Rural Youth Visions of Healing and Recovery from the Covid-19 Pandemic: A YPAR study on Disaster Resilience

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Submitted in partial satisfaction of the requirements for the degree of

MASTER OF SCIENCE

in

Community Development

in the

OFFICE OF GRADUATE STUDIES

of the

UNIVERSITY OF CALIFORNIA

DAVIS

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2022

ABSTRACT

This project sought to understand the experiences of Latino/a/x youth (ages 10-25 years old) during the SARS-COVID-2 pandemic in three Californian agricultural communities. The perspectives of these youth are particularly important to record given that they live in communities disproportionately impacted by environmental injustice, inadequate housing, racism, and a digital divide. In addition, most residents in these communities are "essential workers" in temporary or seasonal jobs in agriculture or related industries. Due to the essential nature of the work in these areas, many families were exposed to Covid-19. While recognizing the many challenges these youth have encountered throughout the pandemic, the goal of this project was to understand how the youth experienced the pandemic, and what a youth-led vision for a just recovery would look like. To gather this data we conducted six focus groups on zoom. The research is grounded in Youth Participatory Action Research (YPAR) methods, and uses resilience theory to situate the findings within a broader conversation on disaster recovery. Our results showed that the youth were very concerned about the health of their families and communities throughout the pandemic, many of whom did get sick and did not have access to PPE or paid sick leave. The youth also experienced a lot of difficulty with the online learning format. However the youth also also spoke to the strong social networks they are a part of, and how they had been involved in various community recovery projects. This study revealed larger themes of structural inequality present in rural agricultural communities, and the impact this has had on youth during the pandemic. However, it also illustrated how youth take action in the face of compounding local and global problems, and build solidarity along the way.

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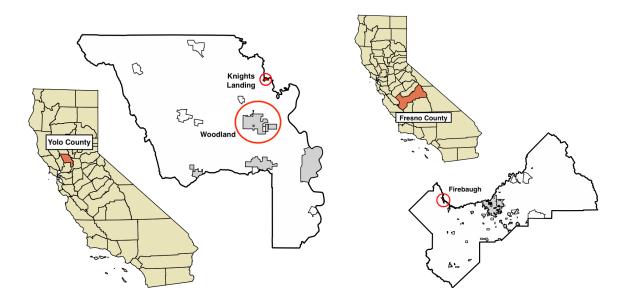
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I. INTRODUCTION

Recall back to March 2020, those first days and weeks of the COVID-19 pandemic, when news outlets kept referring to Covid as the "great equalizer". The prediction was that such a viral illness would impact everyone equally across gender, age, socioeconomic status, and race (Mein, 2020). Having lived through this pandemic for more than two years now, we have seen that this couldn't be further from the truth. All across the country, low income, so-called essential workers, have been on the front lines of Covid exposure. Essential workers go out everyday to work in farm fields, grocery stores, public transportation, sanitation, etc. while white collar workers safely quarantine in their homes. We have also seen how people of color make up the vast majority of these essential workers, bringing into stark awareness the income inequality and structural racism in the United States that disproportionately forces people of color to put their health at risk (Cole et al., 2020). We've seen divisions in the pandemics effect along age groups, most prominently perhaps were the isolation experienced by elders and youth, for whom social connections are of vital importance for mental health and well being. All this to say that through everyone's unique positionality this pandemic has taken on many faces, often compounding already existing inequalities. Given the unique experiences by race, class, age, and geographical location, for this project we were interested in hearing the stories of Latino/a/x youth from rural agricultural communities in Northern/Central California. The stories and lived experiences of these youth are often excluded from the public narrative and from policy proposals. Recognizing the structural and systemic challenges in communities such as these (which will be discussed more in depth in the next section), we were particularly interested in hearing the voices and wisdom of these rural youth.

Environmental Justice and Covid in Rural Agricultural Communities

The communities we worked with on this project, Knights Landing, Woodland, and Firebaugh, are all located in rural agricultural areas in California with histories of institutional racism, industrial agriculture, patterns of transnational migration, environmental exposures, and lack of access to safe drinking water. Despite the amount of wealth that is produced in these areas, communities are under-resourced by government agencies, requiring a tremendous amount of local community leadership to maintain services like volunteer fire departments, health clinics, and fundraiser supported libraries (Deeb-Sossa, 2019). Many of the families are Spanish speaking and Latino/a/x, living in mixed legal immigration status households. Most of the jobs available in these areas, such as temporary or seasonal jobs in agriculture or related industries, were classified as "essential work" during the pandemic. This meant that due to the essential nature of the work, many families were required to keep attending work in person and were disproportionately exposed to Covid-19. In addition, few were provided adequate personal protective equipment (PPE), hazard pay, or paid sick leave (Hampton, 2021). Before the pandemic, families and youth in these rural communities could rely on nearby cities for essential services such as grocery stores and hospitals, albeit a long drive from their homes. However once shelter in place began, access to essential services became an even greater burden due to decreased public transportation options and businesses having reduced hours or being closed. Through all the compounding challenges outlined above, the residents in these communities have been active and vocal about the ways in which places like theirs have been marginalized. In each one of these locales there is a long history of organizing with non-profits, universities, and local governments to improve living conditions.



Youth Health and Wellbeing in the Pandemic

To understand the pre-existing conditions in rural agricultural towns, and the added stressors of Covid, we focused on the lived experiences of youth in these communities during the pandemic. In California (and across most of the world) schools were shut down with the onset of the pandemic, forcing the majority of the youth to continue their education at home. This presented a long list of challenges for parents and youth alike, concerns that being able to attend school in person mitigated. For example, internet access for online learning suddenly became an issue in low income and rural communities; children needed adult supervision and guidance at home during the school day, in particular for families where the parents or guardians had to work outside the home; the absence of school lunches presented food insecurity concerns for families living in poverty. In addition there were challenges specific to Covid, like youth and their families fighting off the illness themselves or caring for others with Covid; or the collective grief, uncertainty, and anxiety that were commonplace amongst all the upheaval. Again it was clear that while everyone suffered during this time, some encountered more hardships than others.

Perhaps even more challenging than the chaos of online learning was the isolation youth experienced during crucial developmental stages when social relationships help form identity and a sense of belonging (Gadassi et. al, 2021). Isolation has been shown to cause anxiety and depression in youth, a trend which we have seen growing in the mental health and wellbeing of youth throughout the pandemic (Almeida et. al. 2021). To cope with mental health issues, health professionals often recommend physical exercise and play outdoors, but again these kinds of activities were explicitly discouraged during periods of the pandemic when transmission was highest. Furthermore, not all youth live close to safe outdoor spaces that are suitable for exercise and play, which is particularly true in these communities where they do not have access to parks or recreation centers. Youth missed out on rites of passage such as graduations, dances, school trips, and birthday parties, experiences which help to recognize their mental, emotional, and physical growth. This is a devastating picture here, but it serves to remember, grieve, and honor what youth all over the world have been through these past two years. Having lived through such unprecedented times, these youth also hold deep wisdom and knowledge about themselves, their families and their communities, making their input key to holistic recovery efforts.

In addition to Covid being mislabeled the great equalizer, another dominant narrative was that youth were not taking the pandemic seriously enough. Youth were often blamed and stigmatized in the media for not wearing masks, for not being careful around elders, and for continuing to see friends in person (Kreitz, Child & Adolescent Behavioral Health). But this too was a wholly inaccurate statement as many youth volunteered in food drives, took care of sick family members, organized Black Lives Matter marches, and participated in countless other public health and community building initiatives. The UNESCO My Covid-19 Story campaign (https://en.unesco.org/news/my-covid-19-story-launch-youth-storytelling-campaign) serves as an

online exhibit and testament to all the creative, transformative actions youth have taken during the crisis. Through written and video testimonies, youth all over the world shared their voices and different lived experiences during the pandemic, including their feelings, perceptions, and solutions to the crisis. Youth also collected data on, by and with young people around key issues arising from the pandemic. This type of social organizing and data collection has tremendous potential for affecting resilience and new forms of solidarity.

YPAR Partnerships

Taking inspiration from the UNESCO My Covid-19 Story, for this project we wanted to understand the experiences, and elevate the voices of rural youth who have been engaged with their communities throughout the pandemic. To carry this research forward, a group of researchers from the University of California, Davis, led by Dra. Natalia Deeb-Sossa, partnered with community health workers, or "promotoras de salud" in each location. Promotoras de salud (promotoras) are people who are either members of the community or have close ties to community members, and who work to address access to care issues by engaging with health care providers, social support services, and researchers. They provide culturally and linguistically appropriate education, advocacy, and outreach (Cramer et al., 2018). In addition to the promotora network, Dra. Deeb-Sossa had connections to local organizations like Empower Yolo, Puentes Network, and Sacramento Area Youth Speaks (SAYS) who served as collaborators and consultants on this project. Each of these partners have strong track records in YPAR and deeply rooted networks, which were crucial in this exclusively virtual project. These partnerships not only allowed us to carry out the project in the first place, but were instrumental for making sure the objectives of the project aligned with community values.

Together representatives from each of the aforementioned groups collaboratively developed three surveys, two spoken word poetry workshops, a photovoice activity, and a closing focus group. The kinds of questions and themes that emerged from the initial planning phase focused not solely on the injustices the youth were exposed to, but also on their personal strengths, their family and community bonds, and their visions for healing and recovery. Below are the research questions that we developed:

- What were the experiences of Latino/a/x youth from rural agricultural communities in California during the Covid-19 pandemic?
 - What was day to day life like for them?
 - How did they feel the impacts of the pandemic in their school, health, social relationships, and community engagement?
 - What challenges did they face? How did they overcome those challenges?
- What are visions of healing and recovery from the pandemic for Latino/a/x youth from rural agricultural communities?
 - Who in their community do they view as leaders and why?
 - What changes would they like to see in their communities in the future?
 - What role do they want to take in building community resilience?

With all of this rich data from so many different research tools, we decided as a team that this thesis would only address the focus group portion of the study, leaving the other results to future papers.

Resilience theory and YPAR (Aldrich, 2012; Zautra et. al, 2008; Cammarota and Ginwright, 2008) offer a theoretical base from which to understand the research that has come before on similar topics, with chapter two on theoretical perspectives going deeper into the

background and significance of these theories. The theoretical perspective is followed by chapter three, which is a brief description of my own positionality in conducting this kind of research and the path that led me here. After my positionality, chapter four discusses the research methods for the focus group, followed by the results in chapter five. Chapter six discusses how these findings relate to the theories, helping to situate the youths experiences within a broader conversation on youth resiliency. Chapter seven offers some recommendations for strengthening youth resilience initiatives, as well as rural recovery. The final chapter, chapter eight, provides a conclusion on what we learned from this research and where future research should focus.

Before jumping into the next chapter on theoretical perspectives, I'd like to provide a birds eye view for each community to help contextualize the histories and nuanced relationships to work, poverty, health, education, environmental quality, and linguistic and cultural background.

Community Demographics

Knights Landing is located on the ancestral land of the Patwin people, in what is today Yolo County, California. It is an unincorporated town, with all the challenges a lack of municipality or emergency services present. It is located on the Sacramento River, about 25 miles northwest of Sacramento in the northeastern portion of the county, covering a span of 321 acres. According to the 2020 census, the population is 1,117, with almost 70% identifying as Hispanic or Latino, and 61% of the population speaking Spanish as their primary language. The median household income in Knights Landing is \$37,545, which is just above the poverty line for a family of four in California. The most common occupations for residents are in transportation, (including truck and tractor operators), farming, fishing, and forestry. Youth under 18 make up 27.8% of the population, with 42% of them living in poverty (U.S. Census Bureau,

2020). According to CalEnviroScreen, Knights Landing is in the 80th percentile for drinking water contamination, the 90th percentile for pesticide exposure, and the 70th percentile for asthma and cardiovascular disease. Data on Covid is only available at the county level, but according to the CDC Covid tracker tool, community transmission is high, with nearly 20% of the population having a confirmed case since the start of the pandemic.

