

Risk and Resilience of Latina/o Families in Rural America: 20 Years of Research

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ABSTRACT. The face of rural America is rapidly changing as rural communities become home to growing numbers of racial and ethnic minorities, especially Latina/o families. While Latinas/os are important to the vitality and productivity of rural communities, they experience disproportionately higher rates of poverty, food insecurity, and additional challenges such as lack of proficiency in English, documentation status, and discrimination, compared to the general population. This paper presents 20 years of findings on the well-being of Latina/o families in rural America from the multi-state USDA Hatch funded projects, Rural Families Speak (NC 223/NC 1011) and Rural Families Speak about Health (NC 1171). Findings are organized by an adapted Bronfenbrenner's Ecological model that includes inner (e.g., individual, family) and outer layer systems (e.g., access to public assistance and healthcare, culture, social support, working conditions). There is discussion of implications for policies and programs affecting Latina/o families.

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Risk and Resilience of Latina/o Families in Rural America: 20 Years of Research

Twenty years ago, when the Rural Families Speak (RFS) project began, researchers understood that the demographics of rural America were changing. To more fully understand well-being among rural low-income families, it was imperative to include families of different racial and ethnic backgrounds in this research. This paper provides a synthesis of findings from publications based on data from Latina/o families¹ who participated in the Rural Family Speak (RFS) and Rural Family Speak about Health (RFSH) projects², along with directions for future research, policy and practice. The Ecological Model developed by Bronfenbrenner (1979, 1992) (Bronfenbrenner & Morris, 2006) is the framework for presenting and understanding findings related to health and well-being among Latina/o families who participated in RFS and RFSH.

Background

The Changing Demographics of Rural America

In rural America, demographics and life in general have changed dramatically and rapidly over the past two decades (Brown & Schafft, 2011). Rural communities, where one in five U.S. residents lives, have become home to growing numbers of racial and ethnic minorities, some of whom left urban centers in search of affordable living, and others who emigrated from rural and urban areas in Latin America in search of employment (Lichter, 2012). Across rural America, the spatial concentration of poverty has also changed (Peters, 2012), affecting family life in multiple ways (e.g., family relations, stress, mental health, access to quality health care, duration of poverty) (Burton, Garrett-Peters, & Eason, 2011; Snyder & McLaughlin, 2004). These contextual factors are linked to risks and disparities in health and well-being (Wolfe, Evans, & Seeman, 2012). Services in rural communities are inadequately prepared to address the growing diverse needs of many families who now reside there (Aday, Quill, & Reyes-Gibby, 2001; Harris, Beatty, Leider, Knudson, Anderson, & Meit, 2016).

The United States Department of Agriculture (USDA) Economic Research Service, using data from the 2016 American Community Survey of the United States Census, estimated that in 2016, Latinas/os in rural America experienced one of the highest poverty rates (25.9%), following that of rural African Americans (33.8%), American Indians and Alaskan natives (32.4%). The high poverty rate among Latinas/os is noteworthy as their share of the rural population increased faster than that of other racial/ethnic groups over the last several decades (USDA ERS, 2017). Additionally, over half (54%) of the U.S. population growth over the past

¹ The term *Latina/o* includes people of Cuban, Mexican, Puerto Rican, South or Central American, or other Spanish culture or origin, regardless of race (Office of Management and Budget, 1997).

² The objective of the Rural Families Speak (RFS) project (1998-2008) was to study the well-being of rural, low-income families in the context of the 1996 federal welfare reform legislation. The overall goal of the Rural Families Speak about Health (RFSH) study (2008-2019) was to identify the factors that influence physical and mental health among vulnerable, rural families. While there were different samples in RFS and RFSH, the participants in both studies were rural female caregivers, 18 years of age or older, with at least one child under the age of 13. For a complete description of RFS/RFSH studies, please see "Rural, Low-Income Families and their Well-Being: Findings from 20 Years of Research" (Family Science Review, issue 1, 2018).

