

Police Officers' Perceptions of Body-Worn Cameras in Beijing

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Abstract:

The Chinese police started using body-worn video cameras (BWVCs) from 2010 in some cities and provinces. On July 1st, 2016, shortly after the death of Lei Yang during arrest by police, the Ministry of Public Security (*Gong'anbu*) introduced BWVCs as mandatory for all for all Chinese frontline police officers through issuing *Regulations on Audio and Video Recording of Onsite Law Enforcement for Public Security Units* (RAVR Regulations). However, despite the nationwide use of BWVCs, the research literature on BWVCs in China remains sparse. Studies from USA, UK provide evidence of the importance of officers' *buy-in* to the new technology. It is, therefore, essential to know Chinese officers' views and evaluations of using BWVCs. Using an anonymised online questionnaire, adapted from published international prior studies, this article reports and evaluates the views of 255 Beijing officers of the Beijing Police Department. Our analysis suggests that, overall, there was a high level of support and a high level of self-reported use for BWVCs among respondents, not only because they are required to use them, but also because they wanted to. Officers perceived more benefits than disadvantages of using BWVCs and most thought BWVCs would help them in their daily work without reducing their enthusiasm for law enforcement. Some differences were found between officers from different working units, and between male and female officers. There were also weak negative correlations between length of service as a police officer and supportive attitudes toward BWVCs. Most criticisms were about technical issues, such as higher expectations on the battery life and BWVC reliability.

Keywords: China; Beijing; body-worn video cameras; police attitudes.

Introduction

This article first provides the background context to the mandatory introduction and use of BWVCs in China generally, and then specifically to the Beijing police department. It then summarizes the research findings from the key international studies that were used to formulate the questionnaire for this Chinese project, before moving on to cover how these were used in constructing the Beijing officer questionnaire. Next, it outlines how the respondents were recruited before summarizing the results of descriptive analysis of officers' general perceptions and attitudes to BWVCs in relation

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to: gender; work units; and officers' length of service. The article concludes with a discussion of the implications of the key findings, along with the limitations to the study and BWVC the associated identification of future research requirements for Chinese police use of BWVCs.

Background context to the introduction of BWVCs in China

Although internal policy developments had ensured that BWVCs had been in use from 2010 onwards in some Chinese police departments (Li & Huang, 2010), a catalyst event on 7 May 2016 resulted in the rapid and mandatory requirement for all Chinese frontline officers to use BWVCs. A 29-year-old man, Lei Yang (雷洋) died unexpectedly during his arrest for suspected soliciting of prostitution in a massage parlour in the Changping district in northwest Beijing (Fei, 2016). Lei Yang had a Masters degree, was a new father and worked for a government-linked environmental organization (Wen, 2016). The arresting officers described Lei as violently uncooperative. They restrained him and he was loaded into a police vehicle. He collapsed inside and was taken to the nearest hospital at 22:15, but was declared dead at 22:55 (Wen, 2016).

Lei's death sparked huge controversy in Chinese society. An angry public demanded to see video footage, but the police responded that no CCTV or BWVC was used at the scene. One officer had attempted to record with a mobile phone instead, but this reportedly fell to the ground and captured nothing. (Huang, 2016). Lei's incident fuelled public disquiet about suspected excessive use of force by police officers, building on an earlier high profile case in 2014 (the Qing'an Shooting), in which a railway police officer shot a 45-year-old man and argued that his issued BWVC was broken and sent for repair on the eve of the case. (Hu, 2015; CNTV News, 2015).

In June 2016, 54 days after the Lei Yang incident, the Ministry of Public Security (*Gong'anbu*) introduced the *Regulations on Audio and Video Recording of Onsite Law Enforcement for Public Security Units* (RAVR Regulations)¹ which resulted in a mandatory requirement for all Chinese frontline officers to use BWVCs.

There are parallels here with similar situations in the United States. In 2014, after Michael Brown, an unarmed black teenager was killed by the police, President Obama funded the nationwide adoption of BWVC, and associated training. (Dann & Rafferty, 2014) However, while it is down to individual police departments in the USA to decide whether to equip their officers with BWVCs, through *Gong'anbu*/RAVR Regulation, BWVC use was made mandatory immediately throughout China for frontline officers with the aims of: improving police behaviour (echoing the USA's general emphasis for BWVCs) (see Ellis et al, 2015); and public confidence. Further, RAVR stipulates that 'all law enforcement activities must be recorded with BWVCs'.

Both Chinese high profile cases shared the fact that BWVC's were claimed to be either broken or absent during the police encounter. Some argued that these were simply poor excuses to avoid accountability and that the police officers involved had used BWVCs *selectively* (Cui, 2016).

These criticisms, and perceived public opinion, provoked questions that had previously never been discussed, or even taken seriously: what was the police attitude to the use of BWVCs; and were police officers using BWVCs willingly? Neither officers, nor their departments, are likely to openly deny or challenge the mandated policy introduced by *Gong'anbu*, which is the highest central power over the police in China.

It is also important to note that, even before the introduction of RAVR Regulations, no official or academic research had been released on how many officers were actually using BWVCs for law enforcement, how many of them were in favor of it, etc. As such, perception issues remained an unanswered question.

Many studies from outside China have pointed to the importance of *buy-in* to BWVCs by police officers (Gaub, Choate, Todak, Katz, & White, 2016; Jennings, Fridell, & Lynch, 2014; Kyle & White, 2016). The effect of body-worn cameras ultimately depends on whether the cops like to use them (Gaub et al., 2016; Gramaglia & Phillips, 2017; Lum et al., 2015). The benefit of technology will not be realized if officers resist BWVCs because they perceive them to be detrimental to their well-being (Young & Ready, 2015).

If this is the case in a police force, department, station, etc., the intended aims of introducing BWVCs will not be successful, they would probably end up in failure with various excuses, no matter how strict the official regulations. Therefore, some departments in the USA and UK tested the perceptions of officers before they decided on large scale adoptions and/or also once the cameras are in operation (Goetschel & Peha, 2017; Jennings et al., 2014). However, in China, the nationwide introduction of RAVR Regulations, effectively an administrative command rather than a testing of police-user consensus, precluded the possibility of canvassing officers' opinions and voices on BWVCs prior to their introduction. This article therefore examines the perceptions of Chinese police officers on their mandatory use of BWVCs and the extent to which these indicate the level of buy-in to the new technology.

