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The importance of context: re-examining the ‘deployments’ of SWAT teams in Canada

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ABSTRACT

Based on an analysis of data released through Freedom of Information (FOI) requests, Canadian researchers have suggested that Special Weapons and Tactics (SWAT) teams are no longer exclusively deployed to resolve high-risk incidents but now frequently respond to routine calls that do not necessitate their involvement. Given concerns about these conclusions, we submitted the same FOI requests to the 14 police agencies examined by Roziere and Walby [2020]. Special weapons and tactics teams in Canadian policing: legal, institutional, and economic dimensions. *Policing and society*, 30 (6), 704–719] and worked with the FOI analyst from each agency to ensure that the data were being interpreted correctly. Based on our re-analysis of the FOI-released data, we report on two problems with the conclusions reached by Roziere and Walby: the conflation of incidents where any SWAT officer responds to calls with full SWAT team deployments and the masking of potential risk factors in calls when relying on call type categories. Our findings illustrate the value of police agencies disclosing relevant contextual information to researchers when possible and they reinforce the necessity of collaborating with FOI analysts to better understand the data being released.

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Police tactical units, colloquially known as Special Weapons and Tactics (SWAT)¹ teams, are specialised units designed to respond to situations that exceed the capabilities of patrol officers (International Association of Chiefs of Police [IACP] 2011). Their inception was meant to shield patrol officers from situations they were inadequately trained for, and to bring about favourable resolutions to high-risk, volatile, and dangerous situations (Davidson 1979). However, since their introduction in the 1960s, SWAT teams have undergone expansion in both their mandate and operational scope (Clark *et al.* 2000). This evolution, and the role of SWAT teams within modern policing, has been the subject of substantial debate in recent years (Balko 2006, Kain 2011). Some literature on this topic suggests that the deployment of SWAT teams has become overly common in contemporary policing practices in that they are frequently involved in ‘routine’ incidents such as domestic disturbances and traffic stops (Kraska 2007, Roziere and Walby 2018, 2019, 2020). Further, some claim that SWAT teams represent a ‘militaristic’ approach to policing that negatively impacts the community and creates an environment where officers are more prone to using force (Balko 2014, Mummolo, 2018, Kraska, 2021)

Previous research has examined the deployments of SWAT teams without considering the fact that no standardised approach exists for defining what a SWAT deployment is. Much previous research has also relied on crude metrics, such as call type designations, to determine how SWAT teams are being used. Given these two issues our current understanding about the use of SWAT

officers is considerably underdeveloped. To help move the field forward, and address these two issues specifically, the current study aims to extend our understanding of the use of SWAT teams in Canada by re-examining operational data from 14 Canadian police agencies that have previously been reported on by Roziere and Walby (2020).

Literature review

While the precise origin of SWAT teams is subject to some debate, it is generally accepted that the first SWAT teams were created in the late 1960s in response to several mass casualty events and widespread public unrest in the United States (US; Klingner and Rojek 2008). The police response to mass casualty events at this time demonstrated that they were generally 'ill-trained, ill-equipped, and ill-prepared' (IACP 2011, p. 2). These deficiencies in their capabilities, in combination with a rise in violent crime, led to the development of SWAT teams aimed at restoring faith in the police's ability to protect the public, particularly during critical incidents such as mass casualty events (Snow 1996, Moule *et al.* 2019). Despite their introduction nearly six decades ago, there exists little consensus on how SWAT teams are used in policing. The broader literature on this topic reflects ongoing debate, with some researchers contending that SWAT teams represent the embodiment of police militarisation, and others asserting that these teams reflect the professionalisation policing has undergone over time.

SWAT teams: the militarisation or professionalization of the police?

Kraska (2007) defines militarisation as a process 'whereby civilian police increasingly draw from, and pattern themselves around, the tenets of militarism and the military model' (p. 503). This definition parses militarisation as a process and militarism as an ideological approach that emphasises the application of force for conflict resolution. Kraska (2007) suggests that police militarisation exists on a scale that is contingent on a police force's approximation to the military on the following four variables: (1) cultural (values and language), (2) material (weapons and equipment), (3) organisational, and (4) operational (Kraska 2007). One commonly cited examples of militarisation in the US, which is in accordance with Kraska's (2007) scale, is the acquisition of excess military equipment by police agencies through the 1033 programme (Koslicki 2023).²

Furthermore, it has also been suggested that SWAT teams actively adopt military techniques, strategy, and culture; in other words, they are perceived to be the embodiment of police militarisation (Balko 2014). This perspective places particular emphasis on the integration of military culture and training into a policing environment as a highly problematic aspect of militarisation (Kraska and Paulsen 1997). As Weber (1999) asserts, due to their close collaboration with the military, SWAT units incorporate a mentality aligned with the military's special forces, which some see as being very problematic. The assumption is that the shared domain of advanced tactical training quells the 'cop on the beat' attitude and instead fosters a warrior mentality (Lieblich 2017, Smickes *et al.* 2019). This mentality, according to some, leads tactical officers see the cities they work with as war zones, and their militarisation fosters a proclivity for force applications, including lethal force, when interacting with the public (Kraska and Cubellis 1997).