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decade was due to Latinas/os. In 2015, Latinas/os comprised 17.6% of the U.S. population; by 2060, it is estimated that Latinas/os will represent over a third of the U.S. population (Stepler & Lopez, 2016). Furthermore, Latinas/os are residing more frequently in rural communities and in areas outside of “gateway” communities (e.g., in California, Florida, New York, and Texas) than in prior years. Over the past decade, in the Midwestern U.S. for example, the Latina/o population increased by 49% (Ennis, Rios-Vargas, & Albert, 2011).

Challenges and Opportunities for Latina/o Family Health and Well-Being in Rural America

Challenges. Latinas/os experience disproportionate burdens of disease such as heart disease, diabetes, and cancer as well as early mortality when compared to the general U.S. population (Heron, 2016). Furthermore, the increases in these health disparities are greater among Latinas/os residing in rural than in urban and suburban communities (Agency for Healthcare Research and Quality, 2012). Rural residents commonly travel farther than their urban counterparts to access health care services, which are typically less affordable and offer fewer choices. Latinas/os who are first generation immigrants may face additional challenges including limited English proficiency, work authorization, low financial resources, and discrimination (Byrne, Greder, & Routh, 2014). These challenges can lead to psychological, emotional, and physiological conditions that negatively affect health and well-being (Carr & Umberson, 2013).

Opportunities. The “*Latino Immigrant Paradox*” (Alegría, et al., 2008, p. 359) posits that being an immigrant may serve as a protective factor against poor health outcomes despite the reality that immigrants are more likely than U.S. born residents to experience discrimination, to have low incomes and limited English proficiency, and to be uninsured (Hall & Farkas, 2008). Some studies suggest that family values such as familism and strong social support networks serve as protective factors for Latina/o populations (e.g., Stein, Gonzalez, Cupito, Kiang, & Supple, 2013) and may partially explain the Latina/o immigrant paradox. The protective factor of being an immigrant, however, may come with an expiration date since some studies also suggest that the longer immigrants reside in the U.S., the more their health deteriorates (Carter-Pokras, Zambrana, Yankelovich, Estrada, Castillo-Salgado, & Ortega, 2008). Our efforts to understand Latina/o families’ well-being, including those living in rural America, should include research focused on protective factors. This will result in opportunities to capitalize on cultural strengths that promote resilience.

Latinas/os are important to the vitality and productivity of rural America; therefore, it is important to understand factors that positively and negatively influence their health and well-being. Most studies that have examined health and well-being among individuals and families are based on cross-sectional national or urban samples and are not generalizable to Latinas/os residing in rural America (Gamm & Hutchinson, 2008). Grounded in the Ecological model (Bronfenbrenner & Morris, 2006), this paper aims to expand understanding of the complexity of risk and protective factors and processes linked to rural Latina/o health and well-being.

Ecological Model

The Ecological model facilitates understanding of how different subsystems (i.e., macro-, exo-, meso-, and microsystems) are interdependent and influence health and well-being among individuals and families. This framework organizes a series of nested systems that encompass cultural values, institutional structures, interactions among and between families and other systems, the family system, and individuals (Bronfenbrenner, 1979, 1992; Bronfenbrenner & Morris, 2006). Individual and families are at the core of the model's inner systems, (i.e., *microsystem* and *mesosystem*). Health behaviors, health care access, food security, and migrant settlement patterns are also included in these systems. The overarching societal cultural context in which individuals live (i.e., *macrosystem*, *exosystem*) is co-constructed as cultural norms develop and emerge. Acculturation, racism, and discrimination are influences at the outer systems of the lives of families, in this case, Latina/o families. Intertwined with the inner and outer layers is the *chronosystem*, described as the patterning of environmental events and transitions over the life course, which shapes the developmental trajectories of individuals and families.

Family research often focuses on one system level without considering interactions between systems and multilevel influences on family functioning (Darling, 2007). To help address this gap, this paper provides systematic review of the research and translational efforts that the RFS and RFSH projects have produced, which provide a systems perspective regarding risk and resilience factors contributing to health and well-being among Latina/o families residing in rural America. This approach is in contrast to most literature on vulnerable families, which focuses primarily on risks. The paper concludes with suggestions for future research, practice, and policy related to rural Latina/o family health and well-being.

