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ABSTRACT: Although social disorganization theory was originally developed in the 1920s to explain juvenile delinquency, scholars have extended it to other forms of crime, making it one of the most widely cited theories of crime. However, previous research has failed to examine whether social disorganization theory can adequately predict white-collar crime, creating limited knowledge on the extent to which community-level characteristics may account for its prevalence. Thus, this study furthers extant literature by examining the link between indicators of social disorganization and four white-collar crimes (fraud, bribery, forgery, and embezzlement). Combining data from the National Incident-Based Reporting System (NIBRS) and the American Community Survey (ACS) for 3,144 counties across the United States, results show that (1) indicators of social disorganization are positively related to county-level counts of bribery, forgery, and embezzlement (but not fraud) and (2) poverty, which is one of the key indicators of social disorganization, surprisingly demonstrates an inverse relationship with all four white-collar crimes.

KEY WORDS: White-collar crimes; Social disorganization; neighborhood

INTRODUCTION

Social disorganization theory emerged in the 1920s and has become one of the most widely cited theories of crime (Osgood and Chambers 2000; Sampson and Groves 1989). According to Shaw and McKay, social disorganization theory is the idea that neighborhood characteristics such as poverty, population heterogeneity, and population turnover weaken the ability of communities to exercise social control over their residents, resulting in a prevalence of delinquency in those neighborhoods (Kubrin and Weitzer 2003; Sampson and Groves 1989). Put

differently, social disorganization is the idea that certain structural community characteristics result in weak social control which then increases the prevalence of delinquency within the affected communities.

Although originally designed to explain the spatial distribution of juvenile delinquency in urban areas, over the years scholars have extended social disorganization theory to the explanation of other forms of delinquency. One of the scholars whose work, arguably, influenced such endeavors was Stark (1987) who pointed out that "kind of places" rather than "kind of people" explanation of delinquency are important in understanding how environmental factors create criminogenic atmosphere and delinquent opportunities. As a result, scholars have continued to concern themselves with the extent to which neighborhood characteristics predict the rate of offending. Largely, the results of scholarly expeditions in this direction have either provided full or partial support for the key propositions of social disorganization theory. Nevertheless, a close examination of these tests shows that they have either specifically focused on interpersonal violence (see Browning 2002; Goodson and Bouffard 2019; Osgood and Chambers 2000) or have lumped together the rate of both interpersonal violence and property crime (see Barnett and Mencken 2002; Sampson and Groves 1989; Ravalin and Tevis 2017).

Even though Bursik (1988) contended that social disorganization theory could explain any form of crime, including white-collar crimes, provided such crimes are serious enough to invoke the collective action of community members, tests of social disorganization theory have continued to ignore white-collar crimes. Considering Croall's (2007) argument that white-collar crimes do not only affect many more people than street crimes but also have far more financial and emotional cost, the lack of specific attention to white-collar crimes in the test of social

disorganization theory have created limited knowledge on whether neighborhood characteristics account for its prevalence.

Beyond studies that have interrogated white-collar crimes through the lens of low self-control, opportunity, and neutralization techniques, the aim of this study is to examine whether Bursik's (1988:521) observation that "the inability of local communities to realize the common values of their residents or solve commonly experienced problems" generate conditions that explain the count of white-collar crimes across counties in the United States. To state it more clearly, the objective of this study is to examine whether the indicators of social disorganization such as family disruption, poverty, ethnic heterogeneity, and population turnover are related to the count of selected white-collar crimes across counties in the United States.

