Canadian Police Tactical Units: The Normalization of Police Militarization or a Pragmatic
Response to High-Risk Calls?

by
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Abstract

Police tactical units (PTUs) were originally developed to be small teams of officers who respond to high-risk calls with specialized training and equipment designed to minimize harm to both the public and officers. The limited research available suggests that, much like their American counterparts, Canadian PTUs have become normalized in that they commonly respond to ‘routine’ calls. This thesis sought to expand upon previous literature by moving beyond crude data (e.g., original calls for service) to determine the presence of risk-factors in PTU calls, which may explain when and why these teams are used. Throughout interviews with patrol and tactical officers it became clear that PTUs are consistently used for high-risk calls, resulting in safer outcomes due in part to their level of training and equipment. These findings conflict with previous assumptions that PTUs are analogous to the police waging war on the public it is supposed to serve.

Keywords: police, police militarization, police tactical units, Canada

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Canadian Police Tactical Units: The Normalization of Police Militarization or a Pragmatic Response to High-Risk Calls?

Introduction

Images of the police response during the 2014 riots in Ferguson, Missouri following the lethal shooting of Michael Brown are seen as the epitome of police militarization. The photos of police officers armed with “assault rifles” while clad in dark clothing brought the practice of police services using military equipment to the forefront of international debate (Ahmed, 2014; Apuzzo, 2014; Levs, 2014; Waldman, 2014; Wofford, 2014). While police militarization is more salient in the United States (US), there is evidence to suggest Canadian police have adopted equipment that is perceived to be militarized (e.g., De Sarkar, 2016; Spratt, 2014). Debates regarding the ‘militarization’ of the police are limited as the construct has no agreed upon definition (Bieler, 2016; den Heyer, 2014; Phillips, 2018; Weiss, 2011). However, the use of police tactical units (PTUs), also commonly referred to as police paramilitary units (PPUs), has been used to assess the extent to which police services have incorporated militaristic equipment and training into their practices (Hill & Beger, 2009; Kraska & Cubellis, 1997).

Police tactical units were originally developed to be small teams of officers who respond to high-risk calls (e.g., barricaded individuals with weapons) with specialized training and equipment designed to minimize harm to both the public and officers (Klinger & Rojek, 2008). However, there is evidence to suggest PTUs are no longer reserved for infrequent, high-risk calls, but instead commonly respond to more ‘routine’¹ calls (e.g., traffic stops; Kraska &

¹ This paper takes the perspective that there is no such thing as a ‘routine’ call as the outcome of any given call type (e.g., traffic stop) can vary widely (e.g., minor offense, impaired driver, subject assaulting the officer). The appreciation for the uniqueness of each individual call for service not only benefits the subject interacting with the officer (e.g., better service provided; Owens, Weisburd, Amendola, & Alpert, 2018), but also the officer, as they

Kappler, 1997; Kraska, 2007). Critics of these units, and the militarization of the police more generally, suggest that these apparent changes in how PTUs are used may have disastrous consequences for the public. For example, considering PTUs are regarded by some as an embodiment of militarism, it is believed that their increased use will expose the public to more aggressive tactics, including the use of lethal force (Delehanty, Mewwhirther, Welch, & Wilks, 2017).

The potential implications of the normalization of PTUs is profound; however, there is currently a dearth of empirical examinations of their use within the Canadian context. The limited research available suggests that, much like their American counterparts, Canadian PTUs have become normalized (Roziere & Walby, 2018). Concerns regarding PTUs within Canada are currently founded on assumptions based on very limited data instead of well-grounded empirical evidence. In order to develop more informed views of PTUs, and make sensible decisions about how they are used, police services (and the public) require higher quality examinations regarding the role PTUs play in the policing of society. Analysis of crude data, such as original calls for service, is unlikely to provide the details that are required to truly understand how and why PTUs are used. Instead, this thesis relies on richer data (e.g., situational factors related to cases where PTUs are used) in an attempt to address these questions, which will include interviews with police practitioners to examine the perceived value of PTUs (previous research has neglected the perceptions of police officers regarding the use of PTUs; Turner & Fox, 2017). Generally, this thesis aims to provide a foundation of empirical evidence that can be used to test current

may be less complacent (e.g., more aware of potential indicators suggesting the subject's intention to cause harm; Alpert, Dunham, & MacDonald, 2004).

assumptions that PTUs are analogous to the police waging war on the public it is supposed to serve (e.g., Herzog, 2001; Hill & Beger, 2009; Paul & Birzer, 2004).

Literature Review

The following literature review will examine the current conceptual issues regarding the definition of police militarization before presenting an overview of the two main perspectives on police militarization; one that presents police militarization as the antithesis of community policing and the other that presents it as the professionalization of the police. Next, empirical examinations of public perceptions regarding police militarization and the relationship between PTUs and the use of force (UoF) will be discussed. Finally, the limited research on Canadian PTUs and the respective methodological shortcomings will be reviewed.

Conceptualizing Police Militarization

The current debate regarding police militarization and the use of PTUs lacks clarity, largely because there is no consistent definition regarding the militarization of the police (Bieler, 2016; den Heyer, 2014; Phillips, 2008; Weiss, 2011). Commonly, Kraska's (2007) four dimensions of militarism are adopted to serve as proxies to measure the extent to which police services are militarized. These dimensions include material (e.g., equipment and technology), cultural (e.g., appearance and values), organizational (e.g., designated units of highly trained officers), and operational (e.g., the adoption of military tactics and training).

Bieler (2016) highlights shortcomings of using these proxies to measure the extent to which the police are militarized. For example, research often relies on the presence of equipment (e.g., Haggerty & Ericson, 1999) or the use of PTUs (e.g., Kraska & Kappler, 1997) to make this determination because these dimensions are easily measured. However, despite the ease of measuring these proxies, Bieler (2016) notes they are insufficient to draw informed conclusions.

For instance, police services can have the same amount of ‘military’ equipment, and therefore be quantitatively equal in terms of militarization, but this metric fails to consider possible qualitative variations in the equipment’s use. Specifically, Bieler argues that “the experience of citizens in one jurisdiction whose police department obtains an armored vehicle and 100 rifles may differ entirely from the experience of citizens of another city whose department received the same materials” (p. 588). Similarly, relying on records of PTU use as evidence for police militarization fails to consider that these activities comprise a small proportion of the services’ calls and therefore do not necessarily reflect the entire services’ culture.

Regardless of the metric used to assess the construct, police militarization is a contentious issue that appears to be deeply polarizing (Fox, Moule, & Parry, 2018). As such, two perspectives have emerged within the literature. One focuses on the inherent conflict between police militarization and community-based policing (e.g., Herzog, 2001; Leichtman, 2008; Paul & Birzer, 2004), whereas the other emphasizes the compatibility of the two models (i.e., police militarization and community policing; Alvaro, 200; Ford, 1995). Specifically, the second perspective sees the adoption of specialized equipment and training as something that increases the efficiency of the police and minimizes harm to the public (den Heyer, 2014).

Police militarization as the antithesis of community-policing. The majority of the literature asserts that police militarization emphasizes the use of force as the appropriate response during police-public interactions (PPIs; Hill & Beger, 2009; Kraska, 2007). Many consider police militarization to be an “... insidious process, which mutates and transforms the ideology, operational behaviour and logistics of the police” (Williams, 2007, p. 197). Such mutations to policing’s core values, including the doctrine of using minimal force, are reported to significantly harm community relations (McCulloch, 2001; Ponsaers, 2001; Wyrick, 2013). The

incorporation of militarism into police services is suggested to further alienate the police from the public as officers are explicitly instructed that they are engaged in a 'war' on crime, in which the community is the 'battlefield' and the public are 'enemies' (Buerger, 2000; Herzog, 2001; Leichtman, 2008).

PTUs are often considered the embodiment of police militarization due to their use of specialized equipment, training with the military, and aggressive appearance (Hill & Beger, 2011; Scobell & Hammitt, 1998). As such, the over-reliance on these units is perceived to be the physical manifestation of Kraska's (2007) indicators of militarization. In fact, the expansion of PTUs has been argued to be the catalyst of police militarization (Kraska, 2007; Kraska & Kappeler, 1997). The specialized equipment and training in combination with the dangerous role they fulfill is said to provide PTUs with elite status (Kraska 1999; Kraska & Cubellis 1997, Kraska & Paulsen 1997). This elite status is considered by some to be 'intoxicating' to general patrol officers who seek to adopt similar tactics (Dodge, Valcore, & Klinger, 2010; Hill, Beger, & Zanettii, 2007; Kraska, 1999). As such, the tactics, equipment, and aggressive mentality may be absorbed into the police service (Hill et al., 2007). The propensity of a police service to mirror the 'aggressive' manner of PTUs is therefore suggested to increase the perceived efficacy of using force (Kraska, 2007). In turn, the dependency on using force as a means to problem solve is likely to hinder the police services' ability to strengthen its relationship with the community. Considering the detrimental effects of PTUs, it is suggested they be quarantined to prevent the creep of militarization into a police service (McCulloch, 2001).

Police militarization as the professionalization of the police. In contrast to the above view, which presents police militarization in a negative light as the antithesis of community policing, the police response to high-risk calls, in the form of highly-trained, specialized teams

have been suggested by others to be an indicator of the professionalization of the police (den Heyer, 2014). For example, like many other organizations (e.g., medicine; McLenon 2004; Orr, et al., 2009; Rhee et al., 2017; Wong, Manoharan, & Mak, 2014; meteorology; Brody, Lafosse, Bellue, & Oram, 1997; Guinn, Stapleton, Winters, Muller, & Schaum, 2017; parole; Matejkowski, Severson, & Manthey, 2015), police services have become increasingly concerned with risk assessment and the management of risk (Beck, 1992; Taylor, 1999; Worden, Harris, & McLean, 2014). In light of this, rather than representing an erosion of policing standards, the use of PTUs may be considered a risk-mitigation strategy (Alvaro, 2000) and an appropriate utilization of resources and highly-trained personnel (den Heyer, 2014).

Relatedly, despite criticism of the police developing partnerships with the military to facilitate knowledge transfer between the organizations (e.g., Hill & Beger, 2009; Kraska, 2007; McCulloch, 2001), some consider this a prudent practice in minimizing the risk to both officer and public safety (e.g., Brimo, 2012; den Heyer, 2014). For example, during the initial development of PTUs, adopting the practices (e.g., training, tactics, and equipment) of military special forces (SF) likely minimized risk to both officer and public safety as SF members were experts in tactics for the operational environment PTUs would work in (den Heyer, 2014). The continued knowledge transfer between the military and PTUs has been suggested as mutually beneficial (Molnar, 2013). Specifically, incorporating PTUs into SF training may be viewed as a form of quality assurance in which both the military and police continually maintain and develop their operational skills (den Heyer, 2014). As such, den Heyer (2014) suggests this cross-training furthers the professionalism of the police. For example, tactics relating to room clearing (e.g., systematically searching indoor structures for potential threats and civilians) used by SF has been

reported to be much safer and more effective than the tactics initially used by PTUs (Brimo, 2012), and it is likely that police services benefited tremendously from learning these tactics.

