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How Families Matter for Health Inequality during the COVID-19 Pandemic

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Abstract

We theorize that social conditions surrounding the COVID-19 pandemic have the potential to increase the importance of families for health and widen existing inequalities. We suggest three primary tenets important for understanding families and health during COVID-19. First, risks of specific COVID-19 outcomes and other health problems are unevenly distributed across families. Second, how families impact health during the COVID-19 pandemic is conditional on public policies, organizational decisions, and concurrent events. Third, many health inequalities driven by racism, sexism, classism, and other oppressive societal force are amplified during COVID-19, but the extent to which this is occurring is shaped by families and by the public policies, organizational decisions, and concurrent events that also impact families and health. As health disparities continue to emerge from this pandemic, we call on researchers and policy-makers to pay attention to the multiple ways that families matter.

On March 31, 2020, New York Governor Andrew Cuomo tweeted, "The virus is the great equalizer," echoing a belief many others had espoused in the early days of the COVID-19 pandemic (Cuomo, 2020). This statement builds on the reality that COVID-19 could infect anyone, from wealthy celebrities like Tom Hanks to minimum-wage clerks at grocery stores. In response to Governor Cuomo's statement, many social scientists and commentators produced evidence-based analysis of early COVID-19 infection and fatality rates-as well as unemployment, poverty statistics, and other health and well-being measures—showing that the virus did not affect everyone equally but was much more impactful for disadvantaged members within society, including people of color, immigrants, people with lower socioeconomic status (SES), and people with disabilities (Clark et al., 2020; Laster Pirtle, 2020; Yancy, 2020). Within the U.S., health disparities stemming from the pandemic have overlapped with an economic recession, a contentious presidential election, and protests over the murders of Breonna Taylor, George Floyd, and many other Black people by police. Dr. Uché Blackstock refers to these coinciding events as a "crisis within a crisis" (Martin, 2020), with large implications for health disparities across society (Krieger, 2020). Despite being called the "great equalizer," it is increasingly clear that COVID-19 is magnifying existing health inequalities.

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In this article, we draw attention to the role that families play in understanding health disparities during the COVID-19 pandemic, with implications for understanding the importance of family during other crisis points. Our objective is to focus on families as "groups of related people, bound by connections that are biological, legal, or emotional" (Cohen, 2020c: 5). Family ties can be divided roughly into five main categories: families of origin (i.e., parents, siblings), extended kin (e.g., grandparents, cousins, in-laws), families of choice, intimate/romantic partners, and offspring (i.e., children, grandchildren). Although providing detailed discussions of each of these ties is beyond the scope of this article, we aim to provide a conceptual framework focused generally on families and applicable across each tie. We point readers interested in a more detailed overview of intergenerational ties during the COVID-19 pandemic to Stokes and Patterson's review (2020) or in couple dynamics during the pandemic to a review by Pietromonaco and Overall (2020), as well as many other articles in the special issue from *Family Processes* on "COVID-19, Families, and Family Therapy."

Our framework posits that the social conditions surrounding the COVID-19 pandemic have the potential to make families even more salient for health, with this relationship conditional on public policies, organizational decisions, and concurrent events. These dynamics in turn exacerbate existing health inequalities, namely those driven by racism, sexism, heterosexism, ageism, classism, ableism, and other oppressive forces within society. We point to emerging evidence showcasing how family ties have been impacted by COVID-19, with scholars anticipating more long-term ripple effects on the family (Cohen, 2020b; Verdery et al., 2020). In developing this framework, we highlight how the COVID-19 pandemic is embedded within other social contexts, and these together have profound implications for the association between families, health, and health disparities. Our aim is for the conceptual framework presented here to be viewed as dynamic, rather than static, providing a starting point for interdisciplinary research agendas relating the role of families and health inequalities during the COVID-19 pandemic.

Families and Health Inequalities

Our conceptual framework builds on a social ecological approach, highlighting how individuals, families, and their social environments mutually affect each other over the life course (Bronfenbrenner, 1986). Our framework is grounded in several theoretical approaches alongside existing empirical research which together point to how multiple components of families and family life—distributed unequally throughout the population— and the extrafamilial context (e.g., public policies, concurrent events) can help us understand widening health disparities during the COVID-19 pandemic. Our framework provides three primary tenets for understanding the role of families in expanding or reducing health inequities during the COVID-19 pandemic.

Primary Tenets

Our first tenet builds from a long history of research highlighting how families are a key social factor shaping health outcomes and health disparities at the population level (see Umberson & Thomeer, 2020 for overview) and asserts that families are particularly

important institutions shaping health outcomes during the COVID-19 pandemic. Preliminary evidence suggests that multiple components of family life have shifted due to COVID-19 (e.g., increased family violence, growth in multigenerational households), and the implications of families for health and well-being are arguably heightened as people spend more time at home and rely on family members as a major part of their social safety net (Bettinger-Lopez, 2020; Cohen, 2020a, 2020b; Prime et al., 2020). Our second tenet argues that the impact of families on health during the COVID-19 pandemic is conditional on public policies (e.g., school closings, unemployment benefits), organizational decisions (e.g., limiting nursing home visitors, workplace furloughs), and concurrent events (e.g., public protests, economic recession) (Berger & Carlson, 2020). Drawing on research that indicates that many health inequalities by race, gender, class, and other socially constructed positions are widening during COVID-19 (Clark et al., 2020; Krieger, 2020; Yancy, 2020), our third tenet argues that the extent to which this is occurring is shaped by families and by the public policies, organizational decisions, and concurrent events that impact families. These heterogeneous impacts are due largely to racism, sexism, heterosexism, ageism, classism, ableism, and other oppressive forces, likely contributing to the exacerbation of health disparities during the pandemic.

Theoretical Background

Before we elaborate on each of these tenets, we briefly summarize the main theoretical approaches which undergird our framework. First, the fundamental cause framework argues that social conditions are a primary and robust determinant of health, with the specific mechanisms shifting over time and across place (Phelan et al., 2010). Families act as a central institution through which resources are distributed and organized, with some family forms increasingly advantaged compared to others as described in the *diverging destinies perspective.* The diverging destinies perspective provides insight into how different aspects of family are distributed unevenly across the population in ways that matter for well-being (McLanahan & Jacobsen, 2015). In recent decades, individuals with higher levels of educational attainment are more likely to delay marriage and childbearing and to avoid divorce and separation, whereas people with fewer years of schooling have experienced more marital disruptions and higher rates of non-marital childbearing (McLanahan & Jacobsen, 2015). Because the state arguably dictates which family forms are preferred, this furthers social advantages to specific family makeups. Thus, the link between SES and family life has consequences for health inequalities, such that marital status and conditions of parenthood shape health outcomes for adults and children within the family. The fundamental cause and diverging destinies perspectives together highlight how variation in family forms is linked to health inequality, including during the COVID-19 pandemic.

Second, our approach builds on the *family systems theoretical* approach which sees family members as interdependent, such that individual people's health outcomes are shaped by their family members (Broderick, 1993). This approach parallels the linked lives concept from the *life course perspective* (Carr, 2018), which suggests that characteristics and experiences of family members influence the health of those within the family because their lives are intertwined. These approaches also complement a *social ecological perspective* that examines the dynamic interrelations among various personal and environmental factors

(Bronfenbrenner, 1986). These three approaches emphasize extrafamilial factors—such as public policies—alongside interfamilial factors, highlighting the interplay between the micro, meso, and macro levels dynamics. This is useful for unpacking the multi-level ways in which families likely matter for health during the COVID-19 pandemic.