LITERATURE REVIEW

White Collar Crime

Edwin Sutherland is often regarded as the scholar who coined the term "white-collar crime" (Coleman 1987; Langton and Piquero 2007), which he described as "crime committed by a person of respectability and high social status in the course of his occupation" (Sutherland 1983:7). This definition has generated debates among scholars. While some have argued that a crime only qualifies as white-collar crime when it is committed by persons of high social status, others insist that white-collar crimes are those committed through a person's occupational position (Langton and Piquero 2007). Interestingly, these two approaches of defining white-collar crimes are still considered narrow because they leave out potential white-collar crimes that are committed by people of lower social status or by those without occupational position. Thus, broader definitions of white-collar crime have been developed. For instance, Eldelhertz (1970)

cited by Braithwaite (1985:18) defined white collar crime as "an illegal act or series of illegal acts committed by non-physical means and by concealment or guile, to obtain money or property, to avoid the payment or loss of money or property, or to obtain business or personal advantage." This definition is consistent with the one provided by Wheeler et al. (1982:642) which viewed white-collar crime as, "economic offenses committed through the use of some combination of fraud, deception, or collusion." These broader definitions, which are adopted in this paper, see white-collar crime not only as those crimes that are committed by people of high social status or by those who hold occupational positions but also as crimes that are committed through non-physical means with the overall aim of gaining economic advantage.

Although Sutherland had originally proposed "white-collar crime" as a distinct genre of crime that is outside the purview of traditional criminological theories (Hirschi and Gottfredson 1987), theoretical efforts to explain white-collar crimes have placed it within the same box as traditional crimes, arguing that they are not different. Hirschi and Gottfredson (1987) posited that crimes are generally motivated by self-interest, that is, the desire to maximize pleasure while minimizing pain. Additionally, they argue that people engage in white-collar crimes because "they provide relatively quick, relatively certain benefit, with minimal effort" (Hirschi and Gottfredson 1987:959). Furthermore, in proposing a general theory of crime, Gottfredson and Hirschi (1990) argued that low self-control can explain all forms of deviance, including white-collar crime. According to this view, people commit white-collar crimes due to the presence of low self-control.

Apart from low self-control, white-collar crimes have been explained using neutralization theory. According to this view, through a process of rationalization, white-collar criminals create justifications for their actions, transferring blame to other people (Coleman 1987). In this regard,

white-collar criminals are motivated to engage in delinquency because they believe that their actions do not directly hurt anyone and that they deserve the proceeds of their crime (Coleman 1987). Other explanations of white-collar crime have associated it with delinquent opportunities. Braithwaite (1991) argued that, irrespective of social class, the presence of social inequality and the availability of illegitimate opportunities for realizing socially approved goals may explain involvement in white-collar crime.

So far, several studies have been carried out with the aim of explaining the prevalence of white-collar crimes in society. Langton et al. (2006) tested the extent to which Gottfredson and Hirschi (1990) general theory of crime could explain employee theft within corporate organizations. They found that low self-control is significantly related to employee theft, leading them to conclude that low self-control is a key variable in predicting individualistic type of white-collar crime. Cressey (1953) investigated why trusted people engage in embezzlement. He found that people often engage in embezzlement when they run into financial difficulties and would usually develop neutralization techniques to maintain a positive image of themselves. Specifically, Cressey found that embezzlers were likely to view themselves as borrowing the money rather than stealing it.

In a study that investigated the extent to which Agnew's general strain theory explains selected white-collar crimes, Langton and Piquero (2007) found that general strain theory predicts certain types of white-collar crime (those that are motivated by financial gains) but do not predict other types (corporate crimes). More specifically, their findings suggest that strain was significantly related to white-collar crimes such as bribery, mail/wire fraud, and false claims but not related to corporate crimes. They concluded that while strain is related to individualistic white-collar crimes, it is unrelated to largescale white-collar crimes. In another study that applied

situational action theory to white-collar crime, Craig (2019) used vignettes to assess the extent to which morality and low self-control predict street offending and white-collar crimes. Craig found that those with high moral standards were significantly less likely to report that they would engage in embezzlement and credit card fraud and that morality moderates the relationship between self-control and white-collar crime.