Additionally, the adoption of equipment originally utilized by the military (Kitchen & Rygiel, 2014; Salter, 2014; Gabinet, 2011) has demonstrated positive outcomes for both officers and the public. Conducted energy weapons (CEWs) for example, are a less-lethal tool that is commonly used in situations where lethal force would be appropriate (Brandl & Stroshine, 2017; Ferdik, Kaminski, Cooney, & Sevigny, 2014; Ho, Dawes, Johnson, Lundin, & Miner, 2007; White & Ready, 2007). Numerous empirical examinations have shown CEWs are quite effective at gaining control over subjects, while reducing injury rates for subjects and officers (e.g., MacDonald, Kaminski, & Smith, 2009; Paoline, Terrill, & Ingram, 2012; Smith & Petrocelli, 2002; Taylor et al., 2009). These findings highlight that, despite concerns with the police using military equipment, there may be tangible benefits to doing so, both for the police and the public they serve.

Public Opinions Regarding Police Militarization

Despite the intense criticism of police militarization, and the assertion that it is analogous to waging war on the public, little research has examined public perceptions on the issue (Lockwood, Doyle, Comiskey, 2018; Moule, Fox, & Parry, 2018a). The majority of the available research has focused on the level of public support for the police use of military equipment. For example, Lockwood and colleagues (2018) utilized a random sample of 1005 American adults who completed a phone survey regarding their approval of police use of military weapons and equipment across various purposes (i.e., counterterrorism, drug and gang enforcement, and riot control). In general, being male, satisfied with the police, and worried about terrorism and drugs/gangs significantly increased the likelihood of condoning the police use of military

weapons. In contrast, participants who self-reported being a college graduate and harassed by the police decreased support for the practice. Similarly, when examining the level of support for the police use of military equipment (e.g., armoured vehicles), respondents who were satisfied with police and concerned about terrorism and drugs/gangs displayed significantly increased support while being a college graduate and liberal decreased support.

These findings were replicated in a sample of 702 American adults, which reflected the gender, race, and household income composition of the 2010 U.S. Census (Moule et al., 2018a). Specifically, when controlling for demographic variables (e.g., gender, age, race, and income) perceptions of police legitimacy largely influenced the extent to which participants endorsed police use of surplus military equipment (e.g., weapons, vehicles, uniforms, and equipment). However, above and beyond perceptions of police legitimacy, being politically conservative, older, and male significantly predicted support for the use of surplus materials. Additionally, ratings of police legitimacy and being conservative significantly reduced the perception that the police are too militarized (e.g., the police look and acts too much like the military), while ratings of legal cynicism (e.g., a distrust for law enforcement) had the inverse effect.

The same sample of 702 American adults was used to examine public support for PTU deployments across various circumstances (e.g., hostage situation, serving drug warrants; Moule, Parry, & Fox, 2018b). Respondents were on average much more supportive of PTU use during hostage and terrorist events (95.3% and 94.4%, respectively) than for the arrest of armed and dangerous offenders (67.3%) or during civil unrest (64.3%). Interestingly, only 40% of the sample approved of PTUs conducting drug warrants. Consistent with previous findings, ratings of police legitimacy significantly predicted support for PTU use during unconventional deployments (e.g., serving drug warrants and during civil unrest). However, perceptions of

police legitimacy were not significantly related to deployments that had relatively strong (i.e., arrest of armed and dangerous offenders) or weak support (i.e., peaceful protests and large-scale events).²

Considering the unique perspective police officers are likely to have regarding PTU use, research on their perceptions of police militarization and the use of PTUs has been largely neglected. In one of the few studies to examine police perceptions, Turner and Fox (2017) conducted an examination of members of the US Congress and police officers regarding their perceptions of Kraska's (2007) four dimensions of police militarization (i.e., material, cultural, organizational, and operational). Of 465 survey responses, 60% of respondents were police officers, 35% were police chiefs/executives, and five percent were members of Congress. Across all dimensions, members of Congress reported significantly less support than police officers and executives. Specifically, members of Congress had lower ratings of acceptance for military procurement programs (40%), as well as the police use of military weapons (48%) and vehicles (44%). In contrast, police officers and executives overwhelmingly supported procurement initiatives and the use of military vehicles and weapons by police. Interestingly, police officers exhibited less support for military procurement (95%) and police access to military weapons (92%) than police executives (99% and 95%, respectively).

Finally, a binomial logistic regression was conducted by Tuner and Fox (2017) to examine the influence of the respondents' position (e.g., police executive) and demographic variables (i.e., gender, race, political affiliation, and veteran status) on the overall support for police militarization. When controlling for all demographic variables, the respondent's position

² Considering the limited variation of public support for PTU use during hostage and terrorist events, the authors did not include these outcomes in the analyses.

was statistically significant in that, between each position (from police executive to police officer to member of Congress), the odds of supporting police militarization decreased by 37%. More specifically, police officers were 37% more likely to be supportive than members of Congress and the odds of police executives supporting police militarization increased by 74% when compared to members of Congress. Additionally, when controlling for all other variables, veteran status was statistically significant. Specifically, the odds of supporting police militarization increased by 85% when the participant had previous military service. However, the regression models' proportion of variance explained was only 4.6%, which suggests that although the model was significant, additional variables are needed to account for variation in support for police militarization. Considering the finding that police executives are generally more supportive of police militarization than police officers, Turner and Fox (2017) highlight the need for qualitative research to develop a further understanding of why stakeholder (e.g., police executives) opinions on police militarization vary.

More recently, Phillips (2018) administered surveys to officers completing the Federal Bureau of Investigation's (FBI) National Academy, which is a professional development course for officers who are mid-level managers and above within their police service. Based on the responses of 324 officers, it appears that in the year following the intense criticism of the police response to the riots in Ferguson, there has been no change in PTU deployments for reactive deployments (e.g., barricaded subjects). However, there appears to be a greater degree of change for proactive situations (e.g., warrants and public protests) with 20% of respondents reporting that PTUs are now used less for low-risk narcotics warrants and 11% reporting a reduction in PTU use for misdemeanor arrests.

Using a different cohort of officers completing the same FBI program, Phillips (2018) found that more than one-third of respondents felt that PTUs should be used more frequently for high-risk warrants. Similarly, 20% of respondents supported the increased use of PTUs for felony arrest warrants. Interestingly, officer opinions significantly differed from departmental policy regarding the use of PTUs. Specifically, compared to their departmental policies regarding how PTUs should be used, respondents believed PTUs should be used more during high-risk narcotics warrants, felony arrest warrants, barricaded subjects, and hostage situations. Further, officers also believed that tactical teams should be utilized less frequently for low-risk narcotics warrants, misdemeanor arrest warrants, and area searches.

Consistent with Turner and Fox's (2017) call for more qualitative research on the subject, semi-structured interviews were conducted by Phillips (2018) with a subsample of respondents to gain further understanding of officer perceptions regarding police militarization. Police chiefs and PTU members were both interviewed, and while both expressed concerns regarding the media's presentation of police militarization, distinct topics were also addressed. Numerous police chiefs, for example, highlighted the need to consider optics when deciding if a PTU should conduct a particular search warrant. Unique to the tactical officers who were interviewed was the perceived importance of comprehending the context in which indicators of militarization (e.g., uniforms, vehicles, and weapons) are utilized (e.g., understanding the risk factors such as the presence of firearms, which may warrant the use of the PTU; however, this information is rarely dispersed to the public). Additionally, some respondents highlighted that sometimes the value of tactical equipment (armoured vehicles in particular) is overshadowed by the public pressure to remove the tools from the police services' use.

Examining the Relationship Between PTUs and Use of Force

Despite suggestions that police militarization has reduced officers to “mindless subordinates who shoot first and ask questions later” (Cowper, 2000, p. 229) it is important to contextualize police UoF. In contrast to the perspectives of the public (Stewart, Henning, & Renauer, 2012), police UoF³ is a statistical rarity during PPIs (Bozeman et al., 2018; Eith & Durose, 2011; Hall, Votova, & Wood, 2013). Estimates suggests that within Canada, less than one percent of all PPIs result in the UoF (Baldwin, Walker, Blaskovits, & Bennell, 2017; Butler & Hall, 2008; Canadian Association of Chiefs of Police, 2013).⁴ Previous research has also demonstrated that officers operate with a UoF ‘deficit,’ in which less force is applied by the police than is being directed toward them (Wolf, Mesloh, Henych, & Thompson, 2009). These findings are supported by a study conducted by Weiss and colleagues (2010) who show that, despite the high risk that officers face (e.g., 57% of the officers they sampled reported being threatened with a gun and over 64% threatened with a knife), only 15% of officers had shot at a subject.

The contention that police militarization motivates police officers to adopt an ideology that emphasizes UoF as an appropriate means to problem solve (Kraska, 2007) is generally not supported by empirical examinations, although there is some limited support for the notion.

³ There is currently debate regarding the definition of UoF (e.g., Hickman, Piquero, & Garner, 2008) and the rate of police UoF drastically changes depending on the definition used (Garner, Maxwell, & Heraux, 2002; Hickman et al., 2008). Some definitions include low-levels of force, such as threats of arrest, handcuffing, searches, and pat downs (Terrill & Mastrofski, 2002), whereas others focus on physical UoF options (e.g., takedowns or punches; Lundstrom & Mullan, 1987). Consistent with previous Canadian research, this paper adopts the definition that force is the application of physical control hard techniques (e.g., strikes and stuns) and above (e.g., intermediate weapons and lethal force; Baldwin, Hall, Bennell, Blaskovits, & Lawrence, 2016; Butler & Hall, 2008).

⁴ The use of lethal force comprises a small proportion of all encounters and is therefore exceedingly rare (Bozeman et al., 2018; Wittmann, 2018). While UoF only occurs in a small proportion of all PPIs, it is still a common event due to the vast number of interactions that occur every day (Bennell & Jones, 2003). In fact, it is estimated that across the US there is a daily average of 1 500 UoF incidents (Shjarback & White, 2016).

Much of the existing research examines the relationship between UoF and proxies of police militarization. For example, using county-level records from four states in the US, the relationship between transfers of military goods to police services (in US dollars) and lethal police shootings was examined by Delehanty and colleagues (2017). When controlling for numerous factors that might be relevant (e.g., median household income, population, violent crime rate), the authors found that increases in military goods (as measured in dollar value) predicted the number of civilian killings. Over a 20-year period, compared to police services which received no military goods, police services that received the maximum observed value killed nearly 8 more civilians.⁵

In contrast to this study, which seemed to suggest a link between police militarization and UoF, another empirical examination of the relationship between militarization and UoF conducted by Williams and Westhall (2003) did not support this association. Using operational files for a three-year period, UoF reports were compared for part-time PTU members and patrol officers. Like patrol officers, the primary responsibility of part-time PTU members is responding to calls for service. The authors found that when fulfilling patrol duties, there were no differences in reported UoF between PTU members and the general patrol officers. While these results seem to counter the claim that PTU members are more aggressive, the similar rates of force might be a product of the patrol officers adopting aggressive tactics through socialization by the PTU members (Dodge et al., 2010; Hill et al., 2007; Kraska, 1999).