Third, based on an *intersectionality perspective* (Collins, 1998), we know that social structures and positions interact with each other such that a college-educated Black genderqueer person's experiences of family are shaped by their race and racism together with their class and classism and their gender and sexism. An intersectionality perspective emphasizes the role of institutions and polices, especially how these interact with one another to shape life chances. This framework is complemented by a *family diversity perspective* which sees family as a source of coping to improve health for marginalized groups (Collins, 1998; Williams, 2019). For example, rather than concluding that single-parent households are damaging to health, a family diversity perspective highlights the strengths of these family profiles, especially those not measured in traditional surveys. Building on both intersectionality and family diversity, we argue that research on families during the COVID-19 pandemic without contextualizing them within broader structures of oppressive systems (e.g., racism, sexism, classism) and the policies and concurrent events framing these structures and systems offers an incomplete picture.

Tenet 1: Family-Based Health Disparities—We now provide an overview of each of these tenets, focusing on existing empirical research supporting each tenet and offering some conjectures to future research. The first tenet draws attention to how family structures, compositions, and dynamics shape health outcomes and health disparities at the population level during the COVID-19 pandemic. As an important caveat, some of the observed correlations between family variables and health outcomes are due to selection factors, which should lead us to be cautious in interpreting the observed links between family and health. Additionally, we discuss family structures, compositions, and dynamics below as separate components of family, but their impact is often interdependent. Finally, as we elaborate in the second and third tenets, the association between families and health during COVID-19 is highly context dependent and does not reflect inherent costs or benefits of specific family forms but rather public policies, oppressive structures, and other external realities.

Family Structure-Based Health Disparities during the COVID-19 Pandemic: A number of studies indicate that there are differential risks in contracting COVID-19 across family structures, which includes the presence and absence of specific family ties, the number of family ties, geographic proximity to family ties, and the extent of contact with family ties. Multigenerational households have stood out as family structures where COVID-19 exposure and transmission may be heightened (Stokes & Patterson, 2020). Within multigenerational households, older adults may be exposed to the virus through their proximity to younger generations who might provide care for them and hold "essential jobs" (e.g., store clerks, healthcare workers) (Balbo et al., 2020). In addition, the share of multigenerational households has increased since the start of COVID-19; specifically, the proportion of adults ages 18-29 living with a parent or grandparent grew, likely due to young

adults exiting COVID-19 hotspots and experiencing financial strains (Cohen, 2020a). Aside from the risks of contracting COVID-19 in multigenerational households, these family structures are also potentially associated with more caregiving and family responsibilities, with health costs for the caregivers and health benefits for those receiving care. Recent evidence indicates that long-term family caregivers experienced worse physical and psychological health in the early part of the pandemic compared to non-caregivers (Park, 2020). This caregiving burden is heightened for "sandwich generation" adults with both older parents and young children, especially if older adults fall ill and childcare is unavailable due to closed daycares and schools (Stokes & Patterson, 2020).

Yet multigenerational households are not the only family structure that intensify health risks for its members during the pandemic. Single-person households face specific social and economic challenges compared to other households during COVID-19, with implications for their health. Researchers note many benefits associated with living alone (Kilinenberg, 2013), but these benefits may be muted during the COVID-19 pandemic as gatherings outside of one's household are limited. A multi-country study associated lockdowns with feelings of low control, social isolation, and elevated levels of anxiety and depression (van Mulukom et al., 2020). Beyond the household, people without any family ties—defined as "kinless"—are at risk of social isolation, a situation associated with a wide range of negative health outcomes and amplified during the pandemic (van Mulukom et al., 2020). This may be especially dire for older adults. Recent analysis of federal data suggests that social isolation has contributed to 13,200 excess dementia deaths since the pandemic began (Wan, 2020), and evidence indicates that older adults who rely on non-residential family members to provide instrumental (e.g., shopping for groceries, transportation) and social support experienced more severe consequences from physical distancing measures (Berg-Weger & Morley, 2020). As people face unemployment or work from home, as well as attend virtual religious services and avoid physical gatherings, the COVID-19 pandemic potentially intensifies the importance of family structure and living arrangements for health and wellbeing.

As an additional important aspect of family structure, the loss of family members through deaths are clearly increasing as a result of the pandemic (Wrigley-Field, 2020), hence contributing to the rise of worse physical and mental health outcomes (Umberson et al., 2017). Perhaps this is uniquely consequential during the COVID-19 pandemic as these deaths are often unexpected, potentially in isolation, clustered within families, and possibly perceived as due to family member conduct. Beyond deaths, family members separated due to immigration, deportation, incarceration, and residence within other institutions (e.g., nursing homes, military) may not benefit from their support systems due to limited visitations. The prevalence of each of these types of losses are greatest for Black and Latinx families compared to White families, due to structural racism as we discuss more in the third tenet (Wrigley-Field, 2020).

Family Composition-Based Health Disparities during COVID-19 Pandemic: Family composition refers to the sociodemographic, economic, psychological, and health characteristics of people within a family, among others. Research on family composition and health outcomes tends to focus on two key characteristics: health status and educational

attainment. First, social contagion studies explain how health can "spread" across family relationships beyond infectious diseases, such that one family member who smokes increases other family members' risk of smoking (Christakis & Fowler, 2009). By its nature, having a family member with COVID-19 matters for one's own risk of becoming ill, given that COVID-19 is a highly infectious disease. Contact tracing indicates how COVID-19 spreads through family clusters, especially at high contact events (e.g., birthday gatherings, weddings, funerals) (Zhang et al., 2020). Moreover, COVID-19 poses special risk to people who are immunocompromised or with specific comorbidities, placing their family members in a difficult position to avoid infection and/or any close contact with at-risk family members. For example, a letter in *The Lancet* emphasized the widespread anxiety commonly experienced among families of children with cancer during the pandemic (Kotecha, 2020). Many people caring for or living with people with comorbidities or compromised immune systems may work essential jobs outside of the home and/or need to send their children to school or childcare, adding to the COVID-19 risk for the household. Isolated family caregiving without supports is associated with worse health (Tebb & Jivanjee, 2000), yet this may be the safest way to provide care during the pandemic. This is likely an impossible balance for many, especially with preceding stressors and costs associated with caregiving (Park, 2020).

Second, educational attainment fundamentally shapes people's responses to COVID-19 and the risk of exposure; specifically, higher education affords the ability to understand and adapt to complex heath information and provides access to remote working arrangements and instrumental resources (e.g., health insurance) consequential for navigating COVID-19 risk. In the U.S., survey data show that early belief in physical distancing measures to "flatten the curve" was higher among college-educated people (Rabouin, 2020). Yet despite educational attainment technically belonging to the individual who earned the degree, the impact of education has ripple effects throughout the family (Yahirun et al., 2020). Therefore, beliefs about physical distancing could spread within family networks, meaning benefits from higher education that reduce COVID-19 infection rates would be shared by less-educated family members. Most of the previous scholarship on the health impact of family members' SES considers a "downstream" effect between parents' educational attainment and children's health (Hayward and Gorman, 2004), but more recent studies identify an "upstream" association whereby children's education attainment also shapes their parents' health (Friedman & Mare, 2014; Yahirun et al., 2020). Both generational directions likely matter for COVID-19-related health risks. For example, recent research finds that adult children may be important sources of health knowledge for their older parents in interpreting and navigating health care access (Jiang & Kaushal, 2020) and encouraging healthier behaviors (Friedman & Mare, 2014). Beyond health and educational attainment, other characteristics of family members likely also matter for COVID-19 and related health risks, such as their political views, religious beliefs and practices, and geographic location.

