

Community perceptions: procedural justice, legitimacy and body-worn cameras

Community
members'
perceptions of
BWC program

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Received 4 October 2019
Revised 6 February 2020
20 February 2020
Accepted 4 March 2020

Abstract

Purpose – This paper explores community members' perceptions of the Milwaukee Police Department (MPD)'s body-worn camera (BWC) program, examining knowledge and support of the program and its impact on views of procedural justice and legitimacy.

Design/methodology/approach – A two-wave, online survey was administered to Milwaukee-area residents in the fall of 2017 and summer of 2018, yielding 1,527 respondents. Multivariate regression analyses focus on overall relationships between sociodemographic characteristics, community member knowledge of the program, procedural justice and legitimacy and support for BWCs.

Findings – Community members are supportive of BWCs and view officers as procedurally just and legitimate; however, perceptions were significantly lower among Black respondents. Respondents with knowledge of the BWC program were more likely to view officers as procedurally just, but program knowledge did not increase support for it.

Research limitations/implications – Police agencies may benefit from improving community awareness of their BWC program as knowledge of the program is positively linked to the views of departmental procedural justice and legitimacy. However, education efforts alone are not sufficient in improving police–community relations. Future research should examine how policing stakeholders can engage the community to build views of legitimacy associated with BWC policies.

Originality/value – Findings provide insight into community member perceptions of a large BWC program in a major US city. Results demonstrate the relationship between knowledge of a department's BWC program and views of procedural justice and legitimacy and support for BWCs.

Keywords Body-worn cameras, Community survey, Legitimacy, Procedural justice, Police

Paper type Research paper

Introduction

Body-worn cameras (BWCs) have received increasing empirical attention as more police agencies rapidly deploy this new technology among officers. Recent research estimates that around half (47.4%) of all agencies and a large majority of those with 500 or more officers (79.6%) have established an operational BWC program (Hyland, 2018). BWCs can improve police operations by providing objective, recorded accounts of police–community interactions that can provide valuable evidence in investigations. However, for many agencies the impetus for establishing BWC programs is to increase transparency, accountability and legitimacy to improve community trust in police (BJA, 2018). This goal is particularly germane after a series of high-profile cases in the United States involving controversial interactions between police and community members. These highly publicized events shed

This project was supported by Grant No. 2015-WY-BX-0006 awarded by the Bureau of Justice Assistance. The Bureau of Justice Assistance is a component of the Department of Justice's Office of Justice Programs, which also includes the Bureau of Justice Statistics, the National Institute of Justice, the Office of Juvenile Justice and Delinquency Prevention, the Office for Victims of Crime, and the SMART Office. Points of view or opinions in this document are those of the author and do not necessarily represent the official position or policies of the U.S. Department of Justice. We would like to thank staff from the Milwaukee Police Department, especially Sgt. Doug Wiorek, who played a significant role in working with the researchers for this study and article.



light on swelling racial tensions between officers and communities of color. A growing body of research shows that the public is *generally* supportive of BWCs, with high expectations in regards to increasing legitimacy, transparency and holding officers accountable to treat people in procedurally just ways. Still, community member support varies by race and other demographic factors (Lawrence *et al.*, 2018). Moreover, much remains unknown about how individuals perceive body camera programs in their own community and how these perceptions hold across different groups. The current study builds on this body of work by measuring community support for the BWC program implemented in Milwaukee, WI.

Public support for BWCs

Since their inception, the public has consistently demonstrated strong support for police BWCs (Morin *et al.*, 2017; Moore, 2015; Sousa *et al.*, 2015). In one of the most prominent US studies on public support for BWCs, researchers asked a representative sample of 635 individuals about their awareness of and support for BWCs, advantages and consequences of the cameras and policies surrounding activation and use (Sousa *et al.*, 2015). They found that most respondents believed BWCs would lead to officers behaving more respectfully toward community members (86%), suspects (82%) and victims (79%); Reduce excessive use of force and other police misconduct (80%) and improve transparency by providing a visual record of police-citizen encounters (91%). In another representative survey of 2,113 individuals in the US, over 90% of respondents supported requiring officers to wear BWCs, while 81% believed BWCs would protect police and citizens equally (Ekins, 2016).

Public support for BWCs is based on the notion that BWCs can improve transparency and accountability within agencies by encouraging officers to engage in more appropriate levels of force and be more respectful during interactions with community members (Sousa *et al.*, 2015). While some studies have found that BWCs may reduce police use of force and complaints of officer misconduct (Ariel *et al.*, 2014; Braga *et al.*, 2017; Jennings *et al.*, 2015; Katz *et al.*, 2015), results from other studies are quite mixed (Ariel *et al.*, 2016; Peterson *et al.*, 2018; White *et al.*, 2018; Yokum *et al.*, 2017). Moreover, BWCs may make officers less willing to engage in certain types of officer-initiated activities and community interactions (Jennings *et al.*, 2014; Ready and Young, 2015), particularly subject stops and other discretionary activities that can lead to negative interactions with the community (Lawrence and Peterson, 2019).