Synthesis of Findings

There were demographic similarities and differences among Latina/o families across RFS and RFSH. Numbers and ages of Latina mothers were similar (N = 119, 31.3 years; N = 136, 32.5 years, respectively). A larger percentage of Latina mothers who participated in RFS were married or had romantic partners, employed, and insured than were those who participated in RFSH. While mothers across RFS and RFSH had very low household incomes, RFS mothers had significantly higher annual household incomes compared to RFSH mothers. Additionally, significantly more mothers in RFSH were born in Latin America and preferred to be interviewed in Spanish compared to those in RFS. Furthermore, while several Latina mothers across RFS and RFSH experienced socio-economic and health disparities (e.g., limited formal education, low income, depressive symptoms, food insecurity), the prevalence of some of these disparities varied significantly between RFS and RFSH. (See Table 1).

Latina/o Families in Rural America: The Inner System

The systematic review identified five themes at the microsystem level (i.e., individual, family): Depression, Obesity, Cultural Health Practices, Food Insecurity, and Homeownership. While each theme has implications for outer systems (i.e., *exosystem*, *macrosystem*), they were studied primarily at the microsystem level in the products reviewed. (See Figure 1.)

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Depression. Five RFS and RFSH products that specifically examined *depression* among Latina mothers were reviewed. The Center for Epidemiologic Studies Depression Scales were used in both RFS and RFSH to measure depressive symptoms among mothers (CES-D 20 for RFS; CES-D 10 for RFSH). The researchers focused specifically on the extent to which depressive symptoms contributed to the risk or resilience of rural Latina/o families, given that depression can be a cause and an effect of multiple risk factors (Browder, Greder, & Jasper Crase, 2013; Routh, Greder, Lohman, & Neppl, 2016). Downey and Greder (2014) found that factors such as young age, single marital status, unemployment, transportation barriers, food insecurity, and inadequate health insurance predicted clinically significant depressive symptoms among rural, low-income mothers in RFSH. However, the Latina mothers in RFSH were half as likely as their non-Latina White peers to experience depressive symptoms (36% of non-Latina White mothers vs. 18.4% of Latina mothers). Browder (2011) also found lower prevalence of depressive symptoms among Latinas in RFS than among non-Latina White and African American rural, low-income mothers. Therefore, across both RFS and RFSH, the prevalence of depressive symptoms was greater among mothers who did not identify as Latina. Interestingly, however, clinically significant depressive symptoms were more prevalent among Latinas in RFS compared to Latinas in RFSH.

Obesity. Regardless of where they reside in the U.S., Latinas/os experience a higher prevalence of obesity than do White non-Latinas/os (National Center for Health Statistics, 2017). Four products included in the systematic review were related to the obesity theme. Obesity can be influenced by personal and family traits (e.g., consumption and activity patterns, stress), social conditions surrounding individuals and families (e.g., income, neighborhood conditions, access to food), and public policies (e.g., Supplemental Nutrition Assistance Program and child nutrition program eligibility and guidelines) (Greder, Ihmels, Burney, & Doudna, 2014; Byrne & Greder, 2014). In a study of RFSH families (Greder et al., 2014), Latina/o and non-Latina/o home environments that promoted limited media usage and health-enhancing physical activity and nutrition behaviors were associated with lower body mass among children.

Research suggests linkages between extreme and/or prolonged adversity and obesity. While many rural families experience ongoing stressors of social and geographical isolation, limited access to health care, and poverty (Eagle et al., 2012; Greder et al., 2014), these stressors are magnified for Latina/o families who commonly have limited English proficiency, access to culturally relevant and sensitive health care, and access to publicly funded assistance (Reina, Greder, & Lee, 2014; Byrne & Greder, 2014). Such families also face high rates of food insecurity and depressive symptoms (Greder, Cook, Garasky, Sano, & Randall 2009).