Literature Review

There is a growing body of international literature, most of it in English, on BWVCs. The results of the early Plymouth (see Home Office 2007) and Aberdeen (Fyffe, 2011) pilots by police in the UK were encouraging, but small in scale and they did not result in continued use once the pilot period ended. It was not until BWVCs were issued to every Isle of White (a division of Hampshire Constabulary, England) police officer in July 2013 (see Ellis, Jenkins, and Smith (2015), and the subsequent adoption of development of BWVC evaluations by the College of Policing after this, that BWVC use became common. In the USA, adoption of BWVCs was expedited by the then President Barak Obama, after the Brown Shooting. (Crow, Snyder, Crichlow, & Smykla, 2017; Evans, 2005) Of the many empirical studies were conducted in these two countries since, the perceptions of citizens, command staff, and police officers drew attention of Chinese researchers.

Most studies found that the majority of citizen respondents had positive attitudes

about BWCs, including during encounters with the police who were using them (Crow et al., 2017; White, Todak, & Gaub, 2017). Indeed, citizens' perceptions of police performance and police interaction were found to be influential factors in the perceived benefits of BWCs using structural equation modeling (Crow, 2017). Studies of command staff also indicated that most of them supported BWVCs' introduction. (Pelfrey Jr & Keener, 2016; Smykla, Crow, Crichlow, & Snyder, 2016). However, command officers did have some reservations about the impact of BWVCs and, e.g., whether officers would be reluctant to use necessary force if being recorded. (Smykla et al., 2016)

Unsurprisingly, most BWVC perception studies are focused on the stakeholders, namely, police officers.(Goetschel & Peha, 2017; Jennings et al., 2014), which is the focus of our study in China. We therefore reviewed the key studies, as covered below (see Table 1).

Table 1 Evaluation of major studies on perception of officers on BWVCs

Authors	Participants	Research method	Study Structure	Important Findings
Katz et al. (2014)	between 100 and 110 patrol officers from Phoenix Police Department	pre-post comparison between target and comparison groups	33 questions clustered into eight subjects: accuracy and speed completing incident reports; use as evidence; reactions of the public to the body worn cameras; police-community relations; police officer behavior; comfort and ease of use; general perceptions of body worn cameras; overall opinions of the value and expansion of BWVCs.	<ol style="list-style-type: none"> 1. Officers tend to agree that the camera is easy to use, comfortable to wear, and that its battery life is adequate, but not that it is easy to locate and retrieve a video and download data. 2. BWVC provides a more accurate account of an incident (58.8%) and improves the quality of evidence 3. Officers became less likely to agree that BWVCs will help enhance evidence for court after BWVCs were implemented. 4. Officers became less positive about impact on citizens, but more positive about impact on the department and officers. 5. The majority of officers are generally dissatisfied with the fact that they wear BWVCs, but the support increased a little over the course.
Jennings et al. (2014)	95 patrol officers from Orlando(FL) Police Department	Online questionnaire.	A questionnaire of 15 questions, testing general perceptions, and perceived effects on citizen behavior, personal behavior and fellow officers.	<ol style="list-style-type: none"> 1. Officers are generally open and supportive of BWVCs. 2. They feel comfortable wearing them. 3. They hold that BWVCs are beneficial in relevant outcomes.
Ellis et al. (2015)	135 officers from Isle of Wight Police	Online survey (comparing police and public; frontline and non-frontline officers)	Questions concerning the impact of BWVCs and whether using BWVCs should be personal or compulsory.	<ol style="list-style-type: none"> 1. The confidence in BWVCs is generally high with little variation between frontline officers, non-frontline officers and the public. 2. Non-frontline officers show significantly lower evaluation for deployment of personal issue BWVCs. 3. The vast majority agree with that all officers should wear BWVCs and it should be compulsory. 4. Non-frontline officers were significantly less likely to agree that all uniformed police officers should use BWVCs and it should be compulsory.
Gaub et al. (2016)	388 (pre-deployment) and 348 (post-deployment)	Randomized controlled trial of before and after deployment of	33 questions covering 7 aspects: completing incident reports, use of evidence in court; citizen/resident reactions; police	<ol style="list-style-type: none"> 1. The Phoenix officers showed less support for BWVCs than officers in Tempe (who were most positive) or in Spokane (who had moderate levels of approval) both before and after the trial.

	officers from Phoenix(AZ), Spokane(WA), and Tempe(AZ) US police departments	BWVCs. Notably this study uses the same data with Katz's(2014), while combining 2 other agencies.	officer behavior; familiarity, comfort and ease of use; and general perceptions and overall recommendations.	<p>2.Three departments all reported improved perceptions on ease of use and comfort of BWVCs and they became more skeptical about the impact on citizens.</p> <p>3.Tempe and Spokane officers recognize the positive effects better after deployment, but Phoenix did not.</p>
Goetschel & Peha (2017)	179 officers from Pittsburg Bureau of Police, both with and without BWVC experience	surveys and interviews	Focusing on overall assessment, police/citizen related benefits and comfort and ease of use.	<p>1.Officers believed that BWVCs would help reduce citizen complaints and maintain police-community relations, but showed low support for deploying them.</p> <p>2. support dramatically increases among officers with hands-on BWVC experience.</p> <p>3. Officers who oppose city-wide BWVC adoption tended to believe that BWVCs would erode trust between officers and their superiors.</p> <p>4. Neither age nor policing experience significantly affected officers' perceptions toward BWVCs.</p>
(Gramaglia & Phillips, 2017)	258 officers from Buffalo and Rochester police departments	Email survey	Following Katz's questionnaire with special care on opinions about examining camera images prior to writing a report.	<p>1.Similar attitudes on many topics, like ease of use and distraction of work, were found not only among Buffalo and Rochester police officers, but also with police officers in other agencies.</p> <p>2.Almost all respondents agree or strongly agree that police officers should have the ability to review body camera images prior to writing a report.</p>

The findings of above studies are mixed. Most (62.7%) officers in Orlando supported use of BWCs.(Jennings et al., 2014) Phoenix officers had negative perceptions of BWCs, while Tempe officers had largely positive perceptions and Spokane officers lay between. Tempe and Spokane officers recognized the positive effects of BWCs better after deployment, but Phoenix officers did not show this change. (Gaub et al., 2016) Support rate for deploying BWCs throughout Pittsburg was low (31%), but it significantly increased among officers with hands-on BWVC experience (57%). (Goetschel & Peha, 2017)

Arguments on the benefits of the use of BWVCs are mainly about: transparency; improved behaviors of both officers and citizens; reducing conflict; and dealing with complaints against officers (Katz, Choate, Ready, & Nuño, 2014; White, 2014). There have been differences though, between studies. Only 20 % of Orlando officers felt their behavior would be “improved” (Jennings, et al., 2014), while Gaub et al. (2016) found that 45.9%, 37.9%, and 68.4 % officers in three jurisdictions respectively felt they would “act more professional” when using a body camera. Further, while one study (Uchida, Soloman, Connor & Shutinya, 2016, cited in Gramaglia & Phillips, 2017) reported that approximately two-thirds of their respondents believed that BWVCs would be a distraction from their policing tasks, Gramaglia & Phillips, (2017) found the equivalent rate in their study was only 48%.