⁵ However, as previously mentioned, there are limitations to using equipment as a proxy for militarization (Bieler, 2016). For example, inter-jurisdictional agreements between police services results in the inaccurate assumption that police services only deploy within a given county (Leipnik, Ye, & Wu, 2013). Specifically, the presence of military goods may be the result of a police service equipping their PTU that also assists neighboring counties. Therefore, the PTU (and its higher value of military goods) may be responding to high-risk calls, which have a higher likelihood of force, on behalf of police services that do not receive any military goods (and do not have a PTU). Finally, concerns have been raised with the reliability of county-level data for crime reports (Maltz, 2006; Maltz & Targonski, 2002; 2003).

Also consistent with the view that PTUs do not rely on high levels of UoF is a study by Klinger and Rojek (2008) in which they reviewed the operational records of 341 PTUs across the US. Using these official records, the authors found that PTU members fired at subjects in less than 0.03% of call-outs. Additionally, there were over 455 cases in which the subject discharged their firearm, but the PTU did not. Furthermore, it appears from their analysis that subjects are more than twice as likely to take their own lives than be killed by PTU members. In general, these findings suggest that PTUs successfully resolve high-risk incidents while using minimal force (Klinger & Rojek, 2008). A possible limitation of these findings is the relatively low response rate (29%) of all US police agencies with PTUs. However, considering that the rate of lethal force reported in this study is consistent with Bozeman et al.'s (2018) recent analysis, this concern may be mitigated.

Finally, while not directly examining the rate of UoF in a naturalistic context, there is evidence to suggest the additional training that PTU members undergo increases their critical decision-making skills during simulated operational tasks (which, if generalizable to real-world encounters, would presumably result in more reasonable UoF decisions). For example, compared to novice officers (i.e., those who have completed basic training), PTU members appear to make more accurate decisions when faced with ambiguous simulations in which a shoot/no shoot decision has to be made. Vickers and Lewinski (2012) equipped officers with protective equipment and their issued firearms, which were loaded with colored soap pellets (i.e., Simunition). During the simulated encounter a confederate had his back to the officer and gradually became irate before rapidly turning to the officer while drawing either a phone or a pistol. Overall, officers with tactical training made significantly more correct decisions (i.e., shooting when a weapon was present and not shooting when the cellphone was drawn), had

higher hit accuracy, and engaged the lethal threat faster. Despite the confederates being coached to maximize the extent to which they act consistently across trials, there still may have been slight variations across participants and this needs to be considered when interpreting the results of this study. However, Vickers and Lewinski's findings have been replicated using an interactive screen that projects identical scenarios to all participants, thereby addressing possible concerns of internal validity (Ward, Suss, Eccles, Williams, & Harris, 2011). Generally, it appears that when the situational factors are the same, there is a greater likelihood of positive outcomes if the responding officer has the additional training provided to PTU members.

In light of the above studies, there is considerable evidence to suggest that officers exercise restraint in applying force and consistently apply less force than they are being threatened with (e.g., Wolf et al., 2009). Additionally, there appears to be little support for the claim, based on the small number of studies that have been conducted, that police militarization increases the likelihood that officers will indiscriminately use force (e.g., Delehanty et al., 2017; Klinger & Rojek, 2008; Vickers & Lewinski, 2012).

Empirical Research on PTUs Within the Canadian Context

As previously mentioned, there is limited research on the use of PTUs by Canadian police services. The first examination of Canadian PTUs aimed to provide a foundation for research in this area. As such, Alvaro (2000) adopted a similar approach to Kraska and Kappler (1997) in order to allow for comparisons between US and Canadian PTUs. Canadian police services with 50 or more officers were sent questionnaires of which over 90% provided a response. Of the 83 police services surveyed, 65% reported having a PTU. The majority of services that did not have a PTU relied on local police services to fill this gap when required. Responses further demonstrated that between 1980 and 1997, the rate of PTU deployments

increased by eight times (increasing on average from 24 times a year to approximately 17 times a month; Alvaro, 2000). This increase in PTU call-outs was greater for full-time teams, which by 1997 averaged one call-out every other day. Additionally, Canadian PTUs have become more proactive as half of their operations include conducting search and arrest warrants. These findings are consistent with Kraska and Kappler's (1997) findings where 75% of American deployments of PTUs were for warrants. In contrast, reactive calls such as hostage situations and barricaded subjects comprised approximately 25% of deployments of PTUs in Canada. Generally, Alvaro (2000) concludes that full-time tactical teams in Canada have become integrated into every day policing (i.e., the use of PTUs has become normalized).

More recently, Roziere and Walby (2017, 2018) attempted to address the significant gap in research surrounding PTU deployments in the Canadian context. Access to information/freedom of information (ATI/FOI) requests were submitted to 10 Canadian police services that have a PTU. The ATI/FOIs requested all records related to the PTU (e.g., frequency of deployments, type of call), the number of officers assigned to the PTU, and all communications between the relevant police service and others, which were relevant to PTU use. To minimize costs, while still allowing the researchers to examine trends, data for the years 2007, 2010, 2013, and 2016 were requested.

Based on the information released by five police services (i.e., Calgary Police Service [CPS], Ottawa Police Service [OPS], Winnipeg Police Service [WPS], Vancouver Police Department [VPD], and the Ontario Provincial Police [OPP]), the authors concluded that Canadian PTUs are frequently being utilized for both reactive (e.g., armed and barricaded subject) and proactive (e.g., search warrant) deployments. However, there appears to be significant variation between police services in how they use their PTUs. Specifically, the overall

number of CPS and OPS deployments decreased for the observed time period while the deployments for WPS and OPP appeared to increase. However, the authors note the increase in WPS deployments is likely a product of a change in reporting instead of actual observed differences. Additionally, the OPP's PTU is extensively involved in search and rescue missions, which consistently account for approximately 20% of deployments and might explain the increased use of the PTU by the OPP.

Regarding the nature of deployments, available operational records suggested to Roziere and Walby (2017, 2018) that planned operations are a sizable proportion of PTU deployments in the services that these researchers examined (unfortunately, VPD's data was notably limited as it did not include descriptives that allowed for the nature of deployments to be determined). Across the police services, the vast majority of these planned deployments included search warrants, although planned OPP PTU deployments also included the provision of security and prisoner escorts. Roziere and Walby suggest using tactical teams for these normal police duties is aggressive and will likely result in the UoF.

Equally concerning to Roziere and Walby (2017, 2018) are the types of reactive calls Canadian PTUs respond to. Such incidents include serious calls, such as robberies and bomb threats, but also (seemingly) more benign calls, such as noise complaints, mental health calls, and traffic incidents (Roziere & Walby, 2018). For example, between 20% and 30% of reactive OPS deployments were related to mental health calls and, while the exact number was not presented, it appears the CPS tactical team also responds to mental health calls in addition to other calls perceived to be outside the mandate of PTUs (e.g., traffic incidents). It is unlikely these two police services are the only services in Roziere and Walby's sample to exhibit these trends; instead, this finding is likely explained by the fact that these services provided more

information regarding the nature of the calls that their PTUs responded to, allowing for these conclusions to be drawn.

Based on the information available from the ATI/FOI request, Roziere and Walby (2017, 2018) suggest that Canadian PTUs are routinely being used outside their intended function. Based on this finding, these researchers argue that heavily armed tactical units represent the militarization of ‘routine’ policing, which strongly opposes the community-policing model. Additionally, these researchers believe tactical team responses to calls for service involving domestic disturbances, suicide threats, and well-being checks are likely to unnecessarily traumatize subjects and aggravate the situation (Goodmark, 2015; Roziere & Walby, 2018).

Ultimately, due to the use of PTUs in ‘routine’ policing and warrant executions, in combination with the contention that PTUs are more likely to use lethal force, Roziere and Walby (2018) suggest this practice should be “scaled back immediately” (p. 46). More specifically, they assert:

The consequences of militarization is likely [to] fall disproportionately on those from minority groups, those with mental health issues, and those exercising democratic rights associated with political expression (Weiss, 2011). The questions that should be asked extend well beyond whether the police should be allowed to use one form of equipment or another, to how legally innocent individuals should be treated by police; what the purpose of the police should be in a democratic society; and to what extent we are willing to allow the state to violently intrude on our lives (p. 46).

Limitations of Canadian research. The limited Canadian research available suggests that, much like their American counterparts, Canadian PTUs have become normalized. However, there are notable limitations to the methodology employed in examining police militarization,

which will be discussed below. Additionally, despite the strong assertion that the practice of frequently using PTUs will increase public exposure to lethal force, the totality of the research regarding police militarization and UoF, some of which was discussed above, suggests that such conclusions are not empirically founded (e.g., Delehanty et al., 2017; Klinger & Rojek, 2008; Vickers & Lewinski, 2012).

The first notable limitation of Roziere and Walby's (2018) study is the small number of police services included in their sample. Further limiting the extent to which the findings from that study may be generalized to all police services across Canada is the size of the municipal police services included. All of the municipal police services examined by Roziere and Walby are among the 10 largest services in Canada (Statistics Canada, 2017a).⁶ Further, with the exception of Ottawa, the municipalities in which the police services operate are above the average rating on the Crime Severity Index (Statistics Canada, 2017b). Therefore, the frequency of PTU deployment in these services is likely biased (upwards) as it is possible these police services and their PTUs are more active than smaller services that police communities which experience less severe crime.⁷

Related to the above limitations is the ease with which the police services examined by Roziere and Walby (2017) can access their PTU, which likely drives up the frequency of their use relative to other Canadian police services. Consider the RCMP, for example. Unlike municipal police services where PTUs are relatively accessible, the RCMP's tactical teams often

⁶ The size of the police services as indicated by the number of police officers are in the following order: CPS (fourth largest), OPS (sixth), WPS (eighth) and VPD (tenth).

⁷ The Royal Canadian Mounted Police (RCMP), for instance, has over 700 detachments across the provinces and territories and services a large proportion of Canada (RCMP, 2018). In contrast to the well-resourced municipal police services included in Roziere and Walby's study, there is evidence to suggest that municipalities serviced by the RCMP have disproportionately low numbers of officers (McClearn, Freeze, & Dhillon, 2018). For example, in the Lower Mainland of British Columbia (BC), the RCMP has approximately half the number of officers per resident than local municipal services (McClearn et al., 2018).

must cover considerable distances to respond to an incident. According to the RCMP, each province has at least one PTU that covers both national and international incidents (RCMP, 2001). For instance, the PTU responsible for responding to incidents in Nunavut appears to be posted 2000 kilometers away in Montreal (Driscoll, 2017). Further, after the fatal shooting of three RCMP members in Moncton, New Brunswick, RCMP PTUs responded to assist in apprehending the lone gunman (MacNeil, 2015). However, the team from Quebec City drove to Moncton overnight and had been up for nearly 24 hours by the time they arrived and had to rest before deploying (MacNeil, 2015). These two examples suggest that unlike many municipal services, RCMP detachments/members may have limited access to the support of a PTU as there is considerable travel time before the PTU is able to assist.