Family Dynamic-Based Health Disparities during the COVID-19 Pandemic: Family dynamics--including the degree of support or strain, violence, social control, and intimacy, to name a few--condition the extent to which family structure and family composition shapes

health, perhaps especially during the COVID-19 pandemic. Social support from family members, defined as instrumental aid, emotional caregiving, and information exchanges, are a key way in which families benefit health (Umberson & Thomeer, 2020), yet levels of familial support have changed during the COVID-19 pandemic. For example, a recent study found that, prior to the pandemic, most single mothers occasionally relied on their family for support, but during the pandemic this shifted into extreme poles--daily help or none at all (Hertz et al., 2020).

COVID-19 has generated elevated stress levels across the population, and family stress in particular rose with COVID-19 related stressors (van Mulukom et al., 2020). With respect to intimate relationships, financial and economic hardship may inhibit communication and prevent couples from problem-solving current challenges (Neff & Karney, 2017). Barriers to communication weaken union stability and increase the stress experienced by the couple. Recent studies identify how stressors related to lockdowns also increased within intimate relationships (Overall et al., 2020; Pietromonaco & Overall, 2020). As one example, forced proximity through physical distancing policies is a central risk factor for aggression and anger, which could enhance relationship strain (Van Bavel et al., 2020). Supporting this, one study found that people whose living arrangements changed as a result of the COVID-19 pandemic had a higher likelihood of increased stress and family conflict than those whose living arrangements remained stable (Evandrou et al., 2020). Additionally, family members with different perspectives about the risks of contracting COVID-19 and behavioral measures to reduce virus transmission (e.g., mask wearing, physical distancing) may also experience increased relationship strain. Currently, projections estimate that, similar to trends following natural disasters and economic recessions, an increase in divorce will follow as a result of COVID-19 (Goldstein, 2020). Data from China already illustrate a rapid spike in divorce filings following the re-opening of government bureaucratic offices in March 2020 (Liu, 2020).

Stressors related to financial insecurity, lockdowns, and physical distancing policies also place additional strain on parents. A survey found higher parental perceived stress among parents who experienced more COVID-19-related stressors (Brown et al., 2020). Strain within intimate relationships could also be exacerbated by the presence of children, with parents at potential odds regarding how much exposure poses a risk to children (Calarco et al., 2020). Spillover effects of couple-level stress are also tied to parenting anxiety and stress during the pandemic (Brown et al., 2020)

Factors that increase social strain within the family during the COVID-19 pandemic could lead to intimate partner violence (IPV) and other forms of family violence. In the U.S., data depict 10 percent more IPV reports in New York State in March 2020 compared to the previous month (Boserup et al., 2020). Social isolation, often used by perpetrators of IPV to restrain victims from seeking support, has been a central force behind the rising number of IPV reports globally (Bettinger-Lopez, 2020). Increased stress, unemployment, economic anxiety, and unavailable formal social services because of government closures and decreased financial support also set the stage for increased violence (Prime et al., 2020). This attention to family dynamics filter the impact of the COVID-19 pandemic and shape consequent health outcomes.

Tenet 2: The Role of Public Policies, Organizational Decisions, and Concurrent Events—Although evidence from our first tenet illustrates how families shape health, our second and third tenet explains how the specific health impacts of family ties during the COVID-19 pandemic are not universal. Rather, they exist within a broader social context that further frame and shape these patterns. In this second tenet, we draw attention to the empirical evidence supporting the claim on how larger institutional and structural factors–specifically public policies, organizational decisions, and concurrent events–condition the effects of family on health during the COVID-19 pandemic.

Public Policies: Policies position specific family structures, compositions, and dynamics in ways that positively or negatively shape health and health disparities (Berger & Carlson, 2020). For example, the positive association between marriage and good health is facilitated through public policies, such as spousal access to employer-sponsored health insurance and federal tax benefits for married couples (Umberson & Thomeer, 2020). Many U.S. policies are built on the assumption that family members are willing and able to provide support and resources during economic and health crises (Cherlin & Seltzer, 2014). The U.S. health care and economic systems rely on the work of family members to provide unpaid care for older adults and children, offering little tangible support to caregivers (Collins, 2019). Public policies privilege certain family forms and place undue strains on others, and certain policies implicitly assert the legitimacy of specific family forms over others. For example, the assumption that the most important family ties are between biological parents and children complicates grandparents' ability to gain parenting rights over grandchildren they are raising and makes stepparent roles ambiguous, all with consequential health outcomes for children (Russell et al., 2018).

We argue that policies that have attempted to address the economic and health consequences of COVID-19 have the potential to make family even more important for health and wellbeing and thus either reduce or exacerbate existing inequalities. For example, early shelterin-place policies, wherein states told residents to avoid physical contact with persons beyond their immediate household, privileged those individuals residing in the same housing structure. Federal economic relief packages also included more money for married couples who filed taxes jointly and additional funding for their children—but no stimulus for families without U.S. citizenship or legal permanent residence (Clark et al., 2020). School closures further impact the extent to which families matter for health, especially when the government or employers do not provide extra support; being a parent during the COVID-19 pandemic is more stressful and worse for well-being than prior to the pandemic (Brown et al., 2020). This is most consequential for single parent households (Choi, 2020; Hertz et al, 2020). These policies may create a model of a society where every family unit is out to gain for themselves, hoarding resources and overlooking those in their communities who may need support.

As another example of how public policies burden certain family forms, especially single parent households, states and cities have enacted bureaucratic hurdles for accessing benefits, such as unemployment and food banks, that require enormous time sacrifices—making multiple phone calls, waiting in long times, tracking down masks to go in public—that may be beyond the capabilities of families already struggling with household duties (Herd &

Moynihan, 2019). These bureaucratic processes fail to recognize that families who struggle to meet these demands are the same families that need these supports the most. Policies that focus on the nuclear family leave those without a spouse and/or adult children on the sideline and offer services based on an inaccurate and outdated picture of family life. Beyond bureaucratic hurdles, families who managed to keep their jobs during the COVID-19 pandemic but are now working part-time or unreliable shifts have experienced a reduction in family income that limits their access to healthy foods and other health-related resources. Compared to unemployed workers, those who are underemployed do not have access to full unemployment programs or certain means-tested benefits, including food stamps. Families who cannot access healthy food through food stamps are more likely to purchase high caloric and processed foods or skip a meal to overcome food insecurity, which could lead to malnutrition, obesity, or diabetes (Hamadani et al., 2020).

In studying the impact of policies, cross-contextual comparisons may be especially instructive. Within the U.S., health researchers have widely discussed how state and local policies set the stage for widening mortality and morbidity disparities (Montez, 2020). The lack of investment in public health infrastructure in certain states even before the emergence of COVID-19 will likely drive health disparities between U.S. states even further. Conversely, international comparisons could shed light on which policies are most successful at helping families buffer the negative heath and economic impact of the pandemic, as well as policies that helped to mitigate disparities between families. Crossnational differences in shutdowns, physical distancing mandates, contact tracing, and recommendations in mask-wearing provide a "natural experiment" of a certain type to examine how policies shape population health outcomes during this pandemic (Pearce et al., 2020).

