

Title: Exploring the Impact of Interpersonal Trust on Health Outcomes in Rapidly Gentrifying Neighborhoods in Portland, Oregon.

Abstract

Social determinants have been recognized to be significant factors contributing to the overall health outcomes of individuals. However, there is limited research on how these factors have directly impacted the mental and physical wellness of people in neighborhoods that are experiencing rapid gentrification. The objective of this study is to determine whether the present level of interpersonal trust between individuals in neighborhoods is associated with the mental and physical health outcomes among its residents. This quantitative study uses the Albina-Rockwood Neighborhood Promise Survey, which uses data from a random sample of families living in two rapidly gentrified neighborhoods in Portland, Oregon. The research will explore the relationship between neighborhoods using self-related mental and physical health questions. We hypothesize that interpersonal trust will positively be related to better overall health results. Residents with a higher degree of trust will have greater physical and mental health outcomes. We will also look at the impacts of trust on different demographics and across class strata. These findings suggest that future studies should examine how race and social class can affect the magnitude of trust in a neighborhood.

Keywords

Trust, social cohesion, neighborhood, gentrification, physical health, and mental wellness

Introduction

Neighborhood Trust, Social Cohesion, and Collective Efficacy

Trust, support, cohesion, safety, and civic participation are some of the quintessential mechanisms that individuals strongly consider when residing in an area (Baum, Ziersch, Shang, & Osborne, 2009). Trust is a belief in integrity and reliability that requires a sense of reciprocity between individuals; it is a characteristic that is associated with a high level of social cohesion, collective efficacy, and physical disorder in communities. Social cohesion pertains to the effectiveness and instrumental mental support in a neighborhood that includes the level of trust between individuals, the strength of social bonds, and how willing they are to reciprocate (Cramm & Nieboer, 2015). Collective efficacy and physical disorder, adjoined by the notion of mutual trust within a neighborhood, reflects the social interaction which results in the level of conformity and crime rates (Cohen, Finch, Bower, Sastry, 2005). When individuals decide to step outside of their homes, they are willing to explore and connect with their communities. This decision is done through a form of trust with the hope of being accepted by other residents in the neighborhood.

Collective efficacy is a combination of social control and social cohesion, reflecting the willingness of community members to look out for each other when there are problems that arise (Cohen et al., 2005). Studies have elucidated that a low level of social cohesion and belongingness in neighborhoods have contributed to the inability to achieve renewal in mutuality, trust, shared norms, and social bonds (Cramm et al., 2015; Henderson, Child, Moore, Moore, and Kaczynski, 2005).

An interest in the common good among neighborhoods positively reflects the strength of relationships, social participation, and collective attachment which is expected to enhance an individual's well-being, whereas, lack of cohesion can induce social disorder, conflict, and extreme inequality (Cramm et al., 2015). Many researchers have proposed that a high level of trust is associated with informal crime control, thus capturing the extent to which neighbors are more likely to engage in actions for the common good of the community (Bjornstrom, Ralston, & Kuhl, 2013).

Physical Disorder

Physical disorder, another prominent factor in the social process of communities, can be seen through incivilities such as vandalism, trash, drug sales, and other crimes (Polce, Hulbert, and Latkin, 2013; Hill, Ross, and Angel, 2005). Additionally, studies have indicated that a high level of disorder in neighborhoods is mediated by primary mistrust which gives rise to a sense of powerlessness, normlessness, and isolation; this idea generates a perception that invokes fear, anger, and distrust which causes individuals to isolate themselves from their communities in order to avoid ambient threats (Bjornstrom, Ralston, & Kuhl, 2013; Henderson et al., 2005; Ross et al., 2009). Scholars also argue that trust between strangers that coexist in the same space, at the same time, is a form of protection from adverse mechanisms of urbanism and physical disorder (Intravia, Stewart, Warren, and Wolff, 2016). An increased physical disorder can lead to isolation which can induce stress that can cause detrimental effects on mental health (Henderson et al., 2015). In addition to stress, isolation can prevent individuals from participating in outdoor activities which can hinder their physical health outcomes. In other words, the level of engagement, participation, and general dynamics in neighborhoods may help reduce possible physical disorders (Cohen et al., 2005). Because trust is an emergent feature of social processes, it is reasonable to suspect that trust is associated with the health outcomes which the many studies have discovered.

