuition, morality, attuned communication, response flexibility, fear modulation, insight, and empathy. Secure attachment has been associated with eight of these nine functions. Intuition and secure attachment has not been formally researched yet.

Social work has become interested in the positive benefits of mindfulness meditation, and neuroscience is identifying how mindfulness meditation has an impact on strengthening aspects of the brain, leading to improved well-being. In a meta-analysis of the effects of mindfulness on the brain, Holzel et al. (2011) identify several brain areas affected by meditation practices. These include the anterior cingulate cortex, the insula, the dorsal prefrontal cortex, the ventromedial prefrontal cortex, the hippocampus, and the cingulate cortex. Strengthening these brain components promotes the following changes: attention-regulation, body awareness, emotion regulation, change in the perspective on the self (e.g., more positive self-concept and self-esteem, stronger acceptance of self), and increased self-compassion.

Neuroscience is also providing some insights into how we learn and related teaching strategies. Few social work educators may be aware of the two to three decades of research on learning and the brain that exists and can be integrated into our educational processes (Jensen, 2005, 2008; Caine & Caine, 2006).

A further significant advantage for social workers of being aware of the neuroscience knowledge related to learning is that both learning and therapeutic change have a common foundation: neural change. Many of the factors that promote optimal learning and therapeutic change are similar. Some insights from neuroscience and learning follow.

Learning is about physical change, the making of new neuronal pathways, strengthening existing pathways, and making more complex neural maps and connections. Learning simply is memory that sticks (Howard, 2006).

Brain-compatible learning is learner-centered, and educators need to begin with what students know and value, and to tie the new learning, whenever possible, to what is known—to the learner's existing neural maps. Getting the attention of the learner is critical, helping the learner to make sense of the content is necessary and helping the learners identify the relevancy of the content is essential.

The educator is a physical agent, and teaching and learning are physical actions. Learners are physically changed if learning occurs. The way the educator sets up the classroom and

communicates with students, the type of content chosen, the method of delivery, and the feedback provided engender a wide range of emotions and feelings that release a cascade of neuropeptides that help alter the body and the mind landscape of the learner. And some changes last a lifetime.

Developing knowledge and skills in constructing a positive emotional climate for learning is at least as important as the quality of the content. Learning rarely surpasses the quality of teaching (Sousa, 2006). To encourage maximum learning, a positive emotional climate within the classroom needs to be created so that students can develop an optimal learning state termed "relaxed alertness" (Caine et al., 2005; Materna, 2007). This state is characterized by low threat and high challenge. In this positive environment, there is an excitement about or interest in learning, and this is accompanied with a feeling of safety that permits learners to take risks in thinking, questioning, and developing new skills. It is a state that engages the executive functions of the brain in analyzing, creating, planning, and taking action.

Educators would benefit from recognizing the importance of unconscious learning and realize that students in a class are learning things consciously and unconsciously. Indeed, Jensen (2008, p. 107) remarks that "the majority of what you and your students are learning . . . was never consciously intended."

Our natural limitations ensure that we only process a limited amount of ideas and memories. Although it varies with motivation, adults can typically process an item in working memory intently for about 10–20 minutes before mental fatigue or boredom sets in and focus weakens (Sousa, 2006). Our neurotransmitters can become depleted and need a rest to rejuvenate and restore these levels. We constantly need to see the meaning and relevance of things, or they won't be attended to or learned.

Sometimes social work educators feel under considerable pressure to "cover" a range of topics that may be too extensive for the number of class sessions. Content is more likely to be added to a curriculum than dropped. Covering the topics through a "content bucket" approach may be unrealistic and not permit time for student reflection, critique, and application of the knowledge. Perhaps educators and curriculum developers need to seriously ask themselves (and students) what content is so important that social workers are likely to use it frequently in their practice. Prioritizing content and ensuring that it is understood by the learner (i.e., it makes sense) and exploring its importance (i.e., why it is relevant) and making connections would increase the chance that it is learned, remembered, and used. Ensuring adequate time and opportunity for reflection (i.e., making neural connections and links with other neural maps) would enhance this process.

Social workers are beginning to integrate neuroscience understandings into their work with all ages of clients. From a psychoeducational perspective, using Daniel Siegel's "hand model of the brain" (Siegel, 2010, p. 15) is enabling social workers to illustrate the different parts of the brain and how each works separately and with the others. It also graphically illustrates how problems with emotional regulation occur and can lead to us "flipping our lids." Siegel demonstrates this online at http://www.youtube.com/watch?v=DD-lfP1FBFk. A psychoeducation perspective is normalizing and allows social workers to move from "a problem with your brain" to "a problem with our brains" when working with clients.