Contrasting the disconcerting picture painted above regarding the growing influence of the military on SWAT teams, some authors paint a less pronounced state of militarisation than what others have portrayed. For example, examining the variables of militarisation that were outlined by Kraska (2007), some researchers have pointed out that the adoption or use of the 1033 programme in pursuit of military equipment has been far from the norm among American police agencies (Johnson and Hansen 2016). Indeed, the acquisition of surplus equipment appears to vary by region, agency type, and size (Johnson and Hansen 2016). Additional research on this topic contends that the militarisation of the police, and SWAT teams specifically, may be dismissive of the progress made by police agencies since the 1960s, and that the acquisition of new

equipment and technology by these agencies may actually be indicative of the increased professionalisation of police services (den Heyer 2014, Bieler 2016). For instance, SWAT officers receive about 500 h of training annually, whereas patrol officers only get between eight to 10 h (Alvaro 2000, Cyr *et al.* 2020, Dunker and Zackrias 2022). The additional training provided to SWAT officers can result in more successful call resolutions when compared to patrol officers, including their ability to resolve high-risk calls with minimal applications of force (Rojek 2005, Klinger and Rojek 2008).

In sum, the literature on SWAT teams is focused either on the negative impacts the teams can have on police culture, a department's operational focus, and police-community relations, or on positive impacts related to improved officer safety and the safe, successful resolution of high-risk calls (Jenkins *et al.* 2021a, 2024). While questions surrounding the appropriateness and applications of SWAT teams continue to be discussed, their use in policing has steadily grown. Their proliferation across North America since the late 1960s, and their increasingly prominent involvement in various police activities, has proven to be another highly controversial aspect of their operation, which is debated by researchers.

The expansion of SWAT teams: the importance of understanding context

As several researchers have discussed, American SWAT teams have gradually become involved in a wider range of operational activities than they were originally intended for (Kraska 2007; Kraska and Cubellis 1997). SWAT teams have maintained their role in responding to critical incidents like active shooters or hostage crises, while simultaneously being used more frequently for proactive policing duties due to an expansion in their mandate and operational scope (Kraska 2007). Indeed, the SWAT team's mandate in the US, as outlined by the National Tactical Officers Association (NTOA), now includes tasks that are proactive rather than reactive, such as warrant executions and high-risk apprehensions (NTOA 2018). Additional research in Canada suggests that the role of Canadian SWAT teams have also expanded. Alvaro (2000), replicating the work of Kraska and Kappeler (1997), found that while Canadian SWAT teams differ from their American counterparts in important ways, these teams have also seen a broadening of their mandate since their introduction and have become more proactive in their operations.

Recent examinations of SWAT teams in Canada by Roziere and Walby (2018, 2019, 2020) have relied on Freedom of Information (FOI) requests.³ Analysing the FOI releases from 14 police agencies, Roziere and Walby (2020) used the call type of each occurrence to conclude that SWAT teams are frequently engaged in low-risk or 'routine' tasks traditionally under the purview of patrol officers, such as warrant operations, mental health calls, and domestic disturbances. They additionally contended that Canadian SWAT teams are utilising a proactive approach to policing operations that mirrors what has been reported in the US. However, subsequent examinations of the same data have revealed that the coding of call type greatly obscures the level of risk associated with these 'routine' calls and fails to capture contextual variables such as the presence of a weapon (Jenkins *et al.* 2021b).

Specifically, Jenkins and colleagues (2021b) re-examined data from the Winnipeg Police Service, which was previously analysed by Roziere and Walby (2018, 2019, 2020). When examining incidents that included additional context beyond the call type, they found that weapons were frequently involved in the incidents that SWAT officers responded to ($n = 610$ of 1019, 59.9%) and that the call type often hid the presence of a weapon. For example, most incidents where a firearm was indicated to be present were not classified as a firearms-related call (e.g. gun call, shots fired). In fact, firearms were reportedly involved in approximately half of warrant executions, domestic disturbances, and suicide threats. Based on these results, they noted that seemingly 'routine' calls 'may include numerous factors that increase the level of risk to both the officers and the public and therefore warrant the response of officers with better training and equipment' (Jenkins *et al.* 2021b, p. 388).

Variations in the use of SWAT teams: what is meant by deployments?

The findings of Jenkins and colleagues (2021b) highlight that there is value in capturing the contextual features of incidents because this context can uncover different levels of risk associated with calls that have been classified as 'routine'. Beyond being able to assess risk more accurately, there are additional benefits associated with the investigation of context; namely, understanding what SWAT 'deployments' actually mean. While researchers frequently make the claim that SWAT *teams* are frequently being used across North America (e.g. Mummolo 2018, Roziere and Walby 2020), it is clear that SWAT officers fulfil more than one role within the departments and that these roles are often conflated. This has important implications. For example, full team deployments for certain types of calls may be cause for concern, but these concerns may be alleviated if deployments only involve individual SWAT officers, or small groups of officers, who are essentially performing patrol officer functions.

Kraska and Kappeler's (1997) work examining SWAT teams in the US made it clear that when they were not on a full team call-out (e.g. warrant operations, barricaded individual), these teams often broke into smaller units and patrolled hot spots where there was increased criminal activity. Alvaro (2000) affirmed this in the Canadian context and highlighted the significant variation in the use of SWAT resources by police services as some teams broke into pairs to bolster resources and respond to patrol calls. Furthermore, Alvaro (2000) demonstrated that how police agencies defined a deployment or call-out varied considerably; some agencies considered a call-out to be an entire team deployment, whereas others included any incident in which at least one SWAT officer responded.