Socioeconomic Status and Gentrification

Gentrification occurs when low SES/working-class neighborhoods experience an influx of new residents from the high SES/middle-upper class (Mehdipanah, Marra, Melis, and Gelormino, 2017; Smith, Breakstone, Dean, and Thorpe, 2020). Although gentrification has promoted an increase in property values, reduction in crime rates, and improvements to

neighborhood environments, it has also disrupted social networks from residential displacement which has contributed to an increase in stress levels among residents who reside in the area (Smith et al., 2020). Gentrification has also endorsed racial discrimination in underserved, disadvantaged neighborhoods, which prevents them from acquiring equal opportunities. Although gentrification has detrimentally affected low-income neighborhoods, the denouements are more significant among Black and Hispanic/Latinx (Brown et al., 2007; Smith et al., 2020). The complexities inherent by relations linked to urban renewal have reintroduced historical trauma and structural racism among the Black, Hispanic/Latinx, and underserved communities (Mehdipanah et al., 2017; Smith et al., 2020). Because trauma and institutional racism has embedded themselves into gentrification, it has made trust a difficult concept to grasp for the underserved neighborhoods. Out of many opportunities that have been taken away from these individuals is equal access to healthcare (Mehdipanah et al., 2017). Health care is a salient element to one's overall health; therefore, the lack of protection for individual health can cause mistrust between them and those who reside in areas that have access to better care (Baum et al., 2009).

Heightened perceptions of socioeconomic discrimination have been considered as a form of stressor that contributes to physical and mental health outcomes. Neighborhoods where there is a high percentage of individuals who are in poverty, poorly educated, unemployed, receive public assistance and rent their home have experienced adverse health impacts. (Hill et al., 2005). Studies have also indicated that along with social determinants, racial minorities that reside in deprived neighborhoods and experience economical hardships are likely to be more susceptible to chronic diseases. (Brown, Ang, and Pebley, 2007; Cohen et al., 2005; Cramm et al., 2015). Accompanying gentrification has led to an increase in overpriced low-quality foods, inadequate housing, limited transportation, and toxic environments all of which may induce worse health denouements (Brown et al., 2007).

Mental and Physical Wellness

Extant work has proposed that social components such as trust and cohesion are directly associated with mental and physical health outcomes. (Bjornstrom, Ralston, & Kuhl, 2013; Baum et al., 2009). Previous studies have comprehensively examined the interrelation between trust and individuals' mental health; however, there is an insubstantial number of studies regarding physical health (Bjornstrom, Ralston, & Kuhl, 2013). Data has examined that neighborhood disorder is negatively associated with health; the indicators to this result are perceived cohesion and danger which are significant predictors of health. Perceived disorder, depression, and fearful anxiety have implications of heavy drinking and poor self-rated health (Bjornstrom, Ralston, & Kuhl, 2013). Therefore, supportive relationships in socially cohesive neighborhoods can positively affect the morbidity, mortality, and aging rate among individuals (Cramm et al., 2015).

Additionally, aggregated neighborhood-level socioeconomic status measures and individual-level perceptions of the neighborhood are linked to the overall health outcomes

(Latkin, German, and Curry, 2009). Studies have also found that there is an increase in health status in regard to the migration of higher-income individuals, whereas there is an increase in the worst health conditions for those low-income residents who are relocating (Smith et al., 2020). Moreover, research indicates that socioeconomic discrimination such as gentrification has led to a deterioration of mental health, high-stress levels, and an increase in the risk of injuries due to changes in physical and social environments which include violence and crime. (Mehdipanah et al., 2017). Obesity, increase in heart rate/blood pressure, cancer, asthma, diabetes, and cardiovascular diseases, and even premature mortality are some of the many diseases that have been seen to be associated with the lack of social cohesion and collective efficacy (Cohen et al., 2005; Henderson et al., 2016; Hill ., 2005).

The Relationship Between Gentrification, Trust, and Health Outcomes

Over the past decade, research has elucidated significant demographic shifts in Portland, Oregon. The prime focus of this study was to examine the relationship between demographic relocation and trust in neighborhoods on the northside of Portland such as the Albina and Rockwood neighborhood. Studies have stated that residents in both neighborhoods have been greatly impacted by gentrification (Labissiere, Shannahan, & Rynerson, 2020). The Albina neighborhood, which has been primarily dominated by the African-American community, has seen an increase in white Americans. Conversely, the Rockwood neighborhood, which has been predominantly white, has seen an inundation of immigrants and people of color. Further studies have proposed that African-American communities are suffering the most from displacement that is perpetuated by gentrification (Swart, 2018). In addition to the transitions of residency, the rise in businesses in the Albina neighborhood is making it financially impossible for working families to afford a livable condition in the area (Swart, 2018). Such burden has led to continual stress which will leave these individuals at risk of exposing themselves to possible physiological disorders (Latkin, et al., 2009).

