The Informal Safety Net: Social Network Activation among Hispanic Immigrants during COVID-19

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Abstract

During times of crisis, individuals may activate members of their social networks to fulfill critical support functions. However, factors that may facilitate or inhibit successful network activation are not fully understood, particularly for structurally marginalized populations. This study examines predictors of network activation among recent and established Hispanic immigrants during the COVID-19 pandemic. Specifically, using unique, longitudinal data from the VidaSana study and its supplemental survey, the COVID-19 Rapid Response study ($N = 400$), we ask: How are COVID-related stressors associated with goal-oriented network activation (e.g., health-focused activation) among Hispanic immigrants? How might structural and compositional characteristics of social networks facilitate or inhibit successful network activation during COVID-19? Results align with theories of network activation (i.e., functional specificity) that imply that individuals engage in selective and deliberate activation of networks. That is, we observe a congruency between COVID-related stressors and social network characteristics, and distinct types of network activation. Moreover, we find that respondents experiencing pandemic-induced economic difficulties engage in activation for financial assistance only if they are embedded in a higher-educated network. We discuss the implications of these findings and provide recommendations for future research.

Keywords

social networks, social support, functional specificity, optimal matching, help-seeking, COVID-19, Hispanic immigrants

INTRODUCTION

Individuals' life chances are strongly conditioned by the structure, function, and content of their social networks. The importance and utility of social relationships become particularly evident during times of crisis when individuals may activate members of their personal social networks to help them manage difficult life circumstances (Lin 2002; Pescosolido 1992; Thoits 1986). Depending on the nature of the crisis, individuals may call upon network members to fulfill various support

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functions, including giving advice or information, demonstrating care and understanding, or providing instrumental assistance (e.g., financial support) (Thoits 2011). Consequently, successful network activation depends on the accessibility of network ties and their ability or willingness to fulfill needed support functions (Cutrona 1990; Cutrona and Russell 1990; Small 2013; Thoits 2011; Wellman and Wortley 1990).

A relatively small but influential body of empirical research has explored social network dynamics and activation during crisis (e.g., natural disasters, illness episodes) (Desmond 2012; Elliott, Haney, and Sams-Abiodun 2010; Gage 2013; Maupome, McConnell, and Perry 2016; Kaniasty and Norris 1993; Leslie and Grady 1985; Messias, Barrington, and Lacy 2011; Morgan 1989; Owens et al. 2011; Perry 2012; Perry and Pescosolido 2012, 2015). These studies have provided critical insight into how the process of network activation unfolds, leading to the development of models of tie activation that describe *who* individuals activate (e.g., strong, kin ties) and *how* they activate (e.g., selective/deliberate activation versus incidental/haphazard activation). Rarely, however, has research on network activation examined how structurally marginalized populations leverage their social ties in response to different crises or disruptive events. This is a notable gap in the network literature, as structurally marginalized populations tend to be most vulnerable during crisis periods and, consequently, have the greatest support needs, which may be met through the mobilization of network ties.

In the present study, we address this gap by examining processes of network activation among Hispanic immigrants during COVID-19—an ideal case for assessing network activation for two reasons. First, the COVID-19 pandemic was unprecedented both in terms of its nature and consequences and created an urgent need for support. This is particularly true for Hispanic immigrants who experienced greater social, economic, and health consequences during COVID-19 compared to the general U.S. population (Gonzalez et al. 2020; Zamarripa and Roque 2021). Second, some Hispanic immigrants may have limited access to the *formal* safety net (e.g., government assistance) and, as a result, may have had to rely heavily on *informal* sources of support, such as their personal social networks, to navigate the COVID-19 pandemic. This is highly likely given the collectivist notion of *familismo* embedded in Hispanic cultural values, which emphasizes the family/group/clan

unit and has been found to promote help-seeking within Hispanic families and communities (Ishikawa, Cardemil, and Falmagne 2010; Villatoro, Morales, and Mays 2014). However, some Hispanic immigrants, especially those who more recently immigrated, may be embedded in geographically dispersed networks, which could affect their ability to access network-based resources. Together, these structural and cultural conditions provide a unique social context in which to explore network activation and will advance theoretical and empirical knowledge of how the activation process unfolds.

To examine social network activation among Hispanic immigrants during COVID-19, we draw on unique data from the VidaSana study and its supplemental COVID-19 wave, the Hispanic COVID-19 Rapid Response study. The VidaSana study is a longitudinal, Indiana-based cohort study of recent and established Hispanic immigrants. We address two research questions. First, how are COVID-related stressors associated with goal-oriented network activation (i.e., health-, socialization-, and economic-focused activation) among Hispanic immigrants? Second, how might structural and compositional characteristics of social networks facilitate or inhibit successful network activation among Hispanic immigrants during the COVID-19 crisis?

BACKGROUND

Crisis Networks and Social Support

Scholars have long been interested in understanding the significance of social networks in helping individuals navigate crises (Hurlbert, Haines, and Beggs 2000; Lin 2002; Pescosolido 1992; K. N. Walker, MacBride, and Vachon 1977). Research that explores the importance of social networks during crisis periods is motivated by the idea that valuable resources (e.g., knowledge, trust, money) are embedded within a social network and can be accessed and strategically employed by its members (Kawachi 2010). In other words, personal social networks are purveyors of *social capital*— that is, "resources that accrue to individuals or small groups as a result of network ties" (Perry, Pescosolido, and Borgatti 2018:33) — which may be cultivated, exchanged, and mobilized by network members (Kawachi 2010).

Social support has been conceptualized as a "manifestation of social capital" (McConnell 2017:505). In theory, an individual may call upon

network members to fulfill multiple types of support functions, which, in general, fall into two categories: (1) emotional sustenance and (2) active coping assistance (Thoits 2011). *Emotional sustenance* refers to demonstrations of love, caring, listening, and sympathy. During times of crisis, emotional sustenance can provide distressed individuals with a sense of purpose, meaning, and belonging, facilitate the development of psychosocial resources (e.g., self-efficacy), and reinforce individuals' beliefs that they are included, accepted, and valued in a social network. *Active coping assistance* may take the form of practical resources and advice, behavioral and material assistance, or guidance on how to overcome a difficult life circumstance. Active coping assistance can help distressed individuals develop a sense of control over the crisis, and attenuate the impact of stressors through direct assistance with a particular issue or by fostering the development of personal resources by "symbolically conveying" a sense of meaning and purpose (Thoits 2011:153).

Importantly, an individual's decision or capacity to activate network members and mobilize network-based support may vary depending on several factors, including, for example, the nature of the crisis (Elliott et al. 2010), the social position (e.g., immigrations status) of the distressed individual (Desmond 2012; Elliott et al. 2010; Messias et al. 2011), and the structure and composition of the network in which an individual is embedded (Hurlbert et al. 2000). Simply put, the process of mobilizing network-based support is complex. However, salient factors that may influence an individual's decision to seek assistance from network members are not fully understood, particularly among structurally marginalized populations. Additional investigations are warranted to better understand how members of high-need, vulnerable populations leverage their social ties to help them manage life difficulties.

Dynamics of Tie Activation

For decades, scholars across several theoretical traditions have explored how provisions of support are distributed within personal social networks and how the process of network activation unfolds (Pescosolido 1992; Small 2021; Wellman and Wortley 1990). In their seminal study, Barry Wellman and Scot Wortley (1990) examined how relational (e.g., sibling, friend) characteristics of social ties influenced the provision of different

kinds of supportive resources (e.g., companionship, financial aid). Their findings revealed that strong ties (e.g., close family members) provided a broad range of support functions, despite constituting a relatively small proportion of an individual's social network. Most social ties, especially peripheral ties (e.g., coworkers, neighbors), provided more "specialized" support, fulfilling one or two types of support needs rather than providing a broad range of support functions.

