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Street Checks: What the Literature Doesn’t Tell Us

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Introduction

In response to a request I received on the state of research concerning street checks\(^1\), I attempted to conduct a systematic review (SR) of the published research literature. This SR was intended to address the following questions:

1. Are street checks effective in deterring crimes?
2. Are street checks effective in solving past crimes?
3. What is the present state of the Canadian research literature on street checks?

As there were too few studies to address each question\(^2\) – and several of the studies are highly limited due to methodological issues – instead of conducting a meta-analysis or a fully developed systematic review, I have opted to provide a brief narrative analysis in response to each of the questions posed.

Method of Inquiry

To address the research questions posed above, I have conducted a systematic review (SR) of the research literature on street checks. A SR is a technique for “finding, sifting, sorting and synthesizing the findings of primary evaluations relevant to particular interventions” (Johnson et al. 2015: 460). In advance of beginning the finding phase of research, the researcher constructs a set of questions to be answered, as well as a set of well-defined inclusion and exclusion criteria.

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\(^1\) A proactive policing initiative also known as ‘carding,’ ‘stop and frisk’, ‘SQF (stop, question and frisk)’ and ‘stop and search.’

\(^2\) For Question 1, I identified 9 (n=9) relevant articles. For question 2, I collected no articles that met the search criteria. Because I expanded the search criteria to include ‘grey literature,’ for question 3 I was able to collect a further five (n=5) articles, bringing the overall total to fourteen (n=14).
(Neyroud 2011). As Uman (2011: 57) explains, “Systematic reviews, as the name implies, typically involve a detailed and comprehensive plan and search strategy derived a priori, with the goal of reducing bias by identifying, appraising, and synthesizing all relevant studies on a particular topic.” Although SRs may include a meta-analysis component, they differ in that the purpose of the systematic review is to summarize all empirical evidence that fits the inclusion criteria, whereas a meta-analysis entails the use of statistical methods to measure effect size by pooling results from multiple primary studies (Hofler and Hoyer 2014). While it is the case that a meta-analysis would be highly useful for exploring the research questions posed, an insufficient number of studies using similar methods led to the decision to instead conduct a systematic review using a narrative approach.

**Search strategy**

Inclusion criteria for this SR were set as follows:

1. Any peer-reviewed study that explored the relationship between street checks and crime deterrent effects;
2. Any peer-reviewed study that explored the relationship between street checks and the ability to solve past crimes;
3. Any study (peer-reviewed or otherwise published) conducted on street checks in the Canadian context.

Exclusion criteria for this SR were set as follows:

1. Opinion or commentary;
2. Literature reviews;
3. Individual or institutional case studies
4. Foreign language papers;

The search strategy for the first two questions entailed identifying keywords that would capture research on activities similar to the field interviews Canadian police term ‘street checks’ but fall under other names both here and elsewhere. These names include: ‘carding’, ‘stop and frisk’, ‘Terry stops’, ‘SQF’ ‘stop, question and frisk’, ‘pedestrian stop’, ‘pedestrian check’, ‘police
stop’ and ‘stop and search’. These keywords were then entered into the University of Western Ontario’s search engine, which allows researchers to search against hundreds of peer-reviewed academic journals and databases. To capture the most recent studies, I set the publication date parameters for 2000-2018. Once duplicate entries were discarded, abstracts were read to determine if the article met the inclusion criteria. In some cases, the paper itself was read to ensure studies were not summarily excluded.

The search strategy for the third question entailed a combination of searches of the academic databases to look for papers on ‘street checks’ and ‘carding,’ as well as extensive use of online search engines to capture ‘grey literature’. Using ‘grey literature’ within SRs is not uncommon and, with respect to Canadian research on street checks, proved to be necessary for increasing the number of studies upon which to draw (Savoie, Helmer, Green, Kazanjian 2003).