Although gentrification has moved a striking amount of residents out of the Albina neighborhood, there is an equal amount of those that decided to stay in the area. For these residents, gentrification is more than just an assault towards the physical environment of their neighborhood, but an assault towards the social dynamics and established relationships that have coexisted throughout the years. Individuals that decided to remain in the Albina neighborhood, especially African-American families, were denied a multitude of resources. Similarly, families who have moved into the Rockwood neighborhood are experiencing the same social and economical adversities. The discrimination and bigotry that is bestowed upon the African-American community have created a sense of mistrust (Labissiere, Shannahan, & Rynerson, 2020). When mistrust propagates and neighborhood trust is being eradicated, resentment and suspicion emerge. These factors have transformed these individuals into strangers in their own neighborhoods and where they have called home for years. This is the absolute opposite of collective efficacy and social cohesion. The transition in identity and

relationships have caused trauma. Studies have determined that this type of trauma contributes to the deterioration of individuals' physical and mental health outcomes.

Current Study

As for this research, the results will be analyzed through the individual scope using a quantitative study supported by the Albina-Rockwood Promise Neighborhood Initiative (ARPNI.) The surveys were given out to both adults and children who live in the Albina/Rockwood neighborhood, located in North/Northeast Portland. The Albina and Rockwood neighborhoods are two non-contiguous communities in Multnomah County. In the past decade, the two neighborhoods have been greatly impacted by gentrification. The Albina neighborhood has been richly filled with the African-American culture; however, gentrification has recently superseded the area, bestowing economical struggles on African Americans who are left behind. Individuals who are left behind are residing in increasingly isolated pockets of poverty. On the other hand, the Rockwood neighborhood, where it is historically predominantly white, has experienced an influx of immigrants and people of color. Moreover, there is a significant difference in annual household income and family stability between the two neighborhoods. In the Albina neighborhood, approximately 40% of participants reported a household income of \$90,000 or more a year, juxtaposing only 3% in the Rockwood neighborhood (Labissiere, Shannahan, & Rynerson, 2020). Similarly, about 65% of Rockwood participant's annual household income is less than \$50,000 compared to just 39% in the Albina neighborhood (Labissiere, et al., 2020). Data from the survey statistically indicated that the economic variation in the Rockwood neighborhood is more diverse compared to the Albina neighborhood, where the differences in incomes are greater.

In this study, the interest is in how trust in neighborhoods affects the physical and mental wellness of individuals in low socio-economic communities, such as the Rockwood neighborhood, versus high socio-economic communities such as the Albina neighborhood. The hypothesis is that the level of trust and social cohesion is lower in the Rockwood neighborhood; therefore, residents in that neighborhood will have worse self-rated health outcomes. In today's society, social cohesion has never been more important; this is one of the prime elements that resonate with trust, safety, physical disorder, and possibly gentrification. As a matter of fact, these are key factors to instituting a robust public health infrastructure. By reducing physical disorders and enhancing social cohesion, it is the first important step to promoting a healthier community. It is crucial for individuals to be able to seek support when it comes to their mental and physical wellbeing; their neighborhood is what influences the outcome of their decisions.

Methods

Study Population and Design

As for this research, the results will be analyzed through the individual scope using a quantitative survey reported by Self Enhancement Inc. (SEI). In the Albina- Rockwood Promise

Neighborhood Initiative (ARPNI), SEI and its local partners, which include United Way of the Columbia-Willamette (UWCW), Albina Head Start (AHS), Immigrant and Refugee Community Organization (IRCO), Latino Network (LN), Metropolitan Family Service (MFS), and Native American Youth and Family Center (NAYA), are a part of a collective impact that aims to ameliorate the living conditions for families that reside in the underserved and under-resourced communities in Multnomah County, Portland, Oregon. They are determined to collectively move the needle on housing for families, dietary lifestyles among the youth, and better access to higher education.

This study was motivated by the ARPNI survey and its prime objectives. ARPNI attempts to illustrate a community that has been fragmented into two different neighborhoods. In the past decade, the Albina neighborhood has experienced rapid gentrification which has led to the displacement and separation of families of color. Additionally, there are indications that gentrification has produced a more deleterious effect on African/American and Hispanic families. Because these communities of color have been pushed out of the Albina neighborhood, they have migrated east into the Rockwood neighborhood. When comparing changes in social dynamics between the two neighborhoods, it helps optimize our knowledge of how detrimental gentrification is among communities of color. The communities of color in Multnomah County are severely suffering more comparing to other communities nationally.