Organizational Decisions: Beyond public policies from the state, other organizations enact decisions that shape the environment through which families impact health during the COVID-19 pandemic. Organizations related to health care, education, employment, banking, housing, immigration, and criminal justice, among others, contribute to the landscape in which families form and operate. Changes in each of these have the power to shape the associations between families and health. The closures of private daycares, layoffs and furloughs by companies, and limited visits in long-term care facilities, among other decisions and policies made by various organizations, matter for family life and-by extension—COVID-19 and other health risks. As governments make assumptions about families in their policies, so too do private organizations. Workplace and childcare policies create important contexts through which families shape COVID-19-related outcomes, either benefiting or harming the health of caregivers and family members. Whereas some workplaces have shown flexibility in workplace demands, especially for parents of young children, others have not (Williams, 2020). As childcare facilities shut down due to the pandemic, employers who demand that their employees work full-time from home expect that childcare duties can be given to-or at least shared with-a partner (Calarco et al., 2020).

Similarly, organization decisions in nursing homes have impacted the health consequences of relationships between older adults in these facilities and their family members. Within the

long-term care setting, the inability to visit vulnerable family members could harm the mental health of older adults within these facilities, who likely already suffer from social isolation (Stokes & Patterson, 2020). Moreover, these organizational policies have implications for the well-being of family members inside and outside of long-term care facilities. These examples indicate that researchers interested in family and health should also consider the roles of workplaces, schools, neighborhoods, medical and care institutions, places of worship, and other organizations that shape health and family life.

Concurrent Historical Events: Beyond organizations and institutions, we must consider the role of the broader historical context of the COVID-19 pandemic, examining how concurrent events influence the role of families and health (Krieger, 2020). One concurrent event with the pandemic was the mass protests across the U.S. in response to the continued killing of Black people by police. On March 13, 2020, at the same time that awareness of the COVID-19 pandemic became salient in the U.S., Breonna Taylor, a Black woman, was shot and killed by police in her own home in Lexington. About two months later, on May 25, 2020, George Floyd, a Black man, was killed in Minneapolis after a police officer knelt on his neck for several minutes. And on October 26, 2020, Walter Wallace, a Black man, was shot and killed by police in Philadelphia, and thirty people were arrested in the protests on that same day. Deaths of Black people by police officers have been occurring for decades in the U.S., with little meaningful government action to reduce these fatalities (Laster Pirtle, 2020). Institutional racism that devalues Black lives leads to extreme inequalities in mortality outcomes for Black people compared to non-Hispanic White people in the U.S. (Wrigley-Field, 2020). Thus, the COVID-19 pandemic is just one event that matters for the health and well-being of Black families, and this pandemic should be contextualized within other concurrent events, each tied to continued racism within multiple institutions in the U.S. We discuss this more in the third tenet.

An additional concurrent event tied closely to the COVID-19 pandemic with implications for long-term family and health dynamics is the economic recession. As a recent parallel, during the 2008 recession, due to a collapse in housing value and stock prices, a drastic rise of the unemployment rate, and mortgage foreclosures and delinquencies (Danziger, 2013; Hout et al., 2011), the economic stability and health of many families was jeopardized. Similar to the 2008 recession, the COVID-19 pandemic has threatened economic stability by increasing the national unemployment rate, from 4.4 to 14.7 percent between March and April 2020 (US BLS 2020). This impacts the long-term well-being of families and provides a key backdrop for understanding how families matter for health during the pandemic. In addition to protests over police brutality and the economic recession, other contexts to consider in understanding the roles families play in health outcomes during the COVID-19 pandemic include the current political administration in the U.S. and high levels of political polarization in the country, the timing of the U.S. presidential election, deportation policies targeted at immigrant families, health care reform efforts, and the climate crisis.

Tenet 3: Families as Embedded within Other Sociodemographic-Based Health Disparities—Our third tenet states that many health inequalities by race, gender, class, and other socially constructed positions are widening during COVID-19, but the extent to which

this is occurring is shaped by families and by the public policies, organizational decisions, and concurrent events that also impact families. Within this tenet, we recognize that families are embedded within broader structures and systems—including racism, sexism, heterosexism, ageism, classism, and ableism– shaping public policies, organizational decisions, and concurrent events—both their existence and their impact. This in turn shapes how, when, and why families matter for health. As Krieger states, "Health inequities comprise differences in health status across social groups that are unjust, avoidable, and, in principle, preventable" (2020: 1620). Thus, we draw attention to these disparities during the COVID-19 pandemic as spaces of injustice that can be addressed through structural changes (Williams, 2019). Within this tenet, we note that families are highly diverse and changing rapidly, hence there is no universal story of when, why, and how families might shape health during the COVID-19 pandemic. Based on our theoretical approaches and existing empirical evidence, we anticipate that differences in families can help us make sense of the emerging disparities and resiliencies around COVID-19, and we highlight some ways this may be occurring for race, gender, and SES.

Race, Families, and COVID-19: We first address existing research regarding how families might be associated with race-based COVID-19 outcomes as well as other health outcomes. Early counts of deaths due to COVID-19 across U.S. cities illustrated racial disparities to the detriment of Black, Latinx, and Native American populations. For example, in Michigan, Black residents represented 40 percent of deaths in a state where they make up only 14 percent of the total population (Yancy, 2020). Motivated by this disparity, twenty U.S. cities and counties and three states-alongside the American Medical Association-declared that racism is a public health crisis (Vestal, 2020). Health scholars suggest multiple ways in which race is linked to higher mortality incidence due to COVID-19 among Black communities: for example, Black individuals are more likely to have existing comorbidities that increase the risk of death from COVID; Black people are more likely to live in poverty and crowded housing conditions; and Black persons are more likely to work "essential" jobs that put them in direct contact with others (Hooper et al., 2020). But when considering racial disparities within any specific health outcome and the linking mechanisms, we must also conceptualize and historicize the social construction of race, for example, situating constructions of race within settler colonialism in the U.S. (Williams, 2019). We note that social determinants of health do not occur within a vacuum: historic racism, housing discrimination, and oppression tied to a divestment in communities of color shaped these factors and place Black, Latinx, and Native American communities at risk of both comorbidities and contracting and dying from COVID-19 (Laster Pirtle, 2020). Thus, we emphasize that driving these other explanations is the fact Black individuals are exposed to racial discrimination at the micro, meso, and macro levels (Hooper et al., 2020).

We draw attention to the family as a key factor that is understudied yet helpful in conceptualizing the impact of COVID-19 on Black communities and other communities of color, both in examining why the health disparities exist at all and in considering why they are not larger. Understanding how families matter for health during the COVID-19 pandemic means seeing how continued structural racism within the U.S. impacts Black families in particular (Laster Pirtle 2020). To illustrate, we highlight the role of living arrangements and

particularly multigenerational living. In 2016, 26 percent of Black people and 27 percent of Latinx people were living in multi-generational households, slight increases since 2009 (Cohn & Passel, 2018). However, as explained above, multigenerational housing arrangements may have been an early culprit in the spread of the virus, driven by policies and organizational decisions that did little to support these families. Another example of how race and racism interacts with families to shape health outcomes during this pandemic is how racial differences in family-level access to resources is likely exacerbating racial disparities in health. Moreover, family composition, and specifically family members' educational resources, are important when considering the safety net that kin may lean on, but also when considering health spillovers, behaviors, and the interpretation of new-and in the case of COVID-19-rapidly changing health information. In the U.S., although far more Black students attend and complete four-year colleges than the past, the racial gap in college attainment prevails (McFarland et al., 2019). This suggests that the pace and progress of access to educational resources at the family level may be slower to close, and, thus, those offspring with a college education may face increased pressure to act as a safety net provider for less educated family members.