Wellman and Wortley's (1990) findings helped lay the foundation for the development of the *functional specificity hypothesis*, which posits that social network activation tends to be selective and purposive—that is, individuals "shop" among network members and activate those members who, they deem, are most capable of meeting their specific support needs (Perry and Pescosolido 2010; Simons 1984). In other words, there is an emphasis on "the fit between the problem or support need at hand and the skills, information, resources, and accessibility of individual ties embedded within network structures and cultures" (Perry and Pescosolido 2010:117). Relatedly, scholars in the social support tradition have referred to the congruency between support needs elicited by a stressor and the support sought from and given by network members as *optimal matching* (e.g., an individual experiencing financial difficulties may seek financial support from network members) (Cutrona and Russell 1990; Thoits 1995). In situations when network activation is initiated by the distressed individual (i.e., ego-driven mobilization), functional specificity and optimal matching often imply that the activation process will follow a rational, linear pattern (Small 2021): Distressed individuals ruminate on the support capabilities of members of their personal social network, identify the network member(s) best able to meet their support needs, and activate the specific network member(s) for assistance.

Indeed, findings from several studies have provided support for the functional specificity and optimal matching perspectives (Maupome et al. 2016; Perry and Pescosolido 2015; Small 2013; Thoits 2021). For example, Brea L. Perry and Bernice A. Pescosolido (2015) examined processes of network activation among individuals experiencing a mental health crisis. To help manage the crisis, they found that individuals activated their strong, core ties (e.g., partner, mother), and ties characterized by frequent interaction. Their

findings also revealed that individuals activated network members who have had *personal experience with mental illness* and those who recommended mental health treatment early in the illness episode—presumably because these network members were perceived to be particularly knowledgeable about the illness experience. These findings, and others (Gage 2013; McConnell 2017), suggest that distressed individuals may deliberate over who in their network can provide relevant, tailored, and effective support and, in turn, mobilize these network members for assistance.[1]

Importantly, however, additional empirical work suggests that successful network activation may depend on the structure and composition of an individual's social network (Hurlbert et al. 2000). For example, Jeanne S. Hurlbert and colleagues (2000) explored network activation for informal support in response to a hurricane. They found that individuals who were embedded in densely connected and more kin-centered networks with greater gender diversity activated a greater proportion of core network ties, and had a higher likelihood of activating supporters from their core network during the preparation and recovery phase of the hurricane. These results suggest that structural (e.g., density of interconnections) and compositional characteristics (e.g., proportion kin) of core networks shape the availability and accessibility of network-based resources, which may facilitate or inhibit network activation when a crisis arises.

In sum, certain theories of tie activation imply that the activation process may be rational and systematic. However, an individual's decision or ability to activate may depend on the structure, function, and content of their social network. Members of vulnerable populations with greater support needs often face resource constraints within their personal networks that may prevent them from engaging in activation and securing adequate support. Hispanic immigrants are one such vulnerable population that has been theorized to frequently mobilize network-based support to help them navigate and negotiate their precarious position in the United States (Almeida et al. 2009; Menjívar 2000; Negi et al. 2013; Plasencia 2021). Still, empirical knowledge of social network dynamics among Hispanic immigrant populations, and vulnerable populations more broadly, during crises is limited. Therefore, exploring network activation among Hispanic immigrants during COVID-19 will provide critical insight into tie activation processes among structurally marginalized groups during periods of crisis and uncertainty.

The Case of Hispanic Immigrants during COVID-19

The COVID-19 pandemic engendered severe social, economic, and health shocks across all sociodemographic populations in the United States (Yeyati and Filippini 2021). Compared with the general U.S. population, however, Hispanic populations, especially recent immigrants, have felt the disproportionate impact of COVID-19, elevating their support needs (Gonzalez et al. 2020; Krogstad and Lopez 2020; Noe-Bustamante, Lopez, and Krogstad 2020; Zamarripa and Roque 2021). For example, due to their overrepresentation in industries most severely affected by the pandemic (e.g., the service industry), unemployment rates among the Hispanic population were the highest among all sociodemographic groups in the United States (Zamarripa and Roque 2021). Moreover, in August of 2020, nearly 60% of Hispanics reported that members of their households experienced unemployment and pay cuts due to the pandemic, compared to 43% of adults in the general U.S. population (Krogstad and Lopez 2020). Hispanics also faced a greater risk of exposure to COVID-19 and were 4.1 times more likely to be hospitalized and 2.8 times more likely to die from COVID-19 compared to their non-Hispanic White counterparts (Zamarripa and Roque 2021). Also, more than half (52%) of Hispanic adults in the United States have had a close friend or family member hospitalized or die from COVID-19 (Noe-Bustamante et al. 2020).

In addition to suffering the greatest social, economic, and health consequences during the COVID-19 pandemic, some Hispanic immigrants in the United States may face considerable barriers in accessing and mobilizing formal aid from the government and public health institutions (Acevedo-Garcia et al. 2021; Berk and Schur 2001; Negi et al. 2013). For instance, regardless of their tax-paying status, undocumented Hispanic immigrants were prevented from receiving unemployment benefits included in the Coronavirus Aid, Relief, and Economic Security (CARES) Act (Zamarripa and Roque 2021). Moreover, tax filers who used individual tax identification numbers (ITINs), commonly used by undocumented workers, could not receive direct relief payments from the federal government (Zamarripa and Roque 2021). Undocumented immigrants were also fearful that accessing formal aid during the pandemic would affect their ability to obtain permanent residency or lead to deportation (Perry 2021; Schneider et al. 2021). Furthermore, because of historical and

contemporary acts of discrimination and violence perpetrated by formal U.S. institutions against Hispanics, combined with anti-immigrant rhetoric that intensified before and during the COVID-19 pandemic, some Hispanic immigrants may exhibit a strong distrust of government and public health institutions (Berk and Schur 2001; Blackman and Sierra 2021; Van Natta 2019). Together, these barriers may prevent or deter Hispanic immigrants from seeking formal aid and, in turn, encourage them to rely on informal sources for support—in particular, their personal social networks.

Both theory and empirical research have documented the importance and utility of social networks in the lives of Hispanic immigrants (Almeida et al. 2009; Menjívar 2000; Negi et al. 2013; Plasencia 2021; Viruell-Fuentes et al. 2013). Research on ethnic enclaves and communities, for example, suggests that Hispanic immigrants often select ethnically bound neighborhoods to gain access to rich sociocultural and economic resources derived from close-knit social networks in these communities. The strength and supportiveness of social networks in segregated Hispanic communities provide a critical safety net and help ensure Hispanic immigrants' survival by reducing acculturative stress and protecting against anti-immigrant sentiment (Morey et al. 2020). Importantly, the cohesiveness of Hispanic immigrants' social networks has also been identified as an explanatory mechanism for the *immigrant-health paradox*—the consistent finding that Hispanic immigrants have better health outcomes compared to U.S.-born individuals (Markides and Rote 2015; Viruell-Fuentes et al. 2013).

The strength of Hispanic immigrants' social networks may, in part, stem from unique Hispanic cultural values—in particular, the collectivist notion of *familismo* (or familism), which promotes "strong in-group feelings" and emphasizes "family goals, common property, mutual support, and the desire to pursue the perpetuation of the family" (Bardis 1959:340). Several studies have found *familismo* to facilitate help-seeking and caregiving within Hispanic families and communities, particularly among Hispanic immigrants who have not adopted the individualistic culture of the United States (Maupome et al. 2016; Plasencia 2021; Ruiz and Ransford 2012). In theory, based on this notion, we should expect Hispanic immigrants to rely heavily on their personal social networks to help them navigate the COVID-19 crisis.

While a few empirical studies have explored social network dynamics among Hispanic immigrant populations, some evidence suggests that personal social networks are important sources of support for Hispanic immigrants during periods of elevated need. For example, in their interview-based study of Hispanic survivors of Hurricane Katrina, DeAnne K. Hilfinger Messias and colleagues (2011) found that survivors relied heavily on local and distant core network members (e.g., family members, friends) for informational (e.g., hurricane severity, evacuation information), instrumental (e.g., housing, food), and emotional support. They also found that Hurricane Katrina "fostered a commitment to collective survival" (p. 110), which led to the formation (and mobilization) of new social ties during the disaster. Importantly, many of the survivors reported relying on their personal social networks because of their distrust for government and media organizations or their inability to access formal aid due to language barriers or fear of deportation. However, some of these Hispanic immigrants faced structural constraints (e.g., poverty, lack of transportation) within their personal social networks, which prevented them from accessing critical information and resources during the crisis.