Several RFSH Latina immigrant mothers reported becoming less physically active and eating less healthily since moving to the U.S. For example, mothers stated they did not spend as much time outside of their homes as they did in their home countries due to the cold, rain, and snow in their new U.S. communities, and because of the lack of parks and stores within walking distance, and fear of deportation. Some mothers who did live within walking distance of such sites stated that the sidewalks near their homes were cracked, difficult, and unsafe to walk on. Additionally, many mothers stated that their homes had limited space for being physically active, and that there were few accessible, affordable recreation facilities (e.g., swimming pools, gymnasiums, fitness centers) in their rural communities (Greder, Romero de Slowing, &

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Doudna, 2012; Greder & Routh, 2014). Mothers also reported that their children's food preferences had changed since they moved to the U.S.; they ate fewer fresh fruits and vegetables and more junk food. Mothers were challenged with how to best navigate their new food environments, including attention to foods served at schools, to help safeguard their families' health (Greder et al., 2012).

Health Practices. Health practices of Latina mothers in RFS and RFSH (e.g., use of traditional healing practices, doctor visits, drinking water, and fresh fruit juices) contribute to understanding their values, beliefs, priorities, as well as their constraints, regarding health. Five RFS and RFSH products specifically addressed health practices among Latinas/os. Informal networks formed a substantial basis for mothers' health practices, as they relied on informal social networks to access modern medical information and folk/traditional medicine and health treatments (Romero de Slowing, 2012). More than one-half of the Latinas in two RFSH studies used home remedies and health care from kin or folk healers to address their health concerns (Dyk, Routh, Katras, Greder, Mammen, & Alvarez, 2016; Romero de Slowing, 2012). Findings also illustrated that several Latina mothers in RFS and RFSH had negative experiences with formal healthcare due to the lack of cultural sensitivity and understanding, and Spanish language proficiency, among providers (Parra-Cardona, Bullock, Imig, Villarruel, & Gold, 2006; Romero de Slowing, 2012; Reina, Greder, & Lee, 2013).

Food Insecurity. Six RFS and RFSH products that focused on food insecurity were included in the systematic review. Food insecurity, a strong correlate to poverty, continues to be one of the chief risk factors for poor health among low-income families (Gundersen & Ziliak, 2015). However, prevalence and severity of food insecurity varied among the Latina/o households in RFS and RFSH. Many of these households were only one crisis away from experiencing food insecurity (Greder et al., 2009). Latina/o immigrant families were at higher risk for food insecurity than were those who had family members born in the U.S., due to lack of familiarity with and potential ineligibility to participate in "safety net" programs such as the Supplemental Nutrition Assistance Program (SNAP) and Temporary Assistance for Needy Families (TANF) (Greder, Cook, Garasky, & Ortiz, 2007). Additionally, some adult family members commonly had limited employability due to work authorization status and ineligibility for a driver's license, which affected their ability to earn incomes to meet basic living expenses, including food. *Heat or Eat* is a construct relevant to Latina/o families, as many had to make decisions regarding paying utility and rent or purchasing food (Greder et al., 2007). However, despite these risks, food insecurity was more prevalent among Latina/o families in RFS (RFS – 53.5%; RFSH – 30.1%), who also had a lower percentage of immigrant mothers than among those in RFSH (RFS – 55.0%; RFSH – 84.6%). Clinically depressive symptoms, which have been associated with food insecurity among mothers in RFS (Browder, 2011; Huddleston-Casas, Charnigo, & Simmons, 2009) and RFSH (Routh, et al., 2016), were also more prevalent among Latina mothers in RFS (RFS – 45.6%; RFSH – 18.4%).

Greder et al. (2007) found that nearly half of the Latina/o immigrant families in one RFS study were food insecure and frequently reported accessing financial and multiple forms of other support (e.g., shared housing, child care, transportation, help paying bills) from family members. These families were also less likely to have knowledge of getting help with heating bills compared to food secure Latina/o families in the same study. Furthermore, Latina/o families who

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were food secure reported higher levels of knowledge of community resources and money management skills, and of participation in the Women, Infants and Children (WIC) program. Food security serves as a bedrock of health and well-being; findings from RFS and RFSH suggest that Latina/o families who experience food insecurity also face multiple, cumulative disadvantages to maintaining or improving health outcomes.