Despite the broad support for police BWCs, there is little research on individuals' perceptions of the use of BWCs in their own community. White *et al.* (2017) conducted phone interviews with 249 individuals who had an encounter with a BWC-wearing police officer in Spokane, WA. Only 28% of respondents were aware of the BWC during the interaction, though 91% agreed that cameras should be worn by all officers. Thus, support for BWCs remains high, even among those who directly encounter officers wearing a camera. Taken together, these studies indicate that support for BWCs is tied to their ability to improve transparency and accountability by preventing officers from using unnecessary force and protecting officers from unfounded allegations by community members. Yet, there is still much to be explored about public perceptions of the benefits of BWCs, particularly among residents in a community after the implementation of a BWC program by a local police agency.

Procedural justice and legitimacy

Given their potential to improve transparency and accountability, public sentiments toward BWCs are linked to perceptions of procedural justice and legitimacy of officers (White *et al.*, 2017). Procedural justice argues that community members judge fairness of a police

encounter on four components: (1) treating community members with dignity and respect, (2) providing community members with a “voice” during encounters, (3) being neutral in decision-making and (4) conveying trustworthy motives (Gau, 2011; Tyler, 2003; Tyler and Fagan, 2008; Tyler and Huo, 2002). Legitimacy refers to the belief that the authorities are justified in exercising their powers to maintain order and solve problems (Tyler, 2004). Procedural justice is the operational component of legitimacy, providing police officers an opportunity to directly influence perceived legitimacy during an encounter with community members (Tyler, 2003).

Past research has explored community members’ perceptions of procedural justice and legitimacy, finding that people value the nature and fairness of an interaction (i.e. procedural justice) with an officer more so than the outcome of the interaction alone, which in turn may lead them to view the officer and agency as legitimate (Sunshine and Tyler, 2003; Tyler, 2003; Tyler and Fagan, 2008; Tyler and Wakslak, 2004). For example, Mazerolle *et al.* (2013) assessed community members’ perceptions of a single encounter with officers and found that procedurally just and legitimate encounters frame their views of that encounter and their general attitudes toward the police. Community member perceptions of procedural justice have also been linked to perceptions of police effectiveness, willingness to cooperate with the police, trust in the police, reliance on police services and confidence in the criminal justice system more broadly (Bradford, 2014; Mazerolle *et al.*, 2013; Gau *et al.*, 2012; Hickman and Simpson, 2003).

Research on community member perceptions of procedural justice and legitimacy in the context of BWCs is mixed. Crow *et al.* (2017) found that community members who perceived an encounter to be more procedurally just reported more benefits of BWCs. Similarly, individuals who were recorded by a BWC in Spokane, Washington reported positive perceptions of the cameras and increased perceptions of procedural justice (White *et al.*, 2017). However, McClure *et al.* (2017) found that the public’s satisfaction with a police interaction is more heavily influenced by whether the officer showed elements of procedural justice, *regardless of whether a BWC was present*. Moreover, a study in Arlington, Texas in which community members were surveyed on their encounters with the police also found that perceptions of legitimacy, levels of satisfaction with the encounter and views of police professionalism were not based on whether the officer was wearing a BWC (PERF, 2017).

Support among communities of color

The rapid expansion of BWC programs by police agencies in the United States was not simply out of an altruistic effort to improve transparency, accountability and procedural justice. Rather, the demands for these devices stemmed from a series of highly publicized incidents in Ferguson, New York City, Baltimore and elsewhere in the country that underscored and exacerbated strained relations with the police, particularly poor Black communities. As a response, public officials and community members saw BWCs as a potential tool to hold officers accountable and improve trust in the police.

Despite these intentions, there is little evidence that BWCs improve relations in these communities. Sousa *et al.* (2015) found that only 33% of respondents believed BWCs would reduce racial tensions between police and minority groups. This result is not surprising as research shows that Black community members have the highest levels of negative perceptions of the police in comparison to Latinx and White community members (Lee and Gibbs, 2015; Schuck *et al.*, 2008). Furthermore, Black community members report more procedurally unjust interpersonal interactions with officers in comparison to their White counterparts, including more arbitrary stops while driving or riding in a car or walking, verbal abuse and excessive force (Brunson, 2007; Brunson and Weitzer, 2009; Weitzer and Brunson, 2013). Kerrison *et al.* (2018) found that Black residents in Baltimore City were

skeptical of the use of BWCs to increase accountability and transparency despite their high levels of support for camera footage. Others have speculated that community members in general are reluctant to communicate and cooperate with BWC-wearing officers because they do not trust police interpretation of the camera footage (Miller *et al.*, 2014). Thus, there is a clear need for research on how BWCs affect community views toward officers and departments using the technology, especially in communities of color (Lum *et al.*, 2015).