The potential limitations of some Hispanic immigrants' social networks are further highlighted in Menjívar's (2000) study of recent Salvadoran immigrants in a San Francisco enclave. Menjívar found that these immigrants' kin ties—already strained by the migration process—become even more unstable and inaccessible as immigrants transitioned to living in the United States. This network instability could be attributed, in large part, to structural constraints that prevented kin and other core network members from providing different types of instrumental assistance (e.g., financial aid, housing assistance).

In sum, the COVID-19 crisis created an acute need for support, especially for Hispanic immigrants and other structurally marginalized populations. However, Hispanic immigrants' support needs were unlikely to be adequately met by formal sources, which may have led Hispanic immigrants to mobilize their personal social networks for assistance. Existing empirical research, which is mainly qualitative, suggests that Hispanic immigrants' social networks can fulfill critical support functions during periods of crisis, *conditional on* the availability and accessibility of resources within the network. In the present study, we take a quantitative approach, leveraging survey data and employing egocentric network analysis to examine factors associated with network activation among Hispanic immigrants during COVID-19.

This approach offers several advantages. First, egocentric network data provide a detailed understanding of the broader social-relational context in which respondents are embedded. This allows us to examine how *multiple* structural and compositional aspects of social networks influence the process of network activation and, in turn, better determine *how* this process unfolds. Second, because these survey data are longitudinal, we have greater confidence in the temporal ordering of relationships between social network characteristics and network activation. Third, given that most research on network activation among Hispanic immigrants during crises has been qualitative, leveraging survey data and employing egocentric network analysis can help achieve "methodological triangulation" (Olsen 2004). That is, using multiple methodological approaches to study the same social phenomenon can provide an in-depth understanding of social processes underlying this phenomenon and ensure the validity of results (Olsen 2004).

Therefore, drawing on unique, longitudinal data from the VidaSana study and its supplemental survey, the COVID-19 Rapid Response study, we address two research questions. First, how are COVID-related stressors associated with goal-oriented network activation (i.e., health-, socialization-, and economic-focused activation) among Hispanic immigrants? Second, how might structural and compositional characteristics of social networks facilitate or inhibit successful network activation among Hispanic immigrants during the COVID-19 crisis?

DATA AND METHODS

Data for this analysis come from the baseline VidaSana study and the Hispanic COVID-19 Rapid Response study. The VidaSana study is a longitudinal cohort study of recent and established Hispanic immigrants in Indiana and was designed to characterize social network dynamics and assess social determinants of health among this hard-to-reach population (Lopez-Owens et al. 2018). Recruitment and data collection for the baseline VidaSana study began in August 2017, with follow-up interviews conducted at six, 12, and 18 months after respondents completed the baseline survey. Follow-up interviews were completed by October 2021. Eligible respondents either immigrated to the United States from Mexico, Honduras, Guatemala, or El Salvador within six months of the baseline wave that started in August 2017 and ended in April 2020 (recent immigrant), or had been

residing in the United States for at least two years at baseline (established immigrant) and were referred into the study by a recent immigrant. Although each established immigrant was referred into the study by a recent immigrant, we treat these as distinct networks. Our analysis relies on de-identified data to assure confidentiality and anonymity to respondents, which prevents us from locating other study respondents within an ego's network.

An extension of the VidaSana study, the Hispanic COVID-19 Rapid Response study, was administered via telephone between September and November 2020 and assessed Hispanic immigrants' attitudes, beliefs, behaviors, and experiences during the COVID-19 pandemic. Four hundred of the original 547 respondents who completed the baseline VidaSana survey were interviewed for the Hispanic COVID-19 Rapid Response study.

Dependent Variables

Goal-oriented network activation. We operationalize goal-oriented network activation using six survey items that assess the extent to which the COVID-19 crisis led respondents to mobilize members of their social networks for various purposes. The stem question is: "I am going to ask you some questions about how COVID-19 has affected your life. I will read a series of things people sometimes do. Please tell me whether they have been *more likely* since the outbreak of COVID-19. We generate three typologies of network activation: (1) health-focused activation, (2) socialization-focused activation, and (3) economic-focused activation.

Health-focused activation is operationalized using two survey items that assess whether COVID-19 has made respondents more likely to "get advice or information from people I know about how to stay healthy" and "discuss my health with other people." We measure *socialization-focused activation* using three survey items that assess whether respondents are more likely to "use social media, video chat, email, or other internet technology to keep in touch with people I care about,"[2] "reconnect or catch up with people I care about," and "spend time with people I care about." We operationalize *economic-focused activation* using one survey item that assesses whether COVID-19 has made respondents more likely to "get financial help by people giving or loaning me money." For each network activation variable, we maintain the original four-category, ordinal coding

scheme; however, we reverse code items such that higher scores correspond to higher levels of network activation (1—strongly disagree, 2—disagree, 3—agree, 4—strongly agree).

Independent Variables

COVID-related stress. The survey included multiple items that gauged respondents' feelings about the COVID-19 pandemic. To identify distinct measures, we employed a principal components analysis, which extracted two factors: (1) general COVID-19 worries and (2) pandemic precarity. The first factor, *general COVID-19 worries*, is composed of seven survey items that assess respondents' worries about personally contracting COVID-19, their loved ones contracting COVID-19, and government and community efforts to control the pandemic. Sample items include, "I am worried about catching COVID-19," "I am worried about becoming seriously ill, being hospitalized, or dying from COVID-19," and "I am worried that we will not be able to control the COVID-19 epidemic" (see Supplementary Materials for the full list of survey items). Respondents indicated the extent to which they strongly agree, agree, disagree, and strongly disagree with these statements. Using the seven survey items, we generated a summative scale, such that higher scores on the scale reflect higher levels of general COVID-19 worries (α = .85, range = 7–28). We standardized the scale for multivariate analyses.

The second factor, *pandemic precarity*, is composed of three survey items that ask respondents whether COVID-19 has made them worry about meeting basic needs (Perry, Aronson, and Pescosolido 2021). Specifically, respondents were asked to indicate whether they strongly agree, agree, disagree, or strongly disagree with the following statements: "COVID-19 has made me worry that I may not have a place to live," ". . .I may not have enough money to buy food," and ". . . about my finances, in general." Using these three survey items, we generated a summative scale, such that higher scores on the scale reflect higher levels of pandemic precarity (α = .83, range = 3–12). We standardized the scale for multivariate analyses.

We conducted supplementary analyses using objective measures of COVID-19 stressors (e.g., whether respondents' friends or family members have been infected with COVID-19) and pandemic precarity (e.g., whether respondents have experienced a reduction in income) (see Supplementary File for a full list of objective stressors). One issue

with these objective measures, however, is that we must assume that respondents appraise these events as stressful. In contrast, subjective feelings of worry provide a more direct assessment of respondents' feelings during the pandemic and, as a result, may be better suited to address the goals of our study. Nonetheless, results from analyses using objective stressors (available for view in Table 9 in the Supplementary File) and analyses using subjective stressors were generally consistent.

Egocentric network characteristics. The Hispanic COVID-19 Rapid Response study does not include formal egocentric network data, as there are many challenges in collecting network data by telephone (e.g., respondents may multitask during the interview, threatening the quality of the data), especially during a large-scale crisis (Perry et al. 2018). Consequently, we draw on egocentric network data from the baseline VidaSana survey,[3] which included nine name-generating prompts (e.g., important matters, health matters) (see Table 3 in Supplementary Materials for the full list of name generators) that asked respondents (i.e., egos) to list the names of people (i.e., alters) they talk to and depend on for support. In four of the nine name generators, established immigrant respondents (i.e., respondents who lived in the U.S. for at least two years at the baseline survey) were asked to reflect on interactions over the past six months; however, recent immigrants (i.e., respondents who immigrated to the U.S. within six months of the baseline survey) were asked to list the names of alters who provided support in the six months *before* they immigrated to the United States. The wording of the remaining five name-generating prompts *did not* differ between recent and established immigrants.[4] Respondents could name up to 30 alters. Once a full list of alters was elicited, egos were asked to provide information about each person in their network (e.g., level of education) and details about their relationship with each alter (e.g., closeness of relationship). Using this information, we employed aggregation techniques and generated multiple social network variables.

We focus on six social network variables for this analysis. *Network size* is a count of unique alters named by egos (theoretical range = 0–30). Having a large, expansive network may connect individuals to diverse resources, novel ideas, perspectives, and information, and other forms of "bridging social capital" (Lin 2002) that may be critical when navigating crises and difficult life circumstances.