Social Disorganization Theory

Embedded within the framework of social disorganization theory is the idea of social disorganization itself, which simply refers to "the inability of society to realize common goals and solve chronic problems" (Kubrin and Weitzer 2003:374). While several scholars have traced the origins of social disorganization theory to Shaw and McKay of the Chicago School (see Sampson and Groves 1989; Kubrin and Weitzer 2003; Wickes 2017; Kubrin and Mioduszewski 2019; Kawachi et al. 1999), others have argued that the idea of social disorganization, which significantly influenced the works of Shaw and McKay, predates the Chicago school. For example, Porter et al. (2015) argued that the emergence of cities in the history of mankind created conditions favorable to social disorganization and that early sociologists such as Emile Durkheim and Du Bois, in their explanation of the nature of social life in urban areas, alluded to concepts that are related to social disorganization.

Regardless of the debate around the origins of social disorganization, Clifford Shaw and Henry McKay are often credited as the scholars who laid the foundation for social disorganization theory as we know it today (Kubrin and Mioduszewski 2019). Shaw and McKay extended the concentric zone theory of Park and Burgess who had partitioned the city of Chicago into different concentric zones and observed that crime rate remained stable within certain areas (Kubrin 2009). Shaw and McKay identified an indirect link between residential mobility,

population heterogeneity, poverty, and the rate of delinquency (Kubrin and Mioduszewski 2019). Today, social disorganization is often viewed as the idea that neighborhood characteristics such as poverty, family disruption, population heterogeneity, and population turnover weaken the ability of communities to exercise social control over their residents, thereby resulting in a prevalence of delinquency in those neighborhoods (Tittle 2018; Sampson and Groves 1989).

With the aim of determining the extent to which the indicators of social disorganization predict the rate of delinquency, several studies have tested the empirical viability of social disorganization theory. Quite notable, in this regard, was the work of Sampson and Groves (1989) who, in addition to the original indicators of social disorganization, introduced family disruption into their model. They reevaluated the original work of Shaw and McKay and found that population turnover, population heterogeneity, and poverty are significantly related to the rate of delinquency and self-reported victimization. In addition, they found that local friendship network and organizational participation mediate the relationship between community structural characteristics and the rate of delinquency. Ravalin and Tevis (2017) investigated the relationship between the indicators of social disorganization and the rate of property and personal crime in California community colleges. Except for concentrated disadvantage, which was measured as the percentage of students receiving Pell grant, other indicators of social disorganization were not significantly related to the rate of property and personal crime. Browning (2002) investigated the extent to which the indicators of social disorganization account for intimate partner violence. Browning found that concentrated disadvantage, which included the percentage of female-headed households, is significantly related to the count of intimate partner homicide. This suggests that intimate partner homicide is lower in neighborhoods with stable family units. Lastly, Versey and Messer (1999) reevaluated the work of Sampson and Groves (1989). Unlike

Sampson and Groves, they found that local friendship networks and organizational participation do not mediate the relationship between family disruption and delinquency. Stated alternatively, Versey and Messer (1999) found local friendship networks and organizational participation provide no additional information on the relationship between family disruption and the rate of delinquency.

CURRENT STUDY

A review of previous literature has shown that the indicators of social disorganization are related to both property crime and interpersonal violence, giving credence to Hirschi and Gottfredson's (1987) claim that white-collar crimes are no different from traditional crimes. If this is true, then it follows that social disorganization theory, which has improved our understanding of traditional delinquency, can also explain white-collar crimes. Therefore, as stated previously, the purpose of this study is to determine if structural community characteristics are related to the count of selected white-collar crimes in counties across the United States. In sum, the hypotheses for this study are stated below:

H1: There will be a significant, positive relationship between poverty and the count of white-collar crimes in US counties. Counties with higher rates of poverty are also more likely to have higher count of white-collar crime.

H2: There will be a significant, positive relationship between residential mobility and the count of white-collar crime in US counties. Counties with lower population turnover should also have lower count of white-collar crime.

H3: Counties with higher rates of family disruption will also have higher rates of white-collar crimes.

H4: Counties with a higher percentage of ethnic heterogeneity will also have a higher rate of white-collar crimes.