The current study

The current study, which is based on survey data from Milwaukee, WI, is well-primed to address many of these research gaps. Historically, the Milwaukee Police Department (MPD) has had fraught relations with communities of color, where community members have reported elevated levels of police presence as well as high rates of crime and poverty. In 2014, an MPD officer shot and killed Dontre Hamilton, which further damaged relationships between the police and these communities in Milwaukee. Subsequent investigations by the state of Wisconsin, the Milwaukee District Attorney's Office and the Department of Justice's civil rights division all resulted in declinations to file criminal or civil charges against the MPD officers involved in the shooting. Afterward, there was widespread civil unrest and demands for the MPD to implement a BWC program. In response, the MPD committed to implement a BWC program in December 2014, with the first camera roll-out occurring October 2015 and all patrol officers being equipped with cameras by December 2016.

This study assesses Milwaukee community members' perceptions of procedural justice and legitimacy, support for BWCs and knowledge of the MPD's BWC program through an online survey. The extant research demonstrates high levels of public support for BWC programs and agreement regarding their potential benefits. However, the existing literature on public support has not focused on community members' local knowledge of BWC programs and how this is tied to their support for BWCs and perceptions of procedural justice and legitimacy. Furthermore, little research to date has documented community member perceptions of their specific jurisdiction's BWC program.

The current study's three research questions focus on the net effect of community members' sociodemographic characteristics and police contact on three outcomes: (1) knowledge of the MPD's BWC program; (2) views of procedural justice and legitimacy and (3) support for BWCs.

Methods

Sample

To capture public attitudes of the police and BWCs in Milwaukee, we administered two waves of online surveys to Milwaukee community members between 2017 and 2018. These self-report surveys used the panel services platform provided by SurveyGizmo. Survey respondents originated from a network of panelists who participate in surveys for a small payment. We chose this platform because respondents could be recruited directly from the greater Milwaukee area while also allowing us to include screening questions at the beginning of the survey to build a representative sample of Milwaukee community members based on their sex and age. Potential respondents were screened out if they did not live or work in Milwaukee. The survey instrument was comprised of 31 items asking about perceptions of procedural justice and legitimacy, attitudes toward the use of BWCs, and sociodemographic characteristics.

Both surveys were conducted after the MPD's BWC program had been fully implemented with all eligible officers equipped with a camera. The first survey was conducted between August 24 and September 30, 2017 and the second between May 23 and July 11, 2018.

Across both waves, 3,277 individuals accessed the online survey, with 1,705 screened out because there were already enough respondents within their stratum, they did not live or work in Milwaukee, or they did not consent to participate. An additional 45 eligible individuals were excluded from analysis because they answered fewer than half of the survey questions.

We analyzed the surveys separately but found little to no difference in the findings across waves and determined that no significant policy changes occurred with the MPD's BWC program between waves. As the focus of the following analyses is the overall relationships between sociodemographic characteristics, knowledge of the program, procedural justice and legitimacy and support for BWCs, rather than changes in these relationships over time, we decided to combine the survey waves, although we do control for wave in our analyses. The combined sample size was 1,527.

The sample data were weighted to match the proportion of Milwaukee residents for age (18–35 year olds, 36 and older) by gender (male and female) by race/ethnicity (White, Black, Hispanic and other races) classifications to resemble the population distributions in Milwaukee using the 2010 estimates from the US Census. For example, 4.6% of Milwaukee's 2010 population was 18–35 years old, male and Black. As such, respondents with these demographics were weighted to match that proportion. The final sample weights were modified to preserve the original sample size, which allows for more accurate comparisons of survey responses across the demographic groups.

Measures

Independent variables. Table 1 details the descriptive statistics of all variables used in the following analyses, both with unweighted and weighted values. Sociodemographic measures include *age, sex, race, education, income, Milwaukee residency and length of work/residency tenure in the city*. A majority of respondents were Milwaukee residents who had lived or worked in the city for more than 5 years, and the sample included an even distribution on educational attainment and reported income characteristics. As indicated by unweighted data, the average respondents were just under 42 years old and were majority female (52.3%). While these characteristics closely match those of Milwaukee, racial groupings clearly do not, with the unweighted sample being made of up 76.2% White respondents. This underscores the need to weight these data on Milwaukee demographic characteristics to ensure they reflect the population from the most recent census. After weighted on age, sex and race, the sample equally matched city demographic characteristics from the 2010 Census.