We also draw attention to the role of agency within families, such that people choose to engage in specific behaviors that may increase or reduce their risk of COVID-19. Notably, white individuals and families are the group that have exhibited the riskiest health behaviors related to COVID-19. For example, social distancing was more prevalent in U.S. counties with more Black residents compared to counties with more white residents (Huang, 2020). Black adults were also more likely than White adults to delay or avoid medical care because of COVID-19-related concerns, demonstrating the complex decision making involved in balancing health concerns (Czeisler et al., 2020). Black families were among the groups most likely to choose virtual learning options for children, yet these families-along with low SES families—were also the most likely to be within school districts with relatively few supports to promote quality remote schooling (Smith & Reeves, 2020). These actions by Black families to reduce their COVID-19 risk are likely somewhat driven by the recognition of greater risk of COVID-19 infection and death within Black communities and being more likely to know someone who died from COVID-19 (Verdery et al., 2020). In fact, in June 2020, about 11 percent of Black Americans reported being close with someone who had died of COVID-19, compared to four percent of white Americans (Stafford & Fingerhut, 2020). Deaths of people within one's social networks, a result of racist systems as discussed above, then impact health behaviors differentially across racial groups. With these complex processes in mind, we call for future research to consider the multiple ways race, racism, and family shape health within the context of COVID-19 and the backdrop of policy decisions and concurrent events.

Gender, Families, and COVID-19: We also suggest that the family plays a role in understanding gender health inequalities during COVID-19. Several empirical studies have considered this in the context of motherhood. The closing of schools and daycare centers have contributed to a decrease in the number of hours women have spent on paid labor, likely due to an increase in childcare and housework (Collins et al., 2020). Between August and September 2020, more than four times as many women than men dropped out of the

labor force (Connley, 2020). We expect these employment transitions to have a meaningful impact on women's health and well-being. This could be mitigated through policy decisions that provide childcare supports to families or promote job security with paid leave options. Given that historical inequalities within intimate relationships related to unpaid work have contributed to gender health gaps (Thomeer et al., 2013), we expect that these changes in family dynamics due to the COVID-19 pandemic may serve to widen the gender health gap more.

The gender health gap is likely especially pronounced within single-parenting in the U.S. Single-mother families in the U.S. lack institutional support that single-mother families in other advanced industrial countries possess, including state-funded childcare, parental leave, and universal health care (Collins, 2019). This lack of institutional supports contributes to the poor economic situation of many single mothers in the U.S., whereas single mothers in other advanced industrial economies fare comparatively better in terms of socioeconomic and overall well-being (Glass et al., 2016). Single mothers in the U.S. face the untenable challenge of working while also providing care for children during the COVID-19 outbreak (Choi, 2020; Hertz et al., 2020). For those single mothers who lost their jobs because of the economic fallout of COVID-19, the pandemic also pushed many into financial instability with long-term health consequences.

Beyond the role of gender and family for women's COVID-19 risk, we can also examine the relationship between the family and COVID-19 risks for men. Importantly, early epidemiological evidence suggested that men have higher rates of infection and mortality from COVID-19 compared to women, with several proposed biological pathways to understand this disparity (Klein et al., 2020). Beyond these biological explanations demonstrating greater risk for males, social explanations also likely play a role-for example, discourses around masculinity contribute to oppositional sentiments about wearing a mask, physical distancing, and even recognizing COVID-19 as a legitimate threat (Cassino & Bessen-Cassino, 2020). Previous research on gender and family suggest that within heterosexual contexts, women monitor men's health and health behaviors, and through social control encourage men to practice healthier behaviors (Umberson et al., 2018). Although not studied in the COVID-19 context, we expect that wives, mothers, daughters, and other family roles occupied by women would promote men's mask wearing, physical distancing, hand washing, and other behaviors to reduce COVID-19 risk. If this is the case, we would expect this to exacerbate the COVID-19 gap within groups of men by family status (e.g., better outcomes for married men compared to single men). Furthermore, the stress of social control may harm women's health more when they are in relationships with men (Umberson et al., 2018).

Less studied, families likely also matter for understand health among transgender and other gender nonconforming people during the pandemic. One study found that transgender (and other gender minority and sexual minority) youth identified being isolated with unsupportive families and the loss of in-person identity-based socialization and support as two of the biggest stressors during the pandemic, with this harming their mental health (Fish et al. 2020). The authors concluded that efforts were needed to provide resources and support for these populations, or there is a large risk that known health disparities experienced by

transgender and other gender nonconforming populations compared to cisgender populations would likely increase (Salerno et al., 2020). Families of choice are likely also important for transgender and other gender nonconforming people during the COVID-19 pandemic, providing supports that buffer against stress and health and economic risks associated with the pandemic.

SES, Families, and COVID-19: Finally, we address disparities across families by SES, considering how existing socioeconomic divides in the U.S. deepened due to the COVID-19 pandemic and likely expanded health disparities for low SES compared to high SES families —especially given the current policy landscape with relatively few supports for low-SES families impacted by the COVID-19 pandemic. Recent data show how U.S. households at the bottom income quintile were detrimentally impacted by the pandemic compared to those in the top income quintile. The share of children living in households in which no one earned an income doubled from 7 percent in February 2020 to 15 percent in April (Bokun et al., 2020). More than one-third of those at the bottom income quintile were laid off compared to 8 percent of those at the top income quintile (Rothwell, 2020). The deepening class divide as a result of the pandemic has parallel translations to who can adhere to physical distancing measures, including the ability to work from home, to secure childcare outside of large-scale institutions (e.g., nannies) and to access medical benefits and medical leave in the event of falling sick (Reeves & Rothwell, 2020).

As noted earlier, family structures are unevenly distributed by SES. Children living in households where the most-educated family member attained less than a college degree are more likely to live in single parent households (Pew Research Center, 2015). Two-parent families, who are more likely to be comprised of college-educated adults (Mare, 2016), make up an increasing share of America's middle-upper class and are most able to work from home and follow "stay-at-home" measures. Preliminary data indicate stark differences in the impact of COVID-19 on economic well-being based on family structure; 14.2 percent of children living with single parents saw their parent lose their job in the early months of the pandemic whereas only 6.4 percent of children living with two parents had both parents become unemployed (Bokun et al., 2020). The two-parent structure also means that parents could ostensibly share childcare responsibilities especially for those with young children (Collins et al., 2020; Prickett et al., 2020). Thus, the pandemic deepens the financial and economic well-being gap between single and married-couple parents, and the health of single-parent families may deteriorate due to loss of employer-based health insurance, food insecurity, or housing. Because COVID-19 has increased immediate economic disparities across family structures, it is likely that we will continue to see widening health disparities as higher SES families recover more quickly from the recession and lower SES families are left behind.

Beyond Race, Gender, and SES: Beyond the focus on race, gender, and SES, other sociodemographic markers (e.g., sexuality, age, disability status, immigration status, religion) are also known to shape family relationships and are integrally associated with broader health outcomes. These positions likely also influence COVID-19 outcomes, although they have not been widely studied. From an intersectionality perspective, these

socially constructed positions interact with each other—and the broader organizational and institutional context—to shape how families matter for health. This is illustrated in thinking about the impact of school closings. Although empirical consideration has been limited, school closings had the greatest costs for Black and Latinx mothers with low SES, especially given the limited support provided by federal and local governments. This greater cost is due to an intersection of historical racism which led to significant segregation and disparities in school quality and resources, sexism which contributed to women being primarily responsible for childcare within communities, and classism which limited low SES's people's abilities to support themselves financially with a steady, well-paid, flexible jobs (Bowleg, 2020). Rather than working in isolation, these factors intersect and create unique needs overlooked by many policymakers. We call for closer consideration of the intersectional factors that matter for studies of families and health, especially in seeing how families contribute to—or reduce health disparities during the COVID-19 pandemic.