These are some illustrations of how emerging research on neuroscience connects with social work's interests and mandates. For a profession interested in a biopsychosocial perspective, neuroscience provides an important source of knowledge that itself is at an early stage of evolution. While advances in imaging technologies have grown this knowledge exponentially, there is still much that is not known and considerable speculation and inference-making within the field. The promise, however, for the profession of social work is remarkable.

References

Applegate, J., & Shapiro, J. (2005). *Neurobiology for clinical social work: Theory and practice*. New York: W.W. Norton & Company.

Caine, G., & Caine, R. (2006). Meaningful learning and the executive functions of the brain. *New Directions for Adult and Continuing Education, 110*, 53–61.

Caine, R., Caine, G., McClintic, C., & Klimek, K. (2005). *12 brain/mind learning principles in action*. Thousand Oaks, CA: Corwin Press.

Cozolino, L. (2010). *The neuroscience of psychotherapy: Healing the social brain* (2nd ed.). New York: W.W. Norton & Company.

Damasio, A. (2001). Interviewed in the video produced by David Grubin, *Secret life of the brain*. New York: Public Broadcasting System.

DeKoven Fishbane, M. (2007). Wired to connect: Neuroscience, relationships and therapy. *Family Process*, 46(3), 395–412.

Farmer, R. (2009). *Neuroscience and social work practice*. Thousand Oaks, CA: Sage.

Gottman, J. S. (Ed.). (2004). *The marriage clinic casebook*. New York: W.W. Norton & Co.

Gottman, J., & Notarius, C. (2000). Decade review: Observing marital interaction. *Journal of Marriage and the Family, 62*(November), 927–947.

Hanson, R. (2013). *Hardwiring happiness*. New York: Harmony Books.

Hanson, R., & Mendius, R. (2009). *Buddha's brain*. Oakland, CA: New Harbinger Publications.

Holzel, B., Lazar, S., Gard, T., Schuman-Olivier, Z., Vago, D., & Ott, U. (2011). How does mindfulness meditation work? Proposing mechanisms of action from a conceptual and neural perspective. *Perspectives on Psychological Science, 6*(6), 537–559.

Howard, P. J. (2006). *The owner's manual for the brain: Everyday applications from mind-brain research*. Austin, TX: Bard Press.

Jensen, E. (2005). *Teaching with the brain in mind* (2nd ed.). Alexandria, VA: Association for Supervision and Curriculum Development.

Jensen, E. (2008). *Brain-based learning: The new paradigm of teaching* (2nd ed.). Thousand Oaks, CA: Corwin Press.

MacFadden, R. (2011). Hypnosis and social work practice: Incorporating new perspectives from neuroscience. In F. Turner, *Social work treatment* (5th ed., Chapter 17, pp. 271–278).

MacFadden, R., & Schoech, D. (2010). Neuroscience and professional decision-making: Implications for ICT. *Journal of Technology in Human Services, 28*(4), 282–294.

Materna, L. (2007). *Jump start the adult learner: How to engage and motivate adults using brain-compatible strategies.* Thousand Oaks, CA: Corwin Press.

Porges, S. (2004). Neuroception: A subconscious system for detecting threats and safety. *Zero to Three*, May 2004.

Porges, S. (2011). *The polyvagal theory: Neurophysiological foundations of emotions, attachment, communication and self-regulation*. New York: W.W. Norton & Company.

Saleebey, D. (1992). Biology's challenge to social work: Embodying the person-in-environment. *Social Work, 37*(2), 112–118.

Schore, A. (2003). *Affect regulation and the repair of the self*. New York: W.W. Norton & Company.

Schore, A. (2012). *The science of the art of psychotherapy*. New York: W.W. Norton & Company.

Seligman, M. (2011). *Flourish*. New York: The Free Press.

Siegel, D. J. (1999). *The developing mind: How relationships and the brain interact to shape who we are* (1st ed.). New York: The Guilford Press.

Siegel, D. J. (2010a). *Mindsight: The new science of personal transformation*. New York: Bantam Books.

Siegel, D. J. (2010b). *The mindful therapist: A clinician's guide to mindsight and neural integration*. New York: W.W. Norton & Company.

Siegel, D. J. (2012a). *The developing mind: How relationships and the brain interact to shape who we are* (2nd ed.). New York: Guilford Press.

Siegel, D. J. (2012b). *Pocket guide to interpersonal neurobiology: An integrative handbook of the mind*. New York: W.W. Norton & Company.

Sousa, D. A. (2006). *How the brain learns*. Thousand Oaks, CA: Corwin Press.

Wilson, T. D. (2002). *Strangers to ourselves: Discovering the adaptive unconscious.* Cambridge, MA: The Belknap Press of Harvard University Press.

For a useful web-based resource highlighting social work and neuroscience, visit the author's website at www.robertmacfadden.com.