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# Fear, victimization, and community characteristics on citizen satisfaction with the police

Citizen satisfaction with the police

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#### Abstract

**Purpose** – The purpose of this paper is to explore the relationship between fear of victimization, actual victimization, and community-level characteristics on citizen satisfaction with police. This study attempts to clarify important factors in how citizens view the police, while accounting for contextual, neighborhood-level variables. **Design/methodology/approach** – This study utilized a representative victimization survey conducted in Saginaw, MI in 2015. Utilizing a sample of 824 individuals, an ordinary least-squares model was fit in order to determine the effects of reported victimization, fear of victimization, and neighborhood characteristics on satisfaction with police. The authors utilized interaction terms to model varying effects between the East and West sides of the city.

**Findings** – The study found that fear of victimization was related to lower satisfaction with police, while actual victimization had an inconsistent effect when community satisfaction and collective efficacy were accounted for. The authors found the effect was present only in the more affluent western portion of the city. Furthermore, the authors found that non-white residents reported much lower satisfaction with police than white residents.

Research limitations/implications – The authors were unable to disaggregate respondents to smaller geographical units than an East\West measure, which limits the authors' ability to discuss small-scale contexts at the block, or block-group level.

**Practical implications** – This study suggests that concerted efforts to reduce fear of crime may increase satisfaction with police, but this effect may be based on neighborhood context. Improving collective efficacy and community satisfaction may provide additional ways to improve citizen satisfaction with police.

Originality/value – This paper adds to the literature examining the relationship between victimization, fear of crime, and satisfaction with police.

**Keywords** Victimization, Community policing, Fear of victimization, Satisfaction with police **Paper type** Research paper

#### Introduction

Significant effort has been expended attempting to determine factors that influence public perceptions of police officers. With an increasing focus being placed on police agencies to engage with citizens in a "community-oriented" manner, understanding how community members view the police is a timely issue. The call for better citizen-police relations has increased dramatically in the mid-2010s following the controversial police killings of unarmed blacks (see President's Task Force on 21st Century Policing, 2015). Considering these issues, it is evident that continued research focusing on factors which influence perceptions of police is necessary. While research has shown strikingly different perceptions of police along racial and economic lines (Schafer *et al.*, 2003), the existing research regarding how fear of crime and victimization affect citizens' views toward the police presents a somewhat mixed conclusion. A number of studies suggest satisfaction with police is related to fear of crime, or victimization (Homant *et al.*, 1984; Dukes and Hughes, 2004; Wu *et al.*, 2009; Lai and Zhao, 2010; Lytle and Randa, 2015). However, some other studies find this association is somewhat weak, or contextually based (Smith and Hawkins, 1973; Dietz, 1997; Kusow *et al.*, 1997; Dowler and Sparks, 2008). Given this conflict, our study



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aims to contribute to the literature regarding this relationship. Utilizing data from a representative victimization survey in Saginaw, MI, this study examines three main research questions:

- RQ1. Do citizens who report fear of victimization, experiences of fear, or actual victimization also report lower satisfaction with the police (SWP)?
- RQ2. Do contextual neighborhood variables, such as collective efficacy and community satisfaction moderate self-reported SWP?
- RQ3. Do these findings hold across racial and socio-economic factors? Before discussing the methods associated with the current study, we review the relevant literature that serves to guide these questions and hypotheses.

#### Review of literature

Citizen SWP

The basis for modern policing in the US centers around developing community support and activism for law enforcement, which is now commonly referred to as "community policing" (Goldstein, 1979). Under the community policing model, police are expected to maintain good relations with citizens, reduce disorder, and promote informal social control (Skogan and Hartnett, 1997). There are several factors which are known to influence attitudes toward police. The persistent racial gap between minorities and whites has long been documented – with black Americans generally holding lower opinions of police than whites or Hispanics (Cao et al., 1996; Wu et al., 2009). However, the effect of race tends to vary by income and class categories – with more affluent blacks in middle- and upper-class neighborhoods having perceptions of police more similar to whites (Weitzer, 1999; Wu et al., 2009). Income, educational attainment, and age are other variables which appear at least marginally related to attitudes toward police (Schafer et al., 2003; Garcia and Cao, 2005; Skogan, 2005). The primary mechanisms driving citizen SWP is still in contention, however, but might be conceptually broken down into "experience with police," "quality of life," and "neighborhood context" explanations (Reisig and Parks, 2000), which we elaborate upon below.