Woodland is a city in Yolo County, California, also on ancestral Patwin land. It is located approximately 15 miles northwest of Sacramento, and 11 miles southwest of Knights Landing. Interstate 5 runs right through the middle of the city. Woodland has a long agricultural history, beginning with the Patwin people who were the first farmers there. Today, Woodland is still surrounded by agricultural fields, with agricultural production grossing more than seven millions dollars annually (Yolo County Crop Report, 2015). According to the 2020 census, the population of Woodland is 61,032 people, nearly half of whom identify as Hispanic or Latino. Approximately 43% of the population speak Spanish at home. In Woodland the median household income is \$71,477, just shy of the California average income. The most common occupations in Woodland are in local, state, and federal government work, followed by occupations in the food industry (both production and preparation). Almost a quarter of Woodland's population are under 18, with 12.8% of those youth living in poverty. CalEnviroScreen shows that Woodland is in the 20th percentile for drinking water contamination, has varying levels of pesticide exposure from 10-90th percentile depending on the neighborhood, and has 20 hazardous waste facilities in the area. It is in the 70th percentile for both asthma and cardiovascular disease.

Firebaugh is located in Fresno County, on the west side of the San Joaquin River, in the San Joaquin Valley. Fresno county is the top agricultural producing county in California,

grossing \$7.9 billion dollars in 2020 (Fresno County Crop Report, 2020). Firebaugh is 38 miles west of the city of Fresno, and 170 miles southeast of Woodland and Knights Landing. This area is the traditional homeland of the Yokuts and Mono peoples. Today, Firebaugh has a population of 8,096 people, with 58% of the population identifying as Hispanic or Latino (Decennial Census, 2020). Just over 80% of the population speak a language other than English at home, with the vast majority speaking Spanish. The median household income is \$36,411, which is just slightly over the poverty line for a family of four in California. The most common jobs held by residents of Firebaugh are in farming, fishing, and forestry occupations, followed by occupations in material moving, and production. Youth under 18 make up 33% of the population, and 42% of them live in poverty. As far as environmental justice concerns, Firebaugh is above the 90th percentile for pesticide exposure, and in the 80th percentile for drinking water contamination (Calenviroscreen). There are two hazardous waste sites in the area that recycle, treat, store, and dispose of toxic chemicals. In terms of health issues, asthma rates are in the 80th percentile and cardiovascular disease is above the 90th percentile. Covid rates in Fresno County were high throughout the pandemic, with more than a quarter of the population contracting the virus.

With this understanding of the kinds of issues our communities were facing pre-covid, the following section will describe how theory can situate the pandemic within a broader conversation on disasters and disaster recovery.

II. THEORETICAL PERSPECTIVES

In this section I will be exploring the relevance of Resilience theory and Youth-Led Participatory Action (YPAR) theory to the multi-pronged issues presented by the Covid-19 pandemic in rural communities. These theories help to contextualize this (and other) disasters through historical race and class inequities, disenfranchisement of youth, community recovery

strategies, and youth organizing, all of which are themes present in the communities we worked with. This chapter provides a general overview of each theory and the disciplines they come from, followed by a third section on how these theories can be applied together to describe the particularities of youth resilience. From there the chapter goes on to describe the significance of YPAR and resilience theory in communities of color, with the subsequent section addressing the theories relevance to the pandemic. The next two sections go on to describe the role of government and civic engagement in the context of youth and resilience, with the following section offering a path through these issues by means of collective action and co-design. The chapter concludes with how these theories can be directly applied to the context of this project, and how they will help frame the results and discussion chapters.

Resilience Theory

The concept of resilience put simply is the capacity of something to return to equilibrium after displacement. While the term initially came from the fields of physics, math, and ecology (Bodin and Wiman, 2004; Standish et. al, 2014; Picket et. al, 2014), resilience can also be applied to development and community planning when considering how communities plan for, resist, absorb, and rapidly recover from disruptive events (Norris et. al, 2008). Resilience as a social science theory has gained traction over the last few decades as a way to describe recovery from natural disasters caused by climate change, but can also be used to describe how communities recover from pandemics and disease outbreaks (Robertson et. al, 2021). Research on resilience theories in the United States have been influenced by such events as Hurricane Andrew in 1992, the 2001 World Trade Center and Pentagon terrorist attacks, 2005 Hurricane Katrina, 2012 Superstorm Sandy, the Covid-19 Pandemic, and more (Koliou, 2020; McAllister, 2016).

As resilience relates to the scope of the planning field, the effects of a disaster can be felt at the individual, neighborhood, community, and societal level. Individuals may be dealing with post disaster mental health issues including bereavement, injury to self or family member, life threat, financial loss, and displacement (Sharifi, 2016). At the neighborhood, community, and society level the aftermath of a disaster may include compounding stressors such as health-related risks, disruptions to essential services, economic recessions, and civil unrest (Sharifi, 2016). Clearly disasters are stressful not only for individuals experiencing personal loss but also for the community-at-large. Furthermore, before a disaster occurs, adaptive capacities, or the ability to cope and transform in response to different types of changes, are different from one community to the next (Brown and Westaway, 2011). These adaptive capacities aren't explicitly emergency preparedness measures, but rather the social and economic fabric of the community (Sherrieb et. al, 2010). These capacities contribute to resilience which in turn influences population health and mental health outcomes. Conversely, communities with limited capacities may experience delayed recovery or prolonged instability.

Building from the assertion that adaptive capacities and resilience come from the social fabric of a community, studies have investigated how communities in the hardest-hit areas of earthquakes, tsunamis, and hurricanes reacted to these shocks. These studies found that social networks - the horizontal and vertical ties that connect us to others - are our most important defense against disasters (Aldrich, 2022). Contrary to many disaster mitigation tactics, physical infrastructure and possession of a disaster kit do not impact survivor rates as much as our connection to others. More people survive when a community is tight knit because neighbors serve as first responders: people check on elders and other disadvantaged folks to make sure they're okay (Aldrich, 2022). While the next section on Community Resilience will go further in

depth as to how social connections play a crucial role at the community level, it is important to understand that resilience is not an immutable characteristic that a community has or does not have, but rather it is a process that emerges from a sense of place, shared narratives, creativity and innovation, and malleable resources (Norris et. al, 2008).

Community Resilience

Resilience planning literature defines community as a location based entity that can be at the scale of a neighborhood or as large as a county, with members having shared identities and affiliations (Sharifi, 2016). While understanding that communities are composed of built, natural, social, and economic environments that influence each other, community resilience considers how the whole is more than the sum of its parts. This brings up an important distinction of community resilience, which is to say that resilient individuals on their own do not guarantee a resilient community (Norris et. al, 2008). More important than the shared geography or individual strengths then is the diverse group of individuals in a given area who are connected through socio economic relationships, common interests, and who engage in collective action (Alshehri et al., 2015). To go one layer deeper on resilience characteristics, Robertson identified seven factors present in highly resilient communities including social ties and connection; experience and shared memory; leadership, engagement and shared responsibility; collective thinking, openness to adapt and cultural change; inclusivity, equity and diversity; communications and coordination; and recognition of local needs (Robertson et. al, 2021). In practice this looks like the ability to organize and respond to collective threats, reduce risk and resource inequities, engage local people in mitigation or adaptation, and the flexibility to plan for not having a plan (Norris et. al, 2008, Buikstra et. al, 2010; Deeb-Sossa et. al, 2022). A secondary, though equally important consideration to resilience is sustainability, in this case the

ability to continue meaningful positive community engagement when faced with adversity (Zautra et. al, 2008, Bonanno, 2004). In the following sections I will describe the role a sense of community, sense of place, and communal narratives can play in pre and post disaster resilience scenarios.

Sense of Community and Place

A "sense of community" can be described as an attitude of bonding with other members of one's group or locale, involving feelings of trust, belonging, mutual concerns, and shared values (Perkins et al, 2002). It can also be characterized by a high concern for community issues, respect for and service to others, sense of connection, and fulfillment of needs, all of which are dimensions that comprise community capacity (Goodman et al, 1998). Research has also shown that these characteristics of bonding are an attribute of resilient communities (Landau and Saul 2004; Pfefferbaum et al. 2005). In one study on the aftermath of the 1923 earthquake and tsunami in Tokyo, Aldrich found that in more than 130 cities, towns and villages, municipalities that had higher levels of trust and interaction also had lower mortality levels. This consensus was reached after controlling for confounding factors such as exposure to the ocean, seawall height, tsunami height, voting patterns, demographics, and social capital (Aldrich, 2022). Based on interviews with survivors it was evident that communities with more ties, interaction and shared norms worked effectively to provide help to family and neighbors. This effective emergency response was particularly crucial in locations where only 40 minutes separated the earthquake and the arrival of the tsunami. During that small window, residents literally picked up and carried many elderly people out of at-risk, low-lying areas. In high-trust neighborhoods, people knocked on doors and escorted people out of harm's way (Aldrich, 2022). In another study on resilience in rural communities of Australia experiencing severe drought, the support provided by family,

friends, or networks based upon shared cultural, economic, or recreational interests, was strongly emphasized as a foundation of both community and individual resilience. (Buikstra et. al, 2010). The literature also suggests that resilient community structures that confer a "sense of community" build on peoples' hopes, optimism, purpose, positive and lasting social ties, and self and collective efficacy (Zautra et. al, 2008). All of these are critical for maintaining physical and mental health in the face of persistent adversities that a disaster can cause.

Place attachment is the intense emotional connection a person feels to their neighborhood or city, and can be separate from relationships to the people who live there (Altman and Low, 1992; Manzo and Perkins, 2006). Conversely, place attachment is also closely related to one's sense of community (Tartaglia, 2006). Brown and Perkins (1992) argued in their study on disruptions to place attachment following a disaster, that place attachments are integral to self-definitions and a sense of stability. Other studies have built on that assumption to study how place attachment often underlies citizens' efforts to revitalize a community, and therefore is essential for community resilience (Perkins et al. 2002). Community development projects that seek to initiate resilience often target geographical communities, and thus if the attachment to place is as strong as a sense of community there is a greater potential for long term resilience (Drury et al., 2019).

Communal Narratives

The third foundation of community resilience following a sense of community and place, is recognition of a communal narrative. An agreed upon communal narrative can give experiences shared meaning and purpose, which can increase a sense of place and connectedness. The capacity to deal with change is strengthened when communities can co-produce knowledge; when members can synthesize and weave a new narrative into their

previous identity as a community. This ability to understand the present with relation to the past is one way communities can process the chaos after a disaster (Armitage et al. 2011). Research has shown that communal narrative building can be bolstered by physical spaces for community groups to meet and share their experiences, memories and knowledge (Robertson et. al, 2021). This kind of group communication can also serve to identify different needs and resources within the community that can then be shared externally with health practitioners, researchers, and policymakers. When communities can identify their shared identity and collective narratives, the process of fostering long-term, sustainable resilience is set in motion (Robertson et. al, 2021). Themes of communal narratives, sense of community, and community organizing are also found in YPAR literature. So, now that a thorough description of resilience theory has been explored, the following section will describe how Participatory Action Research addresses these same themes of community building, with a special focus on youth as change makers.