However, there are also similar findings across previous studies. The perceptions of the ease of use and comfort of BWVCs was often improved after deploying or having experience.(Goetschel & Peha, 2017; Gramaglia & Phillips, 2017; Jennings et al., 2014) In addition, officers usually did not think citizens would be more cooperative. (Gramaglia & Phillips, 2017; Jennings et al., 2014) Potential drawbacks that officers perceived include; invasion of privacy; reducing safety; distracting work; extra stress; trouble in data uploading; reluctance in using necessary force; and less discretion (Gaub et al., 2016; Gramaglia & Phillips, 2017; Sandhu, 2017; Smykla et al., 2016; White et al., 2017).

In sum, the previous literature establishes that attitudes of officers towards innovations in technology in the form of BWVCs will differ with: location as well as history and population (Gramaglia & Phillips, 2017); time, ie, before or after deployment of BWVCs; gender; age; race; length of service; and work units are discussed (Ellis et al., 2015; Gaub et al., 2016; Goetschel & Peha, 2017; Jennings et al., 2014; Katz et al., 2014). However, while the reviewed studies were necessarily helpful in framing the BWVC research approach in China, it was also clear that we would need to adapt our approach to the very different legal and cultural context of China.

While this is the first research study on police BWVCs in China, some Chinese researchers have commented and debated their relative benefits in helping officers with: collecting evidence; dispute settling; and law enforcement standardization (Cao, 2013; Kong, 2014). Liu (2013) has also argued that any negative perceptions by officers towards BWVC adoption indicates their poor understanding of BWVCs’ value in

ensuring better quality policing, and that these attitudes need to be addressed clearly.

There have also been some technical/feasibility studies on camera performance in China. These are limited to important elements that may affect officer confidence and attitudes to BWVCs, i.e.: low battery capacity; low memory storage; inconvenience in wearing and use; complexity in capturing and retrieving footage/clips; and low definition output (Kong, 2014). While these studies add to our understanding of technical elements that may affect officers' attitudes to BWVCs in China, their limited scope and methodology does not provide more than a stepping stone for a more in depth approach to assessing officers' attitudes.

This paper, therefore, provides the first systematic research on Chinese police officers' use of BWCs, and more specifically on their perceptions perception of BWCs. We have based our approach on the review of US studies above, but have also adapted it to the specific Chinese context. First, we assess the extent of officer support for BWCs and account for whether these are affected by hands on experience. We also explore differences between officers based on their demographic and work detail differences. Finally, we compare our finding to those of the US studies we reviewed and offer explanations for this.

Methodology

Interviews and Questionnaire

Overall, this study is based on the development of a questionnaire that was mostly influenced by the prior US work of Gaub et al. (2016) and Jennings et al. (2014). We borrowed and adapted from them to produce our framework for Chinese police officers. In particular, modifications in phraseology were required to fit the Chinese context². We also added some items. For example, we designed a self-report question so we could get information on the use rate for BWVCs. On the other hand, we included only three demographic variables that we deemed most important, i.e., gender, work unit, and length (years) of service in the police. Classifications regarding race/ethnicity are not so well-developed for criminal justice research in China (National Bureau of Statistics China, 2011).

While these modifications were important, we were aware that they were not, in themselves, enough to fully adapt the questionnaire to the Chinese context. We therefore used a sequential design (Robson & McCartan, 2016) which involved using the themes from the literature review and our above adaptations, to use in preliminary semi-structured interviews with a small convenience sample of 8 front line officers from the police department under study. The themes/questions explored were:

- What do you think of BWCs?
- Are you supportive, or not, of BWVCs and why?
- Have BWVCs impacted on your work (and how/why not)?
- Do you think anything needs to be changed in the use of BWVCs (and what/why

not)?

The interview data were then coded and analysed.

The semi-structured interviews largely produced a range of responses and themes within the framework of previous studies carried out outside China. However, some new issues specific to the Chinese context were also discovered. In particular, the practice of ‘deliberately intermittent recording’ and selective use of BWVC recording were discussed. Many of the interviewees also expressed a relatively high level of dissatisfaction about the quality of the current BWVCs that was stronger than represented in the reviewed English language literature.

In the final sequence, based on the previous literature and the semi-structured interviews, we then extracted the keywords from the most common themes and developed these into a total of 26 5-point Likert scale statements in five domains: overall concept; perceived benefits; perceived drawbacks; field experience; and feeling about equipment quality. This structured questionnaire was then used to measure officers’ attitudes and preferences ranging from “strongly disagree” to “strongly agree”.

Sampling and Participants

The target participants in this study were police officers from two contiguous sub-bureaux of Beijing Police Department located in the southwest of Beijing city. We chose these 2 bureaux partly because they had equipped their frontline officers with BWVCs (also referred to as ‘Eagle Eyes’, and other names depending on the body cameras used) since 2010, along with all other Beijing Police Departments’ local policy (Li & Huang 2010). This real world choice was also effectively dictated by the supportive collaboration of the chief commanders of these the branches of the two sub-bureaux and the lack of any comparable study to date.

For both interviews and questionnaires, it was only feasible to effect a convenience sample. It is, therefore, not possible to confirm distribution and response rates etc. Indeed, there are limitations on Chinese statistics for police establishments. They are effectively ‘classified’, and are not published. This is obviously quite different to the challenges in USA and UK, from where we derived our approach, but it does represent the police research reality in China, which should perhaps be of interest as a comparative finding in itself.

Obviously, the local BWVR policy requirements to use BWVCs in all cases has not been fully executed, as can be inferred from the Lei Yang case. Since RAVR regulations were implemented however, there are now provisions to enforce greater accountability and therefore more effective supervision and oversight of front line officers’ behaviour. Our interviewees were clear on the new provisions for being disciplined for being on duty without wearing a BWVC and that they might also receive warnings from the supervisors.

Despite official sanctioning of our study, there was a number of conditions required in order to gain access. While the research process does not provide for, or

require, explicit informed consent in the same manner of the typical western research environment, there are equivalent procedures. Central to this, is ensuring strict anonymity of the police respondents. Further, anonymity of sub-bureaux is also a condition, which, as noted, unfortunately, limits the scope of our analysis at this level.