DATA AND METHOD

Data on the county-level count of white-collar crimes, the dependent variables, were obtained from the National Incident-Based Reporting System (NIBRS) for the year 2020. As part of the Uniform Crime Reporting Program (UCR), the NIBRS data is annually compiled by the Federal Bureau of Investigation (FBI) from participating law enforcement agencies. Because not all law enforcement agencies currently participate in the NIBRS program, only crime data for 2,452 counties were available. All the reported counties (N=2,452) were included in this study.

Data for community-level characteristics, which included independent and control variables, were obtained from the American Community Survey (ACS) for the years 2018-2022. Compiled by the US Census Bureau, the ACS is an annual estimate of the changing demographic characteristics of the US population. The ACS data for 2018-2022 contained demographic information for all US counties (N=3,144). Using Federal Information Processing Standard (FIPS) code, county-level data of reported white-collar crimes in the NIBRS dataset were matched with county-level data on community characteristics obtained from the ACS. Due to the way crime data in the NIBRS were coded, they were first disaggregated by county and then merged with the ACS dataset. A total of 2,452 counties, which matched the number of cases reported by the NIBRS, were included in the final analysis.

Dependent Variables

The dependent variables for this study were county-level count of white-collar crimes obtained from the NIBRS. To be precise, bribery, forgery, embezzlement, and welfare fraud were the white-collar crimes considered in this study. Although the NIBRS reports several types of white-collar crime, the crimes in this study were selected for two reasons. First, they were selected to fit into both Sutherland's definition and the more recent and broader definitions of white-collar

crimes. Second, in line with Bursik's (1988) argument that social disorganization theory will be more relevant in explaining crimes that affect community members, this paper has included white-collar crimes with varying levels of perceived seriousness.

Independent variables

Poverty. Previous studies on the test of social disorganization theory have found poverty to be significantly related to the rate of delinquency (Sampson and Groves 1989; Versey and Messer 1999; Ravalin and Tevis 2017). In the same vein, it is expected that poverty will be significantly related to the count of white-collar crimes across counties. In this study, poverty was measured as the percentage of people living below the poverty line (see Browning 2002; Osgood and Chambers 2000; Lanier and Huff-Corzine 2006). This measure was obtained by dividing the number of people living below the poverty line per county by the county's total population and then multiplying the result by 100.

Residential mobility. Past studies on the relationship between high rate of population turnover and delinquency have noted that they are positively related (Sampson and Groves 1989; Lowenkamp et al. 2003). In this study, residential mobility was measured as the percentage of houses occupied by homeowners per county (see Osgood and Chambers 2000). To arrive at this measure, we divided the number of homeowners in each county by the total number of houses in that county and then multiplied the result by 100.

Family disruption. Several studies have found that neighborhoods with high rate of divorce and female-headed households are also those with higher rate of delinquency and victimization (Sampson and Groves 1989; Osgood and Chambers 2000; Versey and Messer 1999). In this paper, family disruption was measured as the number of children living in single-

parent households per county. This measurement slightly deviates from those used by the likes of Browning (2002), Lanier and Huff-Corzine (2006), and Osgood and Chambers (2000) who either measured family disruption as the number of female-headed households or the number of children living in them. We believe that our measure is gender neutral and more robust.

Ethnic heterogeneity. Previous studies have postulated that social bond will be weaker in heterogenous communities than it does in homogeneous communities and that this may affect the ability of communities to respond to collective problems, including delinquency (Sampson and Groves 1989). It is expected that ethnically diverse counties will have higher count of white-collar crimes when compared to homogenous counties. Consistent with the approach taken by Osgood and Chambers (2000) and Barnett and Mencken (2002), ethnic heterogeneity was measured as the percentage of households occupied by whites versus nonwhites in each county. We arrived at this measure by dividing the number of people who identify as whites in each county by the total population of people in that county and then multiplied the result by 100.

Control Variable

Total population. Because previous studies have consistently shown that population size is significantly related to the rate of delinquency (Lanier and Huff-Corzine 2006), total population was included in the model as a control variable. Total population was measured as the number of people living in each county.