Mean network closeness is a measure of an ego's response to how close they are to each alter, divided by the total number of alters. Network closeness captures the intensity, durability, and duration of bonds between an ego and network members. Higher scores are indicative of higher levels of closeness (theoretical range = 1–10).

Proportion kin is a measure of the proportion of network members whose egos are identified as being related by blood or marriage. Kin-centered networks are generally characterized by close-knit relationships, high frequency of interaction, and their tendency to fulfill a broad range of support functions (Wellman and Wortley 1990). We transform this variable such that each one-unit increase corresponds to a 10 percent increase in the proportion of the ego's network that is kin (theoretical range = 0–10).

Density is computed as the proportion of realized alter-alter ties relative to the total number of possible alter-alter ties in an ego's network. High-density networks are characterized by close-knit relationships that help facilitate the pooling of resources, sharing of information, and coordinating support efforts. We transformed the density measure such that each one-unit increase corresponds to a 10 percent increase in the proportion of realized alter-alter ties (theoretical range = 0–10).

Mean health knowledge is an aggregate measure of an ego's response to how much each network member knows about health and how to take care of health problems (1—"none at all," 2—"a little," 3—"some," and 4—"a lot"). We include this measure to approximate the extent to which egos have access to network members who can provide useful health-related information and advice during the pandemic. Higher scores correspond to higher levels of health knowledge within the network (theoretical range = 1–4).

Mean education is an aggregate measure of each network member's level of education (1—"none," 2—"completed elementary school," 3—"completed middle school," 4—"completed high school," 5—"some college or university," and 6—"completed college or university"). Networks with higher mean education likely afford egos with greater access to diverse resources (e.g., money, specialized knowledge). Higher scores correspond to higher levels of education in an ego's network (theoretical range = 1–6).

Control Variables

We adjusted for several sociodemographic characteristics that prior research has shown to be correlated with key study variables (Ajrouch, Antonucci, and Janevic 2001; Krendl and Perry 2021; Marsden 1987; Perry and Pescosolido 2015). *Educational attainment* is a four-category variable that includes less than high school (reference), high school, some college, and college or more. *Employment status* is a dummy variable (0 = other, 1 = employed). *Marital status* is a three-category variable that includes single (reference), married/cohabiting/union, and divorced/separated/widowed. *Age* is a continuous variable ranging from 18 to 70 (centered at 18 years of age). *Region of origin* (0 = Mexico, 1 = Central America), *recent or established immigrant* (0 = established immigrant, 1 = recent immigrant), and *gender* (0 = male, 1 = female) are all dummy coded. Apart from employment status, all covariates were measured at baseline.

Analytic Plan

All analyses were conducted in Stata 17. We began by computing descriptive statistics for the study sample, which are presented in Table 1. Next, we fit a series of ordinal logistic regression models to examine associations among COVID-related stressors, social network characteristics, and social network activation. We conducted separate regression models for COVID-related stress variables and social network variables to examine independent associations between each set of variables and goal-oriented social network activation. Results from ordinal logistic regression analyses are presented in Table 2. Finally, we computed a series of interaction models to determine whether associations between COVID-related stressors and goal-oriented social network activation depend on various social network characteristics (see Table 2 in Supplementary Materials to view all the interaction models that were computed).

In total, 32 respondents had missing data on study variables (see Table 1 for a summary of missing data patterns). To maximize the number of respondents included in analyses, we employed Multiple Imputation via Chained Equations (MICE) and generated 15 multiply imputed datasets (White, Royston, and Wood 2010). In multivariate analyses, we excluded respondents with missing data on the specific social network activation variable under investigation (von Hippel 2007).

RESULTS

Table 1 presents descriptive statistics for the study sample. On average, respondents report *high levels*

Table 1. Descriptive Statistics for the VidaSana Sample.

Variable	M/Proportion	SD	Min.	Max.	% Missing
Health-focused activation					
Seek health advice	3.39	0.84	1	4	0.0
Discuss health problems	2.41	1.20	1	4	0.0
Socialization-focused activation					
Stay in touch via technology	2.71	0.50	1	4	0.25
Reconnect with loved ones	3.63	0.59	1	4	0.5
Spend time with loved ones	3.55	0.71	1	4	0.25
Economic-focused activation					
Get financial help	1.95	1.04	1	4	0.25
COVID-related stress					
General COVID-19 worries	23.88	4.20	7	28	2.0
Pandemic precarity	8.93	2.78	3	12	0.5
Network characteristics					
Network size	8.45	3.51	0	20	0.0
Mean closeness	8.74	1.30	1	10	2.0
Proportion kin	7.10	2.53	0	10	0.5
Density	4.22	0.78	0	10	1.0
Mean health knowledge	2.97	0.59	1	4	2.25
Mean education	3.08	1.05	1	6	3.25
Covariates					
Employed	0.54	—	0	1	0.75
Education					0.0
Less than high school (ref.)	0.58	—	0	1	
High school	0.18	—	0	1	
Some college	0.07	—	0	1	
College or more	0.18	—	0	1	
Age	35.12	10.85	18	70	0.25
Female	0.73	—	0	1	0.50
Marital status					0.0
Single (ref.)	0.32	—	0	1	
Married/cohabiting/union	0.62	—	0	1	
Divorced/separated/widowed	0.06	—	0	1	
Recent immigrant	0.63	—	0	1	0.0
Central American	0.40	—	0	1	0.0

of activation for health advice (mean = 3.39 on a 4-point scale), and reconnecting with (mean = 3.63 on a 4-point scale) and spending time with loved ones (mean = 3.55 on a 4-point scale); *moderate levels* of activation to discuss health problems (mean = 2.41 on a 4-point scale) and for staying in touch with loved ones via technology (i.e., video chat, email, or social media) (mean = 2.71 on a 4-point scale); and *low levels* of activation for financial help (mean = 1.97 on a 4-point scale).

Descriptive statistics also show that, on average, respondents report moderately high levels of general COVID-19 worries (mean = 23.88 on a 28-point scale) and pandemic precarity (mean = 8.93 on a 12-point scale). With respect to social network characteristics, the size of respondents' networks is about 8.45, on average. Mean closeness is high (8.74 on a 10-point scale). In addition, more than 70% of egos' networks are comprised of kin and over 40% of possible alter-alter ties are realized. Mean health knowledge is moderate (mean = 2.97 on a 4-point scale) and indicates that the average respondent is embedded in a network with "some" health knowledge. Mean education in respondents' networks is relatively low (mean = 3.08 on a 6-point scale) and suggests that the

Table 2. Results from Ordinal Logistic Regressions Examining Associations among COVID-Related Stress, Baseline Social Network Characteristics, and Goal-oriented Network Activation.

Variable	Seek Health Advice	Discuss Health Problems	Stay in Touch Via Technology	Reconnect with Loved Ones	Spend Time with Loved Ones	Get Financial Help
COVID-related stress						
General COVID-19 worries	1.809***	0.870	2.458***	2.329***	2.141***	0.536***
	[1.442–2.268]	[0.709–1.067]	[1.845–3.273]	[1.796–3.021]	[1.662–2.759]	[0.427–0.671]
Pandemic precarity	1.171	1.062	1.023	0.947	0.941	1.276*
	[0.914–1.501]	[0.847–1.333]	[0.756–1.383]	[0.716–1.254]	[0.719–1.232]	[1.003–1.623]
Network characteristics						
Network size	0.973	0.943*	1.035	1.032	1.025	1.009
	[0.915–1.035]	[0.890–0.999]	[0.962–1.114]	[0.960–1.109]	[0.958–1.096]	[0.951–1.071]
Mean closeness	1.109	0.984	1.167	1.202	1.209*	0.870
	[0.937–1.312]	[0.841–1.152]	[0.964–1.414]	[0.997–1.448]	[1.011–1.446]	[0.743–1.019]
Proportion kin	0.981	0.978	0.986	0.993	1.027	1.043
	[0.891–1.080]	[0.895–1.067]	[0.882–1.101]	[0.892–1.105]	[0.928–1.136]	[0.952–1.142]
Density	0.841	1.136	0.813	0.743	0.844	1.329
	[0.610–1.159]	[0.850–1.517]	[0.560–1.180]	[0.522–1.059]	[0.597–1.194]	[0.988–1.788]
Mean health knowledge	1.576*	0.915	2.015**	2.239***	1.639*	0.701*
	[1.112–2.234]	[0.668–1.252]	[1.345–3.020]	[1.507–3.328]	[1.125–2.387]	[0.508–0.966]
Mean education	0.665**	1.121	0.682*	0.627**	0.697**	1.452**
	[0.516–0.857]	[0.892–1.410]	[0.506–0.918]	[0.471–0.836]	[0.531–0.914]	[1.145–1.841]
N	400	400	399	398	399	399

Note. (1) In each model, we exclude respondents with missing data on the social network activation variable (von Hippel 2007); (2) separate models were estimated for COVID-related stress variables and social network characteristics; (3) odds ratios with 95% confidence intervals are presented; (4) all models control for employment status, education, age, gender, marital status, recent/established immigrant, and region of origin.