Conclusion

The conceptual framework outlined here has implications for understanding the role of families during other crisis points. For example, we have already seen the numerous ways in which families shape the response to economic crises. But we can also imagine how the effects of natural disasters, which are increasingly predictable with climate change, are both influenced by the family. Currently, the fallout from COVID-19 suggests that we are headed for widening gaps between the married and the single, those with caregiving responsibilities and those without, people living with others and people in isolation. Multigenerational living, long a solution to financial precarity among poor, working-class, and non-White communities, now endangers the lives of older adults who cannot avoid contact with younger household members. And those without family have always been at special risk for health issues and premature mortality, and this is likely heightened by COVID-19.

As an important note, we began this project in Spring 2020, early during the COVID-19 pandemic, and edited this manuscript in Fall 2020. This means that many important studies about families and health inequalities during COVID-19 were not published in time for us to include within this discussion, and also that many of the empirical examples we do cite are based on preliminary data analysis. The preliminary research that has been done is impressive—and growing on a daily basis—but there is still more research to be done on how families influence our understanding the COVID-19 pandemic. We urge researchers in the months and years ahead to consider collecting data that focuses not only on individual health outcomes during the COVID-19 pandemic, but also that would allow for empirical analyses on how family structure, composition, and dynamics have shifted health disparities during the pandemic. Prior surveys on population health tend to neglect collecting information on the social and demographic characteristics of family members, whereas surveys on family life frequently have scarce indicators on health and health behaviors. Thus, we see a greater need for the collection of both types of information in the immediate future. Likewise, to better understand the pathways through which families shape health outcomes that we have outlined in this paper, the need for qualitative data based on interviews and observations with families is imperative as this provides needed insight into the processes and meanings of the pandemic at this family level (Fine & Abramson, 2020).

We believe that an essential area for future research will be to understand how COVID-19 is also shifting the structure, composition, and dynamics of families. We alluded to some of these behavioral changes throughout this article, for example how the pandemic will decrease the size of the family network through deaths, but response to the COVID-19 pandemic may also lead to positive changes within the family as well. For example, some families may encourage their members to return to school in order to secure stable employment after the pandemic is over. This shift in family investment strategies could positively impact how families respond to future crises. Here, we note that public policies are particularly important in shaping how families are impacted by the pandemic.

We conclude by noting that although our article suggests ways in which families are likely contributors to widening health disparities during the COVID-19 pandemic, the negative consequences of how families respond to this health emergency are not all inevitable. Rather than succumb to the isolation of physical distancing, we see how families have used technology to retain and possibly even strengthen ties despite distancing measures. In addition, COVID-19 has laid bare pre-existing racial inequalities in society, whereby Black and Latinx communities are disproportionally becoming ill, dying, or suffering from the economic fallout of the pandemic (Bowleg, 2020; Krieger, 2020). And yet, this too has struck a chord with many White families, who join the movement for racial justice for the first time. Broadly, the disruption of "normal life" prior to COVID-19 offers unique opportunities to imagine a different type of future, one where families—especially looking beyond the "traditional" family—may help mitigate the gap in health inequalities, rather than serve to widen them.

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Works Cited

- Balbo N, Billari F, & Melegaro A (2020, 4 6). "The strength of family ties and COVID-19." Context. https://contexts.org/blog/structural-shocks-and-extreme-exposures
- Berg-Weger M, & Morley JE (2020). Loneliness and social isolation in older adults during the Covid-19 pandemic: Implications for gerontological social work. Springer.
- Berger LM, & Carlson MJ (2020). Family policy and complex contemporary families: A decade in review and implications for the next decade of research and policy practice. Journal of Marriage and Family, 82(1), 478–507. 10.1111/jomf.12650
- Bettinger-Lopez C (2020, 5 13). A double pandemic: Domestic violence in the age of COVID-19. Council on Foreign Relations. https://www.cfr.org/in-brief/double-pandemic-domestic-violenceage-covid-19
- Bokun A, Himmelstern J, Jeong W, Meier A, Musick K, & Warren R (2020, 7 28). The unequal impact of COVID-19 on children's economic vulnerability. https://thesocietypages.org/ccf/2020/07/28/the-unequal-impact-of-covid-19-on-childrens-economic-vulnerability/
- Boserup B, McKenney M, & Elkbuli A (2020). Alarming trends in US domestic violence during the COVID-19 pandemic. The American Journal of Emergency Medicine. 10.1016/j.ajem.2020.04.077
- Bowleg L (2020). We're not all in this together: on COVID-19, intersectionality, and structural inequality. American Journal of Public Health, 110(7), 917. [PubMed: 32463703]

Broderick CB (1993). Understanding family process: Basics of family systems theory. Sage.

- Bronfenbrenner U (1986). Ecology of the family as a context for human development: Research perspectives. Developmental Psychology, 22(6), 723–742.
- Brown SM, Doom JR, Lechuga-Peña S, Watamura SE, & Koppels T (2020). Stress and parenting during the global COVID-19 pandemic. Child abuse & neglect, 104699. 10.1016/ j.chiabu.2020.104699 [PubMed: 32859394]
- Calarco JM, Meanwell E, Anderson E, & Knopf A (2020). "My husband thinks I'm crazy": COVID-19-related conflict in couples with young children. SocArXiv. 10 9. doi:10.31235/osf.io/ cpkj6
- Carr D (2018). The linked lives principle in life course studies: Classic approaches and contemporary advances. In Social networks and the life course (pp. 41–63). Springer. 10.1007/978-3-319-71544-5_3
- Cassino D, & Bessen-Cassino Y (2020). Of masks and men? Gender, sex and protective measures during COVID-19. Politics & Gender, OnlineFirst. 10.1017/S1743923X20000616
- Cherlin AJ, & Seltzer JA (2014). Family complexity, the family safety net, and public policy. The Annals of the American Academy of Political and Social Science, 654(1), 231–239. 10.1177/0002716214530854 [PubMed: 26478579]
- Choi KH (2020, 5 21). COVID-19 & parenting challenges. Psychology Today. https:// www.psychologytoday.com/ca/blog/social-fabric/202005/covid-19-parenting-challenges? fbclid=IwAR3kDmGvPYCdnQWZzDNvXCvNoidDBiDDc4hj0_eLYqEyzQjSBBz0B-ssZHI
- Christakis NA, & Fowler JH (2009). Connected: The surprising power of our social networks and how they shape our lives. Little, Brown Spark.
- Clark E, Fredricks K, Woc-Colburn L, Bottazzi ME, & Weatherhead J (2020). Disproportionate impact of the COVID-19 pandemic on immigrant communities in the United States. PLoS Neglected Tropical Diseases, 14(7), e0008484. [PubMed: 32658925]
- Cohen PN (2020a). July data show 2.7 million extra young adults living at home. 8 7. Family Inequality. https://familyinequality.wordpress.com/2020/08/16/july-data-show-2-7-million-extrayoung-adults-living-at-home/
- Cohen PN (2020b). Early pandemic demographic indicators. 9 12. Family Inequality. https:// familyinequality.wordpress.com/2020/09/12/early-pandemic-demographic-indicators/
- Cohen PN (2020c). The Family: Diversity, Inequality, and Social Change. 3rd Edition. New York: WW Norton and Company.
- Cohn DV, & Passel JS (2018). A record 64 million Americans live in multigenerational households. https://www.pewresearch.org/fact-tank/2018/04/05/a-record-64-million-americans-live-inmultigenerational-households/
- Collins C (2019). Making motherhood work: How women manage careers and caregiving. Princeton University Press.
- Collins C, Landivar LC, Ruppanner L, & Scarborough WJ (2020). COVID-19 and the gender gap in work hours. Gender, Work & Organization.
- Collins PH (1998). Intersections of race, class, gender, and nation: Some implications for Black family studies. Journal of Comparative Family Studies, 29(1), 27–36. 10.3138/jcfs.29.1.27
- Connley C (2020). More than 860,000 women dropped out of the labor force in September, according to new report. CNBC 10 2 https://www.cnbc.com/2020/10/02/865000-women-dropped-out-of-the-labor-force-in-september-2020.html
- Cuomo A [@NYGovCuomo]. (2020, 3 31). This virus is the great equalizer. Stay strong little brother. You are a sweet, beautiful guy and my best friend [Tweet]. Twitter. https://twitter.com/ NYGovCuomo/status/1245021319646904320
- Czeisler MÉ, Marynak K, Clarke KE, Salah Z, Shakya I, Thierry JM, Ali N, McMillan H, Wiley JF, Weaver MD and Czeisler CA, 2020. Delay or avoidance of medical care because of COVID-19– related concerns—United States, June 2020. Morbidity and Mortality Weekly Report, 69(36), 1250–1257. 10.15585/mmwr.mm6936a4 [PubMed: 32915166]
- Danziger S (2013). Evaluating the effects of the great recession. The Annals of the American Academy of Political and Social Science, 650(1), 6–24. 10.1177/0002716213500454