Homeownership. In the U.S., many families of all income levels want to be homeowners, not necessarily for the real and perceived financial benefits, but for other benefits. Homeownership can help people accumulate assets and wealth and lead to better physical and mental health (Bentzinger, 2009; Shapiro, 2006). Four RFS products that focused on homeownership were reviewed. Owning a home was an important goal among Latina/o families in RFS. Those who had achieved it viewed it as one of the most significant accomplishments in their lives (Cook et al., 2008). Home owners were more likely to be food secure and have fewer depressive symptoms (Bentzinger, 2009; Greder et al., 2009). However, among RFS families, Latinas/os were less likely than other families to own their homes (Bentzinger & Cook, 2012), and few Latina/o home owners received housing, energy, or fuel assistance (Greder et al., 2007; Bentzinger, 2009). These findings help identify discrepancies between desires and realities of home ownership among rural Latinas/os, and the protective role of home ownership against risk factors.

Examining the inner systems of the individual and family and how they interact with each other furthers understanding of risk and resilience factors affecting families. However, it is also critical to examine cumulative effects of these risk and resilience factors on health and well-being (DiPrete & Eirich, 2006), to recognize that individual and family effects do not occur in isolation from one another, and to acknowledge their influence by outer systems in the ecological framework.

Latina/o Families in Rural America: The Outer Systems

The systematic review revealed four themes that cut across the macrosystem, exosystem, and mesosystem levels: Health Care Access, Work Environments, Culture and Social Support, and Immigration Policy. While low-income families face similar challenges to their health and well-being inherent in rural communities (e.g., lack of access to healthcare and public transportation, limited affordable and quality housing), these barriers are more pronounced for ethnic and racial minority families, and are even greater for Latina/o families who may have limited English proficiency and lack documentation. The ways in which Latina/o families experience such barriers are influenced by social policies and how the host communities embrace or resist Latina/o newcomers. Cultural shifts and norms (e.g., racism, discrimination) and the availability of culturally relevant and responsive services affect integration, civic engagement, and health and well-being of Latina/o families.

Healthcare access. Access to healthcare was examined in eight RFS and RFSH products, often by measuring by access to health insurance – one of the most common ways to measure healthcare access (MacKinney, Coburn, Lundlad, McBride, Mueller, & Watson, 2014). Due to interrelations between U.S. health policies, health systems, and immigration policies, employment and citizenship (Bustamante et al., 2012) greatly influence access to health

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insurance. This is an example of how outer systems (i.e., macrosystem, exosystem) interact and influence inner layer systems (e.g., individual and family health outcomes). In RFS and RFSH, Latina/o families more commonly lacked health and dental insurance compared to families who did not identify as Latina/o (Byrne, Greder, & Routh, 2014; Greder & Routh, 2014; Kim, Seiling, & Varcoe, 2004; Tatum, 2006). Parra-Cardona and colleagues (2006) found that when Latina/o migrant workers in RFS experienced changes in employment, they commonly lost health insurance coverage. Byrne and Greder (2014) also reported that many members of Latina/o immigrant families were of mixed documentation status, which affected healthcare usage among family members.

Access to healthcare providers and quality of care are other important factors to measure healthcare access (MacKinney et al., 2014). Rural communities are disproportionately affected by limited access to healthcare providers and services (Agency for Healthcare Research and Quality, 2012; Bennett, Olatosi, & Probst, 2008), which presents barriers to health (Bennet, Olatosi, & Probst, 2008). For Latina/o immigrant families, these challenges were greater due to limited English proficiency, limited health literacy and/or misunderstanding of eligibility requirements, documentation status, lack of culturally relevant and responsive services, and racism and discrimination (Romero de Slowing, 2012; Greder & Routh, 2014). For example, Parra-Cardona et al. (2006) found that many Latina mothers reported receiving treatment that was unequal to that of their White counterparts. Thus, while ethnicity and/or race might not have directly influenced Latina mothers' *use* of and *access* to medical services, these findings suggest that mothers' race and/or ethnicity affected the *quality* and *quantity* of care they received (Parra-Cardona et al., 2006; Romero de Slowing, 2012), potentially influencing their access to healthcare. These results highlight disparities in healthcare access among Latinas/os, pointing to the need for improved policies at the macrosystem level and interventions at the microsystem and exosystem levels to reduce such disparities and prevent negative health outcomes.