*p < .05. **p < .01. ***p < .001 (two-tailed test).

average respondent is embedded in a network with a mean education level between elementary and middle school. This may help explain the low levels of activation for financial assistance in the sample.

Table 2 presents results from ordinal logistic regression models. We begin by summarizing relationships between COVID-related stress exposure and different types of social network activation. Findings indicate that respondents with higher general COVID-19 worries report greater activation for health advice (OR = 1.809, $p < .001$), staying in touch with loved ones via technology (OR = 2.458, $p < .001$), and reconnecting (OR = 2.329, $p < .001$) and spending time with loved ones (OR = 2.141, $p < .001$). Results also suggest that respondents with higher levels of pandemic precarity report higher activation for financial assistance (OR = 1.276, $p < .05$).

Results presented in Table 2 also suggest that multiple social network characteristics are

associated with social network activation. For example, respondents embedded in networks with higher mean closeness have larger odds of activation for spending time with loved ones (OR = 1.209, $p < .05$). Moreover, respondents in networks with higher mean health knowledge have higher odds of activation for health advice (OR = 1.576, $p < .05$), staying in touch via technology (OR = 2.015, $p < .01$), and reconnecting (OR = 2.239, $p < .001$) and spending time with loved ones (OR = 1.639, $p < .05$). Furthermore, we find that respondents embedded in networks with higher mean education have larger odds of activation for financial assistance (OR = 1.452, $p < .01$).

Finally, we computed a series of interaction models to examine whether associations between COVID-related stressors and network activation are moderated by social network characteristics. Results from an interaction model predicting activation for financial assistance revealed a statistically significant interaction between pandemic
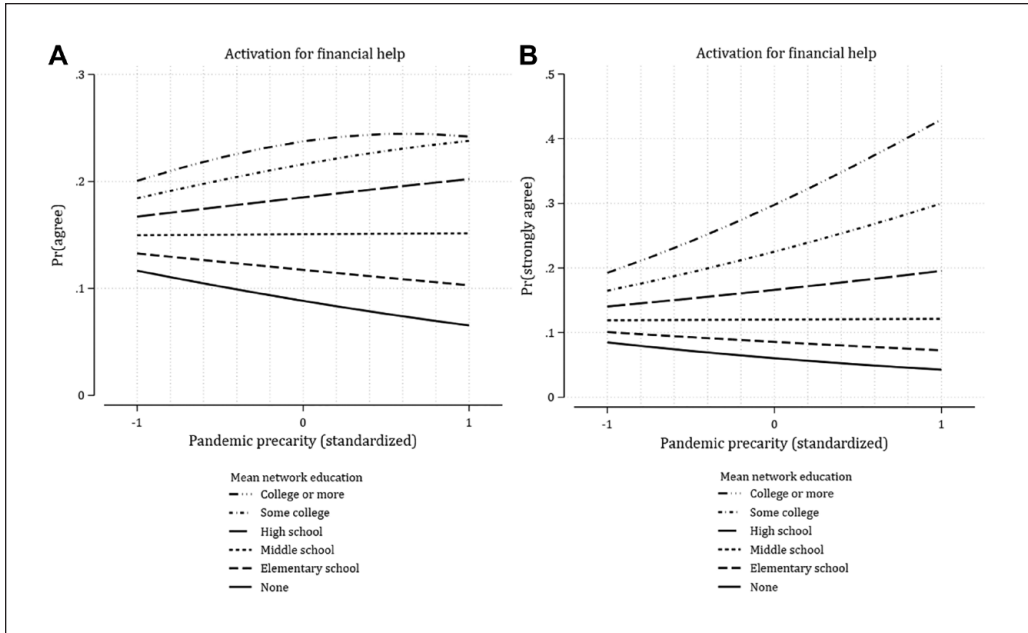
Figure 1. Average marginal effects of pandemic precarity on whether respondents *agree* or *strongly agree* that the COVID-19 pandemic has made them *more likely* to get financial help, by mean education level in network (*N* = 399).
Note. Results are based on an ordinal logistic regression model that includes an interaction term between pandemic precarity and mean network education, controlling for employment status, education, age, gender, marital status, new/established immigrant, and region of origin.

precarity and mean education. We summarize these findings in Figure 1 (see Table 1 in Supplementary Materials to view these results in table format). Broadly, these results suggest that pandemic precarity has a statistically significant association with activation for financial assistance *only among respondents who are embedded in networks with high mean education*. Specifically, among respondents in networks with a mean education level of "some college," each standard deviation increase in pandemic precarity is associated with a 0.022 increase in the predicted probability of *agreeing* that the COVID-19 pandemic has made them more likely to get financial help ($p < .05$) (see Figure 1). The likelihood of activation is even stronger among respondents embedded in a network with a mean education of "college or more"—among these respondents, each standard deviation increase in pandemic precarity is associated with 0.113 increase in the predicted probability of *strongly agreeing* that the pandemic has made them more likely to get financial help ($p < .05$) (see Figure 1).

DISCUSSION AND CONCLUSION

Personal social networks provide a critical safety net during periods of elevated need. Still, factors that may be influential in the process of network activation during a crisis, particularly among structurally marginalized populations, are not fully understood. Here, we aimed to contribute to this body of literature by examining the interplay among stress exposure, social network characteristics, and social network activation among Hispanic immigrants during the COVID-19 pandemic.

Consistent with the functional specificity hypothesis (Perry and Pescosolido 2010; Simons 1984; Wellman and Wortley 1990), our findings suggest that respondents engage in selective and deliberate activation of networks. For instance, respondents who express greater concern about contracting COVID-19, their loved ones contracting COVID-19, and government and community efforts to control the pandemic engage in more health-focused activation—that is, they have larger odds of seeking

health information and advice. These respondents also engage in more socialization-focused activation and are more inclined to stay connected or reconnect with loved ones—perhaps to reduce feelings of social isolation and loneliness that intensified during the COVID-19 crisis (Banjeree and Rai 2020; Hwang et al. 2020; Krendl and Perry 2021). Moreover, we find that respondents who report high levels of pandemic precarity are more likely to engage in activation for financial assistance. Together, these findings suggest a congruency between the support needs elicited by a stressor and the types of support sought by respondents (Cutrona and Russell 1990; Thoits 1995).

Additionally, our findings reveal associations among various structural and compositional characteristics of social networks and different types of network activation. For example, respondents embedded in stronger networks are more likely to engage in socialization-focused activation by reconnecting and spending time with their loved ones during the pandemic. This seems to be consistent with past research suggesting that individuals often mobilize strong ties (e.g., close friends, family members) for emotional sustenance that can help promote a sense of purpose and belonging (Thoits 2011; Wellman and Wortley 1990). We also found that respondents who are in networks with relatively high levels of health knowledge are more inclined to engage in both health- and socialization-focused activation. Specifically, these respondents have higher odds of seeking health information and advice, and staying in touch and (re)connecting with loved ones during COVID-19. This might suggest that respondents' motivations for staying connected with core network members may extend beyond a need for emotional support and stem from their desire to acquire health-related information, particularly if network members are knowledgeable about health matters. Findings also indicate that respondents who are embedded in networks with higher levels of education are more likely to engage in activation for financial assistance. Given that education is a key component of socioeconomic status and highly correlated with other indicators of economic well-being (e.g., income), embeddedness in a highly educated network likely affords greater access to financial resources, which, in turn, may facilitate activation for financial aid.