Respondents were also asked about their *interactions with the police in the past 12 months*. Most respondents reported no interaction, though some reported making one or more requests for the police (15.8%), being stopped by the police (10.3%), or having both a request for *and* stop by the police (16.2%). In addition, respondents were asked about their *willingness to help the police*. This variable consists of two items asking how likely would (1) the respondents themselves and (2) people in their neighborhood be to call the police to report a crime they witnessed (1 = very unlikely, 2 = somewhat unlikely, 3 = somewhat likely, 4 = very likely). The average inter-item correlation was high ($r = 0.47$). Finally, *comfort in being recorded* is comprised of two items asking about community members' comfort in being recorded by a Milwaukee police officer's BWC in (1) a public space and (2) their private residence (1 = not at all comfortable, 2 = a little bit comfortable, 3 = somewhat comfortable, 4 = very comfortable; $r = 0.60$).

Dependent variables. The current study includes three outcomes, detailed in Table 1. To measure a respondent's *knowledge of the BWC program*, survey participants were asked whether Milwaukee officers were currently wearing BWCs at the time of the survey (0 = no; 1 = yes). The second outcome – *procedural justice and legitimacy* – is a six-item scale. Drawing

	Unweighted		Weighted		2010 census Percent
	Freq	Percent	Freq	Percent	
<i>Independent variables used to weight data</i>					
<i>Age</i>					
18-35 years old	595	39.0%	650	42.9%	42.9%
36 and older	925	60.6%	866	57.1%	57.1%
<i>Sex</i>					
Female	798	52.3%	799	52.7%	52.7%
Male	725	47.5%	717	47.3%	47.3%
<i>Race</i>					
White	1,164	76.2%	676	44.6%	44.6%
Black	168	11.0%	538	35.5%	35.5%
Hispanic	106	6.9%	221	14.6%	14.6%
Other/Mixed races	89	5.8%	81	5.4%	5.4%
<i>Independent variables</i>					
<i>Education</i>					
High school degree or less	355	23.2%	420	27.7%	
Technical, vocational or some college	529	34.6%	542	35.8%	
Obtained bachelor's degree	443	29.0%	378	24.9%	
Obtained Masters, PhD or similar	200	13.1%	176	11.6%	
<i>Income</i>					
Less than \$25,000	240	15.7%	346	22.8%	
\$25,001-\$50,000	362	23.7%	364	24.0%	
\$50,001-\$75,000	383	25.1%	342	22.6%	
\$75,001-\$100,000	297	19.4%	263	17.3%	
\$100,001 or more	245	16.0%	201	13.3%	
<i>Milwaukee Resident</i>					
No	308	20.2%	229	15.1%	
Yes	1,219	79.8%	1,287	84.9%	
<i>Length of working or living in Milwaukee</i>					
Less than 5 years	330	21.6%	295	19.5%	
5 or more years	1,197	78.4%	1,221	80.5%	
<i>Interaction with MPD in past 12 months</i>					
No police interactions	879	57.6%	818	54.0%	
One or more requests for police	242	15.8%	245	16.1%	
One or more stops by police	158	10.3%	180	11.9%	
One or more requests and stops	248	16.2%	273	18.0%	
<i>Survey wave</i>					
Wave 1	775	50.8%	747	49.3%	
Wave 2	752	49.2%	769	50.7%	
Willingness to help police	M(SD) = 3.44(0.64)		M(SD) = 3.30(0.73)		
Comfort being recorded	M(SD) = 3.16(0.84)		M(SD) = 3.08(0.89)		
<i>Dependent Variables</i>					
Knowledge of BWC program	M(SD) = 0.73(0.44)		M(SD) = 0.70(0.46)		
Procedural justice and legitimacy	M(SD) = 3.00(0.74)		M(SD) = 2.81(0.81)		
Support for BWC program	M(SD) = 3.49(0.53)		M(SD) = 3.39(0.61)		

Table 1.
Descriptive statistics

from previous research on procedural justice and legitimacy in policing (Sunshine and Tyler, 2003; Tyler, 2003; Tyler and Fagan, 2008; Tyler and Wakslak, 2004), the first four items asked community members how often MPD officers (1) treat people with dignity and respect, (2) treat people in similar situations the same way, (3) listen to what people have to say and (4) behave according to the law (1 = almost never, 2 = sometimes, 3 = frequently and 4 = almost always). The fifth item asked respondents to rate their confidence in how well Milwaukee

officers can do their job (1 = not at all confident, 2 = a little bit confident, 3 = somewhat confident and 4 = very confident). The sixth item asked respondents how much they trust Milwaukee officers to make decisions that are good for the people they encounter (1 = not at all, 2 = very little, 3 = somewhat and 4 = to a great extent). The average measure of internal consistency exhibited high reliability among these items (Cronbach's alpha = 0.92).