Work environments. Demographic shifts in rural communities have often been driven by migrant workers moving to communities with low-wage agricultural and service economies, forever transforming rural communities in many ways (Burton, Garrett-Peters, & Eason, 2011; Lichter, 2012). To better understand well-being among Latina/o families in rural communities, it is imperative to understand economic forces that brought Latinas/os to these new settlement areas, and the contexts and nature of their involvement in these workforces. Although not a major topic of study for two of the products reviewed, three products explored work environment or work-related issues.

In their examination of work environment influences on RFS Latina/o migrant families, Parra-Cardona et al. (2006) found that workers' satisfaction was linked to their capacity to provide for their families. Despite their frustration with long work hours (e.g., for some, more than 80 hours per week), harsh conditions, and lack of health benefits, they worked hard and gave the best they had to their employers. Unfortunately, their dedication to their employers did not always translate into acceptance and fair treatment because these workers often experienced discrimination and exploitation. They reported inadequate compensation, being denied mandated breaks, and were threatened with losing their jobs if they stayed home when they were sick or missed work to care for an ill family member. The working conditions they experienced also led to deteriorated health and negatively influenced family life. Additionally, Greder et al.

(2009) found that several Latina/o families in RFS frequently reported health issues resulting from work related injuries (e.g., back and arm pain, allergies).

Culture and social support. It has been well documented throughout the body of this paper that Latina/o families in rural communities face additional multi-systemic challenges related to their documentation status and cultural barriers. Racism and discrimination are frequent hallmarks of the experiences of many Latinas/os who participated in RFS and RFSH. Yet in the face of adversity, families drew upon their cultural values and social capital to thrive. Family and social networks played important roles in the immigration and acculturation processes. Across RFS and RFSH, four studies took closer looks at issues of culture, family support, and risk and resilience among Latina/o families. Findings revealed that when Latina/o families moved to the U.S., they were more likely to initially live with family members or relatives (Greder, et al., 2009; Parra-Cardona et al., 2006). Familial support also meant obligation. Although such support was a major asset for many families, the reciprocity that was implied and expected hindered some families. Economically vulnerable families were especially affected when expected to support recently immigrated family or friends (Sano, Garasky, Greder, Cook, & Browder, 2010).

Geography does not limit the strength of social networks. Many families maintained close ties with family members in their home countries. Greder, et al. (2009) identified transnational behaviors and activities among Latina/o immigrants who participated in RFS, which include ongoing contact with extended family members in Latin America via phone calls and regular trips to their home countries and speaking Spanish at home. Latina mothers who reported more frequent transnational behavior and activities were also more likely to report higher household incomes and lower prevalence of formal employment and community-level social support (Greder, Sano, Cook, Garasky, Ortiz, & Ontai, 2009).

Immigration policy. Latina/o immigrant families' lives were perpetually nested in immigration policies that determined how they initially entered the U.S. and if they are, or can become, citizens. Immigration policies are embedded in social policies that limit or expand their access to resources and services, as well as to protections and responsibilities by government. The influence of immigration policies on Latina/o immigrant families was an implicit contextual factor that deeply affected their lives. Three policy briefs informed by RFS and RFSH anchor findings related to the influence of immigration policies on the lives of Latina/o immigrant families.

The surge of the Latina/o population in rural communities began after passage of the Immigration Reform and Control Act of 1986 (IRCA). Major provisions of IRCA stipulated legalization of undocumented immigrants, legalization of certain agricultural workers, sanctions for employers, and increased enforcement at U.S. borders (Department of Homeland Security, 2016). With the legalization of many workers came the creation of new family networks. Since 1986, the IRCA has been amended many times. More restrictive immigration measures were enacted over the years, all affecting the lives of Latina/o immigrants and their families one way or another.