Consistent with the "experience with police" model, some research indicates opinions of police are driven primarily from direct or vicarious contact with officers (Scaglion and Condon, 1980; Skogan, 2005). This hypothesis suggests that individuals, who have negative encounters with officers or hear about negative encounters, have subsequently lower opinions of them. Given that minorities are disproportionately stopped and arrested by police, this model would also account for the generally negative view that minorities hold toward police, relative to whites (Engel, 2005). Most generally, individuals who have negative encounters with police – either voluntarily or involuntarily – tend to have subsequently lower perceptions of them (Schafer et al., 2003; Rosenbaum et al., 2005). However, positive interactions with police during involuntary encounters (during a traffic stop, for instance) do not appear to affect attitudes. There is also evidence that these attitudes differ between racial categories. Rosenbaum et al. (2005) found the adverse effect of negative citizen-initiated contacts with police occurred only among whites, which they suggested was due to their higher expectations of the police. These studies also suggest that the impact of vicarious encounters – that is, secondhand information from other people, or the media – affect attitudes toward police (Chermak et al., 2001). However, the negative effect of exposure to police misconduct via the media or through vicarious encounters have the greatest effect among blacks, relative to whites and Hispanics (Weitzer and Tuch, 2005; Rosenbaum et al., 2005).

The "quality of life" hypothesis suggests that satisfaction with police is driven by perceptions of one's overall neighborhood conditions (Reisig and Parks, 2000). If citizens

hold police accountable for the quality of life in their neighborhood, hypothetically they would perceive disorder and physical decay as being indicative of neglect on the part of the police. There is some substantial research to suggest that how citizens feel about their community is directly tied to their attitudes about police. Xu et al. (2005) illustrated this point by contrasting several studies examining the relationship between crime, disorder, and citizen attitudes toward police. Importantly, they found that as community policing reduced crime and disorder in neighborhoods, citizens reported less fear of crime and increased satisfaction with police. Thus, communities which develop partnerships with local police to reduce social disorder and reinforce informal social controls can simultaneously improve residents' SWP (Weisburd et al., 2015). Collective efficacy – that is, the willingness of citizens to solve neighborhood problems and engage in collaboration with local police – is recognized as an important factor in reducing crime (Sampson et al., 1997). While robust evidence exists suggesting community policing positively affects SWP, there is less evidence that it decreases citizens' fear of crime (Gill et al., 2014). The idea that building stronger, more cohesive communities closely fits the "quality of life" hypothesis, suggests that collective efficacy is related to more positive attitudes toward the police (Reisig and Parks, 2000). Indeed, collective efficacy appears to be strongly related to police trust and satisfaction (Nix et al., 2015). The kinds of activities police perform in the neighborhood may have some bearing on the attitudes of citizens. While aggressive order maintenance is linked with more negative attitudes toward police (Howell, 2009; Gau and Brunson, 2010), there does not appear to be a consistent negative effect of police actions on citizen perceptions toward police. For instance, increased activities at crime hot spots does not appear to have a negative effect on perceived police legitimacy, collective efficacy, or SWP (Weisburd et al., 2011; Chermak et al., 2001).

In contrast to the "experience with police" model, the "neighborhood context" explanation suggests that attitudes toward police are based in strongly-held neighborhood norms (Reisig and Parks, 2000). Individuals living in neighborhoods which are racially and economically segregated may express more negative attitudes toward police, irrespective of their own experiences with the police or justice system. Sampson and Bartusch (1998) found concentrated disadvantage in Chicago neighborhoods exerted a strong, negative effect on SWP – independent of race and socio-economic status. In their model, the negative effect of African-American race was diminished when the neighborhood context was considered. Reisig and Parks (2000) replicated their work by finding most of the variation in citizen SWP was explained by neighborhood-level variables, although the negative effect of race was still present. Other analyses attempting to replicate the findings of Sampson and Bartusch (1998) have generally suggested that concentrated disadvantage has a significant impact on citizen satisfaction with police – however, not all of them agree whether racial identification or neighborhood contexts are the most important mechanisms underlying these perceptions of law enforcement personnel (Dai and Johnson, 2009; Lai and Zhao, 2010).