Beyond sampling issues, previous research, including the study by Roziere and Walby (2017, 2018), is plagued by a lack of detailed data, which prevents researchers from gaining a comprehensive understanding of what situations PTUs are deployed (Philips, 2018). Indeed, despite Walby and Larsen's (2012) suggestion that the value of ATI/FOI cannot be understated in critical criminology, this approach may not always provide sufficient information to draw informed conclusions. Walby and Larsen acknowledge that ATI/FOI disclosures often provide incomplete data and as such any conclusions must be qualified. This limitation is highlighted by Roziere and Walby (2018) who state that generally the ATI/FOI requests that formed the basis of their study "fail to capture data that accurately reflects the activities" of the tactical team (p. 40). As previously mentioned, VPD did not provide any information regarding the context of the PTU call-outs, while other police services, including OPS and WPS, provided a brief description of the incident (it appears this information was not considered during the analysis conducted by Roziere and Walby). den Heyer (2014) suggests that there is no disputing that PTUs are

frequently used, but comprehending the reasons for this increase requires deeper analysis. Previous research on the use of PTUs has failed to present this more granular analysis.

Instead of relying on detailed data and analysis to determine how PTUs are actually used, researchers have relied on the original call for service for the police response to make this determination. Utilizing original calls for service to determine how PTUs in Canada are being utilized presents numerous methodological limitations and can potentially lead to erroneous conclusions. For example, a call may be categorized as ‘routine’, including domestic disputes, stopping suspicious people/vehicles, and traffic violations, leading researchers to conclude that the use of PTUs is becoming normalized, without recognizing that these types of calls can be very dangerous (e.g., these types of incidents are most likely to be related to the intentional assault and killing of police officers; Fyfe, 1987; Law Enforcement Officers Killed and Assaulted [LEOKA], 2017; Statistics Canada, 2009; Tiesman, Hendricks, Bell, & Amandus, 2010). Petersson, Bertilsson, Fredriksson, Magnusson, and Fransson (2017), for instance, showed that 70% of officer-involved shootings (OISs) in Sweden occurred when the officer had been dispatched to ‘routine’ calls such as search warrants, fights, and mental health calls.

Further, relying on calls for service to determine whether PTUs have become normalized assumes that the initial information provided to the officer accurately represents the actual encounter. Yet, frequently, police receive incomplete information or misinformation regarding the true nature of the call they are responding to (Johnson, Cesario, & Pleskac, 2018). This approach also neglects the qualitative differences that exist within common call categories. For example, with respect to traffic violations, there may be numerous risk factors that elevate the likelihood the subject will display violence towards the officer, thus making the call much more dangerous (potentially warranting the use of PTUs). Such factors include the history of the

subject (e.g., known to be violent and resist arrest) and situational factors (e.g., intoxication; Covington, Huff-Corzine, & Corzine, 2014; McLaughlin, 1992). Data for the Las Vegas Metropolitan Police Department (LVPD) OIS' between 2011 and 2015 demonstrates that consideration of such risk factors is warranted as nearly 90% of subjects shot by police had a criminal history (LVPD, 2015). Of those subjects who had arrest records, more than half (57%) had been convicted of violent crimes (e.g., assault with weapon). There is also additional risk when officers respond to vehicle related calls, as the subjects' vehicle may be used to crush or kill the officer. This concern appears valid in some jurisdiction (e.g., vehicles were the primary weapon in over 40% of OISs in Calgary between 2012 and 2017; Wittmann, 2018).⁸

Study 1

This thesis includes two studies that were designed to deal with some of the limitations highlighted above and gain a more comprehensive understanding of PTU deployments in Canada. Study 1 hopes to expand upon the limited Canadian research on this topic by providing a more comprehensive understanding of the types of incidents PTUs respond to. The analysis conducted by Roziere and Walby (2018) may have erroneously concluded that PTUs respond to 'routine' calls because these researchers relied exclusively on the initial reason for the police

⁸ A similar argument can be made for other crimes categories, such as warrant execution. Roziere and Walby (2018) suggest that executing warrants is absent of risk and should always be completed by general patrol (GP) officers. However, the same types of risk factors for reactive calls are also considered when deciding if a warrant will be executed by GP officers or the tactical team. The use of PTUs appears to be based on two main factors, the severity of the crime the subject is accused of (e.g., firearms or homicide) and the subject's history (e.g., violence and resisting arrest; DiMaggio, 2008; Prince Weiss, & Davis, 2011 as cited in Brimo, 2012). In fact, some police agencies have adopted risk matrices, in which the risk of executing the warrant is calculated and compared to a predetermined threshold to see if the use of a PTU is necessary (Phillips, 2018). Generally, four risk categories are focused on in these matrices: the location (e.g., did the residence have video surveillance so the police lose the element of surprise), the subject (e.g., gang member or suicidal), presence of weapons (e.g., firearms, edged weapons, or bear/pepper spray), and criminal history (e.g., assaulting a peace officer; Phillips, 2018). Therefore, it may be that the warrants executed by the PTU have one or more factors believed to increase the risk of harm to the police.

response. To overcome this potential limitation of their research, instead of relying on the original call type (e.g., traffic offence) alone, dispatch information related to the calls will be reviewed to determine if factors that potentially warranted the use of the PTU (e.g., the driver was known to carry illegal firearms) were present. More specifically, Study 1 hopes to examine the following research question: To what extent are potential risk factors identified in PTU deployments? For the purpose of Study 1, risk factors were defined as characteristics that may elevate the likelihood the subject will display violence towards officers. Examples of potential risk factors include the history of the subject (e.g., known to be violent towards police, gang affiliations; DiMaggio, 2008), the state of the subject (e.g., intoxication; Covington et al., 2014) and the presence of weapons (Phillips, 2018).

Methods

Data. The VPD, WPS, and OPS agreed to release the same operational data to us that Roziere and Walby (2017, 2018) used to assert that PTUs have become normalized. OPS required a formal ATI request in which we asked for the same information released to Roziere and Walby (Access Request #19-0410). OPS released an Excel spreadsheet that lists all PTU call-outs for 2007, 2010, 2013, and 2016, which provide the type of call (e.g., traffic incident) and occasionally a brief description of the situational factors (e.g., the information available to the officers regarding where the incident is, if the subject is known to police, if it is believed weapons are present, etc.). Further, the information provided included other units that responded to the call (e.g., Drug Unit).

Similarly, WPS provided PDF files containing daily occurrence reports (e.g., calls that the PTU responded to for each day of the year) for all PTU responses for the years 2013 and 2016. All of the files include the original call type (e.g., shots fired) and some of the call-outs

include information detailing the incident (this information is believed to be consistent with that provided by OPS). As previously noted, there are some limitations to VPD's data in that no descriptions regarding the type of call or situational factors are provided. However, all PTU deployments to calls which meet the threshold of critical incidents (e.g., weapons call, armed and barricaded, etc.) for 2010, 2013, and 2016 were provided by the VPD.

Procedure. A coding scheme for possible risk factors was generated from the literature (e.g., history of the subject, intoxication; see Appendix A). This coding scheme denotes the presence or absence of each identified risk factor, whether additional information was provided by the responding police service (e.g., the situational factors), and includes an open-text space for any additional information that may be pertinent (as determined by me, the researcher). The available descriptions for each PTU deployment from all police services were reviewed by the lead researcher, who applied the coding scheme to the data. Hierarchical coding was used during the coding of the call type when there were numerous call types present (e.g., a subject made threats and they had a firearm) such that a higher risk call would subsume lower risk calls (e.g., the previously mentioned call would be noted as a gun call). Files were considered to have additional information if they provided sufficient information to understand the basic context of the situation (e.g., assisted with a warrant execution and the subject is known to have a handgun).

Data from the coding scheme was input into version 25 of the Statistical Package for the Social Sciences (IBM Corporation, 2013). To ensure the coding was applied in a consistent manner, measures of inter-rater reliability (IRR) were calculated. Inter-rater reliability quantifies the level of agreement between independent raters and was used to determine the extent to which the coding rubric was consistently applied to the data (Hallgren, 2012; Sun, 2011). Cohen's Kappa (K) is one of the most widely adopted measure of IRR for nominal data (Sim & Wright

2005). Considering the nominal nature of the operational data, K was used as a measure of IRR in the current study.

Kappa is defined as the unique level of agreement between raters, partialling out the agreement is expected by chance (Conger, 2017; Hallgren, 2012). Plausible values for K range from perfect disagreement (negative one) to perfect agreement (positive one; Hallgren, 2012). The calculated statistic represents how much of the variance in coding is explained by variance in the data instead of being due to differences between coders (Hallgren, 2012). For example, K value of .80 indicates that 80% of the variance is due to the variance in the data while the remaining 20% is due to discrepancies between raters. Numerous heuristics have been proposed for determining whether a certain level of agreement between raters is 'acceptable'. Landis and Koch (1977), for example, suggest that values between 0.41 and 0.60 indicate moderate agreement, values between 0.61 and 0.80 indicate substantial agreement, and values greater than 0.81 indicate almost perfect agreement.

Despite the widespread adoption of K as a measure of inter-rater reliability, numerous critiques of the approach have been raised (e.g., Gwet, 2002; Byrt, Bishop, & Carling, 1993). One concern that is relevant to this thesis is that, in situations where the base-rate of certain outcomes (e.g., the presence of a weapon) is not evenly distributed, the K statistic can be spurious (Hoehler, 2000). For example, when the prevalence of an outcome of interest is uncommonly low, the level of chance agreement will likely be high and the value of K will be reduced (Hoehler, 2000; Sim & Wright, 2005). Adjustments to K, known as the prevalence-adjusted bias-adjusted kappa (PABAK), have been proposed in an attempt to minimize the impact of the prevalence issue (Hoehler, 2000; Sim & Wright, 2005). When issues of prevalence

arise in the current study, both K and PABAK will be presented in order to highlight the impact the base-rate has on the ratings of agreement (Sim & Wright, 2005).

Results

Vancouver Police Department.

Calls for service. Consistent with Roziere and Walby (2018), VPD's tactical team was deployed 282 times in 2010, 161 times in 2013, and 196 times in 2016. Considering the limited amount of information included in the files from VPD, it is not possible to ascertain the types of calls these include or evaluate the presence of risk factors during these call-outs.

Ottawa Police Service.

Calls for service. Reviewing the released records indicated that some of the files were incorrectly categorized (i.e., was from another year) and were therefore excluded. The remaining cases were coded by the lead researcher and 30% of the sample was randomly selected and coded by a trained coder to determine the reliability of the applied coding rubric. Cohen's Kappa ranged from .804 to 1.00 for variables with that were approximately normally distributed (see Appendix B for all items). The item that coded whether a description was provided was coded unreliably due to the fact that very little information was provided ($K = .052$), however the PABAK was much higher (.550). Using the PABAK, the presence a description had 'moderate agreement,' while all other items had either 'substantial' or 'near perfect' agreement between raters (Landis & Koch, 1977).

The operational files suggest that the PTU responded to 507 calls across the four years. A total of 538 responses were captured as some call-outs ($n = 20$; i.e., warrant executions) included multiple locations. Consistent with Roziere and Walby (2018), the majority of these call-outs were planned in nature ($n = 393$, 73.0%; see Table 1) and this finding was consistent across

years. The most common call types include warrant executions ($n = 374$, 69.5%), assisting patrol ($n = 105$, 19.5%), assisting the criminal investigative directorate (CID; $n = 19$, 3.5%), and tactical support ($n = 10$, 1.9%).