Analytic Strategy

The distribution of the county-level count for forgery, bribery, embezzlement, and welfare fraud in the NIBRS dataset has a high frequency of zeros, resulting in a distribution that is positively skewed. Additionally, as can be seen in Table 1, the standard deviations for the dependent variables are quite higher than their means, suggesting that that there is overdispersion in the

distribution (Osgood 2005; Lanier and Huff-Corzine 2006). Clearly, this violates the assumption of normality, which is a fundamental consideration when estimating an OLS regression model (Lanier and Huff-Corzine 2006). According to Osgood (2005), negative binomial regression, which typically considers the parameter for residual variance of a dependent variable, is a more appropriate statistical tool for this kind of distribution. Thus, negative binomial regression was used to predict the relationships that exist between the outcome and explanatory variables across the various models. Running a total of four independent negative binomial regression models, the extent to which the indicators of social disorganization predict the count-level count for bribery, welfare fraud, embezzlement, and forgery was examined.

RESULTS

The purpose of this study was to determine whether the indicators of social disorganization are significantly related to the count of selected white-collar crimes in US counties. Before negative binomial regression was used to estimate the models, a variance inflation factor (VIF) test was conducted to determine the presence of multicollinearity among the explanatory variables specified in the model. All the VIFs in the model were above 0.2 and below 4, indicating that multicollinearity was not a problem in the specification of the regression model (Goodson and Bouffard 2019; Lanier and Huff-Corzine 2006; Fisher and Mason 1981). A total of four negative binomial regression tests were conducted to determine what social disorganization measures were significantly related to the count of bribery, embezzlement, forgery, and welfare fraud across US counties. The results of these tests are presented in Table 2 and 3.

Descriptive Statistics

Table 1 shows the means, standard deviations, and ranges for all the variables included in the model. County-level count for bribery ranged between 0 and 24 (M=0.14, SD=0.85); embezzlement ranged between 0 and 862 (M=7.59, SD=34.1); forgery ranged between 0 and 3,337 (M=36.35, SD=114.69); and welfare fraud ranged between 0 and 1,033 (M=2.27, SD=32.75).

Table 1
Descriptive Statistics for all variables within the model

Variables	Mean	SD	Min	Max
Dependent Variables				
Bribery	0.14	0.85	0	24
Embezzlement	7.59	34.1	0	862
Forgery	36.35	114.69	0	3337
Welfare fraud	2.27	32.75	0	1033
Independent Variables				
Poverty	14.6	6.2	0	58.87
Residential mobility	73.27	8.59	0	95.45
Family disruption	12.42	4.29	0	38.4
Ethnic heterogeneity	81.75	16.93	3.29	100
Control Variable				
Total population per county	103,904	332,097	117	10,000,000

The percentage of poverty for all the counties included in the model ranged between 0 and 58.8 (M=14.6, SD=6.2). Residential mobility ranged between 0 and 95.45 (M=73.27, SD=8.59); family disruption ranged between 0 and 38.4 (M=12.42, SD=4.29); ethnic heterogeneity ranged between 3.29 and 100 (M=81.75, SD=16.93). Lastly, total population ranged between 117 and 10,0000,000 (M=103,904, SD=332,097).

Models Predicting Bribery and Embezzlement

Table 2
Negative binomial regression: predictors of bribery and embezzlement

	Bribery		Embezzlement	
Variables	Coeff	SE	Coeff	SE
Poverty	-.081**	.02	-.056**	.0097
Residential mobility	-.058**	.014	-.043**	.0076
Family disruption	.058*	.29	.074**	.0172
Ethnic heterogeneity	.008	.0076	-.0048	.0037
Total population	.000**	.000	.000**	.000