#### Fear of crime, victimization, and citizen satisfaction with police

Victimization and fear of crime are two adverse effects which have been studied relative to how citizens view the police. As Xu *et al.* (2005) suggested, citizens may view police as responsible for the conditions in their neighborhood – such as disorder, minor incivilities, and predatory crime. In this, there is good evidence that disorder in the community causes greater fear of crime – elaborated upon in the original "broken windows" thesis (Wilson and Kelling, 1982; Ferraro, 1995; McGarrell *et al.*, 1997; Melde, 2009). Consistent with the "quality of life" hypothesis, if citizen SWP is directly tied to conditions in the neighborhood, then individuals who experience fear of crime due to observed disorder or actual crime would likely express more negative attitudes toward the police. Several subsequent studies have illustrated that perceptions of social or physical disorder are related to fear of crime

(Lagrange *et al.*, 1992; McGarrell *et al.*, 1997; Melde, 2009; Scarborough *et al.*, 2010). There exists evidence as well that feeling of fear or observing disorder negatively impact attitudes toward police. For instance, some studies suggest that citizens who report feeling unsafe, being afraid of victimization, or hearing about crime in the neighborhood have lower ratings of satisfaction with police or police effectiveness (Payne and Gainey, 2007; Hawdon *et al.*, 2003). When officers make improvements to the neighborhood, through crime prevention behavior or community-oriented policing, fear of crime is decreased while satisfaction with police is increased (Zhao *et al.*, 2002; Scheider *et al.*, 2003).

Victims of crime may also experience negative attitudes toward police, although the strength of the effect is not clear. Smith and Hawkins (1973) found limited evidence that individuals who reported being victimized in the past year had more negative attitudes toward police, while a similar study examining victims of residential burglary found a stronger, negative effect (Homant *et al.*, 1984). More contemporary studies have found that victims of crime generally have lower opinions of the police, although these effects tend to vary across racial and socio-economic lines (Dowler and Sparks, 2008; Payne and Gainey, 2007; Lai and Zhao, 2010). For instance, Wu *et al.* (2009) found that crime victimization was associated with lower satisfaction toward the police, although neighborhood-level factors, such as racial composition and residential mobility, were more strongly related. Individuals who are dissatisfied with their interactions with police have more negative attitudes toward them, while positive interactions are unlikely to create positive attitudes (Schafer *et al.*, 2003).

As a whole, the literature suggests that the police can have a direct impact on citizen's fear of crime – whether through directed patrol, problem solving at crime hot spots, or community-oriented policing (Weisburd and Eck, 2004). The extent to which fear of crime might be expected to influence attitudes toward police is supported by research which indicates citizens view police as responsible for community quality and safety (Reisig and Parks, 2000). There are arguments as well that the quality of police-citizen interactions – for instance, how responding officers treat crime victims – may influence attitudes as well (Skogan, 2005; Schafer *et al.*, 2003). While some research suggests individual-level factors (such as direct or vicarious interactions with police, or individual experiences of victimization) play a large part in perceptions, other research suggests that wider, neighborhood-level contexts drive citizen satisfaction with police. Given these questions, we utilize a victimization survey conducted in Saginaw, Michigan to disentangle these individual and neighborhood-level effects. In this study, we focus on whether fear of victimization, experiences of fear, or being a victim of crime affects citizens' SWP.

#### **Current Study**

Site description

Saginaw, Michigan is a small city with a population of approximately 50,000 residents. Saginaw has suffered the same fate of many de-industrialized, rust-belt cities – seeing a population drop of roughly 10,000 and a dramatic rise in unemployment and crime during the early to mid-2000s. A curious natural feature splits the racial and economic makeup of the city – the Saginaw River. The East side of the river houses a majority African-American population (64.5 percent), with rates of poverty and unemployment exceeding the national average. The West side comprises a more affluent, predominantly white (67.6 percent) population. Like its sister cities of Flint and Detroit, Saginaw presents a rather unique case, due to its high rates of violent crime and steadily decreasing population. In 2014 Saginaw's violent crime rate exceeded 1,600 per 100,000 residents – roughly four times the state average (Uniform Crime Reports, 2017). Despite these demographic anomalies, Saginaw provides an intriguing study in how perceptions of law enforcement vary in racially segregated, high-crime cities. Table I displays basic demographics of the East and West

sides of the city, illustrating the higher rates of individuals on government assistance, households in poverty, vacant households, and female-headed households on the East side. Figure 1 illustrates the racial and economic segregation of Saginaw, split by the river.

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#### Survey administration

As part of a Michigan-based victimization study, residents in Saginaw were selected for participation in the survey using an address-based sample. A total of 2,525 letters were distributed to households on the East side, yielding 373 completed surveys, while 2,000 letters were sent to West side households yielding 456 completed surveys. Overall, our minimum response rate (American Association for Public Opinion Research, 2016) was 22 percent. Respondents were given a modified version of the American Crime Survey Incident Level Questionnaire (Bureau of Justice Statistics, 2015). One adult per household served as the respondent for his or her dwelling.