For example, The REAL ID Act of 2005, required states to verify an applicant's legal status before issuing a driver's license or personal identification card (Department of Homeland Security, 2016). This policy directly affects Latina/o immigrants who do not possess appropriate documentation by limiting or eliminating their access to drive legally and conduct personal business such as opening a bank account. For low-income Latina/o families already struggling with limited access to healthcare and health insurance (Byrne, Greder, & Routh, 2014) as well as food and housing insecurity (Greder, et al., 2007), this policy means that they have to incur additional expenses to commute to school and work, to do financial transactions such as cashing a check while also being denied access to other safety nets such as SNAP, TANF, and Section 8 (Greder et al., 2007). Other policies, such as the Deferred Action for Childhood Arrivals (DACA) which is proposed to be phased out, granted certain privileges and opened opportunities to Latina/o immigrant youth who did not have legal papers by allowing them to work in the U.S. and serve in the military but limited their participation in programs such as Medicaid (Byrne, Greder, & Routh, 2014).

The outer layers of the larger ecological system discussed above illustrate a complex interconnectedness of systems influencing Latinas/os families' well-being directly or indirectly. Individual level outcomes such as depression, obesity, homeownership, and health practices need to be understood in their relations to larger systems and how these systems constrain families' capacity to thrive. However, and despite the negative influence of outer systems (e.g., policies), Latina/o's cultural values regarding family and collectivism serve as protective factors (e.g., familism immigrant paradox) that help them to thrive despite these challenging circumstances.

Discussion

Findings from RFS and RFSH studies deepen our understanding of the multi-level influences on the health and well-being of low-income Latinas/os families residing in rural America. In alignment with the Ecological Model, findings related to outer system influences help illustrate community and societal level challenges and opportunities confronting families. Findings related to the inner systems help us identify individual and family level factors that either constrain or promote health and well-being. Some issues studied at the inner systems level (e.g., obesity, food insecurity, homeownership) were, in many ways, influenced by interaction and interdependence with the outer systems (e.g., access to food and health resources and services, employment opportunities).

For example, clinically significant depressive symptoms among Latina mothers were related to transportation, health insurance, and health care access (Downey & Greder, 2014; Reina, Greder, & Lee, 2014; Byrne & Greder, 2014), and to food insecurity (Browder, 2011; Huddleston-Casas et al., 2009). However, depressive symptoms and food insecurity were more prevalent among Latinas in RFS than in RFSH, and there was a higher percentage of first generation Latina immigrant mothers in RFSH than in RFS. Perhaps first-generation immigrant mothers had lower levels of acculturation, which may serve as a protective factor, than did U.S. born Latina mothers. Additionally, RFS included families who were migrant workers and moved back and forth between states, which could have placed additional stress on mothers. Furthermore, food security among Latina/o families was related to knowledge of community resources and money management skills and to WIC participation (Greder et al., 2007).

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In relation to obesity, physical environments of communities (e.g., cracked sidewalks, lack of parks and low-cost recreation facilities, cold weather) inhibited Latina/o families from being physically active (Greder & Routh, 2014). By contrast, home environments among Latina/o and non-Latina/o families that promoted healthful eating and activity and limited media usage were associated with lower body mass among children (Greder et al., 2014). Byrne et al. (2014) and Greder et al. (2007) provided evidence that immigration policy directly influenced families' capacity to access health insurance and/or governmental assistance, to obtain driver's licenses in order to travel to doctor appointments or work, to be employed, and to connect with others in their communities. Furthermore, Parra-Cardona et al. (2006) illustrated that work environments of migrant workers created mental and physical stress that negatively affected individual and family well-being. However, opportunities to earn income and provide for one's family was a source of pride and a mechanism to a better life for many migrant families.

Understanding factors at the microsystem level and elements of policies and environments that promote individual and family functioning and health is important for improving programs, services, policies and community contexts, to support the expanding Latina/o population's efforts to thrive and contribute positively to their communities and society. Multiple studies have shown the economic benefits of immigrants to the social fabric and economy of rural America. Despite challenges that rural Latina/o families encounter at multiple systems levels, their human capital, family cultural values and traditions, and support networks interacted and served as glue that kept many families strong and moving forward to meet their needs and aspirations. However, the complexities of challenges that some families experienced were exemplified by negative consequences of immigration and other public policies that became too great to overcome. These factors resulted in family instability and compromised health and well-being.