Another limitation is that it was not possible to establish an accurate number for the total sample population in the sub-bureaux, partly due to personnel flow, but mainly due to confidentiality requirements. We can, therefore, only estimate a response rate of 15%, based on information provided jointly by the sub-bureaux commanders. Our sample shows that of the 255 valid responses we received, the characteristics were: 160 police patrol officers (62.7%); 25 supervisory officers (9.8%); 21 traffic police officers (8.2%); 22 SWAT Patrol (8.6%); 13 auxiliary and intern police (5.1%); and 14 from other roles (5.5%). Only 25 (9.8%) of the respondents were women. The average time in police service was 8.7(\pm 8.3) years.

The link to the online questionnaire was sent to the chief commanders, who distributed it through the police internal network community³. The data were collected from December 2016 to February 2017, resulting in 255 valid, returned questionnaires.

Analysis

The data were processed in SPSS 22.0. We analyzed the data in three steps. First, we made a description of officers' perceptions with statistics of average score (M) and standard deviation (s), which were presented in the form of clustered column diagrams consistent with previous studies (see Jennings et al., 2014; Smykla et al., 2016). We then used analysis of variance to examine differences in views on BWVCs by work allocation role, and by gender. Finally, we conducted Pearson correlation coefficient analysis for the number of years in police service and perceptions of BWVCs.

Results

We analysed the 5 domains outlined above in turn.

Utilization rate for BWVCs

The own-use utilization rate of BWVCs by respondents was very high. Figure 1 shows that the vast majority (93%) of officers chose "frequent use" or above. Only 1% of respondents reported that they never used BWVCs.

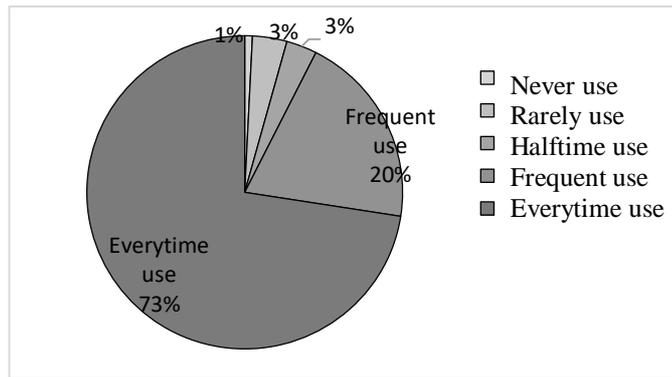


Figure 1: BWVC Utilization Rate

General Views on BWVCs

Officers' ratings on the general value of BWVCs were examined with 3 items (see Figure 2). The distribution of these three issues appear to be much the same. 83.98% officers agreed (or strongly agreed) that BWVCs have more advantages than disadvantages ($M=4.06, s=0.72$). Meanwhile, 80.86% officers agreed or strongly agreed that "Even if it is not mandatory, I will still use the BWVC" ($M=4.00, s=0.75$), and 79.69% officers supported that "All field law enforcement encounters should be recorded" ($M=4.00, s=0.87$).

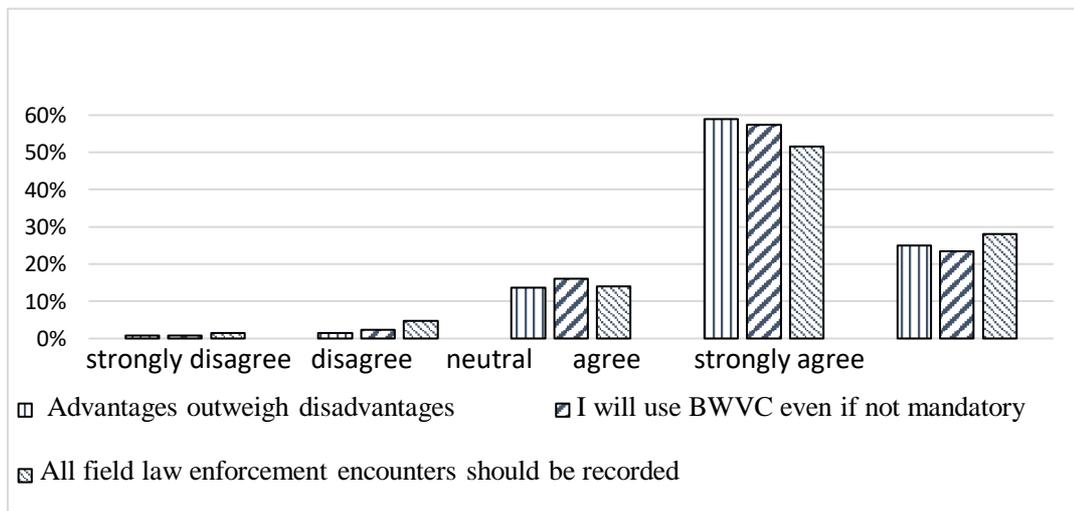


Figure 2: Officers' general views on value of BWVCs

Perceived Benefits of BWVCs

Police officers' perceptions of the benefits in using BWVCs included 7 items. (see Table 2) The table shows that 84.3% of the respondents agreed or strongly agreed that the BWVCs "regulate my enforcement performance" ($M=4.09, s=0.68$), and 84.0% agreed or strongly agreed that BWVCs "can effectively deal with malicious complaints"

(M=4.13, s=0.85). 79.3% officers “feel safer in law enforcement” (M=4.25, s=0.84). About half (54.30%) of officers thought the BWVC “enhanced the credibility of police law enforcement” (M=3.45, s=1.03) or “improved work efficiency” (52.74%, M=3.54, s=0.95). Agreement on whether BWVCs would “reduce citizen complaints”, however, was low (44.53%, M=3.35, s=1.05), especially when compared to earlier studies in the UK, e.g., Ellis et al. (2015) found an equivalent figure of 95%. Further, only 26.17% officers believed that “suspects would be more cooperative” (M=2.91, s=1.06), while the equivalent results in the USA were higher, e.g., 35% in Spokane and 57% in Tempe (Gaub, 2016). As Table 2 summarises, officers’ views on the perceived benefits of BWVCs show they have more confidence in the self-oriented benefits rather than the citizen-oriented benefits.