Youth-Led Participatory Action Research

YPAR is a method to engage young people and adult allies in critical inquiry for issues related to their needs, desires, and real-life problems. This kind of research is unique in that it focuses on locally relevant topics while also incorporating cultural, linguistic, and political realities (London et. al, 2003; Burke et al., 2013). It is an iterative, cyclical research approach that starts with communities defining a problem they see occurring, creating a method to collect data on that issue, and then reflecting and translating the data into meaningful action (Salma and Giri, 2021). This method is especially preeminent for studies by, for, and with youth because topics of investigation are grounded in youths' lived experiences and concerns. According to Fox and several other leading researchers on YPAR, the method embodies four key commitments: (1) the recognition that youth carry knowledge and expertise about conditions of their everyday lives

shaped in contexts of oppression, colonization and resistance; (2) that youth and adults can collaborate together in serious inquiry into histories and present day conditions of injustice; (3) that research should be linked to organizing and action; (4) that research teams need to include youth leaders and adult allies. (Fox et. al, 2010; Anyon et. al, 2018; Camarrota and Ginwright, 2008). At its core, YPAR recognizes that the most structurally disenfranchised youth and their communities have, what Arjun Appadurai (2006) calls "a right to research" the conditions of their oppression and their resistance (Fine, 2009). Through this experience youth are given a platform to amplify their voices and leadership skills, while simultaneously participating in local decision making (Ginwright & Cammarota, 2002; Ginwright et al., 2006).

Youth are not alone in accomplishing these projects, rather YPAR is grounded in an epistemology of solidarity. Youth collaborate with adult allies such as community elders and local experts to cultivate research projects for social justice (Winn, 2016). It is also common for YPAR projects to have academic-community partnerships. Academic research institutions offer credibility and funding given their wide networks of private, foundation, and federal funding sources and also relationships with state, county, and local governments (Doll et al. 2012; Mendel et al. 2011; Wells et al. 2006). While projects are led by youth, they often still require institutional support to succeed, and research institutions can offer this kind of comprehensive and sustainable partnership (Payne, 2017).

Although many YPAR projects are supported by universities and institutions, YPAR theory is unlike many prominent research theories in that it did not originate from any one academic theorist, nor is it confined to the university setting. Participatory Action Research (PAR) initially was a tool informed by ethnographically based inquiry to challenge and transform power structures through social protest and action (Fals Borda & Rahman, 1991; London et. al,

2003). PAR began to gain notable momentum in the 1960's in the United States and Central and South America through the organizing efforts of youth, educators, women and men in prison, and other activists. These collective projects compiled enough evidence to challenge unfair labor and educational policies, mass incarceration, constraints on youth human rights, immigration violations, police brutality and discrimination against LGBTQ youth (Cammarota and Fine 2008; Fine, 2009). Prominent political leaders like Fidel Castro, Che Guevara, and Cesar Chavez took inspiration from PAR principles, as well as groups like the Black Panthers, the student groups demanding ethnic studies, and the AIDs ACT UP protests (Payne, 2017). This long, rich history of PAR speaks to the tremendous potential for social change that this method embodies, and the spirit of the people who bring this kind of work to life (Payne, 2017).

With a thorough background on each of these theories, the next question is how do they join in conversation with each other to bolster our understanding of pandemic recovery? The following section will describe prior literature on youth as agents of resilience, while also identifying ways in which this project pushes these theories in new directions.

Youth and Resilience

At first glance, much of the literature on youth resilience comes from psychology and sociology. Youth resilience from this lens emerges from everyday adaptive systems such as close relationships with adults and peers, nurturing schools and communities, opportunities for success and leadership, and beliefs in self. Core support systems such as these promote the capacity for self-regulation, learning, problem-solving, motivation to adapt, persistence, and hope (Masten, 2001). Protective factors for childhood outcomes from a community development perspective are neighborhood quality, neighborhood cohesion, youth community organizations, quality of school environment, and after-school environment (Brown and Westaway, 2011). Both the psychosocial

and built environment aspects of families, peers, schools, and communities all have a role in nurturing the growth, stability, and recovery for youth (Ungar et. al, 2020).

With the onset of a global pandemic, it was clear just how much children and adolescents rely on these interdependent systems, and how much their mental health suffered in their absence (Dvorsky et. al, 2021). While the literature discussed previously describes how youth develop resilience at an individual level thanks to support from family and communities, absent from disaster resilience literature is how youth contribute to the overall recovery of their communities in disaster scenarios. In an attempt to show the reader how youth are active change makers in recovery initiatives, the next three sections will describe in greater detail how youth contribute to community wide resilience in the context of disadvantaged communities facing overlapping adversities; in public health concerns and the pandemic; and through civic participation.

Contextualizing Resilience and YPAR in Disadvantaged Communities

As mentioned at the start of this chapter, different communities possess differing levels of resilience. And while resilience is primarily dependent on strong social ties, it is not entirely independent of the broader social-ecological landscape. Even before a disaster occurs, some communities face more barriers in terms of health, safety, and resilience than others. This disadvantage is due to histories of institutional and structural racism against African Americans, Native Americans, Latino/a/x and Chicano/a/x, and Asian and Pacific Islanders, manifested through the landscape. As Setten et. al argue, "Landscapes are at the heart of everyday exclusions and inclusions. By extension, landscape and justice are fundamentally and inextricably linked...Landscape speaks to injustice, particularly through social processes of contestation, oppression, and resistance." (2019). Inequitable development patterns, and the

disproportionate exposure of people of color to harmful environmental pollution and disamenities are primary issues at the heart of Environmental Justice studies.

The pandemic exposed many of these landscape and environmental injustices through the uneven vulnerability to Covid, with the most disadvantaged groups bearing the greatest health, social, and economic burden (Penkler et. al, 2020). These disadvantages also contributed to pre-existing conditions, which were unfairly framed and stigmatized as the result of individual lifestyle choices. This framing diverted attention from the deeper causes of susceptibility, particularly how socioeconomic inequalities shape health risks. In the United States, for example, rates of diabetes, heart disease, and asthma are highest among Indigenous, Latino/a/x, and Black people who are subject to economic, social, and environmental discrimination (Penkler et. al, 2020).

It would therefore be remiss to discuss community resilience without acknowledging the added complications that environmental and social injustices posit to resilience building. Disaster resilience theory has found that people living in poverty are especially vulnerable to vicious cycles of decline as a result of stressors, making it even more difficult to recover to pre-disaster levels of well-being, levels that were not desirable standards of living to begin with (Brown and Westaway, 2011). According to Bruneau et al. (2003), rapid recovery or restoration to pre-impact conditions is unlikely if pre-existing vulnerabilities are not remedied; rather, resilient recovery necessitates mitigation of social inequities to reduce future disaster vulnerabilities (Koliou, 2020). Despite this acknowledgement of systemic vulnerability to disasters, community resilience literature lacks much discussion on power relationships and structural issues as a major hindrance to recovery.

Where resilience theory is lacking in this critique, YPAR theory is grounded in the complexities of power relationships and structural issues present in disadvantaged communities. With such a storied history of YPAR organizing by communities of color, and the ability of YPAR to accurately represent the lived experiences of youth, this method of inquiry is an especially powerful tool for understanding the conditions of social inequity that youth of color confront. These youth negotiate the psychological stresses and political realities of racism, poverty, mass unemployment, food insecurity, and police brutality in their communities (Ginwright and James, 2002). The racialized policies and institutional practices that created these conditions in the first place further marginalize youth of color by blaming them for the root causes of their own problems, or cast them off as a threat to civil society (Fox et. al, 2010). However, with such generational trauma comes multi-generational wisdom and tactics of subversion. So, more than just using this methodology to state the problems and evidence for all the inequalities we already understand are pervasive in disadvantaged communities, YPAR provides an opportunity for youth of color to be civically engaged, develop critical consciousness, and learn to advocate for oppressed communities.

Using an asset based lens, YPAR relates stories of genuine love, humor, academic achievement, nontraditional families, positive relationships, and abundant social and cultural capital that is alive, well, and thriving in Black in and Brown communities (Duncan-Andrade, 2007; McDermott et. al, 2007). It creates a unique space for their multiethnic and multilingual backgrounds in the civic engagement process, in so doing humanizing their experiences and the policies that they are deeply impacted by (Desai, 2019; Winn, 2016). This approach is a model for building not only strong, resilient democratic processes, but also healthier communities and

supportive environments for youth (Ginwright and James, 2002). These are all themes which the following section on public health will address in more detail.

Resilience and YPAR Implications for Public Health Outcomes

Resilience theory is applicable to more than just the community development field, with promising implications for public health and the upstream determinants of health. The WHO has long argued that building resilient communities is more than just coping with the aftermath of a disruptive event, but in much the same vein as development, describes the importance of resilience in creating a web of protective factors which will aid people and communities to manage, adapt, and ultimately recover. Community resilience is even considered a public health priority for its focus on social connections, and the benefits this has on health and wellbeing, particularly during times of change (South et. al, 2020).

The Covid-19 pandemic demonstrated just how important community responses were in preventing the spread of the virus, despite the irony of not being able to be near anyone, which can weaken resilience. Through collective agreements to social distance, wear masks, and wash hands communities were able to not only protect themselves, but those most vulnerable with preexisting conditions (South et. al, 2020). The urgent nature of this public health emergency mobilized communities and schools to support youth, families, and workers by delivering meals to families, sewing facemasks, and facilitating neighborhood "birthday parades" (Dvorsky et. al, 2021). Another way to understand how resilience is cultivated and grown is in what Masten describes as "the everyday magic of the ordinary, normative human resources in... children, in their families and relationships, and in their communities" (Masten, 2001). Children, families, and communities demonstrated just how crucial a role the ordinary magic of the everyday has to play in the scientific and public health response to COVID-19. (Dvorsky et. al, 2021).

Role of Government and Civic Engagement

Several of the characteristics of community resilience I have outlined in previous sections solidly reside within the domains of concern for local, state, and federal policy-makers charged with protecting health in the after-math of major disasters (Norris et. al, 2008). However, relying on politicians and government agencies to develop disaster mitigation and preparedness plans continues to reproduce systems of inequalities where people of color, women, children, older folks, and people living in poverty face the greatest obstacles to recovery. After a disaster, these already vulnerable communities have the hardest time recovering in terms of government support and insurance payouts. As Julie Sze describes in Environmental Justice in a Moment of Danger, "Oftentimes, 'solutions' offered after disasters exacerbate and accelerate social and racial injustice, in the form of privatization of schools and housing and destruction of public pensions, what Naomi Klein calls disaster capitalism." (Sze, p. 20). This leads to some of the chief criticisms of resilience narratives: the glossing over of underlying causes of inequities, and the abdication of the government to remedy structural and systemic injustices (Robertson et. al, 2021).

Yet here is where the struggle lies, for scaled up health and resilience plans like those implemented during the pandemic require partnering with local, state, and federal policy makers. Much of the literature even describes how partnering with local governments can facilitate stronger resilience feedback loops. If communities can speak with a unified voice about their needs and visions, and translate them into policy recommendations, this can result in changes in the socioeconomic structure and resources of at-risk communities (Aldrich, 2022). In community resilience literature there are plenty of examples of programs where local residents work alongside civil society organizations to help strengthen connections, build networks of

reciprocity, and think about the needs of the area (Goodman et. al, 1998; Koliou et. al, 2020). Given their political and financial resources, governments remain an influential, if not complicated partner in community resilience building efforts.

So how does civic engagement look for youth who are the most disenfranchised members of society? First, it's important to consider how systemic change occurs at various scales and in multiple ways. Change even at the individual level can create systemic disruptions through a domino effect, knocking down larger policies, institutions, and systems of oppression (Goessling et. al, 2020). This understanding provides youth with the levers of change despite being grossly omitted from the democratic process. Recognizing the potential of multi-scalar change, YPAR draws on deep traditions within community organizing to uphold the rights of disenfranchised members of society, such as youth, to participate in public life and to contribute their knowledge to the public sphere (Fox et. al, 2010). Freire argues that this strengthens democracy for everyone; "The more people participate in the process of their own education, the more the people participate in the development of themselves. The more the people become themselves, the better the democracy. The less people are asked about what they want, about their expectations, the less democracy we have." (Horton and Freire, 1990). Therefore youth research and leadership opportunities mitigate adult-centric perspectives on youth and the broader community (Chan et al., 2003), and instead can positively inform policies that affect youth (Sprague Martinez et. al, 2020). Through mass mobilizations and small scale campaigns, youth movements over the past decade have successfully organized to defeat curfew laws, helped to write and pass policies protecting LGBTQ students in school, changed the curriculum in their schools to make it more reflective of diverse communities, and worked to stop dumping of waste and other forms of environmental racism (Ginwright and James, 2002). Instead of framing youth

as disconnected from political life, a broader definition of civic engagement recognizes their involvement in revitalizing democracy. This participation leads to better public policy, stronger organizations, more relevant services, and healthier communities. (Ginwright and James, 2002).