**Q1. Deterrence**

Upon an initial reading of several articles on the potential deterrent effect of streets checks on local crime and disorder, it became apparent that answering the first question with any degree of confidence, based on the existing literature, would be an impossible task. The reason for this is simple: studies on street check efficacy suffer from the problem of confounding variables – that is, we cannot rule out the possibility that other factors may or may not have impacted any results observed. Put another way: it would be incredibly difficult to disaggregate the effects of the actual street check (as one activity) from the potential deterrent effects of a visible police presence alone.

One of the few subjects in policing in which there is an ample evidence base is the field of hot spot policing. In essence, we know that crime typically clusters in discrete areas (Weisburd and Telep 2014) and that a visible police presence in these spaces can produce deterrent effects (Koper 1995). The problem is, as an article by Weisburd et al. (2014) makes clear: in both research
studies, and in everyday policing activity in the real world, street checks are often one activity that forms part of a larger pattern of ‘hot spot policing.’ Indeed, in their study of SQF (‘stop, question and frisk’) reports filed by members of the New York Police Department, the researchers were able to show that SQFs in that city were closely correlated to crime hot spots (what the NYPD termed ‘impact zones’). What these researchers cannot tell us is whether visible presence, non-SQF proactive policing, or the SQFs were responsible for decreases in targeted areas. This is also the case for a subsequent study of NYPD stops that similarly conflates street checks with hot spot policing, more generally (Weisburd et al. 2015). It is worth noting my concern regarding the possibility of spurious correlations is shared by these authors:

Although we think that our work provides an important advancement over prior studies in this area, we think it is important to note that it does not solve the problem of causality that we noted previously with certainty. Absent a randomized experimental evaluation of SQFs, there is simply no way to assure that the deterrence observed is not a result of confounding in our models. This is true of all efforts so far to assess the deterrent value of SQFs. (ibid.: 54).

The possibility of police presence in hot spots as a confounding variable in studies of street checks was also raised in a recent paper by MacDonald et al. (2016). Using NYPD data, these authors found that high visibility (or ‘saturation’) policing created crime reductions in selected neighborhoods, but that street checks did not have a significant impact in reducing crimes (with the exception of a small minority of cases for ‘probably cause’). From this, the authors conclude:

The results suggest a complicated set of effects that present both good and bad news for concentrated police deployment and investigative stops as a crime reduction strategy in high crime areas. We found that Operation Impact had a statistically significant but relatively small association with a reduction in total crimes. The formation of impact zones had the largest effect on reducing robbery and burglary offenses. The data, however, do not distinguish a clear mechanism for this effect. The increase in probable cause-related stops after the formation of impact zone had the strongest association with reduced burglary and robbery reports, suggesting that physical presence of more police and enhanced apprehension may have generated a deterrent effect specific to those crimes (ibid: 10-11).
Another point about methodological difficulties is well illustrated in an article by Ratcliffe et al. (2011). In this study, the authors ran a randomized controlled trial to evaluate the effectiveness of foot patrols in reducing violent offenses in selected hot spots. ‘Treatment’ sites were further designated as ‘high violence’ and ‘less violent’ spaces. The authors observed that foot patrol activity in the ‘high violence’ treatment spots was accompanied by higher rates of proactive policing, including increased numbers of ‘pedestrian’ and vehicle stops than had occurred prior to the study. The overall result was that “violent crime hotspots that were recipients of foot patrol officers for up to 90 hours per week had a reduction in violence of 90 offenses (with a net effect of 53 offenses once displacement is considered)” (Ratcliffe et al. 2011: 818). The authors conclude that foot patrol presence may operate as a ‘certainty-communicating device’ that signals to would-be offenders an “increased level of certainty that crimes will be detective, disrupted, and/or punished” (ibid.: 820). What the authors do not do is disaggregate the effects of various forms of police activity in the hot spots and link them to increased or decreased crime levels (see also Piza 2018). Why? One explanation might simply be their focus was less on the efficacy of any given activity rather than on the overall utility of foot patrol-based hot spot policing. Another explanation is that attempting to run a randomized controlled trial that also measured the effects of street check activity, would entail keeping police presence, and all other policing activity (arrests, citations, vehicle stops, business checks, etc.), constant across all treatment and control sites to rule out the possibility that some other factor was influencing results. Both the Philadelphia Foot Patrol Study (Ratcliffe et al. 2011) and other experimental studies on hot spot policing have shown how difficult it can be to ensure ‘treatment fidelity’. In other words, that police officers assigned to specific tasks

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3 The term the authors use ‘pedestrian stops’ and ‘field interviews’ or ‘field interrogations’ interchangeably for what Canadian police agencies typically refer to as street checks.
and areas perform as directed without deviating from the research script, so to speak (Rosenfeld et al. 2014).