Table 2 Officers’ views on perceived benefits of BWVCs

Items	%Strongly disagree/disagree	%Neutral	%Strongly agree/agree	Mean score	SD
regulate my law enforcement performance	1.56	14.06	84.37	4.09	0.68
effectively deal with malicious complaints	5.47	10.55	83.99	4.13	0.85
I feel safer	1.95	18.75	79.3	4.25	0.84
enhanced the credibility of police law enforcement	16.41	29.3	54.3	3.45	1.03
improve work efficiency	12.89	34.38	52.74	3.54	0.95
reduce citizen complaints	17.58	37.89	44.53	3.35	1.05
the suspects would be more cooperative	29.3	44.53	26.17	2.91	1.06

Perceived Drawbacks

The mean scores for the five ‘drawback’ statements on BWVCs are weakly positive (see Table 3). While the largest single category of responses for all 5 statements was to disagree with the drawbacks, only disagreement with negative statements about ‘violating other citizens’ privacy’ (55.08%) and ‘increasing my fear of law enforcement’ (54.69%) managed to produce a slim majority. This was largely due to the high proportion of neutral responses (28.28% to 40.63%) which were always higher than the combined, relatively meagre, strongly agree/agree responses (12.89 to 28.13).

While this is encouraging, there is a need to explain the high neutral proportions of the responses. Since previous studies on officers either did not set a neutral option (Gaub et al., 2016; Gramaglia & Phillips, 2017) or did not have drawback options (Jennings et al., 2014), we chose Smykla et al.’s (2016) approach on police leadership. In their study, the neutral rating for BWVCs varied greatly on different items, i.e.: ‘be

a distraction' about 9%; 'invasion of police officers' privacy' about 11%; 'invasion of citizens' privacy' about 16%; and, 'make it harder to get citizens to talk' about 29%. So the high proportion of neutral responses in our study is not unique to the Chinese policing context. One possible explanation for this issue was provided by an officer we interviewed, who thought that the listed drawbacks might be potentially valid, but had not yet been experienced. The answers might therefore be hypothetical and may explain the variation in the neutral category.

Table 3 Officers' views on perceived drawbacks of BWVCs

Items	%Strongly disagree/disagree	%Neutral	%Strongly agree/agree	Mean score	SD
Violate other citizens' privacy	55.08	32.03	12.89	2.47	0.92
Increase my fear of law enforcement	54.69	29.69	15.63	2.55	0.98
Reduce necessary use of weapon and other apparatus	42.97	28.91	28.13	2.87	1.14
Alienate the public	41.4	40.63	17.97	2.71	0.93
Violate personal privacy	38.67	28.28	23.05	2.87	0.99

Experience in the Field

Table 4 shows the law enforcement experience of our police respondents. Encouragingly, the vast majority (95.7%) of the respondents believed that they would speak and behave more cautiously when using BWVCs ($M=4.45$, $s=0.61$), but 54.69% also agreed that they felt stressed through the process ($M=3.45$, $s=1.13$). This indicates that using BWVCs puts an extra pressure on officers. Since governmental requirements and social expectation have already put great pressure on Chinese police officers to conduct themselves properly, and maintain a positive image in the eye of the public (Jiao, 2001), our results suggest that BWVCs are likely to be effective in improving officer behaviour through awareness of recorded evidence.

However, it will be important to address the additional stress that this causes. Despite the high level of officer support for BWVCs, more negative reactions were also recorded, for instance, 28.51% of our sample admitted that they had deliberately used the cameras intermittently when recording ($M=2.73$, $s=1.15$). Some of this could possibly be explained through legitimate discretion, but it is still not in line with RAVR Regulations. Further, 69.92% ($M=3.84$, $s=1.04$) of officers thought that the use of BWVCs was "troublesome and time consuming" and 64.06% ($M=3.77$, $s=0.95$) responded that the cameras affected their physical performance. Finally, almost half

(49.61%, M=3.40, s=0.98) of the officers in our study though BWVCs were “distracting”.

Table 4 Experience in the field

Items	%Strongly disagree/disagree	%Neutral	%Strongly agree/agree	Mean score	SD
I deliberately ceased recording	48.83	22.66	28.51	2.73	1.15
I feel stressful	21.88	23.44	54.69	3.45	1.13
distracting me from actions	21.09	29.3	49.61	3.40	0.98
troublesome and time consuming	14.45	15.63	69.92	3.84	1.04
Affecting my movements (running etc.)	10.55	25.39	64.06	3.77	0.95
I would behave more cautiously	0.78	3.52	95.7	4.45	0.61

Views on Equipment Quality

The officers’ views on the quality of BWVCs are shown in Table 5. As can be seen, most agreed BWVCs were ‘easy to operate’ (73.44%, M=3.71, s=0.94),. This is a higher proportion than found in the studies in: Tempe (post-deployment, 63.9%); Spokane (post-deployment, 54.4%); and Phoenix (post-deployment, 53.8%) (Gaub et al., 2016). The lowest level of agreement, on the other hand, was for whether BWVCs are ‘steady and not easy to drop’ (34.77%). Indeed, this was noted in the Lei Yang case, where it was reported that BWVC’s ‘fell off’. Other aspects, including: battery life (M=3.09, s=1.23); failure rate (M=3.06, s=1.06); and, angle and definition (M=3.12, s=1.09), all emerge a neutral score close to 3 on the 5 point scale, indicating an uncertain attitude to camera quality and usability. The implications here are that a more thorough review of camera usability and performance will be required in further studies.

Table 5 Views on equipment quality

Items	%Strongly disagree/disagree	%Neutral	%Strongly agree/agree	Mean score	SD
steady and not easy to drop	34.77	25.77	39.46	3.04	1.16
good battery life	33.98	23.44	42.58	3.09	1.23
low failure rate	28.91	33.98	37.11	3.06	1.06
good angle and	28.51	31.25	40.23	3.12	1.09

definition					
easy to operate	12.89	13.67	73.44	3.71	0.94

Group Comparisons and Correlation Analysis

Having established the respondents' general attitudes and views of BWVCs, we then analysed their responses to ascertain whether: the type of police units, gender, and length of service made any significant differences.

The results of mean comparisons between police units, gender and length of service are presented in Table 6. The figures here show that there were few differences, but we have highlighted those that were significant in bold. The significant differences ($P < 0.05$) between units here were for whether "BWVCs have a good battery life" and "All field law enforcement encounters should be recorded". For both items, the traffic police and officers from district-level units ranked these factors the lowest, while auxiliary police and intern police ranked them highest.

Significant differences ($P < 0.05$) in the comparison of gender were also found. Female officers tended to believe that BWVCs were: "steady and not easy to drop"; "effective in response to malicious complaints"; and could "enhance the credibility of law enforcement". Male officers, on the other hand, were significantly more likely to agree that BWVCs were "distracting".