Table 1

Breakdown of reactive and planned call-outs for OPS

Year	Reactive Deployment	Planned Operation	Undetermined
Overall	106 (19.7%)	393 (73.0%)	39 (7.2%)
2007	36 (19.9%)	130 (71.8%)	15 (8.3%)
2010	23 (14.9%)	120 (77.9%)	11 (7.1%)
2013	28 (29.5%)	62 (65.2%)	5 (5.2%)
2016	19 (17.6%)	81 (75.0%)	8 (7.4%)

The vast majority of planned operations in OPS were warrant executions ($n = 374$, 95.2%), while the remaining include providing security (e.g., tactical support at a large public function, prisoner escort, etc.). Reactive calls were primarily comprised of assisting patrol (92.5%) and assisting the neighbourhood police unit (1.9%). Approximately three-quarters (76.4%) of reactive calls included enough information to ascertain the type of call the PTU was responding to. Of these calls, the PTU most commonly responded to mental health calls, barricaded subjects, and high-risk traffic stops (see Table 2). The remaining calls included bomb threats ($n = 1$), shootings ($n = 1$), school lockdowns ($n = 1$), and firearms calls ($n = 3$). Additionally, based on the limited amount of information provided, there were a number of calls that could not reasonably be classified. These calls primarily consisted of assisting CID, (35.9%),

assisting patrol (17.9%), and assisting another agency (e.g., Gatineau Police Department; 12.8%).

Table 2

The most common call types for OPS deployments

Call Type	Frequency (Percent of PTU Responses)				
	Overall	2007	2010	2013	2016
Warrant	374 (69.5%)	124 (68.5.%)	114 (74.0%)	59 (62.1%)	77 (71.3%)
Mental	33 (6.1%)	14 (7.7%)	5 (3.2%)	9 (9.4%)	5 (4.6%)
Health Act					
Barricaded	11 (2.0%)	0 (0%)	0 (0%)	8 (8.4%)	4 (3.7%)
subject					
High-risk	4 (0.7%)	1 (0.6%)	2 (1.3%)	1 (1.1%)	0 (0%)
traffic stop					

Presence of risk factors. Unfortunately, the data provided by the OPS did not include sufficient information to determine the presence of risk factors for the call-outs.

Units responding with the PTU. The files often noted the unit that the PTU was supporting during the call-out. In total, the PTU responded alongside other units 523 times across the four-year span and supported 24 types of units or other agencies. During planned operations, the PTU predominately assisted the drug unit ($n = 205$, 53.4%), the guns and gangs unit ($n = 75$, 19.5%), or the street crime unit ($n = 39$, 10.2%). In comparison, during reactive calls, patrol officers were often assisted ($n = 96$, 95.0%) followed by the neighbourhood police unit ($n = 2$,

2.0%). During the undetermined calls, the PTU often assisted patrol ($n = 7$, 18.4%), the guns and gangs unit ($n = 6$, 15.8%), and cell extraction ($n = 7$, 18.4%).

Winnipeg Police Service.

Calls for service. To provide an accurate portrayal of the number of calls that the PTU responds to, a number of the deployments in the files released by WPS were excluded. For example, incomplete call-outs (e.g., the situation was resolved when the PTU was enroute) and planning events (e.g., the tactical team met with another unit to plan a search warrant execution) were omitted. Further, when there was more than one unit responding to the same call, this was counted as one deployment. The remaining cases were coded by the lead researcher and 25% of the files were randomly selected and coded by a second coder. Cohen's Kappa for items without prevalence issues ranged from .720 to 1.00. Kappa values for items that did not have an approximately even distribution were between .663 and .892 (see Appendix C for all items). The PABAK again increased the degree of agreement between raters to between .884 and .986. Therefore, when accounting for prevalence issues, all items were associated with, at minimum, 'moderate' agreement; the level of inter-rater agreement for the majority of items was 'near perfect' (Landis & Koch, 1977).

Our analysis of WPS daily occurrence reports reveals that the PTU responded to 3216 calls with a total of 3231 responses (474 in 2013 and 2757 in 2016). Overall, the WPS tactical team reported responding to 78 different types of calls (e.g., abduction, fight in progress, home invasion, community outreach events, etc.). The vast majority of responses were reactive in nature ($n = 2617$, 81%), while the remaining calls were planned operations. This finding was generally consistent across years (2013 $n = 254$, 53.6%; 2016 $n = 2363$, 85.7%). Across both years, the ten most common call types include executing warrants (Controlled Drug and

Substances Act [CDSA], $n = 249$ and Criminal Code [CC], $n = 149$), gun calls ($n = 432$), and wellbeing checks ($n = 156$; see Table 3 for remaining call types). In total, these calls comprise almost 54% of WPS tactical team call-outs.

Table 3

The most common call types for WPS deployments

Call Type	Frequency (Percent of PTU Responses)		
	Overall	2013	2016
Gun	432 (13.4%)	67 (14.1%)	365 (13.2%)
Warrant- CDSA	249 (7.7%)	140 (29.5%)	140 (5.1%)
Wellbeing	156 (4.8%)	5 (1.1%)	151 (5.5%)
Suspicious	155 (4.8%)	3 (0.6%)	152 (5.5%)
Warrant- CC	149 (4.6%)	75 (15.8%)	74 (2.7%)
Domestic	146 (4.5%)	9 (1.9%)	137 (5.0%)
Weapons	129 (4.0%)	4 (0.8%)	125 (4.5%)
Break and Enter	110 (3.4%)	11 (2.3%)	99 (3.6%)
Alarm	109 (3.4%)	1 (0.2%)	108 (3.9%)
Shots fired	105 (3.2%)	23 (4.9%)	82 (3.0%)

These common call types were relatively consistent between 2013 and 2016. During each year, gun calls, CDSA warrants, and domestics were among the most frequent calls for service. In 2013 however, CC warrants ($n = 75$), shots fired ($n = 23$), assisting other units ($n = 22$), commercial robberies ($n = 14$), stabbings ($n = 13$), suicide threats ($n = 12$), and stolen vehicles ($n = 9$) were within the ten most responded to calls. These call types were not within the ten most

reported calls in 2016. Instead, suspicious persons/vehicles ($n = 152$), wellbeing checks ($n = 151$), weapons ($n = 125$), alarms ($n = 108$), disturbances ($n = 98$), and traffic occurrences ($n = 96$) comprised the remaining 10 most common calls.

Presence of risk factors. As previously mentioned, the call type does not provide sufficient context regarding the situations PTUs respond to. Therefore, the following section will outline the extent to which potential risk factors were prevalent in the call-outs that included additional information. In total, 1019 (31.5%) files included additional information; nearly all the 2013 files provided a description ($n = 470$, 99.2%) while a quarter of files in 2016 included additional information ($n = 549$, 24.9%). Despite the considerable variation in types of calls the tactical team in WPS responded to, at least one weapon was believed to be on scene in the majority of calls ($n = 610$, 59.9%). This finding seems to be relatively stable, however more weapons were believed to be present in 2016 ($n = 363$, 66.1%) compared to 2013 ($n = 247$, 52.6%).

Firearms were the most commonly reported weapon in both 2013 ($n = 197$, 41.9%) and 2016 ($n = 263$, 47.9%). In comparison, the other categories of weapons were relatively uncommon. For example, edged weapons were believed to be on scene in 10% of cases ($n = 47$) in 2013 and 12.6% ($n = 69$) in 2016. Similarly, during 4.3% ($n = 20$) of 2013 and 4.9% ($n = 27$) of 2016 calls it was believed that *other* weapons were on scene. Therefore, it is likely that the increase in reported firearms between 2013 ($n = 197$, 41.9%) and 2016 ($n = 263$, 47.9%) likely explains the increased prevalence of weapons believed to be on scene.

Interestingly, within the calls that included additional information, call types that would indicate a firearm is on scene (i.e., gun call, shots fired, armed and barricaded) comprised approximately half of the occurrences where firearms were reported to be on scene. In 2013, for

example, when firearms were believed to be on scene, only 46.7% of the time ($n = 92$) these calls were classified as firearms-related. A similar trend was present in 2016 in which 51.3% ($n = 135$) of all calls where firearms were believed to be present were classified as firearms-related calls. This finding suggests that the call type (e.g., warrant, traffic incident) is not a reliable indication for the presence of weapons and speaks to the variability of situations within call types. Further, it appears that weapons are frequently believed to be on scene in other seemingly benign call types (e.g., robbery, traffic incident).

To get a more comprehensive understanding of the frequency with which firearms are believed to be on scene, the number of firearms-related calls for files that did not have descriptions were included. There were no firearms-related calls that did not provide a description in 2013. However, in 2016 there were 317 deployments to firearms-related calls that did not include a description and therefore were not captured in the data reported above. When the additional 317 firearms-related files are added to the 263 files previously discussed, the PTU responded to a total of 580 calls where firearms were believed to be on scene. Therefore, in 2016 the tactical team responded to calls where firearms were believed to be on scene at a rate of 1.58 times a day.

In addition to the presence of weapons believed to be on scene, the history of the subject may also influence a call's risk-assessment (e.g., the likelihood that the subject will display violence towards the officer). Not surprisingly, reactive calls ($n = 31$, 28.2%) provided information regarding the subject history less often than planned operations ($n = 79$, 71.8%). For both planned and reactive deployments, the most frequently reported subject history was possession of weapons ($n = 53$ in 2013; $n = 21$ in 2016), gang affiliations ($n = 10$ in 2013; $n = 4$ in 2016), and previous murder or attempted murder charges ($n = 9$ in 2013; $n = 3$ in 2016).

Additionally, a subset of calls ($n = 60$) noted that the subject had made explicit threats. Most commonly these threats were directed to themselves ($n = 32$), to the public ($n = 21$), or to the police ($n = 7$).

Presence of weapons on scene. Members of WPS tactical teams are frequently responding to calls where weapons are believed to present. While officers have to rely on the information provided to them, it is valuable to highlight how frequently the officers did find weapons when responding to a call. Firearms and replica firearms were the most commonly reported weapons found on scene. In 2013, replica firearms were found during 24 calls while firearms were found during 43 call outs, while in 2016 there was an equal number of firearms and replica firearms found ($n = 29$ and $n = 30$, respectively). Edged and *other* weapons were reported to a lesser extent, while impact weapons were only found once during each year. Edged weapons were reported to be found 10 times in 2013 and four times in 2016. Similarly, *other* weapons were found 10 times in 2013 and seven times in 2016.

It is difficult to establish the ground truth regarding the presence of a weapon as the subject was often not found when the officers responded. Therefore, the amount of times weapons were found on scene is likely a conservative representation of the frequency with which weapons are actually present. For example, it was mentioned in 182 files that the subject was not located; considering this, it is not possible to determine if a weapon was present in these cases. Despite the relative infrequency that PTU members came into contact with weapons, the types of weapons found is concerning. Rifles were the most commonly reported firearms found on scene ($n = 43$), followed by unspecified firearms ($n = 21$), sawed off shotguns ($n = 18$), handguns ($n = 17$), incapacitant spray (e.g., pepper spray; $n = 11$), and assault rifles ($n = 5$).