The final outcome includes four items to measure community members' *support for the body-worn camera program*. The first item asked respondents to rate how supportive they are of Milwaukee officers wearing BWCs (1 = not at all supportive, 2 = slightly supportive, 3 = somewhat supportive and 4 = very supportive). The next three items asked respondents to indicate how strongly they agreed with the following statements): (1) BWCs improve relationships between the MPD and community members, (2) BWCs hold Milwaukee officers accountable for their behaviors and (3) Footage from BWCs provide an accurate account of police-community member interactions (1 = strongly disagree, 2 = disagree, 3 = agree and 4 = strongly agree). Again, the measure of internal consistency demonstrates high reliability among these items (Cronbach's alpha = 0.78).

Analytic approach

All results in the current study are shown using both the weighted and unweighted sample data but results from the weighted data are discussed in detail, as there are not substantial differences between the two. We used two analytic approaches across three models to address the research questions. The first model used logistic regression to assess the net effects of sociodemographic characteristics and police-related contacts and attitudes on (1) knowledge of the MPD's BWC program. We report the beta coefficient (b), standard error (SE), and odds ratio ($\text{Exp}(b)$) for these analyses.

The second and third models employed ordinary least squares (OLS) regression to explore the effects of sociodemographic characteristics and police-related contacts and attitudes on (2) perceptions of officer procedural justice and legitimacy and (3) community support for the MPD's BWC program. Outcomes from some models were included as control variables in subsequent models. Specifically, model 2 included knowledge of the MPD's BWC program as a control variable, while model 3 included both knowledge of the program and perceptions of officer procedural justice and legitimacy as controls. We report the unstandardized beta coefficients (b) and standard errors (SE), as well as the standardized beta (β) coefficient for the OLS regressions.

Results

Table 2 summarizes the results of logistic regression analyses that assess the first research question on *community member knowledge of the MPD's BWC program*. No significant differences were found in knowledge of BWCs by the survey respondent's education, income, sex, Milwaukee residency, or willingness to help the police. However, older community members were more likely than younger community members to know about the MPD's BWC program. A 1-year increase in age corresponds to roughly 1.7% increase in the odds of knowing about the BWC program. Also, those who had lived or worked in Milwaukee for five or more years were 40.9% more likely to report that they knew MPD officers were currently wearing BWCs. White community members were 43% more likely to have knowledge of the MPD's BWC program than Black respondents.

Respondents with one or more stops by an MPD officer were significantly less likely to know about the BWC program compared to individuals with no contacts. This is a surprising finding as these individuals would have had more opportunity to see the BWCs on officers compared to respondents who did not interact with the police. This may be a result of the non-

	Weighted		Unweighted	
	b(SE)	Exp(b)	b(SE)	Exp(b)
Constant	-1.351 (0.417)**	-	-1.800 (0.469)***	-
Age	0.017 (0.005)***	1.017	0.022 (0.005)***	1.022
Female	0.032 (0.120)	1.033	-0.059 (0.126)	0.943
Milwaukee resident	-0.128 (0.181)	0.880	-0.263 (0.170)	0.769
Worked/lived in Milwaukee for 5+ years	0.343 (0.151)*	1.409	0.293 (0.150) [†]	1.340
<i>Education (Reference = High school degree or less)</i>				
Technical, vocational or some college	0.053 (0.153)	1.055	-0.144 (0.167)	0.866
Obtained bachelor's degree	0.278 (0.183)	1.320	0.181 (0.188)	1.198
Obtained Masters, PhD or similar	0.241 (0.239)	1.273	0.103 (0.238)	1.108
<i>Income (Reference = Less than \$25,000)</i>				
\$25,001-\$50,000	0.123 (0.173)	1.131	0.021 (0.195)	1.022
\$50,001-\$75,000	0.214 (0.185)	1.238	0.179 (0.203)	1.196
\$75,001-\$100,000	0.201 (0.211)	1.223	0.297 (0.225)	1.346
\$100,001 or more	0.182 (0.239)	1.199	0.006 (0.242)	1.006
<i>Race (Reference = White)</i>				
Black	-0.358 (0.149)*	0.699	-0.353 (0.199) [†]	0.703
Hispanic	-0.259 (0.180)	0.772	-0.332 (0.232)	0.717
Other/Mixed races	-0.441 (0.260) [†]	0.644	-0.429 (0.248) [†]	0.651
<i>Police contact (Reference = No contact)</i>				
One or more requests for police	0.119 (0.170)	1.127	0.201 (0.179)	1.223
One or more stops by police	-0.541 (0.183)**	0.582	-0.433 (0.195)*	0.649
One or more requests and stops	0.434 (0.176)*	1.544	0.571 (0.190)**	1.770
Survey wave 2	0.639 (0.122)***	1.895	0.591 (0.126)***	1.806
Comfort in being recorded	0.286 (0.070)***	1.331	0.303 (0.074)***	1.355
Willing to help police	0.043 (0.090)	1.044	0.197 (0.101) [†]	1.218
Likelihood ratio χ^2	132.66***		152.50***	
df	1,516		1,516	
Nagelkerke Pseudo R^2	0.12		0.14	
Note(s): [†] $p < 0.10$, * $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$				