The results of correlation analysis between length of service in law enforcement and perceptions of BWVCs are also presented in Table 6. Small though the coefficients were, many items were significantly correlated with number of years in law enforcement service ($P < 0.01$ or $P < 0.05$). It can be seen that longer service was significantly negatively correlated with attitudes on: 'general perceptions'; 'perceived benefits'; 'field experiences'; and 'quality'. Length of service was also significantly positively correlated with higher levels of perceived drawbacks. There were no exceptions in these correlations, indicating a clear finding that Chinese police officers with longer service in the 2 sub-bureaux studied were less supportive of BWVCs and are more inclined to perceive problems with their quality or operation.

Table 6 Comparison of units, genders & correlation analysis

	police station	district-level	traffic police	SWAT Patrol	auxiliary and intern	others	male	female	years of law enforcement
	Mean	Mean	Mean	Mean	Mean	Mean	Mean	Mean	<i>r</i>
Overall concept									
Advantages outweigh disadvantages	4.08	3.76	4.19	3.86	4.46	4.07	4.05	4.16	-.255**
Even if not mandatory, I will still use the BWVC	4.04	3.64	4.14	3.91	4.31	3.86	4.01	3.92	-.167**
All field law enforcement should be recorded	4.09	3.36	3.90	4.05	4.15	4.00	4.01	3.92	-0.106
Perceived benefits									
I feel safer	4.27	3.92	4.43	4.05	4.62	4.36	4.22	4.56	-.171**
reduce citizen complaints	3.36	3.40	3.14	3.27	3.69	3.29	3.32	3.68	-.192**

effectively deal with malicious complaints	4.13	3.96	4.05	4.18	4.38	4.21	4.09	4.48	-.153*
improve work efficiency	3.53	3.12	3.48	3.86	3.92	3.57	3.51	3.76	-.157*
regulate my law enforcement performance	4.09	3.96	4.24	4.05	4.15	4.00	4.08	4.16	-.252**
the suspects would be more cooperative	2.91	2.44	3.19	2.95	3.15	2.93	2.86	3.32	-.161**
enhanced the credibility of police law enforcement	3.40	3.16	3.86	3.50	3.92	3.43	3.40	3.88	-.214**
Perceived drawbacks									
violation of my privacy	2.81	3.16	3.00	2.91	2.85	2.79	2.87	2.88	0.043
violation of citizens' privacy	2.43	2.52	2.43	2.59	2.77	2.50	2.46	2.64	-0.038
make me fear of law enforcement	2.52	2.64	2.43	2.68	2.85	2.50	2.52	2.84	-0.034
alienate from the mass	2.73	2.84	2.57	2.73	2.92	2.29	2.72	2.64	0.117
reduce the necessary use of force	2.91	2.64	2.90	3.00	3.08	2.50	2.85	3.08	0.083
Experience in the field									
troublesome and time consuming	3.77	4.08	4.29	3.91	3.92	3.36	3.87	3.60	0.048
affect my movements(running etc.)	3.78	4.00	3.81	3.73	3.31	3.64	3.81	3.40	0.063
distracting me from actions	3.34	3.88	3.33	3.64	3.08	3.21	3.42	3.24	0.115
I would speak and behave more cautiously	4.50	4.32	4.52	4.18	4.54	4.29	4.43	4.60	-.196**
I feel stressful	3.46	3.44	3.24	3.59	3.31	3.50	3.46	3.36	0.027
I deliberately ceased recording	2.66	2.88	3.10	2.91	2.77	2.43	2.77	2.40	0.047
Feelings of equipment quality									
good battery life	3.19	2.68	2.62	2.77	3.85	3.29	3.07	3.36	-.138*
steady and not easy to drop	3.08	2.88	3.10	2.64	3.62	2.93	3.00	3.48	-.148*
low failure rate	3.03	3.12	2.86	2.95	3.46	3.50	3.05	3.20	-0.123
easy to operate	3.71	3.28	4.00	3.68	4.00	3.86	3.69	3.88	-.165**
good angle and definition	3.13	3.00	2.95	2.82	3.77	3.29	3.11	3.20	-.127*

Note: Significant difference($p < 0.05$) are noted in bold in comparison between units and genders;

**means a significant level of 0.01;

*means a significant level of 0.05.

Discussion

The past decade has seen the rapid deployment of BWVCs around the world. China is no exception: the current study found more than 90% of respondents reported that they used BWVCs frequently during law enforcement. Whilst the Chinese officers are now using BWVCs under a very strict nationwide policy, with the main intent of improving accountability, there is minimal Chinese research and literature on the topic, and especially on perceptions of officers. It is, therefore, important to know how officers in China have responded to the biggest roll out of body cameras the world has seen. Driven by this curiosity, this paper has examined police officers' perception on BWVCs use.

We are aware of the limitations of this current study, but this has to be balanced against of the almost total absence of research and publications on BWVC use in China and we feel we have established a base from which to build. In particular, negotiating agreement for access and ensuring cooperation in a potentially sensitive and contentious area can be considered a major achievement. Second, although the sample was restricted to 2 sub-bureaux, the response rate was, possibly, relatively low (affecting representativeness, gender proportion, etc.), and we were not able to pilot the questionnaire, we did carry out initial semi-structured interviews to combine international and local factors. We did achieve 255 responses across all types of police duties, and we were able to produce a Cronbach's Alpha of 0.866 indicating a good level of validity, so that the questionnaire can be further built upon. We are now also

working on translating and adapting the Technology Acceptance Model (TAM) (see Ellis et al, 2015) standardized instrument for future research on Chinese policing.

This study does increase our understanding of police reactions to mandatory use of BWVCs and their use in practice outside of the current literature which is largely based on developed countries publishing in English. It also does manage to ensure a level of comparability with these studies by adapting their questionnaires within the Chinese policing context.

Overall, this study shows that officer 'buy in' to BWVC use is relatively high in Chinese policing, at least in Beijing. Ninety-two percent of officers reported using BWVCs frequently or above and only 1% respondents reported they never used them, while 18% of Pittsburgh officers did not have hands-on experience of using BWVCs (Goetschel & Peha, 2017). Most (80.86%) of the officers in this survey would be willing to use BWVCs even if it were not mandatory.

It is important to note that 84% of the 2 sub-bureaux officers in our survey agreed that the advantages of BWVCs outweighed the disadvantages. This is mostly a much higher rate than the comparable studies from which our questionnaire was derived: Phoenix (post-deployment, 14.0%); Spokane (post-deployment, 55.3%); and Tempe (post-deployment, 80.4%), although it is possible that this was skewed by the relatively low response rate with theirs, which ranged from 77% to 92% (Gaub et al., 2016). However, it is also important to note that, while most Chinese officers surveyed supported recording every law enforcement encounter, 28.5% did admit to deliberate intermittent recording during some encounters. The reasons for this will be a fruitful avenue of future research.