The variation in the use of SWAT resources was also discussed during interviews with police officers from three Canadian police agencies, which were reported on by Jenkins and colleagues (2021a). These researchers noted that participants clearly distinguished between SWAT team deployments and incidents where a handful of tactical officers respond to a call. In incidents where SWAT officers responded to patrol calls, the respondents indicated that the officers were not wearing full SWAT gear (e.g. hard body armour, carbine, helmet) and were cognizant of the distinction between their role supporting patrol officers and their role within the SWAT team.

Beyond the variability observed by Jenkins and colleagues (2021a) in how SWAT officers respond to different calls for service in Canada, further variations exist in how SWAT teams are used from agency to agency. To date, the majority of research examining SWAT deployments has focused on municipal police services with relatively small jurisdictions, which is likely to influence the manner in which SWAT resources are used. In contrast to municipal agencies, which often have pairs of SWAT officers responding to calls, agencies responsible for larger jurisdictions, like the Royal Canadian Mounted Police (RCMP), have reduced accessibility to SWAT officers. Given this, they are more likely to respond to incidents as a full-team deployment when an Incident Commander, who is responsible for managing the necessary resources during a high-risk incident, requests the use of SWAT (IACP nd, Ontario Provincial Police 2006, Dubord 2011, RCMP 2019).

Furthermore, some agencies in Canada, such as the Ontario Provincial Police (OPP), have two different tiers of 'SWAT' teams, with the Tactics and Rescue Unit (TRU) and the Emergency Response Team (ERT) fulfilling different functions. Specifically, the TRU is the hostage rescue team that also responds to high-risk incidents such as barricaded individuals, canine backup, high-risk witness and VIP protection and prisoner escorts, high-risk warrants, and static surveillance where a high risk of violence exists (OPP 2006). In contrast, ERT duties include search and rescue operations, searching for physical evidence, crowd management and public order, VIP security, and the initial containment of potentially violent situations (OPP 2006).

Despite such considerations, and the results of research noting the variability in SWAT resourcing, applications, and inconsistent deployment thresholds, some researchers continue to ignore or conflate the various roles played by SWAT officers, which calls into question conclusions that are being made. Roziere and Walby (2020), for instance, suggest that modern SWAT teams are no longer a specialised and niche tool to be deployed in exigent circumstances (Kraska and Kappeler

1997, Alvaro 2000, Jenkins *et al.* 2021a). Rather, they argue that Canadian SWAT teams are frequently and indiscriminately deployed to fulfil a new proactive policing function, painting a worrying picture of the normalisation of SWAT teams in Canada. However, no attempt is made by the researchers to understand the various ways in which SWAT ‘teams’ are used in the jurisdictions they studied, or even if full teams were being deployed by the services they studied. Clearly, there is a need for additional research exploring how SWAT officers are being used to further understand their role in the Canadian policing environment.

The current study

As highlighted above, the literature on the use of SWAT officers is rife with opposing perspectives and contains little agreement. Ongoing debates cover topics ranging from disagreements on foundational definitions such as militarisation to conceptualizations of what constitutes a SWAT ‘deployment’. However, one unifying theme emerging from the literature is the need for additional research (Bieler 2016). This is particularly true given that there is a great deal of variance with respect to SWAT team composition, structure, operational mandate, and the communities they serve (Alvaro 2000, Klinger and Rojek 2008, Cyr *et al.* 2020). Further, it is crucial to understand that most of the existing literature on SWAT teams comes from an American perspective (Moule *et al.* 2019, Singh 2001). The discussion of police militarisation in the Canadian context reveals an entirely different policing landscape in relation to SWAT teams, as they are subject to a greater deal of oversight, standardised training, and varied access to militarised equipment than their American counterparts (Cyr *et al.* 2020, Towns *et al.* 2023). Further, given the cultural, environmental, and political dissimilarities that exist between the US and Canada (Cyr *et al.* 2020), research that contextualises the use of SWAT teams in Canada is crucial to understanding their place in modern policing.

Given concerns about previous Canadian research on SWAT teams (e.g. conflating full-team deployments and ignoring the presence of potential risk factors in calls responded to by SWAT officers), we requested the same data from Canadian police services that were reported on by Roziere and Walby (2020). The re-examination of the data previously discussed by Roziere and Walby (2020) will shed more light on the sorts of issues highlighted above. Specifically, the current study will examine the following research questions: (1) What types of incidents are included in SWAT ‘deployments’?; (2) How consistent is the information released through FOI requests by police agencies regarding the use of tactical officers?; (3) To what extent are risk factors present in incidents that tactical officers respond to?; and (4) To what extent does the initial call type mask risk factors contained within a call?

Methods

Data

To re-examine the data previously reported on by Roziere and Walby (2020), we submitted FOI requests to the same 14 police agencies that they examined in their study. Specifically, we adopted the same language previously used by Roziere and Walby to request ‘all records pertaining to each agency’s SWAT team’s deployment frequency and type of deployment in each instance’. Additionally, we explicitly stated that we were requesting the same data that was released to Roziere and Walby to ensure that we received the exact same data. To save costs associated with FOI requests, we requested data from the last two years from each respective police agency reported on by Roziere and Walby (2020).