Windows of Opportunity, Self Organizing, and Co-Design

Change outside of government avenues is also viable and well demonstrated in recovery tactics. In disaster resilience literature, there's a term called "windows of opportunity", which describes the time frame immediately after a crisis has occurred, when all aspects of daily life have been upended. While this can be the most chaotic and dangerous period, it also presents opportunities to transform the status quo into social-ecological systems that sustain and nurture communities (Berkes and Ross, 2013). Such windows of opportunity create a space for coordinated social networks to innovate thinking and experimentation. This leads to more rapid and holistic responses to future crises that overwhelm ways of reasoning, living, and governing that previously had proven resilient (Adger et al. 2005). Informal networks are also more likely to enhance resilience by creating a multiplicity of responses to rapid change and uncertainty that can be applied flexibly to different contexts (Folke et al. 2005). Such informal networks in fact thrive outside of organizational hierarchies and regulatory structures that policymakers and governments rely on. Instead, solutions nimbly cross organizational and transdisciplinary borders while still initiating behavioral and policy changes (Goldstein, 2008).

How then can windows of opportunity be harnessed by youth organizers? Co-design speaks to the vital themes of agency and collective action that youth possess, which in turn generate community level resilience (Goldstein 2008; Brown and Westaway 2011). Co-design is a dynamic process in which the public can bring their own particular knowledge and designing capacity to an issue. This approach is particularly important for addressing problems that are not

dealt with by the market or the state, and where the people involved have been marginalized economically or politically. A well executed and fully realized form of co-design can also be understood as landscape democracy. As Setten argues, "Landscape democracy is a bottom up approach to political representation where individuals govern and fashion themselves into subjects on the material and representation basis of landscapes. Landscape participation is a notion of social justice through the reinforcement of legitimacy, cooperation, trust, and information exchange." (Setten et. al, 2019).

In practice landscape democracy means reaching decisions about the public landscape through discursive and dialogic processes. It requires an open mindset, active listening, collaboration, and conflict management. Ideally these kinds of projects will not only be more sustainable to youth and community needs, but can also promote social innovation and change. Negotiating different ideas, values, and needs can be an extremely challenging feat in this open-ended design process, but what makes it such a powerful tool for justice and resilience is a "fundamental belief in the goodness of the human individual and the ability of individuals who come together to make decisions in choosing the right option for the communal weal." (Roe, 2018). Ultimately, resilience co-design has the potential to launch a just transition to a world in which youth, disadvantaged communities, people of color, women, older folks, disabled folks, and people living in poverty do not have to perpetually rely on their own wells of resilience to survive and thrive.

Synthesis

With this thorough theoretical foundation on the convergence of resilience theory and YPAR, there are plenty of studies we can pull from to understand facets of our communities in this conversation. Through all the studies described above, we can explore community resilience

networks and communal narratives at play during Covid, and we can explore youth leadership and creativity. We can also apply concepts from the literature on civic engagement and self organizing throughout the pandemic. However, what this research offers in return to these theories, is an analysis of the unique challenges of a viral disaster, in a field that more commonly looks at natural disasters. It also offers an insight to rural agricultural community recovery, which has not been explicitly addressed in prior resilience or YPAR studies. Finally, the biggest contribution this project offers to the literature is the role of youth in disaster recovery initiatives, and how they contribute to long term resilience and sustainability. In the following section I will describe how my journey led me to ask these kinds of questions, and how I see the reverberating impact of projects such as these.

III. POSITIONALITY

The framing of this research and the theories I am drawing from are not independent of who I am as a student, researcher, academic, or activist. As a white woman in her late twenties from a middle class suburban background, on the surface it may seem that I do not have much in common with the struggles of rural Latino/a/x youth. But throughout this project I have reflected on my academic and professional journey, and have realized that my arrival at this project shows a fairly consistent path leading to exactly this kind of work.

I came to grad school after having worked in a nonprofit immigration law office, working mostly with unaccompanied minors. My weekly tasks included facilitating legal orientations for minors, going to immigration court with youth who were scheduled for hearings, and referring their cases to local lawyers. This was during the Trump administration, when the immigration system was being dismantled daily to strip the rights of immigrant youth and their families.

Many of the youth I worked with had been detained at the border for months, and when they

were finally released to their parents, an aunt or an uncle, a sibling, a distant cousin, they immediately had to enroll in school and find a lawyer. Failure to meet these requirements within a brief window of time meant the possibility of deportation. Seeing the inner workings of the immigration system was infuriating, and the only way to fight back for the rights of these youth was to use the same tools and rules that the system provided. Tools and rules that, at that time, were explicitly designed to degrade the rights of youth. Audre Lorde's words ran through my mind daily: "the master's tools will never dismantle the master's house" (Lorde, 1984). Clearly the youth were given very little agency, and in reality the immigration process felt directly harmful to their mental health and wellbeing. Hungry for the kind of work that could transform these oppressive, racist systems, I began working in public health research.

My main subject area as a research assistant was in reproductive health. Through this work I had the opportunity to collaborate with fairly radical abortion networks in Central and South America who were providing people with abortion medication, and accompanying them throughout the process, almost like a doula. These networks formed because the health system was denying pregnant people the services they needed, and in some places even penalizing them. To work around this punitive system, communities organized locally and transnationally to gather information on safe abortions, and made sure it was available and affordable to the people who needed it. The kind of work these networks were championing changed my whole understanding of care and justice for disadvantaged communities, provided by and for the communities themselves.

Through this work I was also introduced to the promotora de salud (promotora) or community health worker model of research. This is an approach that's very common in YPAR and other community research methodologies, where promotoras are a member of the

community, and are already working to address barriers to health care by facilitating engagement with health care providers and social support services. Promotoras help form a strong research team, and provide a channel of communication between community members and researchers. In my experience, promotoras hold some of the most insightful observations of how the system harms communities, and some of the most emancipatory solutions.

While youth immigration and reproductive health might sound like divergent issues from each other, this project is emblematic of the connections that do exist. Through my prior work experiences and now in this project, I see how youth are incredibly strong, devoted members of their families and communities, how they are discriminated against, and yet they have this deep sense of justice and transformative change for the things adults accept as inevitable. I also see how community activism can have very tangible public health outcomes that come from a sense of connection and collective wellbeing. I see these strands as going beyond just resilience, or bouncing back to business as usual, but building resistance to the systems that caused harm in the first place.

IV. METHODS

In the initial planning phase of this research, our UC Davis research team- Dra. Natalia Deeb-Sossa, Dra. Skye Kelty, and I- met bi-weekly to plan the curriculum and goals of this research with our team of promotores/as, youth promotores/as, and representatives from partner agencies SAYS, Puentes Network, and Empower Yolo. After these initial meetings in the summer of 2021, the research team developed research tools that would gather the information we had agreed in the meetings was pertinent to this project. Through an interactive and iterative YPAR process, both the promotores/as and partner agencies were asked to review and provide feedback on the research tools that were developed. After incorporating their feedback into the

research design, the final research tools included three surveys, two spoken word poetry workshops by Sacramento Area Youth Speaks (SAYS), a photovoice activity, a closing focus group, and an online exhibition of the artwork and stories we collected through the project curated by the youth themselves. Once we all established a timeline that would work for carrying out the project, the team of promotores/as began recruiting youth locally. For the youth that agreed to join the project, we had them and their parents sign IRB consent forms to participate.

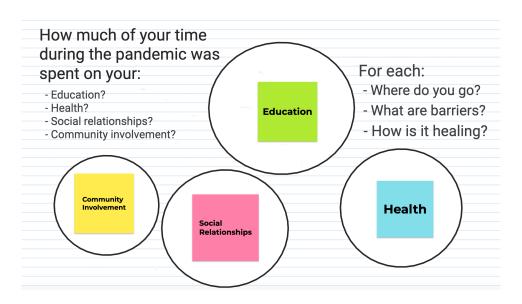
All of the organizing and planning that I described above presented research challenges in the context of a global pandemic. Deadlines were pushed back due to participants getting sick with Covid, soliciting feedback through email sometimes took weeks, and the face to face interactions that build trust and collaboration were not possible. We made the most out of the technology we had, to substitute for what would have usually been done in person. Even with all of these challenges, engagement with promotoras and community members remained strong throughout with weekly emails, phone calls, and bi-weekly zoom meetings. The strength of this engagement can also be attributed to past relationships and collaborations between our partners and Dra. Deeb-Sossa, which helped mitigate the challenges of virtual interactions.

While there were other elements to this research project, such as the surveys, poetry workshops, and photovoice, those results were not analyzed in this paper. As a team we decided that given the wealth of information gathered, those results would be discussed in subsequent papers. With this in mind, and considering the scope of this thesis, I led the process of designing, facilitating, and analyzing the focus group portion of the research project. The focus group pulled activities and inspiration from the Community Futures Community Lore handbook (https://ypar.cfcl.ucdavis.edu/), which is a free online resource to support YPAR. It was led by

Dr. Nancy Erbstein in collaboration with faculty-members, staff and students associated with the UC Davis Center for Regional Change and School of Education.

The focus group activities included:

• A time mapping activity on jamboard where youth were asked how much of their time was devoted to education, social relationships, community involvement, and health throughout the pandemic. They were also asked how time and energy committed to these areas can help contribute to the recovery or healing from the pandemic. The purpose of this activity was to get the youth to reflect on how their daily lives had changed, and how recovery might look different in each area of their lives.

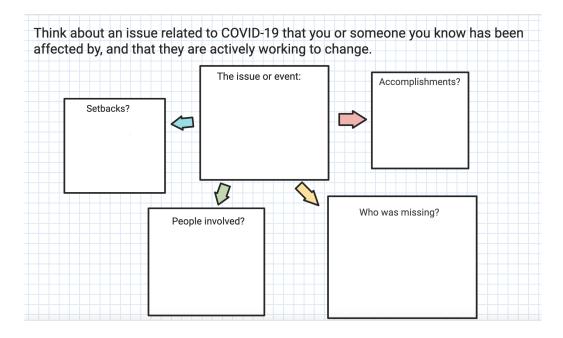


Time Mapping Template

A community activism network map on jamboard where youth were asked to think about
an issue related to COVID-19 that they or someone they know had been affected by.

They were then asked if anyone was actively working to change the issue, and if so who.

The purpose of this activity was to get the youth to identify community changemakers
and the levers of change they were utilizing.



Community Activism Network Map Template

• A final discussion where youth were asked to share a social change issue or movement that they are passionate about, and how the pandemic has impacted that social issue. They were then asked how they can take action to promote social change in their own communities. The purpose of this final discussion question was designed to encourage youth to view themselves as potential changemakers, and identify allies in their community that could support their goals.

In total six focus groups were conducted from February 2022 to March 20222. I conducted all of them over zoom over the course of two hours. This virtual setting presented some challenges, as many of the youth did not have reliable internet or computer access, nor had they used platforms like jamboard before. The promotoras were able to address these concerns by hosting focus groups at their house, with myself as the facilitator attending via zoom. Given this hybrid format some of the youth opted to make drawn diagrams instead of using jamboard, and some of their conversations were not recorded through zoom. Many of the youth also opted to have their

cameras off during the activities, making it difficult to gauge their reactions to conversation topics. For the dialogue that was legible from the focus groups, I later transcripted it in google docs.