One study that did attempt to disaggregate street checks from other types of police activity in hot spots was based on data produced through the frontline work of the Dallas Police Department’s Disruption Unit (Jang et al. 2011). Looking at not only street checks, but also vehicle stops, arrests and citations, the authors found that Dallas’ hot spots policing activities had an immediate impact on violent and property crimes. Of these activities, they observed that the number of street checks per week were “the most significant reason for the reduction in violent crime” (but not property crimes) (ibid.: 607). This was also held to be the case for nuisance offenses (ibid.). Among the limitations cited, the authors fail to explain how they could disaggregate street check effects from the general deterrent effects that can be produced through an active, visible police presence. While the comparison of street check effects to those produced by citations and arrests offers a tantalizing avenue of exploration, the possibility of confounding variables cannot be completely ruled out.

Other studies have tried to side-step these and other methodological limitations of previous research through, for example, comparing street check rates to crime rates. Notably, Ferrandino (2016) analyzed NYPD SQF data against precinct-level crime rates, concluding that year over year, SQF did not produce significant crime reductions. Rosenfeld and Fernango (2014) also measured NYPD stop rates against the volume of reported robberies and burglaries, finding that police stops had little effect on either offense type (from 2003 to 2010). It is worth noting, however, that a significant limitation of this study is they used aggregate reporting data, rather than using location specific data. As they explain, “both the current study and prior research are based on data aggregated to New York City police precincts, with an average population of over 100,000
residents. Such large and heterogeneous geographic areas are probably not ideal for analyses of the impact of SQF on crime, especially if SQF activity is highly concentrated in specific neighborhoods, blocks, street segments, or other crime ‘hot spots.’” In a subsequent study, Rosenfeld and Fernango (2017) attempted to correct this limitation by using census tracts to look at the relationship between SQF and monthly rates of both violent and property offenses. After adjusting their approach, they found that “higher doses of SQF are associated with small crime reductions generally and specific crime reductions for stops of blacks, Hispanics, and whites” (ibid.: 931). Again, they note their research is not without significant limitations and their findings should be employed with caution: “Strong causal inferences,” they suggest, “require experimental data and methods” (ibid.: 948).

Q2. Solving crimes

In a 2010 news article New York City’s then Police Commissioner, Raymond Kelly, was quoted as citing an internal report purporting to show that the practice of SQF had led to solving 170 cases, including 17 murders, 8 sexual assaults and 36 robberies and 67 burglaries (Rivera and Baker 2010). Since then, numerous similar claims have been made as to the investigative value of data collected through street checks (Hoffman, White and Webb 2015). To determine whether the validity of such claims had been independently, empirically tested by external researchers, I conducted a search of the peer-reviewed published academic databases to collect relevant literature. The result was no articles were located.