Materials

To examine risk factors associated with calls responded to by SWAT officers, we adopted a condensed version of the coding manual used by Jenkins and colleagues (2021b; see Appendix A).

Based on the very high level of agreement between coders found in Jenkins and colleagues (2021b), all coding was completed by the second author and inter-rater reliability was not calculated. We conducted a content analysis of the call information by recording whether there was an indication that a weapon was involved in each call using a dichotomous variable (i.e. present vs absent). The content analysis was completed using two different data sources within each FOI release. The first approach only considered the call type to determine whether a weapon was present (e.g. armed and barricaded, gun call, shots fired, stabbing). The second approach used the call type in combination with any additional information provided about the call. Coding for the presence of weapons through these two different methods allowed us to compare the rate of weapons using call type alone and when additional context is provided.

Procedure

We received a response from all 14 FOI requests, which includes 15 SWAT teams as the OPP released data on their ERT and TRU. To ensure that the data released from each agency was being interpreted correctly, we contacted the FOI analysts with follow-up questions. Primarily, these questions related to three main issues: requesting clarity on what the agency considered a deployment, what specific call codes meant, and whether the tactical unit was full-time. This step was taken to further our understanding of the data as FOI requests, while useful, fail to provide all information on a given topic. Furthermore, this was particularly important given the considerable variation in the data released by each police agency. Prior to FOI requests being sent, we received Ethics approval from Carleton University's Research Ethics Board (#110292).

Results

(In)Consistency of information released

One of our primary findings concerns the lack of consistency in the information that was disclosed to us through our FOI requests. Going beyond the inherent limitations of examining data from FOI requests (e.g. limited information), we found considerable variation in how police agencies (1) released data regarding SWAT 'deployment', (2) record incidents where tactical officers are used, and (3) report on such data. For example, we found considerable variation in how police agencies defined a 'deployment' in the FOI data that was released. Some agencies reported the number of occurrences that any SWAT officer was associated with (e.g. Calgary Police Service, Windsor Police Service).⁴ In contrast, other agencies, such as the Halifax Regional Police, excluded incidents where tactical officers supported patrol officers, or instances where SWAT officers responded to regular calls for service.

Similarly, the Vancouver Police Department released data on SWAT team deployments that met the threshold of a critical incident, which they defined as 'serious situations whereby the potential risk is such that a safe and peaceful resolution is beyond the perceived capabilities of the field units responsible for the outcome'. This definition is inclusive of situations like hostage incidents, barricaded persons, and situations that are beyond the abilities of patrol, such as high angle calls where rappel gear is required. Extending beyond the aforementioned definition, the Regina Police Service retains the highest threshold by releasing data on full-team activations where an Incident Commander was present. Overall, it appears that agencies with full-time tactical teams included a broader set of circumstances when reporting on the 'deployment' of SWAT officers (e.g. a pair of SWAT officers assisting patrol). In contrast, agencies with the highest threshold for SWAT team deployments (i.e. only reporting on full-team events) were often those with a part-time team (see [Table 1](#)).

Only two agencies released data on incidents that were solely full-team activations (Regina Police Service and the London Police Service). The other agencies included incidents where one or more tactical officers were dispatched to an incident. Interestingly, some agencies, such as the Calgary Police Service, indicated that within the released data there were 'deployments' in which tactical

officers did not interact with the public at all. Examples of this included surveillance operations or instances when officers were placed on standby for an incident, such as a mental health apprehension, in which it was anticipated that the individual would become barricaded. With the exception of data released by the Regina Police Service, we could not distinguish between full-team deployments and incidents where tactical officers assisted patrol officers during high-risk incidents or when they responded to regular calls for service. These results highlight the significant variation in how agencies define SWAT deployments and underscore the care researchers need to take in drawing conclusions about such deployments.

One final note of importance

While most agencies provided the total number of SWAT ‘deployments’ for each call type, some police services included a list of all incidents (i.e. a unique row for each incident) that tactical officers responded to (e.g. Hamilton Police Service) while the Windsor Police Service included a unique row for each unit dispatched to a given incident. Unfortunately, the inclusion of additional context to explain why a SWAT team or member attended such calls was not a frequent occurrence in the FOI releases. The two agencies that provided the most detailed narratives were the Hamilton Police Service and the Winnipeg Police Service. Notably, the information released by the Winnipeg Police Service contained short narratives on approximately one-third of incidents.

Findings concerning the presence of weapons

Related to the variability in the level of detail released by agencies when responding to our FOI requests, the extent to which information was provided about weapons that were involved in calls drastically differed across agencies (see Table 2).

Among the agencies that provided any additional context for the FOI releases, the call type indicated that weapons were present between 0.5% ($n = 1$, Ottawa Police Service) and 29.7% ($n = 998$, Peel Regional Police) of incidents. However, when including information beyond the call type, this rate increased to between 2.5% ($n = 5$, Ottawa Police Service) and 83.3% ($n = 151$, Hamilton Police Service) of incidents. In the case of the Winnipeg Police Service, the use of the call type alone masked the presence of weapons in 8.5% ($n = 276$) of occurrences.