The results of the focus group were interpreted using thematic analysis in a five-step process. First, I reviewed the data to become familiar with the kinds of issues the youth identified. The second step was to sort the data from the jamboards by question and topic into a google spreadsheet. From there I was able to identify a list of qualitative codes such as: Personal experiences with Covid; Covid in the community; Healthy behaviors; Mental health; PPE and Masks; Vaccine; School; Internet issues; Family; Friends; Social change issues; Past community organizing initiatives; Community changemakers; Recovery ideas; Optimism and hope. In the third step after the responses were coded, I consolidated codes by umbrella themes such as health, education, school, community, family, friends, and activism into a google word document. The fourth and fifth step of the thematic analysis I did simultaneously, which included writing up the results while also defining and titling the themes. The following section is the product of this thematic analysis.

V. RESULTS

The content of this section describes who was involved in the research, and their backgrounds. All of the names are pseudonyms to protect the participants' confidentiality. After getting to know the youth, the following section lays out some of the issues that were encountered in rural communities during Covid. The following sections on health, school, family and friends, and community engagement were then arranged by degree of interest and importance to the participants. For example, there were far more quotes related to health during

the pandemic than there were regarding community engagement. The chapter closes on community recovery efforts identified by the youth, and their sources of hope.

Getting to Know the Participants

In total we had four promotores/as participate in the project, with 2 female promotoras in Knights Landing, 1 female promotora in Woodland, and 1 male promotor in Firebaugh. Our team of 5 youth promotoras/es consisted of 2 female youth promotoras in Knights Landing, 2 male youth promotores in Woodland, and 1 male youth promotor in Firebaugh. In addition to our team of youth promotores/as, we had a total of 24 youth participants in the project. In terms of gender identify, 11 participants identified as female, 5 as male, 1 as nonbinary/ gender queer/ gender fluid, and 7 preferred not to answer. As far as racial identity of the participants, a total of 10 of identified as Latino/a/x or Hispanic, 2 as White, 2 as mixed race or other, and 10 preferred not to answer. The breakdown of the participants by age shows 9 of the participants were between the ages of 11-13, 9 were between the ages of 15-19, and 4 participants were 20 or over, and 2 preferred not to answer. The following tables show these demographics broken down according to place.

Team of Community Promotores/as					
Location	Promotores/as	Youth Promotores/as			
Knights Landing	2 (Female)	2 (Female)			
Woodland	1 (Female)	2 (Male)			
Firebaugh	1 (Male)	1 (Male)			
Total	5	5			

Participant Gender Identity						
Location	Male	Female	Nonbinary/ Gender Queer/ Gender Fluid	Prefer not to answer	Total	
Knights	2	8	1	2	13	
Woodland	2	0	0	1	3	
Firebaugh	1	3	0	4	8	
Total	5	11	1	7	24	

Participant Race					
Location	Latino/a/x or Hispanic	White	Multiracial/ Other	Prefer not to Answer	Total
Knights Landing	6	1	1	5	13
Woodland	0	1	1	1	3
Firebaugh	4	0	0	4	8
Total	10	2	2	10	24

Participant Age					
Location	11-13	15-19	20 and Over	Prefer not to answer	Total
Knights Landing	5	7	1	0	13
Woodland	2	1	0	0	3
Firebaugh	2	2	3	1	8
Total	9	10	4	1	24

To get to know the youth beyond their demographic information, they were asked to describe what makes them unique or important. Five participants described their social role as making them unique, two mentioned their role as a sister, one as a mom, one as a good friend and Luis, 16, from Firebaugh responded, "one thing I like about me is that I try to help my loved ones." Thirteen participants said a unique thing about them was their favorite hobby, including running, basketball, rock climbing, dancing, biking, being out in nature, and making art. One participant, Gabriela, 15, from Knights Landing, mentioned how she was unique because she

enjoys math class and most of her other classmates don't. One of the promotoras, Renata, from Knights Landing, described what makes her unique was her community role as a doula.

Another question that was posed to get to know the participants was what social issues they are most passionate about in their communities. Four participants said they were passionate about farmworker health and safety. As Nancy, 25, from Firebaugh explained "I really like to advocate for my community and where I come from. A social issue I advocate are migrant children and farm working families having access to resources." One youth said food access issues are particularly concerning for them, and another participant said they were passionate about access to higher education for Latinos. Two people said they were passionate about helping other people, like one of the promotores who said "I believe in change. I love to help people and achieve what they want. This is my passion. This is good and bad because sometimes I put people in front of me instead of myself." (Ernesto, Promotor, Firebaugh). Two participants, both mothers, described supporting and caring for their family and other families in the community as their passion.

Rural Youth and Covid-19

Discussions on what participants were passionate about transitioned into what challenges they saw as specific to their communities, especially in regard to the pandemic. Two participants described how hard it was to stay up to date on the latest Covid-19 precautions in the beginning, and how that information was not very accessible to the Spanish speakers in their communities. Yarissa, 24, explained that residents in Firebaugh had a hard time because "The CDC was always changing the guidelines, and I had to constantly go online and check how they had changed. It would be great if all that could be translated into Spanish so we could educate the Latinos in our community, so they have access to all that information and they know what to do. I know my dad

called up some friends and they said that they don't have anyone to distribute food to them, because everyone was infected so they didn't have any food. So those are the issues that we're facing right now in our community." Two participants remembered how difficult it was to obtain personal protection equipment in their communities. As one of these participants described the situation in Knights Landing, "The issue was really at the beginning of the pandemic, a lot of our immigrant, LatinX Community members were the essential workers, they were dying. They were not receiving information. They were having to go to work, and they were not being provided personal protection equipment." (Rosa, research team, UC Davis). This initial discussion on the pandemic diverged into separate conversations on how the pandemic impacted facets of their lives, including health, education, social relationships, and community engagement. The results from those conversations are illustrated below.

Reflections on Health and Mental Health During the Pandemic

Discussions on Covid-19 naturally gravitated towards the youth's experiences with health over the past two years. One youth remembered when they themself got very sick "I got COVID and was hospitalized in the PICU. I had to go to the doctors for check ups. After this I didn't think about my health that much." (Lucas, 12, Knights Landing). One of the promotoras, Liseth explained what it was like when everyone in Knights Landing got sick. She is also a family friend of Lucas, and remembered how sick his mom got. Liseth and Lucas were attending the focus group together in her living room.

"When people got sick it was kind of like a domino effect, like all the households getting sick at one time...It was just hard. We had family and friends come and bring us groceries to the door and just run away because everybody in the house was having the Covid. It was really hard for Lucas' family, because his mom got really sick, to the point

where she got put in the hospital and had to be intubated, because she was just having a really hard time breathing. So this is where he's coming from. And now everything is starting to feel back to normal and vaccines are available. Now he feels like, well there's this new covid strains coming into play, so it's kind of setting everything back. We thought we were out from under the water but people are still recovering. Like his mom, she was literally told that she's gonna have lung issues or it's gonna take like a year to be healthy because the damage that was done to them with the Covid was really bad. It's kind of like if she was smoking for many, many years. It's stressful for the children and families." (Liseth, Promotora, Knights Landing).

Another promotora mentioned the continuing challenges of health for those who have had Covid in Knights Landing. "The issue I continue to see is post Covid health, like loss of taste and smell, fatigue, mental health challenges. The long haulers. Some of those people that are close to my family are living with a chronic condition or disability, and coming to that understanding can be extremely challenging." (Renata, Promotora, Knights Landing). One youth summed up the trauma of the past two years by saying "After I wrote all this down I realized that we went through a lot during the pandemic." (Liliana, 11, Firebaugh).

Another common thread in the discussion on health was around masks and PPE. In these communities PPE was not adequately distributed to everyone. In Firebaugh one of the youth explained how "During the height of the pandemic, our community had little to no access to PPE and tests. Most of the members in our community did not have the means to go into other towns to buy PPE or take a test somewhere else. There was a shortage of PPE everywhere, and no available testing in town." (Yarissa, 24, Firebaugh). More than half of the participants mentioned how although they were afraid of getting Covid, wearing a mask and social distancing made

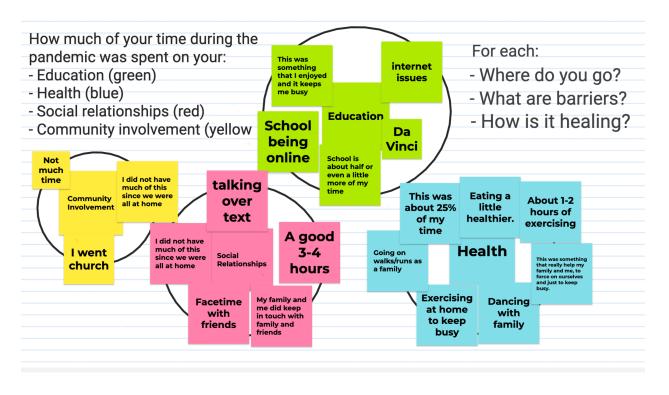
them feel safe. As one person described "Covid is a barrier to my health but face masks make me feel protected." (Silvia, 11, Knights Landing). Another participant explained what was needed to protect the community from contracting Covid, "spreading awareness of Covid credible information. Helping one another. Asking employers to provide proper PPE and supporting essential workers regardless of occupations." (Nancy, 25, Firebaugh).



Drawing by Alicia, 12, Knights Landing

Getting the vaccine was another common response for how participants think the community can be Covid safe. This was mentioned by ten participants, one of whom was Liliana, 11, from Firebaugh who said "I want to make the community safe. I want people to wear masks more often, and for more people to get vaccinated." Max, 12, from Woodland, echoed a similar thought when describing how, in Woodland, "new covids were a challenge, and people not vaccinating. It's healing now that we are getting stronger, and getting vaccines to stay safe from Covid." Like Max, four other participants mentioned that the lack of vaccination was a setback for community recovery. "A challenge is vaccination rates, many people are against it however it fills up hospital beds and becomes a community issue." (Ernesto, Promotor, Firebaugh).

While Covid was at the forefront of everyone's thoughts when discussing health, many youth also relayed how they took care of other aspects of their physical health during quarantine. Nine participants said physical exercise in the form of walking outside, running, and playing sports were ways they took care of themselves. Several youth mentioned how they would do these activities with other family members, like Gabriela, 15, from Knights Landing who explained how she was "Going on walks/runs as a family, dancing with family, exercising at home to keep busy. This was something that really helped my family and me, to force ourselves to keep busy."



Gabriela's Time Map on Jamboard

Participants also discussed how their mental health was impacted during the pandemic, and for many physical exercise was a way of relieving stress. "I do at home workouts, go for runs, play basketball, and go swimming. It's healing 'cause I could get stuff off my mind." (Mateo, 16, Knights Landing). Another participant mentioned how physical exercise and journaling helped

her process everything that was going on "I started exercising to destress and to be healthy. I eat healthier and am taking my health more seriously. Healing by journaling, reading and being expressive with family and friends." (Nancy, 25, Firebaugh). Yarissa, 24, Firebaugh, described a similar coping mechanism and how she is "healing from the past by acknowledging the trauma from the past years and moving forward towards a better future."

Challenges of Remote Learning

After all of the health concerns presented by the pandemic, the changes to education were cited as a major source of disruption to the youths daily lives. Youth described doing school from their rooms, like Sofia, 16, from Knights Landing who said "I did school in bed on my computer most of the time." Some participants described how isolating remote learning was, like Yarissa, 24, from Firebaugh who said "When the pandemic started I was still in college, and then I spent most of my time on a DIY desk I made in my parents' extra room. Some barriers were my mental health, since time didn't stop I still had to submit assignments. I was isolated so it's not like I could go to the library or go to Starbucks to finish my assignments." Yarissa also said that she was able to graduate college during the pandemic, and that amidst all of the upheaval, graduation was a healing experience for her.