#### Variables

The dependent variable, citizen SWP, was constructed by summing seven questions asking respondents their opinion on two categories. First, to what extent they believe police in their

	East	West
Population	24,903	32,623
Households	12,339	15,015
% Black	64.5	22.8
% White	27.1	67.6
% Unemployed	10.3	11.4
% Food stamps	37.4	29.5
% HH poverty	27.5	22.1
% HH vacant	22.4	17.7
% Female HH	9.8	7.6

Table I. Saginaw city demographics – ACS 2015, five-year estimates

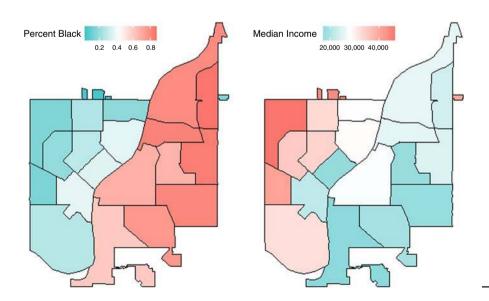


Figure 1. Saginaw city percent black and median income by census tract

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neighborhood: treat people with respect, take time to listen to people, and explain their decisions to people they deal with. Second, the extent to which they: have respect for the police, have pride for the police, believe the police are honest, and believe the police enforce laws consistently. These seven questions had a high ( $\alpha = 0.94$ ) internal consistency and loaded onto a single construct in a confirmatory factor analysis.

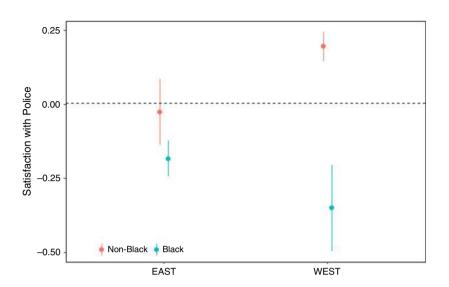
The independent variables constructed from survey questions included measures of community satisfaction, collective efficacy, fear of victimization, and experiences of fear. All questions were subjected to a confirmatory factor analysis to verify the structure of each construct. Cronbach's  $\alpha$  indicated good internal consistency, with all constructs exceeding 0.7, and an average score of 0.87. Community satisfaction comprised seven questions asking citizens their perceptions about the general quality of their neighborhood, the willingness of neighbors to help each other, and the trustworthiness and closeness of neighbors. Collective efficacy represented three questions asking whether people in the respondent's neighborhood were likely to call the police to report an accident or crime or provide information on a suspected criminal. Fear of victimization comprised three questions asking respondents how fearful they were of someone breaking into their home, robbing them, or assaulting them in their neighborhood[1]. Experiences of fear asked if respondents had ever actually felt fearful in the past year, because they thought someone was breaking into their home, thought someone was about to rob them, or thought someone was about to assault them. Prior to analysis all item variables were standardized to have a mean of 0 and a standard deviation of 1.

In addition to asking about their perceptions of crime, respondents also answered questions about actual victimization within their household in the past year. Three questions asked whether they, or anyone in their household, had been victims of a violent crime, a theft or break-in, or another type of crime in the past year. The "other" category included vandalism, credit card fraud, and identity theft. Demographic information was also obtained, including: sex, age, race, and income level. Geographically, survey respondents were only identified based on their location relative to the Saginaw River (either East or West). Because this divide has both qualitative and quantitative differences for the inhabitants' quality of life, a binary East\West variable was utilized as a proxy for demographic measures. While a more granular measure would have been preferable (at the tract or block-group level), the East\West measure adequately captures the unique racial and economic segregation in Saginaw[2].

Table I displays basic descriptive statistics for the relevant data. Responses were roughly proportional to the size of the area from which they were sampled. About 45 percent of responses came from the East side of Saginaw, while 55 percent came from the West side. Respondents were generally female (70 percent) and older (54.1). About 41 percent of respondents were black, while the remaining 59 percent were non-black. The average reported household income fell between \$20,000 and \$40,000. SWP differed sharply across racial and geographic lines. Figure 2 displays the bivariate relationship between race (black vs non-black) and SWP, split by East and West sides of the city, with the horizontal dotted line corresponding to the mean response. Unsurprisingly, blacks reported much lower overall SWP on both the East and West sides of the city (blacks =-0.21, non-black =0.15). Whites on the poorer, East side had lower SWP, while Whites on the more affluent West side reported the highest SWP. Approximately 8 percent of respondents reported they, or someone in their household, had been a victim of a violent crime in the past year, while 18 percent reported a theft or break-in. In total, 12 percent reported some other type of criminal victimization.