Findings concerning SWAT team incident responses and warrant operations

In addition to indicating whether weapons were involved in the calls, the Hamilton Police Service also specified the number of tactical officers that responded to a given incident. Across SWAT

Table 1. Summary of the contextual information disclosed from each agency.

Agency	Call type included?	Context included?	Solely full-team deployments?	Full-time team
Calgary	Yes	No	No	Yes
Halifax	Partially	No	No	Yes
Hamilton	Yes	Yes	No	Yes
London	Partially	No	Yes	Yes
OPP ERT	Partially	No	No	Yes
OPP TRU	Partially	No	No	Yes
Ottawa	Partially	Yes	No	Yes
Peel Regional	Yes	No	No	Yes
Regina	Partially	Yes	Yes	No
Saskatoon	Partially	No	No	No
Toronto	Yes	No	No	Yes
Vancouver	No	No	No	Yes
Waterloo	Yes	No	No	Yes
Windsor	Yes	No	No	Yes
Winnipeg	Yes	Yes	No	Yes

Table 2. Breakdown of FOI data received and indications of risk factors present.

Agency	Call types	Total incidents	Warrants	Weapons as indicated by call type	Total weapons mentioned
Calgary	91	1306	174	92	248
Halifax	6	220	9	0	0
Hamilton	24	180	93	5	151
London	11	59	24	0	0
OPP ERT	17	4469	148	0	0
OPP TRU	9	503	247	0	0
Ottawa	15	203	136	1	5
Peel Regional	86	3364	–	998	998
Regina	17	54	22	12	20
Saskatoon	3	187	71	0	0
Toronto	94	1130	–	337	337
Vancouver	–	357	–	–	–
Waterloo	69	4462	60	129	129
Windsor	134	4892	21	218	241
Winnipeg*	78	3231	398	859	1135

Note. * indicates data that has previously been reported by Jenkins *et al.* (2021b). Blank cells indicate that the data released was unable to be used to identify the number of incidents specific to each header.

‘deployments,’ there were, on average, seven ($SD = 3.6$) tactical officers responding, with ‘deployment’ sizes ranging from two (assisting other police forces with armoured vehicles, assisting patrol officers, and assistance with K9 tracking) to 22 (execution of a *Controlled Drugs and Substances Act* search warrant with a firearm involved). Similarly, the Windsor Police Service released data on the number of responding tactical units, in this context a unit is a pair of SWAT officers. Across all incidents, 1.3 units ($SD = 0.78$) responded on average with between one and 14 units responding. The number of SWAT personnel who responded to calls was not present in any other FOI releases, preventing further analyses on the composition of the SWAT ‘deployments’ from being conducted.

Given the findings that different agencies adopted considerably different thresholds when releasing data on SWAT team ‘deployments,’ we used the percentage of total incidents that were warrant operations as an approximation of the deployment threshold adopted by a given agency. Additionally, warrant operations were selected as a suitable threshold as all but three of the agencies (Peel Regional Police, Toronto Police and Vancouver Police) provided data on this call type. Its consistency in the information released aided in making comparisons across teams and jurisdictions possible. More than one-third of occurrences were warrants for police agencies that only report on full-team deployments, such as the Regina Police Service ($n = 22$ of 54, 40.7%) and London Police Service (24 of 59, 40.7%). In contrast, the rate of warrants is much lower for agencies that released data on all incidents that tactical officers were associated with (e.g. Calgary Police Service $n = 174$ of 1306, 13.3%; Halifax Regional Police $n = 9$ of 220, 4.1%). In fact, warrants comprised approximately one percent of occurrences in some agencies (Waterloo Police Service $n = 60$ of 4462, 1.3%; Windsor Police Service $n = 21$ of 4892, 0.4%). Overall, these results provide evidence that the percentage of incidents that are related to warrants is indicative of whether the police agency used a broad (e.g. all incidents that SWAT officers were dispatched to) as compared to a narrower (e.g. full-team deployment with Incident Commander) threshold for reporting on ‘deployments’.

Discussion

The presence of SWAT teams in policing, specifically within the Canadian context, has been the subject of great concern over recent years. Some researchers suggest that the role of SWAT *teams* is rapidly expanding and that they are now participating frequently in ‘routine’ calls that do not warrant their involvement (Roziere and Walby 2018, 2019, 2020). If just the call type of these instances is reported on, it is easy to see how one might extrapolate that SWAT is everywhere, participating in calls that may not warrant their involvement, such as mental health calls, domestic disturbances, traffic stops, and search warrant executions for drug offences. However, our analyses indicate that this narrative may not be accurate.

Consistency in reporting practices

Within the 14 police agencies that released FOI request data regarding the use of their SWAT officers, we found a lack of consistency in reporting practices. When investigating our first research question, the results revealed variation across agencies in terms of how they define SWAT 'deployments'. The criterion used to decide what calls are considered a SWAT *team* 'deployment' plays a significant role in understanding how frequently tactical resources are used by Canadian police services. A 'deployment' in the present study included a variety of scenarios, ranging from occurrences where SWAT team members did not interact with the public at all (e.g. officers conducting surveillance or placed on standby; Calgary Police Service), to a pair of tactical officers assisting patrol (Winnipeg Police Service), to full-team activations with an Incident Commander on scene (Regina Police Service). Given this variability, results generated from agency to agency must be contextualised and understood through the lens of their deployment criterion, not just the frequency at which SWAT officers are 'deployed'. Without adopting such an approach, calls where SWAT members may have only tangentially participated in a call, or calls where SWAT members were serving in a patrol function without their tactical gear, may be conflated with full-team deployments. Conversely, the actual number of incidents where SWAT officers responded could be significantly larger than the FOI released data suggest because agencies may exclude instances where a SWAT member played an instrumental role in the call, but a full-team deployment was not enacted. The definitive number of SWAT deployments can only be estimated once additional information on the definition of a 'deployment' is provided and investigated in future works.