An exploratory Pearson chi-square test of independence was conducted to examine if there is a relationship between call type and the presence of weapons. Considering that certain call types are indicative of weapons (e.g., shots fired, stabbing, assault with a weapon), these calls were excluded from the analysis. Therefore, this exploratory test determines if there is a relationship between 'routine' calls for service and the presence of weapons. Within the files that noted the presence or absence of weapons ($n = 694$), the chi-square was not significant $\chi^2(82) = 100.24, p = .084$. Therefore, during 'routine' calls for service, the call type is not associated to the presence of weapons (e.g., weapons are just as likely to be found during a domestic as they are during a mental health call).

Role of the PTU. In addition to the presence of risk factors, the daily occurrence reports occasionally included the role that the PTU played within a particular call for service. Most of the information related to the PTUs role was included for warrant executions. Considering this, the PTU most frequently used various types of entries including no-knock entries ($n = 70$), knock and announce ($n = 46$), surround and call out ($n = 32$), or knock and talk ($n = 18$). The PTU also reported frequently engaging in a takedown of a subject ($n = 31$) and conducting surveillance ($n = 46$). Based on these findings it appears that dynamic or no-knock entries were utilized in under half (i.e., 42%) of all warrant executions. To examine if there was a relationship between the role of the PTU and the belief that weapons were on scene, an exploratory Pearson chi-square test of independence was conducted. Within the calls that included the role of the PTU ($n = 228$), there was a significant association between the role of the tactical team and the belief that weapons were present, $\chi^2(6) = 95.98, p < .001$. Specifically, it appears that knock and talk was used more frequently when there was no indication weapons were present ($n = 13$ vs $n = 4$), whereas

surround and call out was used more often when weapons were perceived to be on scene ($n = 23$ vs $n = 5$).

Units responding with the PTU. The files also noted if there were other units responding with the PTU. In total, the PTU co-responded 955 times with over 20 types of units (e.g., negotiator, canine). The most frequently reported co-responding unit was general patrol ($n = 344$), followed by canine ($n = 160$), and the street crime unit ($n = 122$; see Table 4 for a breakdown by year). With the exception of the reduced use of Incident Command, the percentage of co-responding units was stable.

Table 4

The most common co-responding units for WPS deployments

Unit	Frequency (Percent of co-responses)		
	Overall	2013	2016
General patrol	344 (36.0%)	180 (34.7%)	164 (37.5%)
Canine	160 (16.8%)	85 (16.4%)	75 (17.2%)
Street Crime	122 (12.8%)	69 (13.3%)	53 (12.1%)
Community Support	85 (8.9%)	53 (10.2%)	32 (7.3%)
Incident Command	66 (6.9%)	45 (8.7%)	21 (4.8%)

Discussion

Consistent with Roziere and Walby (2018), we found that the majority of OPS call-outs were planned in nature and primarily consisted of warrant executions, whereas the WPS tactical team was most often responding to reactive calls. However, with the exception of VPD, there were some inconsistencies between Roziere and Walby's (2018) findings and ours regarding the

number of PTU responses. For example, our analysis revealed less OPS call-outs ($n = 28$) and significantly fewer deployments for WPS ($n = 625$). Some of these discrepancies may be explained by the way we analysed the data in that we did not include events when the PTU did not deploy (e.g., call outs that were cancelled or operational planning). Additionally, there were numerous instances where more than one unit responded to the same call; in these cases, duplicates were not included so as to not inflate the number of reported call-outs.

Instead of relying on detailed data to determine how PTUs are utilized, researchers have previously relied on relatively crude measures (e.g., the original call for service) to determine the types of incidents PTUs are responding to. As previously mentioned, this approach presents numerous methodological limitations and can potentially lead to erroneous conclusions. For example, the ‘routine’ calls that PTUs respond to are the same events in which officers are most often intentionally assaulted, killed, or use lethal force (e.g., LEOKA, 2017, Petersson et al., 2017). Therefore, the call type is not necessarily indicative of the level of risk posed to officer and public safety. Supporting these findings, we found no relationship between ‘routine’ calls for service and the presence of weapons on scene. For example, approximately half of the weapons found on scene were for call types unrelated to weapons calls (e.g., warrant executions, mental health calls, and domestics).

When sufficient information was provided to ascertain the situational factors of the call-out ($n = 1019$), at least one weapon was believed to be present the majority of the time. Firearms are the most commonly reported weapons that are believed to be on scene, as well as the most common weapons found on scene. For example, of the WPS PTU responses, firearms were believed to be on scene during 45% of calls, whereas firearms and replica firearms were found in 12.4% of calls. While relative to the number of PTU deployments, weapons were found in a

small proportion of calls, there were numerous instances where the subject was not found so the ground truth regarding weapon presence cannot be determined. Additionally, the rate at which the PTU is responding to calls where firearms are believed to be present, or found, is greater than general patrol members (Klein, 2019). The history of the subject was noted in 101 WPS calls of which the three most common risk-factors included the possession of weapons, gang affiliations, and previous murder or attempted murder charges. Additionally, when the subject made threats, they were most often to their own safety, followed by the safety of the public, and finally to the police. To provide a response to the research question examined in this study – to what extent are risk factors identified during PTU deployments? – it appears that potential risk-factors, especially the belief that weapons are on scene, are frequently present during PTU call-outs. However, information pertaining to the subject history, and threats made by the subject, was presented less frequently.

Considering the frequency with which PTUs are responding to incidents where weapons are believed to be on scene, and the lack of a relationship between calls for service and the presence of weapons, the assertion that PTUs are responding to ‘routine’ calls is not supported. As previously mentioned, the propensity for violence, as indicated by the subject history, was overwhelmingly present in warrant executions. This, in combination with the belief that weapons are present, indicate that warrant executions conducted by the PTU are not benign occurrences like it has been suggested (e.g., Kraska, 2007; Kraska & Kappler, 1997; Roziere & Walby, 2018). These meaningful findings and additional context were masked by the superficial analyses previously conducted on the same dataset by Roziere and Walby (2018) therefore highlighting the value of a more detailed analyses.

That being said, our analyses are not without limitations. For example, in order to ascertain the situations that the PTUs responded to, we are relying on the officers to completely and accurately fill out the relevant records. This may not always happen. Relatedly, the operational data that provided sufficient information to identify potential risk-factors within the call-outs was restricted to approximately one-third of WPS responses. Considering this, we cannot speak to the presence of potential risk-factors within the remaining WPS data, or the files released by VPD and OPS. Similarly, the extent to which our findings generalize to other PTUs within Canada is currently unknown.

Considering the need to develop a comprehensive understanding of the use of tactical teams in Canada, future research should be conducted to identify, not only the frequency with which tactical team members respond to calls and the situational factors present in these calls, but also the resolution of the call (e.g., subject arrested without harm, firearm located). This information would not only provide a more comprehensive understanding of the use of tactical teams in Canada, but would also prove vital in providing an empirical understanding of whether the use of these high-specialized teams are related to negative outcomes (e.g., an increase in the frequency and severity of force applied by officers).

Study 2

The perspective of Canadian police officers has been absent in academic discourse relating to PTU deployments. More generally, there have been few attempts to examine how policing professionals perceive police militarization, including the use of PTUs (Turner & Fox, 2017). Brimo (2012), however, conducted interviews with American PTU members and found that they felt that PTUs were misunderstood by the media and the public. Therefore, the second

study in this thesis seeks to gain an understanding of the perspectives of police officers from three Canadian police services about the use of PTUs (OPS, WPS, and VPD).

Researchers who are critical of the common approach to measuring militarization (i.e., using the presence of equipment such as weaponry or the frequency of PTU deployments) highlight the need for qualitative data to provide more context to quantitative findings (Bieler, 2016; den Heyer, 2014). It is likely that the required qualitative details can only be provided by the police. Considering the conclusions reached by Roziere and Walby (2018), such as the belief that PTUs respond to ‘benign’ calls such as traffic incidents and noise complaints, it is particularly valuable to capture the perceptions of officers from the sampled police services. Therefore, the primary goal of Study 2 is to gain a better understanding of the situations in which PTUs are deployed in Canada. Considering their unique perspective within policing (Phillips, 2018), the opinions regarding PTU deployments will be examined through interviews with general patrol (GP) officers, PTU members, and PTU supervisors.

Study 2 examines the following five research questions:

1. What types of incidents do PTUs respond to?
2. What, if any, factors are evaluated when considering deploying a PTU?
3. What role do PTUs fulfill when deployed?
4. What benefits or drawbacks are there in deploying PTUs?
5. Do participant responses to these questions vary depending upon the position they hold within their policing service (i.e., GP officer vs. PTU member vs. PTU supervisor)?

Methods

Participants. The VPD, WPS, and OPS gave their permission for me to interview GP officers, PTU members, and PTU supervisors. The goal was to interview two PTU supervisors, 10 PTU members, and 10 GP members from each service. In actuality, I interviewed six officers from OPS, eight officers from WPS, and nine officers from VPD (see Table 5). Considering the current study's focus on police officer perspectives regarding the use of PTUs, the current study had the exclusion criteria that interested participants must be active police officers within one of these police services. The officers were not compensated for participating in the study.

Table 5.

Overview of participants position held and police service

Service	Position Held			
	Patrol officer	Patrol supervisor	Tactical member	Tactical supervisor
OPS	1	1	2	2
WPS	4	1	1	2
VPD	3	3	2	1
Total	8	5	5	5

Across the three services, a total of 23 participants were interviewed, which corresponds to a response rate of 39%. The interview length ranged from 18.25 minutes to 79 minutes, with an average of 47.00 minutes ($SD = 17.44$). Consistent with the demographics of Canadian police services (Statistics Canada, 2018), the majority of officers were Caucasian males above the age of 30 (see Table 6). Participant age ranged from 32 to 54, with the mean age of 44 ($SD = 7.21$). Approximately half the sample were officers who were currently on a tactical team ($n = 10$,

43.5%). Further, there was a relatively even representation of the three police services included in the sample (OPS $n = 6$; WPS $n = 8$; and VPD $n = 9$). All but two participants consented to have sections of the interview transcripts anonymously quoted.

Table 6.

Measures of central tendency for participant demographics

Variable	Most common response
Age	$M = 42$ ($SD = 6.37$)
Gender	Male ($n = 21$)
Ethnicity	Caucasian ($n = 22$)
Years service	$M = 17$ ($SD = 6.36$)
Rank	Constable ($n = 11$)
Military experience	No ($n = 20$)
Carbine trained	Yes ($n = 19$)
PTU experience	Yes ($n = 12$)
Years on PTU	$M = 9$ ($SD = 4.98$)
Current position	GP member ($n = 8$)

Procedure. Convenience sampling was utilized as the officer in charge of each PTU identified PTU members and supervisors, as well as GP members who were interested in participating in the study. Officers who were interested in participating were sent an informed consent form that explained the purpose and requirements of the study (see Appendix C). If officers were still interested in participating after reviewing the informed consent form, they were instructed to contact the researcher to schedule an interview. Snowball sampling was also

used in that I asked participants to forward my contact information to anyone who may be interested in participating. Approximately 10 officers were contacted through this method, of which three have been interviewed at this time (and are included in my thesis).