The majority of the youth said that doing school from home was incredibly challenging due to internet issues, in addition to other distractions. "Something that made it hard was the internet. Also when there was a lot of noise in the background. Another thing is that my siblings were next to me on their chromebooks and that made loud noises." (Isaac, 14, Firebaugh).

Aracely, 11, from Firebaugh, and her mom talked about how she would get distracted when her mom started cooking, or when she did her Zumba classes. For the youth that lived further from town in particularly remote areas, the internet going out was a constant issue. Like Tori, 11, from

Knights Landing who explained "a barrier in my education is sometimes my computer will stop working and the internet will shut off." Not having reliable internet meant some of the youth were falling behind, and in some cases weren't able to attend class at all. Aracely and Isaac's mom said that when the school switched to online classes, they couldn't participate because of the internet in Firebaugh. The school called their mom saying they would get reported if the kids kept missing class. One promotora described what she heard from other community members in Knights Landing about these challenges:

"My sister, she has smaller children and when they went virtual she had to become a teacher. I was really wondering how other families do it? I know that there were a lot of other neighbors that were asking them "Hey, how do I even turn on my computer?"

Sometimes there's an idea that if you provide a hotspot that's automatically going to give them internet access, but the reality is that there's a very high learning curve for some of us. We had to get used to zoom and suddenly it became part of our life. But we're able to learn quickly with technology, but for other families, it is not. I think the schools now have sessions where they can teach the parents to turn on the computer. And oftentimes the kids are doing things themselves. Even when I grew up, I knew that I had to learn to do a lot of things, because my parents couldn't understand the language. So kids are learning how to find solutions on their own." (Renata, Promotora)



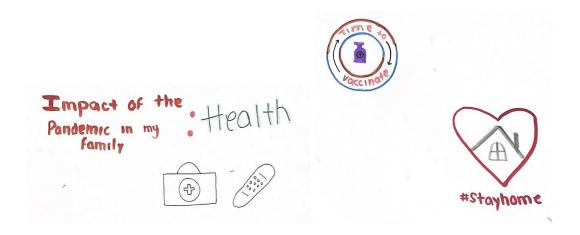
Drawing by Aracely, 11, Firebaugh

Going to school in person again was seen as a benefit to many of the youth, like Max, 12 who said "I hated school online at home. I enjoy going to school now. It is so much better now that school is in person and we do not have to wear masks anymore." And Lucas, 12, from Knights Landing who explained "School in person is healing because it gets me out of the house and back into the community." Two youths said that they receive a lot more assistance from teachers now that they are in person again, and that their attention span has improved. "I feel that we are healing because they give us more support and help me, and I understand things better because they gave us more attention." (Isaac, 14, Firebaugh). Liliana, 11, from Firebaugh echoed similar thoughts "My education is better because I can better listen to what the teacher is talking and you can have fun now because you're in real school."

The Centrality of Family Bonds and Friendship

Family and friendships were mentioned throughout the discussion as sources of concern, support, and healing. Five participants explained how worried they were about their family members getting sick from Covid, and three of these youths mentioned their moms in particular. As Lucia, 10, from Knights Landing remembered "My mama got Covid-19. We had to stay inside and could not see mama. I missed my mommy cooking. Tia was not there because she got sick too." Two other participants worried not so much for their own exposure, but passing it to others and not being able to care for their family members. "I am constantly scared that despite being vaccinated and following safety guidelines, I may get my loved ones sick. I am also worried that if I get sick, I may not be able to help them if they need help." (Renata, Promotora). JC, 18, from Knights Landing had a similar thought to Renata, "If I get covid, you know it's not really a big deal, but the thing is I don't want to pass it to my house, like the most important thing is not spreading it to anybody else." In terms of family as a source of support, another participant

explained how her family helped each other emotionally and became more connected during quarantine "I'm closer to my family. Bonding more as busy adults. Sharing with family ways to cope with stress." (Nancy, 25, Firebaugh). One participant, Aracely, 11, from Firebaugh, said that family support also came in the form of sending money and supplies when family members got Covid.



Drawings by Joana, 17, Knights Landing

Friendships were a lot harder to maintain during the pandemic, but youth also described seeing friends again in person as a form of healing and recovery. Juliana, 16, from Knights Landing, explained her social interactions during the pandemic. "This aspect of my life changed. I have met more people virtually. It has made me meet people differently, but typically never truly got to meet them:/" Five other youth talked about how they stayed in touch with friends through social media, texting and video chatting, and through online games, like Jose from Knights Landing who said "I talked to my friends through video games. It's a little way to escape and have fun." Tori, 11, from Knights Landing said that talking to her friends on the phone made her feel less alone. Three other youths said that they would socialize with others by playing outside or going to the park, however some of their friends were not allowed to join them. Max, 12, said that in Woodland "I would ride my scooter to the park but really did not get to talk to

anyone other than my family. Not everyone could play because they or their family was scared of Covid. Life is getting better and getting back to normal and I can play with everyone again and I have a social life once again." Several other youth mentioned that, like Max, being able to see other people out and about in the community has felt good. Yarissa, 24, from Firebaugh summed up the healing power of friendships by saying "It's healing to slowly rebuild relationships through social gatherings."

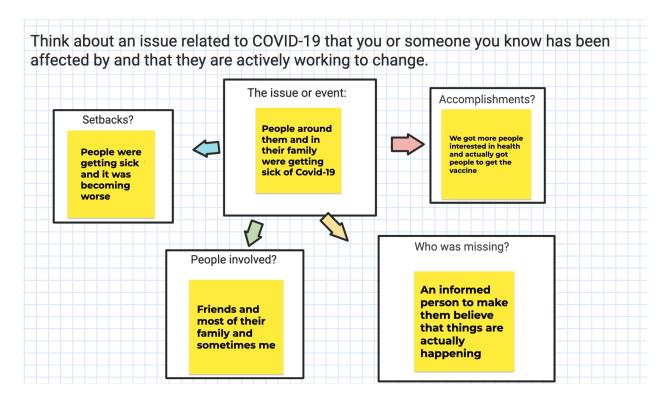
Networks of Community Support

While community engagement became extremely difficult to do safely during the pandemic, the networks of community support were evident from the participants' testimonies. The youth described different ways in which the community rallied around families who had Covid or needed PPE, and later on the vaccine. Nancy, 25, explained how people in her community took care of others in Firebaugh "We didn't have the proper resources available for people at the start and now we are trying to provide resources. We had friends share how to take care of each other, mask, disinfect/ sanitize, it affected everyone in different ways." Another participant explained how in Knights Landing a group of volunteers banded together to ensure no one was evicted from their homes if they couldn't make rent. "An accomplishment was that after two years of this work, we were able to keep 65 families housed. We had 20 volunteers involved, most of them were women who spoke Spanish. We were able to get the county involved, but sometimes bureaucracy came in the way of who was able to get some money or not." (Rosa, research team). People described other ways they stayed involved in the community, such as food drives (Gabriela, Knights Landing, and Luis, Firebaugh) keeping up with community news and volunteering to make it better (Liseth, Promotora), spending time learning about the community history and the people in it better (Juliana, 16, Knights Landing), and by attending

virtual meetings. Even if having the community meetings online was not an ideal way to organize, there was a sense of solidarity and shared frustration for the issues everyone was facing "(In the pandemic we did) virtual meetings, it is not the same! It is healing to find common ground and understand that others are just as 'tired' from the constant lemons thrown at us...we are tired of making lemonade!" (Renata, Promotora). This same participant explained how important it was for people to rely on each other for support and advice during the pandemic "I would say that really helping communities support each other and having families understand that they can call one another outside of regular eight to five hours or however the helpline hours are set, that they can depend on each other. And I think oftentimes we don't necessarily know that, especially if we don't see each other in person like we used to." (Renata, Promotora). While it seemed that some participants remained engaged with their communities, others didn't. Three youths said they weren't involved in any community efforts during the pandemic. Jose from Knights Landing said while he would usually go to church or other events, "when the pandemic hit this was most affected because it became a struggle to go out, it became a little easier to put this on the backburner."

After discussing the kinds of community organizing that took place during the pandemic, the youth were asked who was involved and who they viewed as changemakers in their communities. Three participants identified assembly members, council members, and other political figures (Yarissa from Firebaugh, Sarina, Gabriela, from Knights Landing). However it was much more common for the youth to view their own family members as community change makers. Ten participants mentioned their family in this way, like Tori, 11, from Knights Landing who called out her mom, grandma and grandpa. Emilio, 21, Firebaugh, said his whole family, and Mateo, 16, Knights Landing, identified himself, his family, and other community members

as changemakers. Three participants said that their parents' work in the community led them to also help out in their community. Joana, 17, and Lucia, 10, both from Knights Landing, both said that they help out on community projects with their moms, and Yarissa, 24, from Firebaugh said that "Before (the pandemic) my parents were really involved in the community, and I think this project has helped me to get more involved with the community." The youths also identified themselves as changemakers, like Sarina, 20, who said "I'd like to play a role in giving some time to volunteer programs." Four participants said that other members of the community are changemakers, as long as they are willing to donate their time and effort (Carlos, 19). Miguel, Firebaugh summed it up by saying "everyone as a whole is responsible for our community because we are what makes up the community."



Emilio's Activism Network Map

The youth also identified who was missing from community organizing over the past two years, people who they thought should have been playing a role in the pandemic relief efforts.

Two participants said they thought the schools should have been more supportive of the students during quarantine. Another participant recalled back to the lack of PPE for farm workers, saying "The employers never did anything, they should have been making sure the workers were safe, with PPE, hazard pay, health care access, etc." (Rosa, research team). One participant said that the medical system near Knights Landing did not understand the challenges that farmworkers were facing during the pandemic.

"A challenge was the medical system not yet knowing how to treat these things and sometimes not offering understanding. I go to a lot of virtual appointments with people, just to make sure that communication flows. And I have sat on appointments where the doctors have said things like, "Well, you know, you still have to go to work because I'm coming to work and I'm at risk." But it's a completely different situation when you have a doctor who is very educated, they know about PPE, they have access to these things, whereas if you tell that to people in the community it's extremely different. It also tarnishes the relationship between medical providers, which people should be able to trust." (Renata, Promotora).

After having identified the kinds of community organizing that took place during the pandemic, who was involved in those efforts and who was absent, the participants were then asked to envision what a just Covid-19 recovery would look like.

Visions of Community Recovery

Thoughts on the pandemic recovery differed by the history and location of the communities. Four youths from Knights Landing said that they could envision recovery from the pandemic if everyone wore masks. Beyond the pandemic, Silvia, 11, from Knights Landing said her vision of recovery means picking up trash and making sure the community is not

contaminated. Participants from Woodland and Knights Landing live much closer together so residents were able to talk about both from personal experiences. Chelsea, from Woodland, explained the issues of Knights Landing as an unincorporated town,

"Knights Landing is part of Yolo county but it seems that Knights Landing gets forgotten. They need more, they need a soccer field for the kids, a park. I personally would like to see a community health center brought in for the residents. They have the little clinics and the veterinary services that come in, which are needed. But they need a little bit more than just that. There's still a lot of resources that still need to be met for community members. I think if we all can work together to keep the pressure on the board of supervisors, and building planning, and keep having community focus groups. I would like to see more come out of Knights Landing." (Chelsea, Promotora).

Another promotora, Liseth, agreed with Chelsea, saying "We want more preventative care in our communities." JC echoed similar thoughts around community building, saying he wanted a park in the community, or something where everybody can come together. He remembered Christmas parades in Woodland, and wanted more events where the whole community could walk down mainstreet together. In Woodland and Knights Landing, they have organized these kinds of projects before, but have noticed a lack of support in the follow through. Chelsea explained, "We've had town halls where we brought in people from all over. There were people from the community, we had our county sheriff, the board members. But I feel like it's hard to keep the momentum going. There needs to be a plan set in place where we continue on, that there's someone who can be supportive of the follow through." (Chelsea, Promotora).