- Evandrou M, Falkingham J, Qin M, & Vlachantoni A (2020). Changing living arrangements, family dynamics and stress during lockdown: evidence from four birth cohorts in the UK. SocArXiv. 10.31235/osf.io/kv8dg
- Fine GA, & Abramson CM (2020). Ethnography in the time of Covid-19. Vectors and the vulnerable. Etnografia e ricerca qualitativa, 13(2), 165–174.
- Fish JN, McInroy LB, Paceley MS, Williams ND, Henderson S, Levine DS, & Edsall RN (2020). "I'm kinda stuck at home with unsupportive parents right now": LGBTQ youths' experiences with COVID-19 and the importance of online support. Journal of Adolescent Health, 67(3), 450–452. 10.1016/j.jadohealth.2020.06.002
- Friedman EM, & Mare RD (2014). The schooling of offspring and the survival of parents. Demography, 51(4), 1271–1293. 10.1007/s13524-014-0303-z [PubMed: 24917296]
- Glass J, Simon RW, & Andersson MA (2016). Parenthood and happiness: Effects of work-family reconciliation policies in 22 OECD countries. American journal of sociology, 122(3), 886–929. 10.1086/688892

Goldstein M (2020, 4 13). Will divorce rates spike after coronavirus? Boston Globe. https:// www.bostonglobe.com/2020/04/10/lifestyle/will-divorce-rates-spike-after-covid-19/

- Hamadani JD, Hasan MI, Baldi AJ, Hossain SJ, Shiraji S, Bhuiyan MSA, Mehrin SF, Fisher J, Tofail F, Tipu SMU, & Grantham-McGregor S (2020). Immediate impact of stay-at-home orders to control COVID-19 transmission on socioeconomic conditions, food insecurity, mental health, and intimate partner violence in Bangladeshi women and their families: An interrupted time series. The Lancet Global Health, 8(11), e1380–e1389. [PubMed: 32857955]
- Hayward MD and Gorman BK (2004). The long arm of childhood: The influence of early-life social conditions on men's mortality. Demography, 41(1): 87–107. [PubMed: 15074126]
- Herd P, & Moynihan DP (2019). Administrative burden: Policymaking by other means. Russell Sage Foundation.
- Hertz R, Mattes J, & Shook A (2020). When paid work invades the family: Single mothers in the COVID-19 pandemic. Journal of Family Issues, 0192513X20961420.
- Hooper MW, Nápoles AM, & Pérez-Stable EJ (2020). COVID-19 and racial/ethnic disparities. Jama. 10.1001/jama.2020.8598
- Hout M, Levanon A, & Cumberworth E (2011). Job loss and unemployment. The great recession, 59–81.
- Huang VS, Sutermaster S, Caplan Y, Kemp H, Schmutz D, & Sgaier SK (2020). Social distancing across vulnerability, race, politics, and employment: How different Americans changed behaviors before and after major COVID-19 policy announcements. medRxiv. 10.1101/2020.06.04.20119131
- Jiang N, & Kaushal N (2020). How children's education affects caregiving: Evidence from parent's last years of life. Economics & Human Biology, 100875. 10.1016/j.ehb.2020.100875 [PubMed: 32445917]
- Kilinenberg E (2013). Going solo: The extraordinary rise and surprising appeal of living alone. Penguin.
- Klein SL, Dhakal S, Ursin RL, Deshpande S, Sandberg K, & Mauvais-Jarvis F (2020). Biological sex impacts COVID-19 outcomes. PLoS pathogens, 16(6), e1008570. 10.1371/journal.ppat.1008570 [PubMed: 32569293]
- Kotecha RS (2020). Challenges posed by COVID-19 to children with cancer. The Lancet Oncology, 21(5), e235. 10.1016/S1470-2045(20)30205-9 [PubMed: 32220660]
- Krieger N (2020). ENOUGH: COVID-19, Structural Racism, Police Brutality, Plutocracy, Climate Change—and Time for Health Justice, Democratic Governance, and an Equitable, Sustainable Future. American Journal of Public Health, 110(11), 1620–1623. 10.2105/AJPH.2020.305886 [PubMed: 32816556]
- Laster Pirtle WN (2020). Racial capitalism: a fundamental cause of novel coronavirus (COVID-19) pandemic inequities in the United States. Health Education & Behavior, 1090198120922942. https://doi.org/https://doi.org/10.1177/1090198120922942
- Liu Y-L (2020, 6 4). Is COVID-19 changing our relationships? BBC. https://www.bbc.com/future/ article/20200601-how-is-covid-19-is-affecting-relationships