Q3. Canadian content

Although they did not disaggregate immediate post-stop arrests from subsequent arrests based on SQF reports, a report by the New York State Attorney General’s office did note that “fewer than one in four SQF arrests — or 1.5% of all stops — resulted in a jail or prison sentence; Just one in fifty SQF arrests — or about 0.1% of all stops — led to a conviction for a crime of violence” (Schneiderman 2013: 1). Instead, the majority of arrests (approximately 40%) were related to Quality of Life offenses.
Upon expanding the search frame to include non-peer-reviewed, published research, I was able to identify five Canadian studies that examined one or more issues surrounding the practice of street checks. Of these, four focused on real or perceived impacts on minority communities. The first is an analysis of 27 news articles on the use of street checks by the Hamilton Police Service (Tobias and Joseph 2018). Drawing on this sample, the authors argue that the police and local media “enact gaslighting … to deceive and undermine the credibility of the target” and that this gaslighting produces a “sense of disenfranchisement from the community, and distrust toward the police” (ibid.: 1). The second article, by Pierone et al. (2017), drew on responses to a survey of 543 African, Caribbean, and Black youth living within an unidentified city in Ontario on their social environment and perceptions of the police and courts. What these researchers found is that ethno-racial differences in police contact became significant once the data was adjusted for neighbourhood social disorder (increased likelihood of police contact) and leisure activities (decreased likelihood of police contact) (ibid.). Gender also plays a role, with young men being 2.4 times more likely than young women to be subjected to a street check (ibid.). The third study surveyed 4,163 young persons across Canada, asking them about not only their contacts with police, but also their social contexts and self-reported involvement in violent and property crimes (Fitzgerald and Carrington 2011). While involvement in violent crime was positively associated with increased contacts with police, controlling for other risk factors, minority youth were found to be more likely to be subjected to police contacts. A fourth study drew on data collected for the 2000 Toronto Youth Crime Victimization Survey, which explored experiences and attitudes of both a random sample of homed high school students and a convenience sample of homeless youth (Hayle et al. 2016). The results revealed that black youth (approximately 26%) with no criminal history were more likely to be stopped and searched by police on two or more occasions than white
youth (approximately 4%) or other minority youth (approximately 2%) (ibid.). Among those termed ‘high deviancy’ there were, however, no statistically significant differences based on race or ethnic group (ibid.). From all of this, the researchers conclude that

good behaviour does not protect black youth from police contact to the same extent that it protects white youth. Even among those who never engage in criminal activity, black race serves as a master status that increases the probability of being stopped and searched by police. Furthermore, at low and medium levels of deviance, black youth are still more likely to be stopped and searched than white youth. Thus, at similar levels of deviance, whiteness appears to protect white youth from police scrutiny (ibid.: 340).

Only one study – by Griffiths et al. 2018 – looked at not only community impacts, but also questions of efficacy and investigative utility. As with other studies here and in the U.S., the researchers cite significant community concerns about the practice and both real and perceived negative impacts. On less solid grounds, they do touch on the issue of the general deterrent value of street checks, citing interview data from police officers who claim that street checks have a deterrent impact on crime (see page 264). More importantly, given the lack of research to date on the extent to which street check data can inform police investigations, Griffiths et al. observe that data resulting from SCR forms “may be a component of the intelligence/investigative package … The officers noted that, in order for a street check to be of any EPS Street Check Policy & Practice Review use, it needed to be credible, compelling and corroborated.” (ibid. 228). Further, investigators stated that SCR data had been used not only to further an investigation, but also to verify a suspect’s alibi and/or to demonstrate that a crime had not occurred (ibid.). To substantiate such claims, the authors drew on a small sample of selected cases to reveal how SCR data had been beneficial in solving or developing a case.

As comprehensive as this study is (relatively speaking) – it too suffers from notable methodological limitations (as the authors acknowledge). Principally, the lack of experimental
methods means that it cannot contribute to our understanding of the real or potential deterrent effect, if any, of street checks as a policing strategy.

**Conclusions**

Empirical support for street checks is very weak and, in some instances, non-existent. In relation to the latter, we have no published studies of the use of street check data to inform investigations and/or solve cases. Where research exists, but is very weak, is in the context of arguments that street checks can produce crime deterrent effects. As I noted above, we cannot rule out the possibility that any crime deterrent effect is produced by a visible police presence in hot spots. The only way in which to rule out this factor is to conduct experiments in which visible police presence is carefully controlled for. Until this work is done, and in enough locations with enough independent researchers to build a credible evidence, the issue of street check efficacy will remain an open empirical question.

**References**


Rosenfeld, R. and Fornango, R. 2014. “The Impact of Police Stops on Precinct Robbery and