Indeed, results from interaction models suggest that being embedded in a less-educated network may inhibit activation for financial support, particularly among respondents who may be experiencing economic difficulties. Specifically, we find that the association between pandemic precarity and activation for financial assistance is conditional on whether respondents are embedded in a higher- versus lower-educated network. That is, among respondents in networks with an average education level of high school or less, experiencing pandemic precarity has no statistical association with activation for financial assistance. In contrast, among respondents embedded in networks with an average education level of some college or more, higher levels of pandemic precarity are associated with a higher probability of seeking financial help during the pandemic. Notably, average levels of pandemic precarity among respondents are moderately high; however, the average respondent is embedded in a network with a mean education level between elementary and middle school. This suggests that there may be a substantial unmet financial need among respondents.

Importantly, these findings reveal potential limitations of the informal safety net and indicate that Hispanic immigrants, especially those who are undocumented, could face a double burden: They may experience resource constraints (e.g., financial deprivation) within their personal social networks *and* have limited access to government-based support or other formal sources of aid. Consequently, during large-scale disruptive events like the COVID-19 pandemic, some Hispanic immigrants may have limited means for survival and few places to turn for economic assistance. Recently, scholars have provided several policy recommendations to expand government social safety net programs and remove restrictions for immigrant populations in accessing government benefits (Acevedo-Garcia et al. 2021). Such policy changes are important in promoting more equitable outcomes and preventing members of immigrant populations from falling through the cracks, particularly during times of crisis and uncertainty.

Moreover, although speculative and beyond the scope of the present study, our results help reinforce the importance and may reveal potential drawbacks of ethnic enclaves and the social networks they condition. On one hand, ethnic enclaves provide Hispanic immigrants with access to cultural resources (e.g., *familismo*/familism) and supportive, close-knit community networks that can be mobilized for support, particularly if immigrants' support needs are unable to be adequately met by formal sources or core network members (Almeida et al. 2009; Ebaugh and Curry 2000; Plasencia 2021). On the other hand, ethnic enclaves may (re)

produce racial and socioeconomic segregation in Hispanic immigrants' social networks and, as a result, limit their ability to access important resources (e.g., economic resources) and diverse forms of social capital (e.g., bridging social capital) that are critical for survival and social advancement (Desmond 2012, 2016; Menjívar 2000). As our findings suggest, limited access to these resources may lead to unmet support needs during a crisis, which could reinforce, maintain, and exacerbate broader patterns of social inequality. Future studies should explore whether ethnic enclaves may serve as a double-edged sword vis-à-vis the structure and composition of social networks and the ability to access different kinds of supportive resources.

While this study makes important contributions to the literature on social network activation, it does have limitations. First, the COVID-19 Hispanic Rapid Response study is cross-sectional, which can lead to endogeneity bias due to reverse causation. For example, seeking (and receiving) health advice may influence respondents' level of concern about the COVID-19 pandemic. Additionally, spending time and reconnecting with loved ones could elevate respondents' worries about their friends and family members contracting COVID-19. Though research that leverages longitudinal data has found that individuals often engage in network activation *in response to* stress, crisis, and uncertainty (Perry and Pescosolido 2015), we cannot establish the directionality of associations between COVID-related stressors and network activation in the current study.

Second, due to data limitations, we had to rely on aggregated network measures. This approach may obscure the specialized use of network ties, as we are unable to examine how characteristics of specific alters and relationships influence network activation. Still, aggregated network measures offer important and useful insight into the social-relational context in which respondents are embedded and the accessibility of certain kinds of ties and resources that may facilitate or inhibit successful network activation.

Third, we were unable to examine how additional network factors like proximity and availability may shape the activation process. When seeking help, individuals' activation decisions may seem irrational or haphazard, and people do not solely rely on members of their core network, especially if they are embedded in resource-deprived networks (Desmond 2012, 2016; Gage 2013; Menjívar 2000; Perry and Pescosolido 2015; Plasencia 2021; Small 2013, 2021; Small and Sukhu 2016; Thoits

2011). Future research should explicitly test models of tie activation that do not imply rational decision-making.

Fourth, our study uses an Indiana-based sample of Hispanic immigrants, limiting the generalizability of our results. For instance, there is significant regional variation in anti-immigrant attitudes and policies that affect immigrants' ability or willingness to access government assistance in the United States—factors that may influence immigrants' decisions to mobilize their personal social networks for support during disruptive events (Garcia and Davidson 2013; K. E. Walker and Leitner 2011). Moreover, compared to traditional Hispanic immigrant destinations (e.g., Arizona, California), ethnic enclaves are less established in Indiana, so patterns observed in the present study may not extend to regions with more developed immigrant settlements. However, the sparsity of scientific reports offering empirical information beyond the traditional, established immigrant enclaves ascribes more importance to the present study since the Midwest has been one of the fastest-expanding gateway locations for Hispanic immigration in recent years—a geographic area to be documented more fully as far as immigration trends are concerned (Flippen and Farrell-Bryan 2021).

Fifth, the COVID-19 pandemic is an unprecedented period and, as a result, is somewhat incomparable to other crises. Although relationships observed in the present study are consistent with broader theories of network activation (e.g., functional specificity), these processes may unfold differently across social contexts and among various social groups. Researchers should continue to seek out "natural experiments" to explore social network dynamics during unnatural and uncertain periods.

Despite these limitations, the present study offers important insights into the process of network activation. Our results confirm that personal social networks fulfill critical support functions and help ensure survival during periods of elevated need, especially when access to formal sources of support may be impeded. Moreover, our study helps identify avenues of future research that can advance current understandings of how individuals leverage their social networks during a crisis.

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SUPPLEMENTAL MATERIAL

Supplemental material for this article is available online.

NOTES

1. Other theories of tie activation suggest that the process is not always rational and deliberate but rather can be intuitive or incidental (Small 2013, 2021; Small and Sukhu 2016). Heterogeneity in the process of network activation could be attributable to multiple factors, such as proximity to and accessibility of potential helpers, a distressed individual's (un)willingness to risk engendering "empathetic distress" among core network members, or whether an individual is embedded in a resource-rich or resource-deprived network.

2. Although our results for this measure align with results for other socialization-focused activation variables (i.e., reconnecting and spending time with loved ones), results for this measure should be interpreted with caution, as it taps more into the use of specific *methods* of communication rather than actual levels of socialization. That is, respondents may have reported that they are more likely to stay in touch via technology because of the stay-at-home orders and social distancing recommendations as opposed to respondents' desire to socialize with loved ones.

3. Because respondents were administered the baseline survey at time points (administered between April 2017 and April 2020) that were more or less distant from the COVID-19 Rapid Response survey (administered between September and November

2020), we conducted sensitivity analyses that adjusted for the date of the baseline VidaSana interview (results available for view in Tables 7 and 8 in Supplementary Materials). Results and substantive conclusions drawn from sensitivity analyses are virtually consistent with those presented here. However, there are two modest differences. In sensitivity analyses: (1) the main effect of pandemic precarity on activation for financial help (see Table 7, Model 6 in Supplementary Materials) becomes marginally statistically significant ($OR = 1.247$, $p = .051$); and (2) there is still evidence of an interaction effect between pandemic precarity and mean network education, but the association between pandemic precarity and the predicted probability of activation for financial help among respondents embedded in a network with a mean education of "college or more" becomes marginally statistically significant ($AME = 0.096$, $p = .089$) (see Table 6 in Supplementary Materials). We caution, however, about interpreting these patterns as null or nonsignificant findings (Amrhein, Greenland, and McShane 2019; Wasserstein, Schirm, and Lazar 2019), especially given the relatively small sample size and considerable effect sizes. Importantly, among respondents embedded in networks with a mean education of "some college," we still found a statistically significant association between pandemic precarity and activation for financial assistance ($p < .05$). Furthermore, we found no statistically significant association between pandemic precarity and activation for financial help among respondents embedded in networks with a mean education level of high school or less. Taken together, these results lead to the same conclusion: pandemic precarity is associated with activation for financial assistance *only among respondents embedded in networks with relatively high levels of education*.