Expanding beyond what is and is not considered a SWAT deployment, further inconsistencies were discovered in the level of detail provided concerning the incidents that received a response from tactical officers (Research Question 2). The information associated with the call type displayed significant variability. For example, some police agencies that responded to our FOI request provided broad categories of incidents while others provided a more detailed breakdown of call types. For example, the Saskatoon Police Service provided three categories of incidents that involved SWAT deployments (i.e. High-Risk Warrants, Emergent Calls, and Security Detail) across the two years examined. In contrast, the Windsor Police Service indicated that their tactical officers responded to 134 unique call types (e.g. Assault, Robbery, Wellbeing Check). Again, this variability has to be factored into our (lack of) current understanding of how SWAT officers are utilised in Canada.

Presence of weapons in 'deployments'

Beyond the inconsistencies in the information released, the data speaks to our third research question, which focused on the extent to which risk factors are present in incidents that receive a response from tactical officers. Our results indicate that most agencies did not release data that provided sufficient context to determine whether risk factors were present. However, based on the call type alone, we found that weapons were involved in up to 30% of SWAT 'deployments' ($n = 998$, 29.7%; Peel Regional Police). When including additional context, this rate increased to more than 80% of incidents for some agencies, such as the Hamilton Police Service ($n = 151$, 83.3%). Comparing the percentage of incidents where weapons were involved within the Hamilton Police Service to other services highlights the value of including contextual information in deployment data as the rate increased by 80% ($n = 5$ vs $n = 151$). The presence of weapons in any call significantly changes the risk to both officer and public safety, and as existing research has already suggested, SWAT officers are more capable and better trained to deal with such situations, thus further justifying their involvement (Williams and Westall 2003, Seebock 2018, Jenkins *et al.* 2021a).

Our results also indicate that the presence of weapons in SWAT 'deployments' may be more frequent than previously reported. It has been suggested by Roziere and Walby (2020) that using SWAT officers during 'routine' events such as warrants is unnecessary and likely to harm civilians. However, when presented with additional contextual information, it becomes apparent that many of these

warrant executions involved the presence or believed presence of firearms. Our results indicated that the six agencies involved in the present study that provided additional contextual information enabled us to code and include 626 incidents where weapons were involved. This additional information was not captured by the call type and without the additional context would have been lost in our analyses. Ultimately, while warrant operations may seem like a routine policing activity, they can present grave risks to officers (as affirmed by the US Supreme Court decision in *Commonwealth v. Garner* 1997).

Call type masking risk

Our fourth research question considered whether the call type masks an indication that weapons are involved in the incidents that SWAT officers are responding to and if the call type is a reliable indicator of the risks associated with a call. We found that within agencies that released additional context, the initial call type often masked the belief that weapons were involved in the incident. In some cases, there were substantial differences in the prevalence of weapons when comparing the call type to the narrative provided (e.g. Hamilton Police Service). These findings are consistent with previous research (Jenkins *et al.* 2021b, 2023) and reiterate the need for high-quality data. They also call into question research that has relied exclusively on call type data to determine the appropriateness of SWAT 'deployments' (e.g. Roziere and Walby 2020).

Implications

Our findings not only have implications for research examining the use of SWAT officers across North America, but also speak to attempts to understand the use of police resources more generally. Primarily, our findings call into question the interpretation and conclusions of Roziere and Walby (2018, 2019, 2020) regarding the use of tactical resources in Canada. For example, according to Roziere and Walby (2018), the Winnipeg Police Service had 3,372 SWAT *team* deployments in 2016. However, this conclusion does not consider the composition of the SWAT team in question, which has approximately 37 officers across four shifts (Griffiths and Pollard 2013). Given this information, Roziere and Walby's (2018) assertion that Winnipeg's SWAT team responds to an average of approximately ten full-team deployments every single day of the year is highly unlikely, if not impossible. Instead, it is more likely that these figures include all incidents where SWAT officers were dispatched or linked to an incident, the majority of which did not involve a full-team response. The conflation of SWAT team callouts and incidents where a small number of tactical officers support patrol officers (likely not in full tactical gear) is further substantiated by Jenkins *et al.* (2023) who found that approximately half of the incidents in which Winnipeg SWAT officers were involved received a two-member response ($n = 1531$ of 3215).