NOTE: **p<0.01; *p<0.05

Presented in Table 2 are the coefficients and standard errors for the negative binomial regression models predicting county-level count of bribery and embezzlement in 2,452 US counties. The results indicated that three of the four indicators of social disorganization were significantly related to the counts of both bribery and embezzlement. Specifically, the analyses revealed that, controlling for other variables in the model, for a one unit increase in the percentage of people living below the poverty line, the difference in the logs of expected count for bribery and embezzlement would be expected to decrease by 0.081 and 0.056 respectively. Additionally, for every one unit increase in the percentage of homeowners the difference in the logs of expected count for bribery and embezzlement would be expected to decrease by 0.058 and 0.043 for bribery respectively, controlling for other variables in the model. Lastly, for every one unit increase in the number of children living in single-parent household, the difference in the logs of expected counts for bribery and embezzlement would be expected to increase by 0.058 and 0.074 respectively, controlling for other variables in the model. While ethnic heterogeneity was not significantly related to the counts of bribery and embezzlement, total population was significant.

Models Predicting Forgery and Welfare Fraud

Table 3
Negative binomial regression: predictors of forgery and welfare fraud

	Forgery		Welfare fraud	
Variables	Coeff	SE	Coeff	SE
Poverty	-.071**	.0068	-.047†	.018
Residential mobility	-.054**	.0052	.013	.011
Family disruption	.095**	.011	.024	.026
Ethnic heterogeneity	.004†	.0025	-.008	.0067
Total population	.000**	.000	.000**	.000

NOTE: **p<0.01; *p<0.05; †p<0.10

Presented in Table 3 are the coefficients and standard errors for the negative binomial regression models predicting county-level counts of forgery and welfare fraud in 2,452 US counties. The results indicated that while the four indicators of social disorganization were significantly related to the count of forgery, only poverty was significantly related to welfare fraud. More precisely,

the analyses revealed that for a one unit increase in the percentage of people living below the poverty line, the difference in the logs of expected count for forgery and welfare fraud would be expected to decrease by 0.071 and 0.047 respectively, controlling for other variables in the model. Furthermore, for every one unit increase in the percentage of homeowners, the difference in the logs of expected count for forgery would be expected to decrease by 0.054, controlling for other variables in the model. Also, for every one unit increase in the number of children living in single-parent household, the difference in the logs of expected counts for forgery would be expected to increase by 0.095, controlling for other variables in the model. Finally, for every one unit increase in the percentage of people who identify as white versus non-whites in the population, the difference in the logs of expected count for forgery would be expected to increase by 0.004, controlling for other variables in the model.

DISCUSSION

The current study investigated the extent to which community structural characteristics account for the count of selected white-collar crimes across US counties. Conducting a total of four negative binomial regression analyses that included poverty, residential mobility, family disruption, and ethnic heterogeneity as predictors while controlling for population, this study investigated whether indicators of social disorganization were correlates of bribery, forgery, embezzlement, and welfare fraud. It was hypothesized that counties with higher rates of poverty, residential mobility, family disruption, and ethnic heterogeneity would also have higher counts of bribery, forgery, embezzlement, and welfare fraud. However, the various negative binomial regression analyses conducted only provided partial support for social disorganization theory.

Given that the four models in this study included the same predictors and control variable, the discussion here will be presented in respect to how each of these predictors were related to the county-level count of the white-collar crimes considered in this paper. To begin with, the regression analyses indicated that poverty was significantly related to bribery, forgery, embezzlement, and welfare fraud in the opposite direction. This result was unexpected as previous literature, as well as tests of social disorganization theory, have suggested that poverty is related to the rate of delinquency (Sampson and Groves 1989; Bursik 1988; Browning 2002). Similarly, Braithwaite (1991) argued that poverty and limited access to legitimate opportunities of satisfying economic needs could make people turn to white-collar crimes. Therefore, one would expect that places with greater social inequality and concentrated disadvantage should record higher count of white-collar crimes. One explanation for the negative association between poverty and the selected white-collar crimes in this study may be that there are less opportunities to commit white-collar crimes in socially disadvantaged neighborhoods.