Table 2.
Logistic regression
results—knowledge of
BWC program

voluntary nature of their interaction, where they are more focused on complying with the officer than noticing the BWC. On the other hand, individuals with one or more requests and stops by the police were 54.4% *more* likely to know about the MPD's BWC program. This may be a result in the amount of both voluntary and non-voluntary police contacts, in which these individuals had multiple occasions to see the BWCs on officers compared to respondents who did not interact with the police. Community members were 89.5% more likely to have knowledge that MPD officers were wearing BWCs during the second survey wave. This is also consistent with expectations, given that the BWC program was about a year older during the second survey wave. Finally, those who reported they were comfortable being recorded by a BWC were more likely to know about the BWC program. A 1-unit increase on this scale corresponded to a 33.1% increase in the odds of knowing about the BWC program.

Table 3 details the results of multivariate OLS regression on the second research question examining the relationship between the study's independent variables and *perceptions of officer procedural justice and legitimacy*. No significant differences were found in perceptions of officer procedural justice and legitimacy by the respondents' sex, education, income, residency, police contacts and survey wave. However, older residents and those who reported a high level of comfort in being recorded by BWCs, a willingness to help the police, and

Community members' perceptions of BWC program

	Weighted <i>b</i> (SE)	β	Unweighted <i>b</i> (SE)	β
Constant	0.863 (0.113)***	–	0.796 (0.122)***	–
Age	0.005 (0.001)***	0.084	0.003 (0.001)**	0.063
Female	–0.046 (0.032)	–0.028	–0.057 (0.031) [†]	–0.038
Milwaukee resident	0.000 (0.046)	0.000	0.001 (0.04)	0.001
Worked/lived in Milwaukee for 5+ years	–0.169 (0.041)***	–0.083	–0.099 (0.039) [†]	–0.055
<i>Education (Reference = High school degree or less)</i>				
Technical, vocational or some college	0.019 (0.041)	0.011	0.015 (0.042)	0.01
Obtained bachelor's degree	–0.002 (0.048)	–0.001	–0.017 (0.046)	–0.01
Obtained Masters, PhD or similar	0.090 (0.061)	0.036	0.022 (0.058)	0.01
<i>Income (Reference = Less than \$25,000)</i>				
\$25,001–\$50,000	–0.024 (0.048)	–0.012	0.031 (0.052)	0.018
\$50,001–\$75,000	0.006 (0.050)	0.003	0.065 (0.052)	0.038
\$75,001–\$100,000	0.032 (0.056)	0.015	0.053 (0.057)	0.029
\$100,001 or more	0.018 (0.063)	0.008	0.106 (0.062)	0.053
<i>Race (Reference = White)</i>				
Black	–0.414 (0.039)***	–0.245	–0.404 (0.053)***	–0.169
Hispanic	–0.057 (0.048)	–0.025	–0.075 (0.063)	–0.025
Other/Mixed races	–0.045 (0.072)	–0.012	–0.046 (0.067)	–0.014
<i>Police contact (Reference = No contact)</i>				
One or more requests for police	0.029 (0.045)	0.013	0.047 (0.044)	0.023
One or more stops by police	–0.035 (0.052)	–0.014	–0.022 (0.053)	–0.009
One or more requests and stops	0.020 (0.045)	0.009	0.007 (0.045)	0.004
Survey wave 2	–0.018 (0.032)	–0.011	–0.058 (0.031) [†]	–0.039
Comfort in being recorded	0.110 (0.019)***	0.122	0.126 (0.019)***	0.141
Willing to help police	0.499 (0.024)***	0.452	0.503 (0.027)***	0.435
Believes MPD officers are wearing BWCs	0.113 (0.035)**	0.064	0.096 (0.036)**	0.057
<i>F</i>	58.79***		42.09***	
<i>df</i>	1,494		1,494	
Adjusted <i>R</i> ²	0.445		0.363	

Table 3.
OLS regression results—procedural justice and legitimacy

Note(s): [†]*p* < 0.10, **p* < 0.05, ***p* < 0.01, ****p* < 0.001

knowledge of the MPD's BWC program, showed statistically significant positive views of officer procedural justice and legitimacy. Conversely, those who had lived or worked in Milwaukee for five or more years had less positive views on procedural justice and legitimacy. Black community members also demonstrated significantly negative views of procedural justice and legitimacy compared to their White counterparts. This is demonstrative of the strained, complicated relationships between the MPD and Milwaukee's communities of color, particularly black communities.