4. To assess whether differences in network data collection between new and established immigrants produce any meaningful patterns, we conducted supplementary analyses (results presented in Tables 4–6 in Supplementary Materials) that: (1) examine the statistical significance of mean differences between new and established immigrants on network characteristics and network activation (bivariate analyses, Table 4 in Supplementary Materials); and (2) investigate whether there are any notable differences in statistical associations among COVID-related stress exposure, social network characteristics, and social network activation between new and established immigrants (stratified, multivariate analyses, Tables 5 and 6 in Supplementary Materials). We found no statistically significant mean differences between new and established immigrants on network characteristics and network activation. However, results from stratified, multivariate analyses revealed a few notable differences between the two groups. Specifically, we found network density to be

associated with activation for financial assistance only among recent immigrants. Additionally, for established immigrants, results indicate a statistically significant association between mean network education and activation for health discussion (OR = 1.572, $p < .05$). These findings are still consistent with theoretical expectations. That is, being embedded in a denser network often facilitates the sharing of resources, and individuals may be more inclined to engage in health discussion when they are embedded in a higher-educated network that may include alters with specialized health knowledge.

REFERENCES

Acevedo-Garcia, Dolores, Pamela K. Joshi, Emily Ruskin, Abigail N. Walters, and Nomi Sofer. 2021. "Restoring an Inclusionary Safety Net for Children in Immigrant Families: A Review of Three Social Policies." *Health Affairs* 40(7):1099–107.

Ajrouch, Kristine J., Toni C. Antonucci, and Mary R. Janevic. 2001. "Social Networks among Blacks and Whites: The Interaction between Race and Age." *The Journals of Gerontology* 56(2):112–18.

Almeida, Joanna, Beth E. Molnar, Ichiro Kawachi, and S. V. Subramanian. 2009. "Ethnicity and Nativity Status as Determinants of Perceived Social Support: Testing the Concept of Familism." *Social Science and Medicine* 68(10):1852–58.

Amrhein, Valentin, Sander Greenland, and Blake McShane. 2019. "Retire Statistical Significance." *Nature* 567:305–307.

Banjeree, Debanjan, and Mayank Rai. 2020. "Social Isolation in Covid-19: The Impact of Loneliness." *International Journal of Social Psychiatry* 66(6):525–27.

Bardis, P. D. 1959. "A Familism Scale." *Marriage and Family Living* 21:340–41.

Berk, Marc L., and Claudia L. Schur. 2001. "The Effect of Fear on Access to Care among Undocumented Latino Immigrants." *Journal of Immigrant Health* 3(3):151–56.

Blackman, Christine Crudo, and Lidia Azurdia Sierra. 2021. "Anti-immigrant Rhetoric, Deteriorating Health Access, and COVID-19 in the Rio Grande Valley, Texas." *Health Security* 19(Suppl. 1): S50–56.

Cutrona, Carolyn E. 1990. "Stress and Social Support—in Search of Optimal Matching." *Journal of Social and Clinical Psychology* 9(1):3–14.

Cutrona, Carolyn E., and Daniel W. Russell. 1990. "Type of Social Support and Specific Stress: Towards a Theory of Optimal Matching." Pp. 319–66 in *Social Support: An Interactional View*, edited by B. R. Sarason, I. G. Sarason, and G. R. Pierce. New York: John Wiley.

Desmond, Matthew. 2012. "Disposable Ties and the Urban Poor." *American Journal of Sociology* 117(5):1295–335.

Desmond, Matthew. 2016. *Evicted: Poverty and Profit in the American City*. New York: Crown.

Ebaugh, Helen Rose, and Mary Curry. 2000. "Fictive Kin as Social Capital in New Immigrant Communities." *Sociological Perspectives* 43(2):189–209.

Elliott, James R., Timothy J. Haney, and Petrice Sams-Abiodun. 2010. "Limits to Social Capital: Comparing Network Assistance in Two New Orleans Neighborhood Devastated by Hurricane Katrina." *The Sociological Quarterly* 51:624–48.

Flippen, Chenoa A., and Dylan Farrell-Bryan. 2021. "New Destinations and the Changing Geography of Immigrant Incorporation." *Annual Review of Sociology* 47(1):479–500.

Gage, Elizabeth A. 2013. "Social Networks of Experientially Similar Others: Formation, Activation, and Consequences of Network Ties on the Health Care Experience." *Social Science and Medicine* 95:43–51.

Garcia, Carols, and Theresa Davidson. 2013. "Are Rural People More Anti-immigrant Than Urban People? A Comparison of Attitudes toward Immigration in the United States." *Journal of Rural Social Sciences* 28(1):80–105.

Gonzalez, Dulce, Michael Karpman, Genevieve M. Kenney, and Stephen Zuckerman. 2020. "Hispanic Adults in Families with Noncitizens Disproportionately Feel the Economic Fallout from COVID-19." Retrieved March 4, 2023 (https://www.urban.org/research/publication/hispanic-adults-families-noncitizens-disproportionately-feel-economic-fallout-covid-19).

Hurlbert, Jeanne S., Valerie A. Haines, and John J. Beggs. 2000. "Core Networks and Tie Activation: What Kinds of Routine Networks Allocate Resources in Nonroutine Situations?" *American Sociological Review* 65:598–618.

Hwang, Tzung-Jeng, Kiran Rabheru, Carmelle Peisah, William Reichman, and Manabu Ikeda. 2020. "Loneliness and Social Isolation during the COVID-19 Pandemic." *International Psychogeriatrics* 32(10):1217–20.

Ishikawa, Rachel Zack, Esteban V. Cardemil, and Rachel Joffe Falmagne. 2010. "Help Seeking and Help Receiving for Emotional Distress among Latino Men and Women." *Qualitative Health Research* 20(11):1558–72.

Kaniasty, K., and F. H. Norris. 1993. "A Test of the Social Support Deterioration Model in the Context of Natural Disaster." *Journal of Personality and Social Psychology* 64(3):395–408.

Kawachi, Ichiro. 2010. "Social Capital and Health." Pp. 18–32 in *Handbook of Medical Sociology*, edited by C. E. Bird, P. Conrad, A. M. Fremont, and S. Timmermans. Nashville, TN: Vanderbilt University Press.

Krendl, Anne C., and Brea L. Perry. 2021. "The Impact of Sheltering in Place during the COVID-19 Pandemic on Older Adults' Social and Mental Well-being." *The Journals of Gerontology* 76(2):e53–58.

Krogstad, Jens Manuel, and Mark Hugo Lopez. 2020. "Coronavirus Economic Downturn Has Hit Latinos Especially Hard." Pew Research Center. Retrieved March 13, 2023 (https://www.pewresearch.org/hispanic/2020/08/04/coronavirus-economic-downturn-has-hit-latinos-especially-hard/).

Leslie, Leigh A., and Katherine Grady. 1985. "Changes in Mothers' Social Networks and Social Support Following Divorce." *Journal of Marriage and Family* 47(3):663–73.

Lin, Nan. 2002. *Social Capital: A Theory of Social Structure and Action*. Cambridge, England: Cambridge University Press.

Lopez-Owens, Mariana, Kristen Starkey, Cindy Gil, Karla Armenta, and Gerardo Maupome. 2018. "The VidaSana Study: Recruitment Strategies for Longitudinal Assessment of Egocentric Hispanic Immigrant Networks." *International Journal of Environment Research and Public Health* 15(12):2878.

Markides, Kyriakos S., and Sunshine Rote. 2015. "Immigrant Health Paradox." Pp. 1–15 in *Emerging Trends in the Social and Behavioral Sciences*, edited by R. Scott and S. Kosslyn. Hoboken: John Wiley.

Marsden, Peter V. 1987. "Core Discussion Networks of Americans." *American Sociology Review* 52(1):122–31.

Maupome, Gerardo, William R. McConnell, and Brea L. Perry. 2016. "Dental Problems and Familismo: Social Network Discussion of Oral Health Issues among Adults of Mexican Origin Living in the Midwest United States." *Community Dental Health Journal* 33(4):303–308.

McConnell, William R. 2017. "Cultural Guides, Cultural Critics: Distrust of Doctors and Social Support during Mental Health Treatment." *Journal of Health and Social Behavior* 58(4):503–19.

Menjívar, Cecilia. 2000. *Fragmented Ties: Salvadoran Immigrant Networks in America*. Berkeley, CA: University of California Press.