- Mare RD (2016). Educational homogamy in two gilded ages: Evidence from inter-generational social mobility data. The Annals of the American Academy of Political and Social Science, 663(1), 117– 139. https://doi.org/https://doi.org/10.1177%2F0002716215596967
- Martin R (2020, 6 9). Examining racial disparities observed during coronavirus pandemic. NPR. https://www.npr.org/2020/06/09/872711019/examining-racial-disparities-observed-duringcoronavirus-pandemic
- McFarland J, Hussar B, Zhang J, Wang X, Wang K, Hein S, Diliberti M, Cataldi EF, Mann FB, & Barmer A (2019). The Condition of Education 2019. NCES 2019-144. National Center for Education Statistics.
- McLanahan S, & Jacobsen W (2015). Diverging destinies revisited. In Families in an era of increasing inequality (pp. 3–23). Springer.
- Montez JK (2020). Examining Population Health Across US States Using Secondary Data, Logistic Regression, and Graphics. SAGE Publications Ltd.
- Neff LA, & Karney BR (2017). Acknowledging the elephant in the room: how stressful environmental contexts shape relationship dynamics. Current Opinion in Psychology, 13, 107–110. doi: 10.1016/ j.copsyc.2016.05.013 [PubMed: 27766285]
- Overall N, Chang V, Pietromonaco P, Low R, & Henderson AM (2020). Relationship functioning during COVID-19 quarantine. PsyArXiv. 8 9. doi:10.31234/osf.io/7cvdm.
- Park SS (2020). Caregivers' mental health and somatic symptoms during COVID-19. The Journals of Gerontology: Series B. 10.1093/geronb/gbaa121
- Pearce N, Lawlor DA, & Brickley EB (2020). Comparisons between countries are essential for the control of COVID-19. International Journal of Epidemiology. 10.1093/ije/dyaa108
- Phelan JC, Link BG, & Tehranifar P (2010). Social conditions as fundamental causes of health inequalities: theory, evidence, and policy implications. Journal of health and social behavior, 51(1_suppl), S28–S40. 10.1177/0022146510383498 [PubMed: 20943581]
- Pietromonaco PR, & Overall NC (2020). Applying relationship science to evaluate how the COVID-19 pandemic may impact couples' relationships. American Psychologist. Advance online publication. 10.1037/amp0000714
- Prickett KC, Fletcher M, & Chapple S (2020, 7, 3). The parenting myth revealed by lockdown. https:// www.newsroom.co.nz/ideasroom/the-parenting-myth-revealed-by-lockdown
- Prime H, Wade M, & Browne DT (2020). Risk and resilience in family well-being during the COVID-19 pandemic. American Psychologist, 75(5), 631–643. 10.1037/amp0000660
- Rabouin D (2020, 3 23). Americans' belief in "flattening the curve" increases with education. Axios. https://www.axios.com/flattening-the-curve-coronavirus-education-poll-b70a59db-7698-4207-a513-ff9be330971e.html
- Reeves RV, & Rothwell J (2020, 3 27). Class and COVID: How the less affluent face double risks. https://www.brookings.edu/blog/up-front/2020/03/27/class-and-covid-how-the-less-affluent-face-double-risks
- Rothwell J (2020, 6 1). The unequal distribution of economic damage from COVID-19. https:// news.gallup.com/opinion/gallup/311714/unequal-distribution-economic-damage-covid.aspx
- Russell LT, Coleman M, & Ganong L (2018). Conceptualizing family structure in a social determinants of health framework. Journal of Family Theory & Review, 10(4), 735–748. 10.1111/ jftr.12296
- Salerno JP, Williams ND, & Gattamorta KA (2020). LGBTQ populations: Psychologically vulnerable communities in the COVID-19 pandemic. Psychological Trauma: Theory, Research, Practice, and Policy, 12(S1), S239–S242. 10.1037/tra0000837
- Smith E & Reeves RV (2020). Students of color most likely to be learning online: Districts must work even harder on race equity. https://www.brookings.edu/blog/how-we-rise/2020/09/23/students-of-color-most-likely-to-be-learning-online-districts-must-work-even-harder-on-race-equity/
- Stafford K, & Fingerhut H (2020). Poll: Black Americans most likely to know a COVID-19 victim. AP News 6 15 https://apnews.com/article/52ed0842bd17102560e5d896be79d38c
- Stokes JE, & Patterson SE (2020). Intergenerational relationships, family caregiving policy, and COVID-19 in the United States. Journal of Aging & Social Policy, 1–9. 10.1080/08959420.2020.1770031

- Tebb S, & Jivanjee P (2000). Caregiver isolation: An ecological model. Journal of Gerontological Social Work, 34(2), 51–72. 10.1300/J083v34n02_06
- The Pew Research Center. (2015, 12 17). The American Family Today. https://www.pewsocialtrends.org/2015/12/17/1-the-american-family-today/
- Thomeer MB, Umberson D, & Williams K (2013). Women, stress, and health. In Women and health (pp. 685–695). Academic Press.
- Umberson D, Donnelly R, & Pollitt AM (2018). Marriage, social control, and health behavior: A dyadic analysis of same-sex and different-sex couples. Journal of health and social behavior, 59(3), 429–446. 10.1177/0022146518790560 [PubMed: 30052080]
- Umberson D, Olson JS, Crosnoe R, Liu H, Pudrovska T, & Donnelly R (2017). Death of family members as an overlooked source of racial disadvantage in the United States. Proceedings of the National Academy of Sciences, 114(5), 915–920.
- Umberson D, & Thomeer MB (2020). Family matters: Research on family ties and health, 2010-2020. Journal of Marriage and Family, 82(1). 10.1111/jomf.12640
- U.S. Bureau of Labor Statistics. 2020. Labor Force Statistics from the Current Population Survey. 8 20. https://data.bls.gov/timeseries/LNS14000000
- Van Bavel JJ, Baicker K, Boggio PS, Capraro V, Cichocka A, Cikara M, Crockett MJ, Crum AJ, Douglas KM, & Druckman JN (2020). Using social and behavioural science to support COVID-19 pandemic response. Nature Human Behaviour, 1–12. 10.1038/s41562-020-0884-z
- van Mulukom V, Muzzulini B, Rutjens BT, van Lissa CJ, & Farias M The Psychological Impact of Lockdown During the COVID-19 Pandemic: Exacerbating Factors and Mitigating Actions. https:// files.osf.io/v1/resources/fs2n9/providers/osfstorage/5f2970759c9094020948604b? action=download&direct&version=1
- Verdery AM, Smith-Greenaway E, Margolis R, & Daw J (2020). Tracking the reach of COVID-19 kin loss with a bereavement multiplier applied to the United States. PNAS, Online. 10.1073/ pnas.2007476117
- Vestal C Racism is a public health crisis, say cities and counties. Pew Stateline. 6 15, 2020. Available at: https://www.pewtrusts.org/en/research-and-analysis/blogs/stateline/2020/06/15/racism-is-apublic-health-crisis-say-cities-and-counties.
- Wan W (2020). Pandemic isolation has killed thousands of Alzheimer's patients while families watch from afar. Washington Post, 9 16. https://www.washingtonpost.com/health/2020/09/16/ coronavirus-dementia-alzheimers-deaths/?arc404=true
- Williams DT (2019). A call to focus on racial domination and oppression: a response to "racial and ethnic inequality in poverty and affluence, 1959–2015." Population Research and Policy Review, 38(5), 655–663. 10.1007/s11113-019-09538-x
- Williams JC (2020, 8 6). Real life horror stories from the world of pandemic motherhood. The New York Times, 23. https://www.nytimes.com/2020/08/06/opinion/mothers-discriminationcoronavirus.html
- Wrigley-Field E (2020). US Racial Inequality May Be as Deadly as COVID-19. Proceedings of the National Academy of Sciences. https://doi.org/https://osf.io/9csa6/
- Yahirun JJ, Sheehan CM, & Mossakowski KN (2020). Depression in later life: The role of adult children's college education for older parents' mental health in the United States. The Journals of Gerontology: Series B, 75(2), 389–402. 10.1093/geronb/gby135
- Yancy CW (2020). COVID-19 and African Americans. JAMA. 10.1001/jama.2020.6548
- Zhang J, Tian S, Lou J, & Chen Y (2020). Familial cluster of COVID-19 infection from an asymptomatic. Critical Care, 24, 1–3. 10.1186/s13054-020-2817-7 [PubMed: 31898531]