Relatedly, many of the 'deployments' discussed by Roziere and Walby (2018, 2019, 2020) are likely instances where SWAT officers are working to support patrol officers by bolstering front-line resources when dealing with excess calls for service. Many agencies, such as the Waterloo Regional Police, made it clear that their SWAT officers can be called upon to assist with patrol operations during times of higher operational demand, and their involvement in such calls is indicative of capacity constraints given the increasing number of calls for service. Therefore, a given police services capacity considerations cannot be overlooked when discussing SWAT teams' involvement in routine calls. Across North America, the number of officers has typically decreased despite the increasing number of calls from the public (PERF 2021, Statistics Canada 2023). In some jurisdictions, this has resulted in considerable wait times before officers are dispatched to a call (e.g. Griffiths and Pollard 2013). These conditions create situations where SWAT officers may need to fill a patrol function to provide adequate policing services to the public. Given this, it is likely that SWAT teams are not responding to 'routine' calls as previously suggested; instead, members of the tactical unit are responding to incidents to address staffing issues given increased operational demands (e.g.

Alvaro 2000, Cyr *et al.* 2020, Demers *et al.* 2007, den Heyer 2014, Jenkins *et al.* 2021a). In fact, Demers and colleagues (2007) recommended that tactical officers become more involved in patrol when possible as it would 'reduce the workload of regular patrol units, increase the performance of patrol units and improved the service offered to citizens' (p. 1030). Importantly, when tactical officers are augmenting patrol resources, they are often wearing grey patrol uniforms and are not equipped with the sort of equipment that is necessary when responding to high-risk calls like hard body armour and carbines.

Additionally, our results have implications for research that seeks to understand the use of police resources, particularly as it relates to SWAT officers. The results of our study, in combination with previous research, make it clear that there is no standardisation of reporting practices regarding the use of tactical resources across police services (e.g. Alvaro 2000, Griffiths and Pollard 2013, Roziere and Walby 2018, Jenkins *et al.* 2021b). Given this, we are unable to accurately compare the rate of 'deployments' over time or across jurisdictions. The threshold used when releasing data on SWAT 'deployments' has significant implications for understanding the extent to which SWAT officers are utilised by a given service. For example, if we consider a full-team callout to include at least eight tactical officers, and the Hamilton Police Service only reported on full-team deployments, the FOI release would contain approximately half of the incidents ($n = 83$ of 180) that it actually included. In contrast, if other police services (e.g. the Toronto Police Service or the Winnipeg Police Service) excluded incidents where a small contingent of tactical officers were responding (three or fewer), many agencies would have released significantly less data. While fictitious, the previous example illustrates that the threshold adopted by an agency significantly influences the stories that each department tells through their data releases, and this impacts how their SWAT teams are perceived. Considering the significant variation in the data agencies released, previous research that has relied on this data (e.g. Roziere and Walby 2020) should not be relied on to benchmark the 'growth' of deployment rates among SWAT teams or make cross-jurisdictional comparisons. To the extent that similar issues are present within the research conducted in the US, results pertaining to SWAT 'deployments' are equally problematic.

Given that the lack of consistent reporting standards across agencies reduces our ability to compare the use of tactical resources, it would be beneficial for agencies to co-develop reporting standards and protocols so that comparisons could be made across agencies. The results reported in our study indicate the need for further consistency in SWAT team data reporting and lends credence to the possibility of 'a nationwide methodology [being] developed to keep accurate and standardized records' (Alvaro 2000, p. 95). Relatedly, our findings reiterate the need for police agencies to 'capture, record, and release higher-quality data ... particularly regarding contextual information' associated with calls involving SWAT officers (Jenkins *et al.* 2021b, p. 389). While there has been some progress on this issue at the state level in the US, including Maryland, it has been relatively short-lived (Dobrin *et al.* 2020, Mummolo 2018). We acknowledge that the development of standardised reporting practices is a challenging process given that there is no universal governing body for police agencies across North America, and previous attempts at systematically tracking police use-of-force have failed (Kiedrowski *et al.* 2015, Alpert 2016, White 2016, Bennell *et al.* 2022). In the absence of standardised reporting, it would still likely be valuable for police agencies to proactively publish information on incidents that SWAT teams are deployed to, along with relevant contextual information. The use of public dashboards on SWAT deployments, which include contextual information, would ultimately increase transparency and ensure that data is accurately interpreted by the public.

Finally, the contrast between our results and those reported by Roziere and Walby (2018, 2019, 2020) has implications for research using FOI to access government records. Specifically, the conflation of full-team deployments with incidents where at least one SWAT officer responds in any capacity highlights the need for researchers using FOI data to do their due diligence in ensuring that they properly understand the data that are being released. As an example, when comparing our results to those of Roziere and Walby (2020), there were inconsistencies in the number of incidents SWAT officers were dispatched to. This was most prominent in the data released by the

London Police Service, where the present study recorded approximately 40% fewer tactical *team* deployments than those previously reported ($n=59$ compared to $n=97$). Similarly, we recorded 23% fewer 'deployments' within the Windsor Police Service ($n=4892$ compared to $n=6356$). Further, our approach highlights the value of engaging with police practitioners, such as FOI analysts, to develop a more informed understanding of the data that are being examined. Without engagement with practitioners, one's understanding of the data may be incomplete and lead to erroneous or unsubstantiated conclusions.