The responses to the survey are intended to drive equity, provide additional cultural specifics and responsive services, and empower families of color. The ARPNI based their study on the Whole School Model, which includes the relationship model, culture of success, continuum of service, and comprehensiveness. Congruently, the purpose of this study is to help further understand how trust between neighbors can be employed as a tool to improve the overall mental and physical wellness of individuals with distinct racial backgrounds and different socioeconomic statuses. In this study, the main focus is to understand the impact of interpersonal trust and sense of safety physical and mental health wellness of individuals in the two neighborhoods.

The goal was to start with an accurate based estimate. An accurate based estimate will allow these organizations to envision where to start from and which direction to go towards. To avoid a biased study, the decision was to use a stratified random sample. By adhering to a random assignment, all residents will have an equal opportunity to participate in the study. Because of the equal chances and random selection, it helps increase the quality of the sample. This is useful for obtaining the based estimates for the health and education indicators which are the greatest concerns to the communities. A robust random sample will help provide an accurate estimate of the population.

As for the study, a list of families with children in the census tract was obtained via a commercial enterprise. Metro data was provided by the Population Research Center at Portland State University and the addresses of each parent in the census were collected from Portland Public School District and Reynolds School District. The three lists were combined to get the relevant number of parents and their households in the neighborhoods. A sample will be drawn

from the complete list. Residents that are selected to participate in the study will receive the survey via mail or email. Questions on the survey will pertain to living conditions, education, level of safety, and wellness statuses. The purpose of the survey is to identify an accurate based estimate. The survey was translated into 6 different languages; these languages were the ones recorded in the census. The results from this year's survey will be compared to last years' results to determine the changes in the percentage of food and the sense of safeness that has transpired in these neighborhoods. These organizations will continue to track the changes in estimate every year and use these changes to provide resources to help improve communities. A \$40 gift card will be handed out as an incentive to those who decide to take the survey.

Independent variable

The level of interpersonal trust between neighbors is the primary predictor of this study and is also the independent variable. Neighborhood trust was categorized in different variations including a high, medium, or low level of trust. To identify the different magnitude of interpersonal trust that exists between individuals in a neighborhood, participants had to indicate their level of agreement via questions from the California Health Interview Survey determining if they strongly agree, agree, disagree, strongly disagree, or don't know on questions such as "people in my neighborhood are willing to help each other" and "people in my neighborhood can be trusted." The responses will be compared to the responses to questions from the Interpersonal Support Evaluation List (ISEL) -- General Population (Cohen & Hoberman, 1983) where individuals had to identify whether it is definitely true (3), probably true (2), or probably false (1) and definitely false (0). These questions include "I often meet or talk with family or friends" and "If I were sick, I could easily find someone to help me with my daily chores." The presented questionnaire seeks to examine the level of trust present between neighbors and how these relationships vary depending on the neighborhood they reside in. A high score indicates higher levels of trust that exist between neighbors.

Dependent Variable

The variations of trust will be used to understand the different levels of mental and physical wellness. Therefore, mental and physical health outcomes are the dependent variables that will be used to understand the effect of trust. These questions can analyze the level of stress that is perceived by individuals residing in the Albina-Rockwood neighborhood. To measure the overall physical health conditions of these residents, participants will answer Self- Rated Health questions such as "would you say your health, in general, is excellent, very good, good, fair, or poor?" In previous longitudinal studies, there are suggestions that poorer self-rated health is associated with a higher mortality rate along with functional limitations (Brown et al., 2007). In addition to their overall physical health analysis, the questions retrieved from the Generalized Anxiety Disorder-2 and GAD-7 scale (Sapra, Bhandari, Sharma, Chanpura, & Lopp, 2020) will be used to examine the mental health outcomes. Participants will be asked to select not at all, several days, more than half the days, or nearly every day to "over the last 7 days, how often

have you been bothered by the following problems- feeling nervous, anxious, or on edge? Would you say not at all, several days, more than half the days, or nearly every day? Answers to these questions will be compared to individual's trust scores.

Analysis

Regression analysis will be used to understand the relationship between trust and health outcomes while controlling other confounding variables. In this study, confounding variables include gender, race, class, and neighborhood. A scale will be developed using the responses from the dependent and independent variable questions. From the scale, a Cronbach's alpha coefficient will be established to measure the reliability and significance of the scale. The goal of this analysis is to allow us to comprehend whether trust impacts the mental and physical health outcomes regardless of their environment, socio-economic status, or demographics.

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