#### Analytic strategy

To determine the effect of our independent variables on citizen SWP, an ordinary least squares (OLS) regression was utilized. OLS is appropriate in a number of circumstances,



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Figure 2.
Bivariate relationship
between SWP and
region of city, by race

given the underlying assumptions are met – such as normally distributed, homogeneous errors (Casella and Berger, 2002). An examination of residual plots showed the errors were approximately normally distributed[3]. Because responses to the survey were not proportional to the underlying demographics of the city (they were disproportionately older and female), we weighted the results by applying the survey weights calculated during the design phase. The design effect of 1.02 suggested the inflation of variance due to the weighting procedure was negligible.

A non-trivial amount of missing responses were present in the data, with 18 percent of cases having one or more missing values. Most variables with missing data had from 7 to 35 missing values, while income data was missing on 93 cases. We assumed the data were missing at random (i.e. we assumed the missing values could be correctly estimated using values from observed cases), and a multiple imputation procedure was performed (Little and Rubin, 2014). Regression analyses were carried out using the pooled estimates from the imputed data sets using Rubin's combination rule (Little and Rubin, 2014). Table II displays the mean value of the data in the original data set and the pooled imputed data set.

#### Results

Model 1 displays the results omitting interaction effects and contextual neighborhood variables (see Table III). The estimated effect of fear of victimization was -0.16 (95% CI = -0.24, -0.08), which indicated that a one-unit increase on the fear of victimization scale was associated with a lower -0.16 standard deviation decrease in SWP. However, the association between actual experiences of fear were near zero, and consistent with a null effect ( $\beta = 0.01$ ; 95% CI = -0.01, 0.07). Among the variables testing the relationship between household victimization and SWP, violent victimization was associated with a moderately lower reported SWP ( $\beta = -0.35$ ; 95% CI = -0.61, -0.08). Those who reported violent victimization in their household in the past year also reported a -0.35 standard deviation decrease in SWP. The wide confidence interval suggests considerable uncertainty about this measurement – likely due to the small number (-8 percent) of individuals reporting violent victimization. Household victimization relating to theft or break-ins ( $\beta = -0.16$ ; 95% CI = -0.34, 0.02), or other victimization ( $\beta = -0.24$ ; 95% CI = -0.46, -0.02) were also associated with lower SWP; however, the large standard errors relative to the size of the effect suggests an overall null effect.

**Table II.**Summary statistics

PIJPSM		Original data	Missing cases	Imputed data
		M		M
	Area			
	East	0.45	0	0.45
	West	0.55	0	0.55
	Individual demographics			
	Sex		7	
	Male	0.31		0.31
	Female	0.69		0.69
	Age	54.5	1	54.5
	Race		10	
	Black	0.41		0.41
	Non-Black	0.59		0.59
	Income	3.5	93	3.5
	Household victimization			
	Violent victimization	0.08	0	0.08
	Property victimization	0.18	0	0.18
	Other victimization	0.12	0	0.12
	Survey questions			
	Community satisfaction (median)	0.18	20	0.18
	Collective efficacy (median)	0.25	12	0.25

Fear of victimization (median)

Satisfaction with police (median)

Experiences of fear (median)

**Note:** n = 824

Consistent with prior research, blacks reported much lower SWP than non-blacks ( $\beta = -0.31$ ; 95% CI = -0.49, -0.13). On average, blacks reported a -0.31 standard deviation lower score for SWP relative to non-blacks, holding all other variables constant. Older individuals reported higher SWP, with a 0.35 standard deviation increase for each log increase in age. The dummy variable capturing which side of the city a respondent lived on (East vs West) did not suggest that the average SWP was especially different on either side of the river, after accounting for all other factors. Males reported SWP than females ( $\beta = -0.17$ ; 95% CI = -0.32, -0.02), however, the upper bounds of the estimate were near zero. Similarly, the relationship between income category and SWP was near zero.

-0.12

-0.41

0.19

22

14

35

-0.12

-0.42

0.19

Model 2 tested the effect of contextual neighborhood variables – specifically measures of collective efficacy and community satisfaction. Consistent with prior research, both collective efficacy ( $\beta$ =0.39; 95% CI=0.31, 0.47) and community satisfaction ( $\beta$ =0.15; 95% CI=0.07, 0.23) were positively related to SWP. Each increase in the collective efficacy measure was associated with a 0.39 standard deviation increase in SWP – an effect in magnitude larger than any other variable. Measures of community satisfaction were associated with a smaller, 0.14 increase in SWP. The strong association between these neighborhood context variables is evident with the substantial increase in  $R^2$  from 0.11 in Model 1 to 0.30 in Model 2. With the addition of collective efficacy and community satisfaction, the direct effects of fear of victimization and violent victimization were substantially decreased, while the impact of race was mostly unchanged.