The relatively high rate of acceptance of BWVCs among Chinese officers might be explained by utilitarian and/or rational choice approaches, similar to Gaub et al., (2016), ie, officers have become familiar with use of BWVCs, experienced the benefit they brought about and most police officers believe that the use of BWVCs could regulate their own behaviors, make them feel safer, deal more effectively with citizen complaints, enhance the credibility of law enforcement, and so on. The surveyed officers did not think the use of BWVCs would violate privacy, decrease the necessary use of weapons, or make the public more feel alienated. It therefore appears that BWVCs have been generally accepted by Beijing law enforcement officers, with the benefits brought to their daily work, and without reducing their enthusiasm of law enforcement, although they did indicate some additional stress related to BWVC introduction. As such, the use of BWVCs seems a rational choice for officers under the current Chinese social and occupational circumstances.

Consistent with the reviewed US and UK studies, we found that our survey respondents did not see BWVCs as a panacea to all law enforcement problems. For example, many officers did not agree that the use of BWVCs would make suspects more cooperative, nor could it reduce the number of citizen complaints (see Ellis et al., 2015; Gaub et al., 2016; Gramaglia & Phillips, 2017).

It is also important to note that the approach taken here has identified that there are

limits to this single method approach which can be addressed in future research. In our case, it was clear that drawbacks to privacy (both citizens' and their own) were not fully recognized by officers as they were only referencing their own experience and usage. However, incidents of privacy invasion caused by BWVC data leakage have been reported frequently (Li, 2015). It exposes the problems of footage access accompanied with, as yet, incomplete regulations, which currently poses a great challenge in Chinese policing.

Basic technological and quality issues in operating the BWVCs should also not be overlooked, but tend not to be discussed in prior studies is the quality of BWVCs (Gaub et al., 2016), although Ellis et al (2015) did include a human factors approach on this element. We found that officers expected a higher quality of BWVCs than they were currently provided with. Except for the item "simple to operate" (73.44%), all the aspects of qualities listed in the questionnaire were rated at lower than 50%, meaning that officers were hardly satisfied with them. We can therefore assume that the currently used models of BWVCs are not user-friendly enough. They cannot fully meet the actual needs and expectations of the officers in battery life, stability, storage space, lens angle and other issues. In other words, the current quality of BWVCs might be an obstacle for the implementation, which should be overcome by technical improvement. We hope to use the Chinese version of TAM we have developed to address this problem for an evidence-based solution.

In this research, we were able to explore the perceptions of different officers by comparing among some sub-groups (mostly by role designation). In common with Jennings (2014), we found more similarities than differences between these groups, including officers' gender. Only on particular issues, the traffic police and district-level police showed less support for BWVCs, while auxiliary and intern police officers showed more support. Since the traffic police are effectively frontline officers, our finding is inconsistent with the findings of the UK study in Hampshire, where frontline officers showed significantly more support on use of BWVCs (Ellis et al., 2015). This latter study also showed that investigating officers were less enthusiastic about BWVCs, while in China, the investigation role would be subsumed within a frontline officers' general role, making comparisons difficult. The weak correlation between length of service and acceptance of BWVCs might be explained by greater openness to, and acceptance of, new technology among younger officers, but we will need to conduct a larger study, using the TAM instrument, to adequately develop analysis on this theme.

Other key areas for future research in Chinese policing were also identified in our study. We are not at a stage yet where we can make explicit comparisons between US, UK and Chinese contexts. The differences in police organisational arrangements, as much as cultural factors, still need to be explored. However, a clearer exposition of what 'use of force' entails in each of the countries seems to be necessary comparative project, along with notions of what constitutes 'officer safety'.

Overall, the findings of this first study provide an important base from which to produce further research on BWVC use in China. There is a need to expand the research

and evaluation evidence base, along with establishing how a nationwide policy shapes the behavior and attitudes of individual officers, in combination with the exigencies of the job. Our findings suggest that Chinese police officers seem to be more accepting of BWVCs than US and UK officers, but a larger research base needs to be established as a result of this study. Indeed, we are aware of the fact that this is a fast moving area of study, but we feel this Beijing-based study, and the larger research and evaluation projects that will follow it, will contribute valuable findings to the international corpus of evidence and knowledge on BWVCs effectiveness.

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Notes

1 The Chinese for it is : 《公安机关现场执法视音频记录工作规定》.

2 An example is that the expression ‘use of force’ is somewhat ambiguous in Chinese language, so we used ‘use of weapon and other apparatus’ instead in the questionnaire.

3 Chinese multi-purpose messaging social media, most notably WeChat, are in common use, but police groups will be closed off from general users. All responses were recorded anonymously on the Wenjuanwang platform.

References

Ariel, B., Sutherland, A., Henstock, D., Young, J., Drover, P., Sykes, J., Megicks, S., Henderson, R. (2016). Report: increases in police use of force in the presence of body-worn cameras are driven by officer discretion: a protocol-based subgroup analysis of ten randomized experiments. *Journal of Experimental Criminology*, 12(3), 453-463. doi:10.1007/s11292-016-9261-3

Cao, T. & Wu, Y.(2013). Research on the Issues and Efficiency of the Police Law Enforcement Recorder. *Journal of Yunnan Police Officer Academy*, 100(5), 85-87.

China Daily (2017). *Requirement for law enforcement recordings boosts transparency*. Retrieved March 31, 2017, from http://www.chinadaily.com.cn/opinion/2017-03/31/content_28749007.htm.

Crow, M. S., Snyder, J. A., Crichlow, V. J., & Smykla, J. O. (2017). Community

perceptions of police body-worn cameras: The impact of views on fairness, fear, performance, and privacy. *Criminal Justice & Behavior*, 44(4), 21.

CNTV News (2015). 《高清还原庆安枪击事件全程原始视频》 (*High Definition Video to Restore the Qing'an Shooting, The Officer: Feeling Aggrieved*) Retrieved 28 February 2017, from <http://m.news.cntv.cn/2015/05/30/ARTI1433001361253800.shtml>.

Cui, S. (2016). 《对“执法记录仪选择性损坏”的担忧别当笑话听》 (*Do Not Take the Selective Use of BWVCs as a Joke*). Retrieved 28 February 2017, from <http://cpc.people.com.cn/pinglun/n1/2016/0704/c78779-28521198.html>.