In Firebaugh, the youth viewed community recovery as listening to heath messages and cleaning up trash in the community (Isaac, 14, Firebaugh). Three youths said that they think

community recovery would be possible if more community members became involved (Miguel, Liliana, Isaac, all from Firebaugh). Three of the youth also expressed interest in civic engagement with local governments to remedy some of the challenges they see in Firebaugh. Nancy, 25, from Firebaugh was curious how they would even go about getting the government more involved and posed this question to the group: "I do have a question, for example, how we're provided with PPE, how can the community advocate for themselves? Or how do you bring awareness to people to like our mayor's or like our political leaders? That's something that I'm not aware of. How do you bring awareness to help distribute that back to us, into our community?" One of the promotoras in Knights Landing offered this in response to Nancy's question.

"Well, one thing is the way everything is divided, how help from the Federal Government comes down into the state, how it's channeled down into the counties, and then how the county decides to distribute that. It's very specific to the county, so a good place to start may be your county public health because that's where all the resources are being pulled and then they get distributed. So I would say you start by building a relationship with county public health. Some counties will have an ag representative. Oftentimes what I've noticed is that they don't even know how to distribute the resources, because the reality is that county public health is not really a boots on the ground organization. It's becoming one now because of Covid, but they're trying to learn how to get the resources out into the Community."

Ernesto shared that there is a history of youth organizing in Firebaugh, and there is also support and opportunities for the youth to keep fighting for the changes they want to see. "I was thinking a couple days ago, I was a leader, since I was maybe 10 years old or less. I started in the school

helping the other kids. I want the kids to be leaders in this community, and make changes in their life and other people's lives too. The youth here are part of a youth council in Firebaugh. I want them to speak in front of the city council to ask for the changes they want to see, because they are leaders already."

Wells of Hope

Given all of the reflections on trauma and stress from the past two years, we wanted to end the focus group on a more empowering, optimistic note. We asked the youth to tell us what gives them hope and strength to keep fighting for the things they care about. Five people said that their major source of hope was their family. Three participants said their friends give them hope, like JC, from Knights Landing, who shared what it's like to see friends again at school "I feel like we're slowly coming back together like how we used to be. I know It's gonna take a while but I'm happy, like an example with schools reopening, I felt like that was such a huge relief. I can be social again, I can go outside again. See my friends and teachers and all my peers. It felt really good. It gave me hope." Two youth said that setting goals helps them feel hopeful for the future. Five participants said that feeling loved and supported, and seeing other's experience those feelings as well, brought them hope. Sharing those feelings of happiness with other's was echoed by Renata, who said she is "Hopeful that we will have the opportunity to make more joyful (healthy) memories in the community." Another promotora said that getting to know all of the youth in this project made her hopeful for the future because "the voice of our youth matter" (Chelsea, Promotora).

VI. DISCUSSION

The results from this study showed evidence of resilience characteristics in these communities, while also exposing some notable gaps in how scholars can use the theory to

comprehend the complexities of deep injustices in rural agricultural areas. This discussion begins with how the youth in these communities exhibited resilience through strong social networks, communal narratives, and collective efficacy. It then discusses the role youth play as public health ambassadors, and how they can strengthen resilience through this avenue. The final section discusses ways in which resilience theory is inadequate in describing disaster recovery in disadvantaged communities, and how a critical rural and critical race lens can fill in those gaps.

As a brief recap to resilience theory, it is a term often applied to development and urban planning when considering how communities plan for, resist, absorb, and rapidly recover from disruptive events (Norris et. al, 2008). More than just a tool to understand the aftermath of a disaster in terms of health-related risks, disruptions to essential services, and economic recessions (Sharifi, 2016), resilience theory focuses on adaptive capacities, or the ability to cope and transform in response to different types of changes. These adaptive capacities are different from one community to the next (Brown and Westaway, 2011), and are influenced by the social and economic fabric of the community (Sherrieb et. al, 2010). Resilience is not an immutable characteristic that a community has or does not have, but rather it is a process that emerges from social ties and connection; experience and shared memory; leadership, engagement and shared responsibility; collective thinking, openness to adapt and cultural change; inclusivity, equity and diversity; communications and coordination; and recognition of local needs. In the following pages I will describe which adaptive capacities were evident in this research through the participants own testimonies.

The Social Wealth of Rural Youth

At the core of resilience studies is the idea that social networks and social capital are the most important defense against disasters (Aldrich, 2022). Community resilience theory defines

social capital as encompassing elements of social support, social participation, and community bonds (Norris et al. 2008). Inherent to these relationships is trust, reciprocity, and shared norms and values (Sherrieb et. al, 2010). Using these definitions of social capital, the youth appeared to have a wealth of supportive, healthy relationships. When participants were asked what made them unique or important, five youths described their social role. Two mentioned their role as a sister, one as a mom, and one as a good friend. Another youth, Luis, 16, from Firebaugh said "one thing I like about me is that I try to help my loved ones." These examples speak to the youths' sense of pride and belonging in their close relationships, but also to the responsibility and reciprocity they feel in supporting their loved ones. The social capital of these youth was also evident through community bonds, as four people said they were passionate about helping other people. One of the promotores said "I believe in change. I love to help people and achieve what they want. This is my passion." (Ernesto, Promotor). Two participants, both mothers, described supporting and caring for their family and other families in the community as their passion. Not only do these examples show the strength of the social support and community bonds present in these communities, but it also communicates that concern for others' wellbeing is a strongly held value. Furthermore, it is a norm to act on these values through collective efficacy, a point I will explore in more depth in section three.

The pandemic is exceptional from other disasters described in resilience theory for the fact that social isolation was required. This tested the strength of social networks precisely through their physical absence. Many of the youth described growing distant from their friends and feeling lonely, even while they tried to keep in touch over social media. As Max from Woodland explained "I would ride my scooter to the park but really did not get to talk to anyone other than my family. Not everyone could play because they or their family was scared of Covid.

Life is getting better and getting back to normal and I can play with everyone again and I have a social life once again." Even with social distancing throughout the pandemic, it was clear through these testimonies, and the sections that will follow, that social relationships were a major source of hope, support and strength throughout the pandemic. In resilience literature, this social net is described as a "protective factor", in that it enables people and communities to manage, adapt, and ultimately recover well. Indeed, literature demonstrates that being a member of multiple social networks or groups can have important effects for health and wellbeing, particularly during times of change (Buikstra et. al, 2010).

Shaping a Communal Narrative

Building off of established social networks, resilience theory posits that experience and shared memory after a disaster are the basis for forming an agreed upon communal narrative. This narrative gives experiences shared meaning and purpose, and in so doing reestablishes a sense of place and connectedness despite upheaval. When communities can co-produce knowledge and weave a new narrative into their previous identity as a community, their capacity to deal with change is strengthened. The focus group format for this project functioned as a virtual space for the youth to meet and share their experiences, memories and knowledge of the pandemic. One youth in Firebaugh described how she had already begun processing her experiences both internally and with her family "I am healing by journaling, reading and being expressive with family and friends." (Nancy, 25, Firebaugh). Another youth in Firebaugh expressed a similar sentiment, saying she was "healing from the past by acknowledging the trauma from the past years and moving forward towards a better future." (Yarissa, 24).

Understanding the present with relation to the past is one way communities can process the chaos after a disaster (Armitage et al. 2011), and both Yarissa and Nancy seemed to be coping

with the stress of the pandemic through their own narrative building. One youth summed up the trauma of the past two years by saying "After I wrote all this down I realized that we went through a lot during the pandemic." (Liliana, 11, Firebaugh). When youth can give voice to their own story, they can then begin to recognize the relationships between their families and communities stories of the pandemic.

Narrative building at the community level was also evident in Knights Landing, as one participant discussed how some members of the community met virtually during the pandemic. Even if having the community meetings online was not an ideal way to organize, there was a sense of solidarity and shared frustration for the issues everyone was facing "(In the pandemic we did) virtual meetings, it is not the same! It is healing to find common ground though." (Renata, Promotora). Research has shown that communal narrative building can be bolstered by physical spaces for community groups (Robertson et. al, 2021). So while gathering in person was unsafe during the pandemic, virtual meetings served as the next best solution. Whatever the setting, this kind of group communication can serve to identify different needs and resources within the community that can then be shared externally with health practitioners, government representatives, and policymakers. When communities can identify their shared needs through a communal narrative, the process of fostering long-term, sustainable resilience is set in motion (Robertson et. al, 2021).

Narrative building was evident not only at the personal level and community level as the previous two examples illustrated, but also across regions. Case in point were the memories of everyone contracting Covid at the same time. This happened in Knights Landing "When people got sick it was kind of like a domino effect, like all the households getting sick at one time...It was just hard. We had family and friends come and bring us groceries to the door and just run

away because everybody in the house was having the Covid." (Liseth, promotora). It also happened in Firebaugh, as Yarissa explained "My dad called up some friends and they said that they didn't have anyone to distribute food to them, because everyone was infected." Not only did everyone get sick at the same time, but being sick presented food access issues in both scenarios. In this case being able to reflect on what had happened, while also hearing that another community faced similar challenges enables the kind of group communication that can identify different needs and resources within and between communities. More than just a local issue, two of the youths, Nancy from Firebaugh, and Juliana from Knights Landing, recognized how persistent food access issues are for farm working families. Nancy explained this by saying, "I really like to advocate for my community and where I come from. A social issue I advocate are migrant children and farm working families having access to resources." In this example too, the youths were able to connect the present issues to ongoing challenges in their area. These narratives and shared experiences are the predecessors to the next section on collective efficacy, which describes the kinds of actions communities take after acknowledging their shared concerns. If communities can speak with a unified voice about their needs and visions, and translate them into policy recommendations, this can result in changes in the socioeconomic structure and resources of at-risk communities (Aldrich, 2022).

Collective Efficacy

In disaster resilience literature, collective efficacy is described as the capacity of community members to engage in projects of coordinated action despite constraining events and structures (Buikstra et. al, 2010). Underlying these efforts are a sense of concern for community issues, respect for and service to others, a sense of connection and needs fulfillment, and a sense of agency in responding to change (Brown and Westaway, 2011). In the focus groups, collective

efficacy was evident from the way the youth described how the community rallied around families who had Covid or needed PPE, and later on the vaccine. Nancy, 25, explained how in Firebaugh "We didn't have the proper resources available for people at the start and now we are trying to provide resources. We had friends share how to take care of each other, mask, disinfect/ sanitize, it affected everyone in different ways." This example shows the kind of needs recognition and organizing that was used to address Covid outbreaks in the community. Another participant, Rosa, explained how in Knights Landing a group of mostly women volunteers banded together to ensure no one was evicted from their homes if they couldn't make rent. Both of these examples illustrate how informal social networks enhanced protective factors against Covid; they did this by creating a multiplicity of responses to the rapid change of the pandemic. Resilience literature describes this kind of leadership, engagement, cooperation and shared responsibility as key factors in meaningful, sustainable community engagement when faced with adversity. While I shudder to think at the possibility of future disasters in these communities, the lessons learned through the pandemic may contribute to more rapid and holistic responses to future crises that overwhelm ways of reasoning, living, and governing that previously had proven resilient (Adger et al. 2005; Zautra et. al, 2008).