Given the large, negative relationship between fear of victimization and violent victimization on SWP in Model 1, we estimated a set of interaction effects. These examined

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		Mode	11			Mode	12			Mode	13	
	β	SE	95% CI	CI	β	SE	95% CI	CI	β	SE	95% CI	CI
Intercept	-1.13	0.39	-1.89	-0.36	-0.17	0.36	-0.87	0.53	-0.22	0.36	-0.92	0.48
Fear of victimization	-0.16***	0.04	-0.24	-0.08	-0.02	0.04	-0.09	0.02	0.07	0.02	-0.02	0.16
Experiences of fear	-0.01	0.04	-0.1	0.07	0.01	0.04	-0.07	0.08	0.02	0.04	-0.06	60.0
Violent victimization	-0.35**	0.14	-0.61	-0.08	-0.23	0.12	-0.47	0.01	-0.18	0.16	-0.5	0.14
Theft or break—in victim	-0.16	0.09	-0.34	0.05	-0.07	80.0	-0.23	0.1	-0.05	0.08	-0.21	0.11
Other victimization	-0.24*	0.11	-0.46	-0.02	-0.17	0.1	-0.37	0.03	-0.18	0.1	-0.37	0.02
Race black	-0.31***	0.09	-0.49	-0.13	-0.34**	80.0	-0.5	-0.18	-0.33***	0.08	-0.49	-0.17
Age (log)	0.35	0.1	0.15	0.54	0.13	60.0	-0.05	0.31	0.14	0.09	-0.04	0.32
Sex male	-0.17*	0.08	-0.32	-0.02	-0.09	0.07	-0.22	0.02	-0.08	0.07	-0.22	90.0
Area west	0.04	0.09	-0.13	0.22	-0.09	80.0	-0.25	0.07	90.0-	0.08	-0.22	0.11
Income	0	0.05	-0.04	0.04	-0.02	0.05	-0.05	0.01	-0.03	0.05	90.0-	0
Community satisfaction					0.15***	0.04	0.07	0.23	0.15***	0.04	0.07	0.23
Collective efficacy					0.39***	0.04	0.31	0.47	0.39***	0.04	0.31	0.47
Fear of victimization *West									-0.19***	90.0	-0.31	-0.07
Violent victimization *West									-0.13	0.22	-0.56	0.3
Adjusted $R^2$	0.11				0.30				0.31			
<b>Notes:</b> * $p < 0.05$ ; ** $p < 0.01$ ; **	***p < 0.001											

Table III.
OLS regression
predicting citizen
satisfaction with
police (SWP)

the relationship between neighborhood context (East Saginaw vs West Saginaw) on SWP to determine if these effects were equal across areas of the city. In our model, we allowed the slope of these two variables to become conditional based on a respondent's location in the city (East vs West). In Model 3, the interaction between fear of victimization and location on SWP was moderately strong and negative ( $\beta = -0.19$ ; 95% CI = -0.31, -0.07), while the main effect of fear of victimization was substantially reduced in magnitude, and consistent with a null effect ( $\beta = 0.07$ ; 95% CI = -0.02, 0.16). Here, the results indicate respondents living in the more affluent, Western portion of the city reported lower levels of SWP relative to those living in the East, when experiencing increasing fear of victimization. Figure 3 displays the marginal effect between the interaction of location on fear of victimization and SWP. While the base level of SWP was higher in the West than the East, the negative relationship between fear of victimization on SWP was enhanced in the West. This suggests that the conditional effect of having high fear of victimization and being in the Western portion of the city was associated with lower SWP, controlling for community factors.

#### Discussion

The results of this study suggest that several factors are important predictors of SWP. As it pertains to RQ1, we found that fear of victimization was negatively associated with SWP, which is consistent with other studies (Hawdon *et al.*, 2003; Haberman *et al.*, 2016). However, this effect was especially pronounced in West Saginaw. We did not find compelling evidence that an individual's actual experience with fear or victimization was associated with lower SWP. Similarly, while violent victimization displayed a negative relationship in Model 1, its effect was substantially reduced when collective efficacy and community satisfaction were added to the model. This supports prior studies which have found mixed support for the relationship between victimization and negative attitudes toward the police (Hawdon *et al.*, 2003; Dowler and Sparks, 2008).