The final research question is how the study's independent variables influence *community member support for BWCs in Milwaukee*. The results of this analysis are shown in Table 4 and reveal that age, residency, living or working in Milwaukee for at least five years and education, police contacts, survey wave and knowledge of BWCs have no significant effect on support for BWCs. However, other sociodemographic characteristics have varying levels of significant net effects on BWC support. First, females and people with an income of \$25,000 to \$50,000 had significantly higher support for BWCs. Second, Black community members, compared to White community members, were significantly less supportive of the program.

Those who feel comfortable being recorded by BWCs and who are willing to help the police express significantly higher levels of support for the BWC program. In fact, these two

	Weighted		Unweighted	
	<i>b</i> (SE)	β	<i>b</i> (SE)	β
Constant	1.681 (0.091)	–	2.010 (0.091)***	–
Age	–0.001 (0.001)	–0.032	–0.002 (0.001)**	–0.055
Female	0.072 (0.025)**	0.059	0.087 (0.023)***	0.082
Milwaukee resident	0.037 (0.036)	0.022	–0.005 (0.029)	–0.004
Worked/lived in Milwaukee for 5+ years	–0.053 (0.032)	–0.034	–0.029 (0.029)	–0.023
<i>Education (Reference = High school degree or less)</i>				
Technical, vocational or some college	–0.003 (0.032)	–0.002	–0.011 (0.031)	–0.010
Obtained bachelor's degree	0.005 (0.038)	0.004	–0.007 (0.034)	–0.006
Obtained Masters, PhD or similar	–0.006 (0.048)	–0.003	–0.027 (0.043)	–0.017
<i>Income (Reference = Less than \$25,000)</i>				
\$25,001–\$50,000	0.083 (0.037)*	0.059	0.062 (0.038)	0.050
\$50,001–\$75,000	0.049 (0.039)	0.034	–0.006 (0.039)	–0.005
\$75,001–\$100,000	0.058 (0.044)	0.036	–0.001 (0.042)	–0.001
\$100,001 or more	–0.069 (0.049)	–0.038	–0.054 (0.045)	–0.038
<i>Race (Reference = White)</i>				
Black	–0.110 (0.032)**	–0.087	–0.160 (0.040)***	–0.095
Hispanic	–0.037 (0.038)	–0.022	–0.040 (0.046)	–0.019
Other/Mixed races	–0.052 (0.056)	–0.019	–0.065 (0.049)	–0.029
<i>Police contact (Reference = No contact)</i>				
One or more requests for police	0.033 (0.035)	0.020	0.005 (0.032)	0.003
One or more stops by police	0.037 (0.041)	0.020	0.067 (0.039) [†]	0.039
One or more requests and stops	–0.040 (0.035)	–0.025	–0.009 (0.033)	–0.006
Survey wave 2	–0.025 (0.025)	–0.021	–0.025 (0.023)	–0.023
Comfort in being recorded	0.260 (0.015)***	0.382	0.252 (0.014)***	0.398
Willing to help police	0.213 (0.022)***	0.256	0.154 (0.022)***	0.187
Believes MPD officers are wearing BWCs	–0.040 (0.028)	–0.030	0.041 (0.027)	0.034
Procedural justice and legitimacy scale	0.101 (0.020)***	0.135	0.073 (0.019)***	0.103
<i>F</i>	46.39***		32.53***	
<i>df</i>	1,493		1,493	
Adjusted <i>R</i> ²	0.397		0.314	
Note(s): [†] <i>p</i> < 0.10, * <i>p</i> < 0.05, ** <i>p</i> < 0.01, *** <i>p</i> < 0.001				

Table 4.
OLS regression
results—support
for BWCs

domains were the leading factors in predicting support for the BWC program. Finally, respondents who reported higher perceptions of procedural justice also had higher levels of support for the program. This is in line with expectations as these respondents are likely to believe MPD officers will use BWCs in a fair, legitimate way.

Discussion

Previous research has shown that the public have favorable opinions of police BWCs and recognize their benefits in promoting accountability, transparency and public trust in the police. To date, there is little known about the influence of community member knowledge on views of procedural justice and legitimacy and support for BWCs in the context of a local BWC program. The survey results confirm that, in general, Milwaukee community members are supportive of the MPD's BWC program. However, there are notable differences across race that merit further discussion in the context of the historical strains in police-community relations in Milwaukee.

The findings demonstrate that Black community members have less positive views of procedural justice and legitimacy than White respondents, which impacts their overall

support for the BWC program. These findings are in line with existing research, which has found that Black community members are often less optimistic that BWCs can increase trust, accountability and legitimacy in the police (Sousa *et al.*, 2018). The results also show that Black respondents were less likely to know that MPD officers wear BWCs. Black community members were more likely to report having a negative interaction with the police, which could be a contributing factor to skepticism that BWCs can improve community relations and increase trust in the police (Crow *et al.*, 2017; Ray *et al.*, 2017).