For those participants who provided their consent, semi-structured interviews were conducted over the phone (for VPD and WPS) or in-person (for OPS). To ensure consistency between interviews, an interview guide for each group of officers was utilized. The interview guides include questions on the following topics: (a) demographics, (b) when the specialized teams are used, (c) the role PTUs fulfill when used, and (d) potential advantages/disadvantages of utilizing PTUs (for a comprehensive list of interview questions see Appendix D for GP officers, PTU members, and PTU supervisors). Interview questions were added after the completion of Study 1 to gain further information for trends that emerged during Study 1 (Appendix D lists the questions that were set *a priori* and added throughout the process).

To ensure that the qualitative codes were applied in a consistent manner, Cohen's Kappa (K) was calculated in NVivo. Consistent with the measures of inter-rater reliability previously calculated (see Study 1), K measures the total units of agreement between the two coders that occurs above chance (Hallgren, 2012; Sun, 2011). The calculations were based on the character level in NVivo and a weighted K was used to account the differing interview lengths.

Analytical approach. Interviews were audio recorded, transcribed verbatim, and thematically analyzed. Thematic analysis is a flexible approach to qualitative research, which can provide a rich account of participant perspectives by highlighting the similarities and differences across and within participants (Braun & Clarke, 2006; King, 2004). Additionally, thematic analysis provides a structured approach to analyzing qualitative data, allowing for coherent and well-organized reports (King, 2004). While thematic analysis has received some criticism for

lacking rigour (e.g., the perception that “anything goes”; Antaki, Billig, Edwards, & Potter, 2002), when applied in a systematic and transparent method the insights may be invaluable (Attride-Stirling, 2001).

Due to the limited research available on the perspectives of police regarding police militarization, an inductive thematic analysis was conducted. The thematic analysis proceeded by identifying themes in participant responses to the semi-structured interview questions, instead of relying on previously established themes from the literature (Braun & Clarke, 2006; Patton, 1990). Braun and Clarke’s (2006) six-stage thematic analysis process was adopted. This included the researchers: (1) becoming familiar with the dataset, (2) generating initial content codes, (3) organizing codes into potential themes, (4) reviewing themes in the context of the broader dataset, (5) defining and naming themes, and finally, (6) reporting the findings (Braun & Clarke, 2006). Generally, this analytical process is referred to as recursive, as the analysis of qualitative data does not follow a linear trajectory (Braun & Clarke, 2006; Ely, Vinz, Downing, & Anzul, 1997). Instead, the process of refining the definition and organization of themes occurs until themes are clearly articulated and summarized in a few sentences (Braun & Clarke, 2006; Maguire & Delahunt, 2017). This recursive process was facilitated by the software program NVivo (QSR International, Melbourne, Australia).

To maximize the extent to which readers trust qualitative research, Lincoln and Guba (1985) suggest four principles must be adhered to: credibility, transferability, dependability, and confirmability. Credibility describes how accurately the researchers capture and represent the respondents’ views (Tobin & Begley, 2004). To allow other researchers to determine the extent to which findings are transferable to other contexts, the researcher must provide in-depth descriptions of the research site(s) (Tobin & Begley, 2004). Third, dependability is achieved

when the research process is logical and clearly documented (Nowell, Norris, White, & Moules, 2017). Finally, confirmability is demonstrated when the researcher's findings and interpretations are data driven and clear explanations are provided for how conclusions were made (Tobin & Begley, 2004).

Considering the principles mentioned above, numerous techniques were utilized to provide a systematic and transparent analytic process. For example, to maximize the reliability of the themes identified within the dataset, inter-rater reliability was assessed by another graduate student involved in the project (see below for results). In addition, once the final themes were developed, the findings underwent 'member checking,' which involved a subset of the research participants reviewing the findings to ensure their opinions were accurately represented (Castleberry & Nolen, 2018)⁹. This stage is recommended in order to ensure the credibility and confirmability of the researcher's findings (Lincoln & Guba, 1985). Finally, an audit trail, which describes the decision-making process throughout the recursive process of the thematic analysis, was kept with the intention of providing transparency (Nowell et al., 2017; See Appendix E).

Results

First, an overview of the research sites will be provided to give context to the experience of the officers, as well as the researcher. Unfortunately, I was unable to conduct the interviews for WPS and VPD members in person, so I relied on the officers' description of the city in these sties. However, the interviews with OPS members provided similar portrayals of the issues facing police officers and the society they serve.

⁹ Due to the availability of the officers the member checks were not included in this manuscript, however these checks are currently being completed.

The officers in all sites generally described the lack of resources within policing, the prevalence of substance use and mental health issues within the populations they serve, with particular mention being made of the rise of methamphetamine as a source of crime in society. The descriptions provided by the interviewees were very consistent with the media's portrayal of the issues officers face in their respective cities (e.g., Crawford, 2018; MacLean, 2019; Tumilty, 2019). Considering that officers are often guarded and wary of outsiders, throughout the interview process I was surprised by the extent to which they were open regarding their perceptions of the issues facing police officers generally and PTUs specifically. They also appeared to be honest in our discussions of police militarization.

Themes identified within participant responses regarding the sorts of incidents PTUs respond to and factors considered when deciding whether a PTU should be utilized will be described first. Following this, the role the PTU fulfills when deployed will be highlighted as well as the possible consequences of utilizing PTUs when functioning in both high-risk incidents and assisting patrol members. Table 7 presents a list of the themes that emerged from the interviews, as well as the frequency with which the officers from each operational role endorsed the theme. These themes will be discussed in more detail below.

Four interviews were randomly selected and coded by a research assistant. The overall weighted K was .43 with measures ranging from .11 to .63 (see Appendix F for all items). Therefore, the overall rating of agreement between raters was 'moderate' (Landis & Koch, 1977). However, the high prevalence of areas where both coders did not apply a code (as the interview section was not pertinent to the research questions) may be reducing the value of K (Hoehler, 2000; Sim & Wright, 2005). Unfortunately, the researchers are not aware of a method to account for this in NVivo and therefore the ratings of agreement are likely conservative.

Table 7.

Frequency at which themes were endorsed by current participant role

Themes	Total Frequency (<i>n</i> = 23)	Patrol member (<i>n</i> = 8)	Patrol supervisor (<i>n</i> = 5)	Tactical member (<i>n</i> = 5)	Tactical supervisor (<i>n</i> = 5)
Instances PTUs respond to					
High-risk incidents	20	6	4	5	5
Beyond capabilities of GP	13	4	2	3	4
Assisting GP	11	3	2	3	4
Factors considered in utilizing PTU					
Weapons believed to be present	22	7	5	5	5
Subjects' propensity for violence	18	4	4	5	5
Environment	15	2	5	4	4
Policy	11	2	2	3	4

PTU role when utilized

Assume responsibility	11	3	4	0	4
Mentorship	10	2	3	3	2

Consequences of utilizing PTU

High-risk call

Optics	21	5	5	5	5
Safer outcomes	21	6	5	5	5
Strain on resources	10	7	3	0	0
Loss of abilities for GP	5	1	1	2	1
Liability	4	1	2	0	1

Assisting Patrol

Relationship with GP	10	4	3	2	1
Loss of abilities for PTU	5	0	2	3	0

Incidents PTUs respond to. During the interviews it became evident that PTUs are utilized during both high-risk incidents as well as operating in a support capacity to GP during non-priority calls.

High-risk incidents. The primary role of the tactical team was described by nearly all participants as responding to high-risk incidents. Officers operating in a patrol capacity described the calls as events where at: “any time there is, I’ll say, beyond the normal risk that’s known to our members... So there’s no real specific [call type]; for me, there’s no real specific type. Ultimately, when there’s a greater risk than what is normal” (Participant 13- GP supervisor). The same participant continued and suggested that “and so, for me, again, my threshold is, is there now a greater risk to my members in doing some sort of higher-risk arrest and what not? Then I will consider utilising a tactical team.”

This view was consistent with information that emerged from interviews with general patrol officers. For example, one officer stated:

But my experience of it, they’re most likely or most often they’re high-risk situations where there’s potential of an armed suspect or there’s a weapon involved that could pose either grievous bodily harm to any member of the public or to a police officer or someone else. (Participant 6- GP member)

This description was also consistent with a response from a member of a tactical team:

So, in general we attend the more high-risk calls. To put that into more everyday terms, anything where there’s a higher threat level to the officers. So, anything where there’s a gun involved, knives, depending on the level of violence.

Anything where somebody is barricaded inside a residence. (Participant 19- PTU member)

Included in the discussion of high-risk events, numerous officers explicitly mentioned warrant executions. A patrol supervisor explained that... “in the City of [Location], the policy is that they [the PTU] attend any high-risk warrant. So this is any type of warrant that will involve potential loss of evidence, a dangerous circumstance, weapons present, high-risk persons for example.” (Participant 21- GP member)

Beyond capacities of GP. In addition to the high-risk nature of calls that PTUs attend, some participants ($n = 13$) described the nature of these calls as beyond the capabilities of GP to safely resolve the incident. For example, a patrol member noted that “...for me, if it’s extremely violent or they’re armed with a handgun or a rifle, that sometimes surpasses our capacity, and yes, they [the tactical team] are required for those types of situations” (Participant 12- GP member). Consistent with this belief, another patrol officer claimed “now it’s getting out of patrol’s wheelhouse of doing stuff. This is getting above our skillset, and maybe we need something else [referencing to the tactical team]” (Participant 20- GP member). Tactical members similarly described that they may respond when a call is “deemed to be outside the capabilities of being handled by just your general patrol members” (Participant 2- PTU member).

Assisting patrol. Approximately half of the sample ($n = 11$) described the PTU responding to calls outside of a priority response to assist GP. Considering that these instances are not priority responses there was variation in the extent to which participants endorsed the extent to which PTU members assisted patrol. For example, one PTU member explained that “... you’d find each squad has their own personality, their own belief about how much or how little they would be willing to support patrol” (Participant 2- PTU member).

Tactical members and supervisors at both the GP and tactical level described the PTU assisting GP more frequently than patrol officers. Often tactical team members assist GP as a cover unit to support the GP officers. For example, a tactical supervisor suggested “There are occasions where we will respond if only a small... Or one, two officer cars attending, and they’re just looking for backup, and if we’re available we’ll go as a backup capacity” (Participant 5- PTU supervisor). These sentiments were mirrored by a patrol member:

And it all depends too, if we get a call of violence like a domestic, and there’s one GP unit going, which is a General Patrol unit, and they’re looking for back up, and a tactical unit is on the road and they’re patrolling as a General Patrol officer. They would attend to the call with us. They just give us some back up.
(Participant 12- GP member)

In addition to acting as a cover officer for patrol members, PTUs appear to assist patrol members by completing calls to help manage the backlog of calls waiting for a police response. Interestingly, this perspective only emerged from participants with tactical experience or those operating in a supervisory capacity:

But there's a lot of stuff out there that [PTUs] can help with, to essentially just help cut down the workload and just have that faster turnover of members being available to go and deal with calls. If they can run around and put out small fires, it leaves patrol more available to come and take your call. (Participant 4- GP member)

In general, police services are under-staffed and are having trouble meeting their minimum standards [of officers on patrol]. And so, they're asking canine units,

tactical units, or search and rescue teams to do patrol support whenever they can.