RQ2 examined whether contextual neighborhood variables moderated the relationship between fear of victimization, experiences of fear, and victimization on SWP. Community satisfaction and collective efficacy were both strongly associated with more positive attitudes toward the police, and their addition to the models substantially reduced the

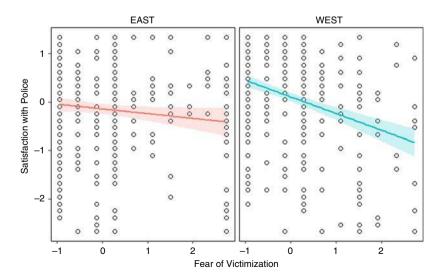


Figure 3.
Relationship between SWP and fear of victimization, by region of the city

significant relationship observed between fear of victimization and violent victimization in Model 1. The addition of these variables to the model increased the amount of variance explained from 11 to 30 percent – underscoring the importance of community satisfaction and collective efficacy as predictors of SWP. Here, we find that citizens' perceptions of neighborhood conditions are likely tied to their opinions toward the police. Indeed, this finding agrees with other similar studies suggesting that perceptions of community cohesiveness and disorder are largely connected with their attitudes toward law enforcement (Nix *et al.*, 2015; Weisburd *et al.*, 2015).

RQ3 addressed whether the relationships observed in Models 1 and 2 held when racial and socio-economic factors were accounted for. Both Models 1 and 2 showed that race was strongly associated with more negative attitudes toward the police, which was virtually unchanged even after accounting for community satisfaction and collective efficacy. Using the East\West divide in Saginaw as a proxy for racial and economic segregation, we found that fear of victimization was associated with lower SWP only in the more affluent Western half of the city. Therefore, after accounting for community satisfaction and collective efficacy, we found some evidence of a contextual effect – that is, the effect of fear of victimization in West Saginaw was enhanced relative to those living on the East side. This differential effect is intriguing and may be partially explained in several ways. First, citizens living in racially segregated and economically disadvantaged neighborhoods may view the police with cynicism or distrust (Sampson and Bartusch, 1998). In communities where distrust of law enforcement is part of long-held neighborhood norms, citizens may not view police as a meaningful avenue for solving their problems (Carr et al., 2007; Kirk and Matsuda, 2011). On the other hand, individuals who feel the police are responsible for their "quality of life" may project their fear of crime or their dissatisfaction with community conditions toward the police (Rosenbaum et al., 2005). In this case, it is possible that individuals in the more affluent West Saginaw more strongly link their fear of crime to the police, than those in East Saginaw.

A number of implications are evident from the results of this study. First, our finding that fear of victimization is associated with lower SWP suggests that police agencies should institute procedures to reduce fear of crime within neighborhoods. A number of studies have also advocated for police to interact with citizens to reduce neighborhood-level fear of crime and increase informal social control (McGarrell *et al.*, 1999; Hinkle and Weisburd, 2008). Police outreach to victims as well as regular interaction with neighborhood associations and block watches may both be an effective way to address fear, as well as a demonstration of police care and respect. These findings point to the potential for such strategies to have the added benefit of improving citizen perceptions of the police. Similarly, there is convincing evidence that improving neighborhood conditions can reduce fear of victimization (Gibson *et al.*, 2002; Weisburd and Eck, 2004). One such example is research demonstrating that so-called "greening" and related efforts to reduce disorder and blight are associated with crime reductions and "cooling" of crime hot spots (Sadler *et al.*, 2017; South *et al.*, 2015).

Second, and perhaps most fundamental, these results add to the growing literature on the importance of collective efficacy. As noted herein, and in related research (e.g. Reisig and Parks, 2000), collective efficacy and community satisfaction were strongly related to increased SWP. Given the relationship between collective efficacy and crime and violence (Sampson *et al.*, 1997), it appears that strategies to strengthen neighborhood collective efficacy could have reinforcing effects through reduced crime and victimization, reduced fear, and enhanced perceptions of the police. Although there is limited evidence that the police can play a direct role in improving both collective efficacy (by working directly with community members to solve problems) and community satisfaction (by addressing disorder-related crimes within the neighborhood), the importance of these relationships

suggest that much greater attention should be given to building an evidence base around co-producing collective efficacy. Promising practices along these lines are being reported (e.g. Weisburd *et al.*, 2015; Gill *et al.*, 2014) and being developed in federally funded initiatives such as Strategies for Policing Innovation (www.strategiesforpolicinginnovation.com/) and Innovations in Community Based Crime Reduction (www.lisc.org/our-initiatives/safe-neighborhoods/cbcr/). Of note, these federal initiatives include police-researcher partnerships that may shed light on the ability to purposefully build collective efficacy at the neighborhood level. The importance of such work is reinforced in the present findings.