Previous tests of social disorganization theory have suggested a positive relationship between residential mobility and the rate of delinquency (Sampson and Groves 1989; Lowenkamp et al. 2003), which is often based on the assumption that neighborhoods with higher rate of population turnover will likely have higher number of residents who are less invested in it, resulting in a higher rate of delinquency in such neighborhoods (Kubrin 2009). The various regression analyses indicated that residential mobility was significantly related to the count of forgery, bribery, and embezzlement. As the number of homeowners increased, the count of these white-collar crimes also decreased, suggesting that the selected white-collar crimes in this study are less prevalent in neighborhoods with low population turnover. Nevertheless, no significant relationship was found between residential mobility and welfare fraud.

In line with Stark's (1987) argument that social controls are weaker in neighborhoods with unstable homes, previous studies have found significant relationship between family disruption and the rate of delinquency (Sampson and Groves 1989; Osgood and Chambers 2000: and Versey and Messer 1999). In this study, family disruption was found to be significantly related to county-level count of bribery, forgery, and embezzlement. As the number of children in single-parent households increases, the count of bribery, forgery, and embezzlement also increased. Consistent with previous studies, it appears that neighborhoods with disrupted family units are also those more likely to experience higher count of white-collar crimes. Again, it was found that family disruption was not significantly related to welfare fraud.

The result for the relationship between ethnic heterogeneity and the selected white-collar crimes in this study was largely nonsignificant. Social disorganization theory assumes that social control will be weaker in heterogenous society, therefore weakening the ability of community members to solve commonly experienced problems (Kubrin 2009; Sampson and Groves 1989). Contrary to expectations, ethnic heterogeneity, which was measured as the percentage of whites versus those who identify as nonwhites in the population, was only related to forgery ($p<0.1$). When considered wholistically, the result indicated that ethnic heterogeneity was not related to count of white-collar crimes in this study.

To summarize, except for ethnic heterogeneity, the indicators of social disorganization such as poverty, residential mobility, and family disruption were significantly related to the count of forgery, bribery, and embezzlement at the county-level. However, none of the indicators of social disorganization was significantly related to welfare fraud. Following Bursik's (1988:536) argument that "…. White-collar crime committed by residents of the community but having no widespread impact on that community may not be subject to the same internal processes of social

control," it can be argued that welfare fraud was not significantly related to the indicators of social disorganization because it is less likely to be perceived as threatening to the peaceful coexistence of community members. Thus, community-level social control mechanisms would be less likely to be activated against welfare fraud, suggesting that welfare fraud and other related crimes may be outside the purview of social disorganization theory.

Like most studies, this study has some limitations. First, it relied on data that was collected from NIBRS, which is an official source of crime records. Although the NIBRS is often regarded as an improvement of the Uniform Crime Report (UCR), reliance on official records in estimating crime incident is generally considered problematic due to their inability to capture dark figures of crime (Truman and Morgan 2016). Additionally, this study did not control for the concentration of large businesses at the county-level, making it impossible to assess the extent to which the findings of this study would hold if opportunities and strain were accounted for.

CONCLUSION

The current study significantly enriches the literature on social disorganization and white-collar crimes by revealing the extent to which community-level characteristics are related to white-collar crimes. Broadly speaking, the results of this study indicate that some indicators of social disorganization are significantly related to selected white-collar crimes. After controlling for population, indicators of social disorganization such as poverty, residential mobility, and family disruption were significantly related, except for welfare fraud, to the count of bribery, forgery, and embezzlement at the county level. These results indicate that community-level characteristics are also quite as important as individual-level characteristics when investigating white-collar crimes.

However, some of the findings of this study require further investigation. Future work should investigate why poverty is significantly related to the selected white-collar crimes in the opposite direction. Additional measures of poverty and examining broader categories of white-collar crimes might prove useful for anyone who decides to undertake such an intellectual expedition. In addition, more research should be conducted on welfare fraud alongside other related crimes to determine why the indicators of social disorganization do not significantly account for its occurrence.

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