Limitations and future directions

While the results and implications discussed in the present study provide additional context to SWAT 'deployments' in Canada, there are a number of limitations to our approach. The primary limitation is found in our reliance on FOI requests. In accordance with FOI legislation, the requested information may be subjected to redactions or exemptions; as such, missing information may be present in the data received from an FOI request. In particular, law enforcement agencies have a number of additional rights afforded to them via this Act and retain the right to refuse access to records for several reasons (disclosure may adversely affect investigations, an individual, interfere with procedural fairness, etc.). As recognised by Roziere and Walby (2018, 2019, 2020), FOI requests will rarely produce a complete disclosure of the requested information. Rather, the information received is subject to the interpretation of the analyst completing the request and any redactions they might make. As such, while FOI requested data is useful in gaining access to information that is not proactively reported on, it is inherently limited in so far as it does not provide all the information required to fully understand a given topic.

The lack of contextual information included in much of the data released to us likely resulted in the underreporting of risk factors. Given this, our results are not meant to suggest that the incidents that do not mention weapons are necessarily low risk. Instead, due to the limited amount of contextual information, we are only able to report on the trends extracted from the data and are unable to speak to the actual level of risk posed in calls without additional information. This is especially true given the findings that weapons, such as firearms, are involved in approximately half of mental health calls and domestics that SWAT officers responded to in Winnipeg (Jenkins *et al.* 2021b). Furthermore, due to the lack of sufficient context provided, we can only report on whether weapons were indicated to be involved instead of coding for other risk factors included in Jenkins *et al.* (2021b), such as individuals making threats to harm police officers.

Moreover, given the variation in the composition, mandate, and structure of SWAT teams across Canada, we are unable to speak to the reporting practices and SWAT activities in agencies that were not included in the current study. While the sample of SWAT teams used in the present study provides a more informed understanding of the reporting practices and use of SWAT resources across Canada, additional research which includes a broader sample of police agencies is needed. In particular, it would be valuable to include smaller agencies and those with a part-time SWAT team to better understand how such resources are utilised in conjunction with patrol officers, if at all. Furthermore, given the focus on municipal police agencies, it would be valuable to include services responsible for larger jurisdictions, such as the RCMP.

Despite SWAT teams being a contentious issue, the amount of research focusing on their role within the Canadian policing environment is significantly underdeveloped. Much of the existing literature on this topic is rooted in examinations of American police departments operating within vastly different criminal justice environments (e.g. Kraska and Kappeler 1997, Klinger and Rojek 2008, Koslicki 2017). Given this, there are many crucial research questions regarding the operation and use of Canadian SWAT officers that warrant further investigation, including but not limited to; the variation of reporting practices, risk factors that are present within the incidents that they respond to, training standards across teams, as well as the use of force by SWAT officers. There is also a great deal of variance with respect to SWAT team composition,

structure, and operational mandates. Such variations necessitate a great deal of in-depth research. As Koslicki (2017) noted:

research into SWAT teams (and thus, militarization as a whole) should be, first, conducted more frequently to obtain more complete and current data, and second, be conducted with far more consideration for the variances amongst SWAT teams themselves, as well as the possible external factors that could influence trends in SWAT growth and activity. (p. 745)

The available literature raises several critical questions about the use of SWAT officers and their place in modern policing, as well as how they impact the communities they serve (e.g. Mummolo, 2018, Roziere and Walby 2018). As a result, additional research on this topic is needed from a multitude of disciplines and perspectives. While we call for more research on the use of SWAT, we caution against approaches that rely on counting the number of ‘deployments,’ particularly when the incidents are void of context.

Conclusion

De-contextualised data has been used to suggest that SWAT teams are frequently deployed to low-risk incidents across Canada (Roziere and Walby 2018, 2019, 2020). Our study examined the consistency of data released by police agencies regarding SWAT ‘deployments.’ When contrasted against existing research that has drawn on the same data, the inclusion of additional context expanded our understanding of SWAT team ‘deployments’ to include their involvement in non-traditional settings, such as supporting patrol officers. Based on our results, it can be concluded that SWAT team deployments are not as pervasive as previously suggested, and that the study of SWAT teams demands careful consideration of contextual factors to understand their role in the Canadian criminal justice system. When undertaking this research, we urge researchers to engage with police services in order to gain access to high-quality data in a manner that accounts for the complexities of the data being released.

Notes

1. SWAT teams are also commonly referred to as: Emergency Response Teams (ERT), Special Response Units (SRU), Tactical Teams, Police Paramilitary Units (PPU), Tactical Action Group (TAG), and other related identifiers. While there might be minor differences in operational scope from one term to another, or variations from agency to agency, the names represent similar roles. This paper will use the term SWAT team when referring to specialised policing units designed to respond to situations that exceed the capabilities of general patrol officers.
2. In the US, the Department of Defence (DoD) 1033 permits the Secretary of Defense to transfer ownership and use of excess DoD supplies/equipment to state, county, and local law enforcement agencies (Defense Logistics Agency n.d.).
3. Under the Freedom of Information and Protection of Privacy Act (FIPPA) and the Municipal Freedom of Information and Protection of Privacy Act (MFIPPA), individuals are able request information from certain public sector institutions by submitting an FOI request. When submitting the request, the individual must identify what records they are hoping to receive, identify the implicated institution(s), and submit a FOI request online or by mail to any institution under FIPPA or MFIPPA (Government of Ontario 2014).
4. It should be noted that SWAT officers’ association with a call is a nebulous term used to capture a variety of instances. It can include cases where at least one SWAT officer was assigned to a call and therefore associated with the occurrence but was not actively involved in the resolution of the incident, while also including cases where SWAT members attend a call to support patrol officers.

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