These tensions were likely exacerbated by several high-profile events in Milwaukee that occurred after BWCs were deployed. For example, on August 13, 2016, a BWC-wearing MPD officer shot and killed a black man named Sylville Smith during a foot pursuit, prompting days of protests and violence in several parts of Milwaukee. The officer was ultimately charged with first-degree reckless homicide but was acquitted after a jury trial. The BWC footage of the incident was not publicly released by the district attorney until nearly a year after the incident (June 14, 2017) because it was being used in an active investigation and trial. A similar incident occurred between the two survey waves when MPD officers stopped Sterling Brown of the Milwaukee Bucks for a parking violation on January 26, 2018. After a verbal exchange, the officers wrestled Brown to the ground and tased him. Again, BWC footage of the incident was withheld for several months while the incident was investigated. After the video was released, the officers involved were suspended. The footage was coincidentally released at the same time as the second wave of survey data collection (May 23, 2018).

The current study also identified a positive relationship between knowledge of the BWC program and perceptions of procedural justice. Procedurally just behaviors can include officers treating community members with dignity and respect, trusting them to do the right thing during an interaction, devoting time to listen to community members during an interaction, and making decisions that are fair based on the interaction (Blader and Tyler, 2003; Sunshine and Tyler, 2003; Tyler, 2003). The indicators of procedurally just behavior examined in the current study can influence perceptions of interactions with the police in general, with specific officers and with the department as whole (Donner *et al.*, 2015). While many factors outside of the use of technology influence police accountability and public trust of the police, increasing the local knowledge and awareness of BWCs may be the first step for departments to communicate with the community about what specific BWC behaviors and policies are desired, and ultimately help improve perceptions of department legitimacy.

Conclusion and implications

The current study has several limitations that may have impacted the findings. First, the sample is limited to those who have the ability and are willing to respond to an online survey. Research demonstrates that women, older adults, members of racial and ethnic minority groups, and those who have lower income and education levels are typically less likely to have Internet access than their counterparts (van Deursen and van Dijk, 2013). Second, the panel services platform provided by SurveyGizmo does not allow screening respondents based on their race. This resulted in over-sampling of White respondents and underrepresentation of Black and Hispanic community members. Third, our weighting technique was based on demographic characteristics of Milwaukee residents, whereas the survey data were collected from people who either lived or worked in Milwaukee. While this could be a problem, the survey results show that 79.8% of the unweighted samples were Milwaukee residents, reducing our concern when using the city demographic characteristics to calculate the weights. Taken together, these limitations likely affected how representative our sample was of Milwaukee community members.

Finally, as noted above, the Sterling Brown incident occurred between the two waves of our survey with the BWC footage being release right at the beginning of wave 2 data collection. This incident sparked outrage among community members and many saw the withholding of BWC video for months as a lack of transparency by the MPD. Thus, this incident likely had an impact on community perceptions of police-community relationships and views of the MPD's BWC program, particularly among Black respondents.

Despite these limitations, these survey data offer valuable insights into the relationship between community member support and knowledge of BWCs and perceptions of legitimacy. The current study indicates that when members of the community know that their police department is currently using BWCs, they are more likely to report viewing officer behavior and interactions as procedurally just and legitimate. These findings point to important policy implications for departments with BWCs. By working with community members to educate them on the existence of BWC programs and policies, agencies may observe more positive views that officers are meeting the community's standard of procedural justice. Thus, departments should work closely with the community – and particularly with communities of color – to improve local knowledge of BWCs.

BWCs may increase police transparency in encounters with the community, but this may not necessarily improve trust in the police or confidence that BWCs can improve police-community relations. There are additional factors that play a significant role in public perceptions of police interactions and their support for BWCs. In localities like Milwaukee where police-community relations are characterized by historical racial tensions, simply educating community members about an agency's BWC program is not enough to establish trust among disadvantaged communities and communities of color. Genuine and ongoing face-to-face engagement between the community and officers is needed to establish trust in and support of the police. Research suggests that officers can use procedural justice techniques to increase support and engagement from community members who are disaffected (Madon *et al.*, 2017). The events leading up to the MPD's adoption of the BWC program were high-profile and widely publicized, but the MPD did not host formal information sessions detailing specific components of the proposed BWC program. A breakdown in communication between an agency and the community can be perceived as a lack of transparency, which can lead to negative views of department legitimacy (Jannetta *et al.*, 2019). Police departments can benefit from working closely with leaders and groups that represent community views to illustrate the department's desire to be collaborative and inclusive when developing policies and procedures that have direct impacts on the community, particularly for people of color.

Future research should work to disentangle the relationship between knowledge and support for BWCs and perceptions of legitimacy. Such research may lead to the identification of concrete methods in which agencies can seek input from community members on the procedurally just and legitimate policies and behaviors that should be expected from a BWC program to most improve police-community relations.

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