Third, the contrasts between the East and West sides of Saginaw Neighborhood suggest that strategies may need to be tailored to local context. For example, given the observed contextual relationship between fear of victimization and SWP, it is probable that these strategies will not work equally across all neighborhoods (see also, Swatt *et al.*, 2013). Likely, the extent to which police are held accountable for reducing crime in the neighborhood influences the link between fear of crime and SWP. Here, citizens in the more affluent, white, West side of the city reported lower SWP when reporting higher fear of crime. On the predominately black and less affluent East side, we did not observe a similarly strong relationship between fear of crime and SWP. Additionally, the differences between white and non-white respondents were less pronounced among East side residents in the more affluent part of the city. This suggests the role of both neighborhood context and socio-economic conditions for conditioning perceptions of the police.

These findings have some clear implications to police practice. First, while our study seems to confirm that fear of crime has some effect on satisfaction with police, strategies focused on reducing fear (either through educational campaigns or preventative patrol) are unlikely to impact SWP in all situations. In neighborhoods where trust in police is already low, programs focused primarily on reducing fear of crime may not have the desired effect. Rather, improving SWP in racially and economically segregated neighborhoods may be tied to community norms associated with distrust in the police, legal cynicism (Sampson and Bartusch, 1998), or fear of encounters with police (President's Task Force on 21st Century Policing, 2015). The large racial gap we observed in SWP between largely white and black citizens – even after controlling for community satisfaction and collective efficacy, suggest that alternative and intensified strategies be implemented for racially segregated neighborhoods. As a whole, our study suggests that neighborhood context is an important factor in determining SWP, and that failing to account for community-level factors may hamper strategies intended to improve community-police relations. In particular, thoughtful and intensified strategies for improving police-community relations are most needed in those neighborhoods where racial and socio-economic disadvantage are associated with the most negative perceptions of the police.

There are some notable limitations to these results. Because this study was conducted cross-sectionally, we were unable to establish causal time ordering – that is, did citizen SWP arise because of collective efficacy, or vice versa? The results are consistent with a model of reciprocal effects whereby attitudes toward the police influence collective efficacy, and collective efficacy influences citizen SWP. The implications suggest the importance of intentional efforts to build collective efficacy and improved relationships between citizens and the police (President's Task Force on 21st Century Policing, 2015). Similarly, we recognize the relatively coarse resolution of our "East\West" measure which stands as a proxy for multiple socio-economic and demographic variables. Further research should build on these results and attempt to disentangle the various social factors which are related to citizen SWP. In addition, if there are differential patterns in how citizens view the police as responsible for their quality of life, new research should examine what factors predict these citizen opinions.

Notes

1. Consistent with the literature on fear of crime, we also included a set of questions asking respondents to indicate how likely they thought someone would break into their home, rob them, or with the police

- 1. Consistent with the literature on fear of crime, we also included a set of questions asking respondents to indicate how likely they thought someone would break into their home, rob them, or assault them. This construct, "perceived risk," loaded separately from "fear of crime." However, when both constructs were added into a single model, the high correlation between variables (approximately 0.65) increased the variance inflation factor of the perceived risk measure to 5. Prior research tends to suggest that fear of crime and perceived risk are distinct constructs (see: Rountree and Land, 1996; Melde, 2009), although the relationship between the two in our study is much stronger than this previous research indicates. Rather than combine the two measures into a single construct, we chose to utilize the "fear of crime" measure which corresponds to our underlying research question, but as a robustness check we estimated the same models with "perceived risk" in place of "fear of crime." The "perceived risk" model had a marginally higher  $R^2$ in model 1 (0.14 vs 0.11), although the  $R^2$  in models 2 and 3 were identical to the "fear of crime" model. In addition, the interaction effect between perceived risk and side of the city was very similar ( $\beta = -0.19, 95\%$  CI = -0.32, -0.06). Given these similarities, it is possible that both the "fear of crime" measure and "perceived risk" measure represent an underlying perception of victimization risk. We recognize that alternative questions – such as how likely a respondent thought a crime might occur to them or in their neighborhood – might address this problem, which we note as a limitation.
- 2. The East/West divide created by the Saginaw River is also locally meaningful. That is, residents of the city use the river as a dividing line between the wealthy and poor residents of the city.
- 3. The lowest quantile of model residuals showed a modest departure from normality. The sensitivity of the model results were tested by utilizing a robust linear regression (RLS) fitted using M-estimators (Fox, 2015). RLS is often useful when model residuals are heavy-tailed. The results from these tests did not substantively impact the interpretation of the results from the ordinary least-squares model.

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