Messias, DeAnne K. Hilfinger, Clare Barrington, and Elaine Lacy. 2011. "Latino Social Network Dynamics and the Hurricane Katrina Disaster." *Disasters* 36(1):101–21.

Morey, B. N., G. C. Gee, S. Shariff-Marco, L. Allen, and S. L. Gomez. 2020. "Ethnic Enclaves, Discrimination, and Stress among Asian American Women: Differences by Nativity and Time in the United States." *Cultural Diversity and Ethnic Minority Psychology* 26(4):460–71.

Morgan, David L. 1989. "Adjusting to Widowhood: Do Social Networks Really Make It Easier?" *Gerontologist* 29:101–107.

Negi, Nalini Junko, Lynn Michalopoulos, Javier Boyas, and Adrianna Overdoff. 2013. "Social Networks That Promote Well-being among Latino Migrant Day Laborers." *Advances in Social Work* 14(1):247–59.

Noe-Bustamante, Luis, Mark Hugo Lopez, and Jens Manuel Krogstad. 2020. "U.S. Hispanic Population Surpassed 60 Million in 2019, but Growth Has Slowed." Pew Research Center, Washington, DC. Retrieved March 13, 2023 (https://www.pewresearch.org/fact-tank/2020/07/07/u-s-hispanic-populationsurpassed-60-million-in-2019-but-growth-has-slowed/).

Olsen, Wendy. 2004. "Triangulation in Social Research: Qualitative and Quantitative Methods Can Really Be Mixed?" Pp. 1–30 in *Developments in Sociology*, Vol. 20, edited by M. Holborn. London, England: Macmillan.

Owens, Christabel, Gareth Owen, Judith Belam, Keith Lloyd, Frances Rapport, Jenny Donovan, and Helen Lambert. 2011. "Recognising and Responding to Suicidal Crisis within Family and Social Networks: Qualitative Study." *BMJ* 343:d5801.

Perry, Brea L. 2012. "Coming Untied? Narrative Accounts of Social Network Dynamics from First-time Mental Health Clients." *Sociology of Health and Illness* 34(8):1125–39.

Perry, Brea L. 2021. "Contact Tracing Could Exacerbate COVID-19 Health Disparities: The Role of Economic Precarity and Stigma." *American Journal of Public Health* 111(5):778–81.

Perry, Brea L., Brian Aronson, and Bernice A. Pescosolido. 2021. "Pandemic Precarity: COVID-19 Is Exposing and Exacerbating Inequalities in the American Heartland." *Proceedings of the National Academy of Sciences* 118(8):e2020685118. doi:10.1073/pnas.2020685118.

Perry, Brea L., and Bernice A. Pescosolido. 2010. "Functional Specificity in Discussion Networks: The Influence of General and Problem-specific Networks on Health Outcomes." *Social Networks* 32:345–57.

Perry, Brea L., and Bernice A. Pescosolido. 2012. "Social Network Dynamics and Biographical Disruption: The Case of 'First-timers' with Mental Illness." *American Journal Sociology* 118(1):134–75.

Perry, Brea L., and Bernice A. Pescosolido. 2015. "Social Network Activation: The Role of Health Discussion Partners in Recovery from Mental Illness." *Social Science and Medicine* 125:116–28.

Perry, Brea L., Bernice A. Pescosolido, and Steve P. Borgatti. 2018. *Egocentric Network Analysis: Foundations, Methods, and Models*. Vol. 44. Cambridge, England: Cambridge University Press.

Pescosolido, Bernice A. 1992. "Beyond Rational Choice: The Social Dynamics of How People Seek Help." *American Journal of Sociology* 97(4):1096–138.

Plasencia, Melanie. 2021. "'I Don't Have Much Money, but I Have a Lot of Friends': How Poor Older Latinxs Find Social Support in Peer Friendship Networks." *Social Problems*. Published electronically December 30. doi:10.1093/socpro/spab081.

Ruiz, Maria Elena, and Edward H. Ransford. 2012. "Latino Elders Reframing Familismo: Implications for Health and Caregiving Support." *Journal of Cultural Diversity* 19(2):50–57.

Schneider, John, Willie Love, Laura Rusie, Ariana Flores, Beth Tadesse, Anu Hazra, and David Munar. 2021. "COVID-19 Contact Tracing Conundrums: Insights from the Front Lines." *American Journal of Public Health* 111(5):917–22.

Simons, Ronald L. 1984. "Specificity and Substitution in the Social Networks of the Elderly." *The International Journal of Aging and Human Development* 18(2):121–39.

Small, Mario Luis. 2013. "Weak Ties and the Core Discussion Network: Why People Regularly Discuss Important Matters with Unimportant Alters." *Social Networks* 35:470–83.

Small, Mario Luis. 2021. "How Actors Mobilize Their Networks in Practice." Pp. 573–95 in *Personal Networks: Classic Readings and New Directions in Ego-Centric Analysis*, edited by Mario L. Small, Brea Perry, Bernice Pescosolido, and Edward Smith. New York: Cambridge University Press.

Small, Mario Luis, and Christopher Sukhu. 2016. "Because They Were There: Access, Deliberation, and the Mobilization of Networks for Support." *Social Networks* 47:73–84.

Thoits, Peggy A. 1986. "Social Support as Coping Assistance." *Journal of Consulting and Clinical Psychology* 54(4):416–23.

Thoits, Peggy A. 1995. "Stress, Coping, and Social Support Processes: Where Are We? What Next?" *Journal of Health and Social Behavior* (Extra Issue):53–79.

Thoits, Peggy A. 2011. "Mechanisms Linking Social Ties and Support to Physical and Mental Health." *Journal of Health and Social Behavior* 52(2):145–61.

Thoits, Peggy A. 2021. "'We Know What They're Going Through': Social Support from Similar Others Versus Significant Others." *The Sociological Quarterly* 62:643–64. doi:10.1080/00380253.2020.1802360.

Van Natta, Meredith. 2019. "First Do No harm: Medical Legal Violence and Immigrant Health in Coral County, USA." *Social Science and Medicine* 235:112411.

Villatoro, Alice P., Eduardo S. Morales, and Vickie M. Mays. 2014. "Family Culture in Mental Health Help-seeking and Utilization in a Nationally Representative Sample of Latinos in the United States: The NLAAS." *American Journal of Orthopsychiatry* 84(4):353–63.

Viruell-Fuentes, Edna A., Jeffrey D. Morenoff, David R. Williams, and James S. House. 2013. "Contextualizing Nativity Status, Social Ties, and Ethnic Enclaves: Implications for Understanding Immigrant and Latino Health Paradoxes." *Ethnicity and Health* 18(6):586–609.

von Hippel, Paul T. 2007. "Regression with Missing Ys: An Improved Strategy for Analyzing Multiply Imputed Data." *Sociological Methodology* 37(1):83–117.

Walker, Kenneth N., Arlene MacBride, and Mary L. S. Vachon. 1977. "Social Support Networks and the Crisis of Bereavement." *Social Science & Medicine* 11:35–41.

Walker, Kyle E., and Helga Leitner. 2011. "The Variegated Landscape of Local Immigration Policies in the United States." *Urban Geography* 32(2):156–78.

Wasserstein, Ronald L., Allen L. Schirm, and Nicole A. Lazar. 2019. "Moving to a World Beyond 'p<0.05.'" *American Statistician* 73(Suppl. 1):1–19.

Wellman, Barry, and Scot Wortley. 1990. "Different Strokes from Different Folks: Community Ties and Social Support." *American Journal of Sociology* 96(3):558–88.

White, Ian R., Patrick Royston, and Angela M. Wood. 2010. "Multiple Imputation Using Chained Equations: Issues and Guidance for Practice." *Statistics in Medicine* 30(4):377–99.

Yeyati, Eduardo Levy, and Federico Filippini. 2021. *Social and Economic Impact of COVID-19*. Washington, DC: The Brookings Institution.

Zamarripa, R., and L. Roque. 2021. "Latinos Face Disproportionate Health and Economic Impacts from COVID-19." Center for American Progress. Retrieved March 13, 2023 (https://www.american-progress.org/article/latinos-face-disproportionate-health-economic-impacts-covid-19/).

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