Implications

Despite the strong body of RFS and RFSH research focused on rural Latina/o families over the past 20 years, there is a need for more studies. Latina/o populations in the U.S. are diverse and are rapidly changing the face of rural America. Continued examination and monitoring of factors, programs, and policies at multiple levels that promote economic and health security and civic engagement among rural Latina/o families are investments in America's future.

U.S. immigration policy is a major factor in immigrant families' access to resources and services, determining families' trajectories for health and well-being in many ways. Studies using RFS and RFSH data to explicitly compare and contrast well-being among Latina mothers who are U.S. citizens or lawful residents and those who are not have not been conducted and could contribute to the knowledge base on Latina/o family health and well-being. Research is also needed to explicitly monitor and examine effects of U.S. immigration policy on Latina/o families across generations over time. Furthermore, immigration paths and related consequences look different for sub-groups among Latinas/os. The intersectionality of their different identities influence their experiences. There must be additional research to further understand experiences of Latinas/os of different countries of origin across rural America. Such findings could be helpful to inform educational materials and programs for families. For example, the food pathways of

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Latinas/os may vary greatly by country of origin, which could provide useful information to nutrition and health education programs provided by Cooperative Extension Services and other public health agencies.

For children to reach their full potential, become civically engaged, and contribute to their communities, investments in families as a whole – access to supports and services for basic needs (e.g., food, health) and education, including higher education – are crucial. Despite unauthorized residency status among some Latina/o immigrant parents, they strive to safeguard their children’s health and future. When parents cannot meet basic needs, their abilities to care for their children are compromised. Therefore, investing in health and well-being of parents without U.S. citizenship or legal residence status is an investment in children, including the children of U.S. citizens. Responsive community and family-based programs are needed to help equip low-income rural Latina/o immigrant families with information and support systems to navigate their local communities and access resources that promote health and well-being. Program policies and practices should be reviewed to assess their cultural relevance and sensitivity to interests and needs of rural Latina/o families.

Findings related to Latina/o family health and well-being across multi-system levels, as identified in RFS and RFSH studies, provide opportunities for reflection scholarship across various domains and units of analysis. Dynamic changes in rural economies and family demographics create a need for research and reflective practice that helps us understand and respond positively to continuity and change, and to factors promoting risk and/or resilience among Latina/o families. Researchers must continue to push for collective understanding of rural Latina/o families. Practitioners must implement research-based solutions to eliminate and minimize risks and maximize the potential of rural Latina/o families.

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Table 1. Demographic characteristics of mothers

| | RFS (N = 119) | RFSH (N = 136) |
|---|-----------------|----------------|
| Age of Mothers (<i>M</i> , Range) | 31.3 (18 - 48) | 32.5 (19 - 48) |
| Interview conducted in Spanish, N (%) | 73 (61.3) | 107 (78.7) |
| First generation immigrant, N (%) | 82 (55.0) | 115 (84.6) |
| Mothers' Relationship Status, N (%) | | |
| Single (never married, divorced, widowed) | 13 (10.1) | 22 (16.2) |
| Married or partnered | 106 (89.1) | 108 (79.5) |
| Other | 0 (0.0) | 6 (4.4) |
| Annual Household Income (<i>M</i>) | \$26,753 | \$22,500 |
| Employed, N (%) | 59 (49.6) | 43 (31.6) |
| Had Medical Insurance, N (%) | 63 (42.3) | 40 (29.4) |
| Mothers' Education Level, N (%) | n=117 | |
| Some high school, 8 th grade or less | 74 (63.2) | 64 (47.1) |
| High school diploma or GED | 20 (17.1) | 45 (33.1) |
| Post-secondary education | 23 (19.7) | 27 (19.9) |
| Food Security Status, N (%) | n=114 | |
| Food secure | 53 (46.5) | 94 (69.1) |
| Food insecure | 61 (53.5) | 42 (30.1) |
| Clinically significant depressive symptoms, N (%) | 47 (45.6) n=103 | 25 (18.4) |

Notes: RFS data based on sample size of 119 unless indicated otherwise. RFSH data based on sample size of 136 unless indicated otherwise. Income adjusted for inflation and does not include SNAP/Food Stamps.

Figure 1. Socio-ecological influences on rural Latino individual and family well-being