Ellis, T., Jenkins, C., & Smith, P. (2015). *Evaluation of the Introduction of Personal Issue Body-Worn Video Cameras (Operation Hyperion) on the Isle of Wight: Final Report to Hampshire Constabulary*.

Fei, Fei (2016). *Man Dies While in Custody: What Happened*. CRI English. Retrieved from <http://english.cri.cn/12394/2016/05/11/3521s927253.htm>

Fyfe, A. (2011) Evaluation in the Community Safety Unit Body Worn Video Projects in Paisley and Aberdeen - Self Evaluation: Evaluation Report . Glasgow: ODS Consulting. Retrieved from

<http://www.bwvsg.com/wp-content/uploads/2013/07/BWV-Scottish-Report.pdf>

Gaub, J. E., Choate, D. E., Todak, N., Katz, C. M., & White, M. D. (2016). Officer Perceptions of Body-Worn Cameras Before and After Deployment: A Study of Three Departments. *Police Quarterly*, 19(3), 275-302. doi:10.1177/1098611116653398

Goetschel, M., & Peha, J. M. (2017). Police Perceptions of Body-Worn Cameras. *American Journal of Criminal Justice*, 42(4), 698-726. doi:10.1007/s12103-017-9415-5

Gong'anbu (2016). 《公安机关现场执法视音频记录工作规定》 (*Regulations on Audio and Video Recording of Onsite Law Enforcement for Public Security Units*). Retrieved February 28, 2017, from <https://baike.baidu.com/item/公安机关现场执法视音频记录工作规定/19760300?fr=aladdin>.

Gramaglia, J. A., & Phillips, S. W. (2017). Police Officers' Perceptions of Body-Worn Cameras in Buffalo and Rochester. *American Journal of Criminal Justice*(1), 16.

Home Office (2007). Guidance for the police use of body-worn video devices. London: Police and Crime Standards Directorate. (includes Plymouth Head Camera Project) Retrieved June 12, 2018, <http://library.college.police.uk/docs/homeoffice/guidance-body-worn-devices.pdf>.

Huang, E. & Horwitz, J.(2017). *The death of a young man in police custody is rattling the trust of China's middle class*. Retrieved Jan 3, 2017, from <https://qz.com/876828/the-death-of-a-young-man-in-police-custody-is-rattling-the-trust-of-chinas-middle-class/>.

Hu, J.(2015). *Police Shoot a Man Dead. Justified Force or China's 'Stability Maintenance' at Work?* Retrieved May 21, 2017, from <https://globalvoices.org/2015/05/21/police-shoot-a-man-dead-justified-force-or-chinas-stability-maintenance-at-work/>

Jennings, W. G., Fridell, L. A., & Lynch, M. D. (2014). Cops and cameras: Officer perceptions of the use of body-worn cameras in law enforcement. *Journal of Criminal Justice*, 42(6), 549-556. doi:10.1016/j.jcrimjus.2014.09.008

Jiao, A. Y. (2001). Police and culture: a comparison between china and the united states. *Police Quarterly*, 4(2), 156-185.

Katz, C. M., Choate, D. E., Ready, J. R., & Nuño, L. (2014). Evaluating the impact of officer worn body cameras in the Phoenix police department. Phoenix, AZ: Center for Violence Prevention & Community Safety, Arizona State University.

Kong, D.W.(2014).执法记录仪给规范执法带来了什么?(What have BWVCs brought to Law Enforcement?). 《人民公安》(*Renmin Gong'an*), (22), 10-12.

Kyle, M. J., & White, D. R. (2016). The impact of law enforcement officer perceptions of organizational justice on their attitudes regarding body-worn cameras. *Journal of Crime and Justice*, 40(1), 68-83. doi:10.1080/0735648x.2016.1208885

Li, S. & Huang, J. (2010, March 25). 北京民警配发执法记录仪(Beijing police officers equipped with BWVCs). 《法制日报》(*Legal Daily*).p.1.

Li, Y.(2015). *Videos of In-car Sex Were Let Out by The Police*. Retrieved February 28 2017, from http://www.china.com.cn/cppcc/2015-12/23/content_37378709.htm.

Liu, J.(2013). Research on Body-worn Cameras in Police Field Law Enforcement. *Journal of Hubei University of Police*, 146(11), 20-22.

National Bureau of Statistics of China (2011). Main data bulletin of Beijing's Sixth National Census in 2010. Retrieved June 12, 2018, http://www.stats.gov.cn/tjsj/tjgb/rkpcgb/dfirkpcgb/201202/t20120228_30381.html.

Pelfrey Jr, W. V., & Keener, S. (2016). Police body worn cameras: a mixed method approach assessing perceptions of efficacy. *Policing: An International Journal of Police Strategies & Management*, 39(3), 491-506. doi:10.1108/pijpsm-02-2016-0019

Robson, C., & McCartan, K. (2016). Real world research. John Wiley & Sons.

Sandhu, A. (2017). 'I'm glad that was on camera': a case study of police officers' perceptions of cameras. *Policing and Society*, 1-13. doi:10.1080/10439463.2017.1285917

Smykla, J. O., Crow, M. S., Crichlow, V. J., & Snyder, J. A. (2016). Police Body-Worn Cameras: Perceptions of Law Enforcement Leadership. *American Journal of Criminal Justice*, 41(3), 424-443. doi:10.1007/s12103-015-9316-4

Wen, Phil (2016). *Death of brothel-visiting new dad electrifies China, forces police to explain themselves*. Sydney Morning Herald. Retrieved from <https://www.smh.com.au/world/death-of-brothelvisiting-new-dad-electrifies-china-forces-police-to-explain-themselves-20160512-got19a.html>.

White, M. D. (2014). *Police Officer Body-Worn Cameras: Assessing the evidence*. Washington, DC: Office of Community Oriented Policing Services.

White, M. D., Todak, N., & Gaub, J. E. (2017). Assessing citizen perceptions of body-worn cameras after encounters with police. *Policing: An International Journal of Police*

Strategies & Management, 40(4). doi:10.1108/PIJPSM-07-2016-0105

Young, J. T. N., & Ready, J. T. (2015). Diffusion of Ideas and Technology: The Role of Networks in Influencing the Endorsement and Use of On-Officer Video Cameras. *Journal of Contemporary Criminal Justice*, 31(3), 243-261. doi:10.1177/1043986214553380

Zhu, L.W. & Xie, C.Y. (2014). 论公安民警用枪的困境与对策 (The Predicament and Countermeasures of Police Officers' Gun Use). 《铁道警察学院学报》 (*Journal of Railway Police College*), 24(03),66-72.

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