Knowing that so many different instances of collective action took place in these communities throughout the pandemic, the next question is who were they led by? The youth were asked this question in the focus group, and it was clear from their responses that they had seen family members involved in collective efficacy efforts, or even in some cases were themselves involved. The most notable example of this was how the youth identified their own family members as change makers during the pandemic for all the ways in which they took care of each other. Ten participants described their family in this way, like Tori, 11 who called out her

mom, grandma and grandpa as changemakers. Some of the youth named themselves as changemakers in their communities, like Joana, 17, and Lucia, 10, both from Knights Landing who said that they help out on community projects with their moms. Other youth identified members of the community as changemakers, "as long as they were willing to donate their time and effort" (Carlos, 19). Clearly the youth had a deep understanding of the concept "collective" in collective action, like Miguel, from Firebaugh, who answered "everyone as a whole is responsible for our community because we are what makes up the community." Based on the youth's responses we can infer that they understand the role of solidarity, and the power of drawing on their strengths in combination in responding to the Covid crises in their communities.

The third element of collective efficacy that emerged from the focus group was how positive affect strengthens capacity building. Building on peoples' hopes, optimism, and purpose is shown to be more effective for engagement, action, and ultimately resilience (Zautra et. al, 2008). All of these factors are critical for maintaining physical and mental health in the face of the persistent hardships that the pandemic caused. The youth shared what gave them hope throughout this period, with five people reporting that their major source of hope was their family. Three participants said their friends give them hope, like JC, from Knights Landing who shared what it's like to see friends again at school "I feel like we're slowly coming back together like how we used to be. I know It's gonna take a while but I'm happy, like an example with schools reopening, I felt like that was such a huge relief. I can be social again, I can go outside again. See my friends and teachers and all my peers. It felt really good. It gave me hope." Two youth said that setting goals helps them feel hopeful for the future. This optimism and purpose expressed by the youth is evidence of an asset based worldview, one which is essential for confronting such a formidable adversary such as the pandemic.

Youth as Public Health Ambassadors

This project illuminated aspects of resiliency that I did not encounter in resilience theory literature, the first of which is the role youth can play in the upstream determinants of health. Through the experiences the youth recounted in the focus groups, I found them to be exceptionally conscientious public health informants. More than half of the participants mentioned how although they were afraid of getting Covid, wearing a mask and social distancing made them feel safe. As one person described "Covid is a barrier to my health but face masks make me feel protected." (Silvia, 11, Knights Landing). Another participant explained what was needed to protect the community from contracting Covid, "spreading awareness of Covid credible information. Helping one another. Asking employers to provide proper PPE and supporting essential workers regardless of occupations." (Nancy, 25, Firebaugh). Through these examples we can see how concerned they were about the health of their families and communities, and how adhering to public health guidelines was seen as the best way forward. These sentiments carried over into their opinions on vaccination, as getting the vaccine was a common response for how participants think the community can be Covid safe. This was mentioned by ten participants, one of whom was Liliana, 11, from Firebaugh, who said she wanted the community to be safe by wearing masks and getting vaccinated. Max, 12, echoed a similar thought when describing how, in Woodland, "new covids were a challenge, and people not vaccinating. It's healing now that we are getting stronger, and getting vaccines to stay safe from Covid." The youth seem to be taking up the role of public health ambassadors in these instances, especially considering how they live in places where technology and internet access are limited, and where the majority of the population do not speak English as their primary language. Yarissa, 24, from Firebaugh described how "It would be great if all the CDC

guidelines could be translated into Spanish so we could educate the Latinos in our community, so they have access to all that information and they know what to do." The youths' knowledge on the challenges pertaining to their communities in regards to Covid, in addition to being bilingual, speaks to their cultural wealth and unique position in promoting public health among these populations.

Learning all of this from the youth, I encourage more resilience and public health research to study how youth are active disseminators of health information in their communities. Resilience theory discusses community organizing without really specifying what forms that may be in. While the role of promotoras and youth promotoras has more footing in public health, this model has much to offer resilience theory through preventative upstream determinants of health and community organizing around health issues. All of this is crucial in the covid response, but also in future disasters, because as one participant said "the reality is that county public health is not really a boots on the ground organization. It's becoming one now because of Covid, but they're trying to learn how to get the resources out into the Community." (Renata). This speaks directly to the strengths of a promotora, or youth promotora network, who have experiential knowledge but also longer term commitments to the community.

Critical Race and Rural Resilience

For all of resilience theory's asset based lens and recognition of community strength, its analysis of systemic injustice is severely lacking. The factors at play in our communities demonstrated how complicated a term like resilience can be when going back to a baseline of living before the pandemic is not a desirable goal. For these communities the normal never worked, they have always had difficulties, and they're constantly working to make things better. So whilst they are constantly fighting for basic services, being called "resilient" can feel like a

backhanded compliment from academics living comfortable lives. As Renata said, "we are tired' from the constant lemons thrown at us...we are tired of making lemonade!" The lemons Renata referred to were the difficulty of obtaining personal protection equipment in their communities, of everyone getting sick at once, and of not having adequate preventative care services. Yarissa echoed this by remembering "During the height of the pandemic, our community had little to no access to PPE and tests. Most of the members in our community did not have the means to go into other towns to buy PPE or take a test somewhere else." (Yarissa, 24, Firebaugh). Resilience theory does not offer an explanation for why low income, essential-workers of color were disproportionately exposed to Covid-19 all across the country, and how this has historically been the case in other US disasters. This blind spot demonstrates the theory's lack of critical race analysis in resilience outcomes.

In addition to racial inequities, resilience theory does not speak to the impact of disasters in urban versus rural contexts. A persistent issue in rural areas that is far less common in urban areas, is the internet going out. Like Tori, 11, Knights Landing who explained "a barrier in my education is sometimes my computer will stop working and the internet will shut off." Not having reliable internet meant some of the youth were falling behind, and in some cases weren't able to attend class at all. This lack of critical infrastructure, especially during a disaster such as the pandemic when life went "remote", poses a significant barrier to recovery and success. Not only was the infrastructure lacking in this regard, but there is also a gap in technology proficiency in these communities. Many had never used zoom, while still other's didn't know how to turn on their computers. As Renata explained "Just because you give someone a hotspot does not mean you've provided them with internet access." This infrastructure to do school and

work from home will likely be used in future disasters, i.e. extreme heat, smoke exposure, and therefore is necessary to address in recovery plans.

Many of the concerns around rural and racial inequities fall within the sphere of influence of the government. Given all we have learned from this disaster, the next logical question is how will governments better allocate resources now, and in future disasters knowing the inequities in distribution for this pandemic? Research on the disproportionate exposure of disadvantaged communities to Covid, including the results from this project, can help inform new policies that rather than rushing to rebuild the status quo of inequality, encourage deep structural transitions to prioritize health and well-being. This can only be done if the crises in health care, social, ecological, and economic policies laid bare by the pandemic are addressed (Penkler et. al, 2020). While the youth shared with us all the ways in which their communities are organizing around these overlapping crises, Chelsea referred to the need for more government support "there needs to be a plan set in place where we continue on, that there's someone who can be supportive of the follow through." This all speaks to the sustainability of resilience, or the capacity to continue forward in the face of adversity. For disadvantaged communities, it is not sustainable to be fighting multiple fronts of injustice simultaneously. Therefore resilience literature and policies need to be grounded in critical race, critical youth, and critical rural studies. This social justice orientation is essential for going beyond disaster resilience, to disaster resistance.

For the youth in this project, resistance meant not just forming a vision of a new normal, but challenging the language of resilience itself. The youth took exception to the "we're all in the same boat" mentality of resilience by starting a dialogue to process the trauma and inequity they have been subjected to. Voicing this deep recognition of inequities, and having it reach higher levels of governance, is essential to ensure that disaster policies in the future don't use

"back to the way it was before" as a baseline for recovery efforts. Resistance to resilience ideology recognizes that disadvantaged communities need a new normal that does not just reinforce inequities but challenges them, as well as meeting their needs to live healthy and well.

VII. RECOMMENDATIONS

From the youth's feedback throughout this project, I have developed three recommendations that I think would directly benefit these communities in the recovery of the Covid-19 pandemic, while also mitigating future disaster scenarios.

1. Given the youth's interest in health and organizing, and the lack of avenues for their voices to reach higher levels of governing, I recommend Youth Advisory Boards for local and state governments, particularly on long range disaster plans such as climate change and disease outbreaks. A youth advisory board would promote better communication and partnership between local representatives and the communities they speak for, while also ensuring that the youth are aware of who is in positions of power, what their role is and how to contact them. This exact concern was brought up in the focus group by Nancy in Firebaugh:

"I do have a question, for example, how we're provided with PPE, how can the community advocate for themselves? Or how do you bring awareness to people to like our mayor's or like our political leaders? That's something that I'm not aware of. How do you bring awareness to help distribute that back to us, into our community?"

Strengthening that constituency communication will enable local and regional resilience. Using the youth we worked with as a pilot youth advisory board, one of the first steps in initiating this relationship would be for them to meet with the Yolo county supervisor,

Angel Barajas, and the Fresno county supervisor, Nathan Magsig. Having connections to local representatives would provide them a platform to advocate for the things they identified in this project, like parks, a community center, and preventative services. It would also help the youth to navigate the political complexity of being an unincorporated town. Ideally, these youth advisory boards could meet semi-annually at conferences hosted at the state capital. These conferences would create a space for youth from disadvantaged communities to meet each other and discuss their shared concerns, while also exposing them to civic engagement at the state level.

- 2. My second recommendation stems from the participants' concerns over lack of access to technology and the internet, especially when they became lifelines in the Covid-19 pandemic. Computers became a stand in for school, work, food delivery services, community organizing, telehealth appointments, and social connection. The communities we worked with were not prepared for this infrastructural shift, making the adjustment to "remote" life even more difficult. I recommend the state and counties invest more internet infrastructure in rural, disadvantaged communities so that the digital divide does not create an even greater income and achievement gap. I think the remote lifestyle that emerged from this pandemic will continue to be utilized in response to disease outbreaks and climate change, and we cannot leave rural communities behind in this momentous shift.
- 3. My third and final recommendation stems from my contribution to resilience literature and disaster recovery policy, which is to encourage a stronger intersectionality lens. The results from this project demonstrated that resilience theory on its own is not adequate in describing disaster recovery for disadvantaged communities and communities of color,

nor for the challenges of rural vs urban communities, nor for youth. While not explored in this paper, a consideration of who does most of the disaster care in marginalized communities highlights the need to further interrogate how gender shapes resilience. This recognition of social injustices present before disaster occurs, I hope, will provide a more contextual implementation of disaster response and funding at the policy level.

VIII. CONCLUSION

This project began with the question: what were the experiences of rural Latino/a/x youth from agricultural communities throughout the Covid-19 pandemic? After recruiting 24 youth from Knights Landing, Woodland, and Firebaugh through a promotor/a and partner agency network, we hosted six online focus groups. Through these focus groups we heard from the youths' how difficult it was to attend school online, not only for the distraction and lack of teachers' attention, but also for the digital divide that exists in rural areas. They told us how worried they were about their families getting sick, about the lack of information or PPE for farmworkers in their communities, but also about how they took care of their mental and physical health throughout all the hardships. They shared how their family bonds were a source of support and hope, and how their friendships are mending now that more in person activities are allowed. They also shared all the ways in which they have seen or been a part of recovery efforts, and how they envision a Covid safe future where everyone is vaccinated, has PPE, and has access to all the resources they need to live well. Through YPAR and resilience theory we can better understand how these youth are leaders in small and big ways, and how those efforts can scale up to bigger systems change. Throughout the pandemic they did this by nurturing their social networks, recognizing communal narratives, and contributing to collective efficacy efforts. This research exposed how youth in rural areas step into roles as public health informants, and

understand the complexities of social inequality in the upstream determinants of health. Having lived through such unprecedented times, these youth also hold deep wisdom and knowledge about themselves, their families and their communities, making their input key to holistic recovery efforts. I encourage future research on these topics to explore how youth have been involved in other disaster recovery efforts around the world, and how that contributes to overall community resilience. A deeper analysis of disaster resilience for disadvantaged communities, communities of color, and rural communities is also warranted to better inform disaster recovery policies and emergency funding.

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