(Participant 14- PTU supervisor)

Additionally, some participants explicitly mentioned the number of calls waiting to be dispatched to officers:

So, there is the yin and the yang. Like you don't want them to get too involved in the patrol calls. But it is nice to have the extra help. Because quite often, recently, we've had upwards of 80 to 120 calls, holding in our district for service, and no one to go to these calls. Now, a lot of them are report-type calls. But when the in-progress stuff starts coming in, we just get bogged down. So, it is nice when you hear them come on the air, saying, hey, you know what? We're here. We're assisting. Or saying, we got this call. It's nice to hear. (Participant 18- GP supervisor)

So we do a lot of back-up for general patrol members. And also, queue management. In [location] we have at times 300 calls in the queue waiting for dispatch. Some of the calls just require area checks, so we do that as well just to attempt to alleviate some of the calls for service that are waiting in our queue.

(Participant 15- PTU member)

Additionally, a few respondents highlighted that in some instances PTU members may be able to respond to the call faster than patrol members. For example, a PTU supervisor suggested they may respond to:

The odd domestic. That's pretty rare for us to attend, but there is an occasion where we'll go, if it sounds like the callers are saying, people are screaming, it sounds like things are breaking, or whatever. And if no uniformed units are available to attend or are unable to

at that moment in time. If the [PTU] unit is close by, sometimes we'll go. That's somewhat rare. That's not a common thing, but we will do those calls every once in a while. (Participant 5- PTU supervisor)

Factors considered in utilizing PTUs. During the interviews it became very salient that there were numerous factors that, when identified in a call, would indicate the call was high-risk and the tactical team should be utilized. The factors that were discussed were identified in warrant executions, as highlighted by a tactical member when stating "if it's a warrant service call, then typically it's when, again, there's a history of violence or mention their access to weapons, history of association with criminal organisations" (Participant 2- PTU member). Relatedly, another tactical member discussed the presence of these factors during an in-progress call and how the removal of these factors may reduce the need for the tactical team:

So, again, there are hundreds of [Mental Health Apprehensions], so a simple [Apprehension] does not involve tactical. There's no red flag, there's no, oh, we better give tactical a heads up. So, it's only in those cases where there's been a history of violence or if there's been news that the person's acquired a weapon to hurt themselves. Or, perhaps, they've confided to somebody that they're going to try to be shot by police officers or go out in a blaze of glory or whatever, then that sort of thing, they [referring to patrol] would come to tactical and say, this is our situation. ... And then, you get information and evidence that says, no, we're mistaken, this is not... These risks that we were considering at the beginning, are now mitigated. That's not the case anymore. Well, we have to scale back. That measured response goes both ways. The risks are high, the response is a certain way. No, we've learnt that, in fact, the person, they're not suicidal and they don't

have access to weapons. Then you're like, oh, what's tactical doing here then; let's get all this stuff out of here and we'll justify why we were here, because of this information. But now that we have this information [that the factors are not present], now it's going to be a door knock and a hello, how are you sort of a call. So, it has to go both ways, and so we go to great lengths to make sure it goes both ways. (Participant 14- PTU member)

Weapons known or believed to be present. The most commonly mentioned factor ($n = 22$) considered when deciding to utilize the tactical team was the belief that weapons were present. Specifically, the mention of firearms during the dispatch information was a primary factor considered by officers from all positions:

We usually use [the tactical team] for incidents of extreme violence or where somebody's like... A commercial robbery, where this person's attended that location with a firearm and they've presented in the manner to obtain what they want from that facility. (Participant 12- GP member)

A patrol supervisor mirrored this perspective in stating, "if there's any mention of a weapon, like especially a firearm, not necessarily, let's say, a knife or anything like that, but specifically a firearm or explosive, that's an automatic" (Participant 13- GP supervisor). Additionally, some participants mentioned that PTUs respond to bomb threats. For example, a tactical member stated that "we have breachers, explosive breachers and explosive disposal unit members attached to our team as well, so any kind of bomb call or bomb threat, suspicious package, that kind of thing" (Participant 2- PTU member).

The subjects' propensity for violence. Another factor taken into consideration is the subjects' propensity for using violence against other members of the public or the police ($n =$

18). The evaluation of the propensity for violence was suggested to be based off the history of the subject and if they are currently making threats. For example, a tactical officer stated that if the police knew that they were “going to deal with this gentleman or this female, and the last two times that we arrested that person it ended up in a big fight,” (Participant 10- PTU member) they would be more likely to utilize members of the PTU. Relatedly, a tactical team supervisor noted that:

...there's also a high gang culture in the city. So, there's a lot of gangs. A lot of people want to show their friends how tough they are and they're not afraid to use violence against police or against other people. So, those are the big things, I think, that are drawing us to more and more calls nowadays. (Participant 8- PTU supervisor)

Threats to the safety of the individual or others was another commonly reported factor considered in the deployment of PTUs. For example, a patrol member highlighted instances where “somebody made threats that they’re going to... The police show up and are going to start shooting them... I have my wife in custody or whatever you know, that type of thing, we would notify our tactical team” (P12- GP member).

Environmental factors. The environment that police are responding to was also noted to be a consideration in utilizing the PTU ($n = 15$). Supervisors for both patrol and tactical, as well as PTU members, primarily identified the environment as influencing whether members of the tactical team would be utilized. There were two primary situations in which accessing the subject was dangerous and therefore the PTU may be utilized. These included armed and barricaded subjects, and people threatening suicide at significant heights.

A tactical team member broadly explained that a PTU may be used during instances “which require some tactical intervention in a specialised environment, whether it be marine-type environments, in the woods, or any kind of environment that patrol officers wouldn’t have equipment or training for” (Participant 3- PTU member). These special environments often included heights where “people who will be on the ledges of buildings or parkades. And even some of the overpasses” (Participant 18- GP supervisor). Another patrol supervisor similarly described that they will request the tactical team when “for example, if we’ve got a barricaded person who is on a balcony, or someone who is a potential jumper from a bridge” (Participant 21- GP supervisor). Finally, another supervisor further described the role that the environment plays in utilizing the services’ PTU:

District One is predominantly downtown, so we have a lot of high rises, so if we ever have someone who is barricaded in a suite, a standard procedure would be to have some [PTU] members prepare to rappel down from the balcony above to cut off access and prevent them from potentially harming themselves. (Participant 7- GP supervisor)

Policy considerations. Approximately half ($n = 11$) of the respondents explicitly mentioned how policy dictates when the tactical team should be requested to attend either an in-progress call or a pre-planned event, such as a warrant. Interestingly, patrol members referred to their organization’s policy at a reduced frequency compared to officers fulfilling other capacities. However, when patrol members did describe policies, they typically referred to in-progress calls. For example, one officer stated:

Our policies are that if there’s somebody armed and barricaded, we do not do entry on that residence or that building. Unless there’s like say, an active shooter

incident where there's an imminent threat to life, then General Patrol will do an entry. But if there isn't, if it's an armed and barricaded, our [PTU] comes in, we pull back and their negotiation starts. (Participant 12- GP member)

The policies pertaining to entering a residence during exigent circumstances were similarly described by tactical members:

So there's a policy that says that unless it's exigent, any door that needs to be breached, any forced entry they call it, that needs to be happening throughout [Location], the tactical team will do it, unless it's exigent or unless it's deemed so safe that we're not really required. (Participant 10- PTU member)

Policies for warrant executions were commonly referred to by tactical members and supervisors. For example, a tactical supervisor stated that "So, in [Location] our policy is that virtually all search warrants with the exception of a few are to be conducted by [the PTU]. (Participant 5; PTU supervisor). Another PTU supervisor further described the situations in which the tactical team may not be required:

We do, as a matter of policy, any warrants that involve breaching to create access [to the residence]. So, warrants can be done by a detective if they're just serving papers or there's not... They don't have to do any forced entry. But, as soon as there's forced entry then the tactical unit will execute those warrants. (Participant 14- PTU supervisor)

The same supervisor then explained that due to policy, it was not feasible for GP members to be able to conduct warrants where breaching was required:

There is no way they [referring to GP members] could even... Under policy, they would be able to breach. Because of adequacy standards in [Location], they would

never have enough time to fill the training mandates.” (Participant 14- PTU supervisor)

Roles fulfilled when tactical team members respond. Less than half of the officers ($n = 11$) described the roles that tactical members fulfill when responding to a call. Typically, it was general patrol members who did not speak to the roles PTUs play when deployed. When participants did describe the roles that tactical members fill when responding to calls, they did so in two manners.

Assuming responsibility. Due to their operational mandate, it was commonly ($n = 11$) described that the PTU would assume responsibility of the call during a high-risk event. This theme was often endorsed by both patrol and tactical supervisors, as well as a few patrol members. Regardless of the positions held by the officers, all participants described the PTU taking ownership of the call in a consistent manner. Interestingly, this theme was not present in any of PTU member interviews.

One of the manners in which the tactical members would claim responsibility of the call was by relieving GP members of the inner perimeter, which is established as close as safely possible to the subject’s location (OPP, 2006). The establishment of the inner perimeter allows members to contain access to the area and observe the subject (OPP, 2006). Both patrol members and supervisors described the process of the PTU assuming responsibility of the zone closest to the subject:

So, what we’ll do is we’ll just set up the perimeter and then when tactical comes, they take the inside of the perimeter, and it’s their show from there. If they need us to be moved or something like that, then there’s a reason why they need us moved or they want us moved. It’s either not in a safe spot, or maybe if I’m on the

perimeter rifle, can you move over there, 100m? Because your line of site is right where we're going to be. (Participant 20- GP member)

And then the practice is that they'll take over the inner containment tight to the location, and the patrol will supplement any assistance required on the inner containment and then patrol will look after the outer containment, and that [referring to the patrol] sergeant will take that role and the [PTU] sergeant will take the inner role. (Participant 7- GP supervisor)

Mentoring role. Additionally, participants ($n = 10$) described that due to the specialized training and experience that PTU members have, they are able to operate in a mentoring capacity to patrol members who may be less attuned to tactical considerations. For example, one tactical supervisor noted that:

...the tactical officers act in a bit of a mentoring role. When they show up on a traffic stop and they can talk to the guys about here's a safer way to do it, here's a safer way to position yourself, your vehicle. Here's a risk that you might not have thought about. (Participant 14- PTU supervisor)

Similarly, a patrol supervisor highlighted that in their experience, tactical team members "...provide a lot of direction to frontline members as far as advice to even supervisors as to what the safest way is to attack particular problems" (Participant 22- GP supervisor). Relatedly, a tactical officer explained that "the benefits are also that we have fairly experienced members out there providing advice and consultation, mentoring to patrol on the road. I think there's definitely a benefit there" (Participant 3- PTU member).

The mentoring capacity that PTU members fulfill was described not only during a call, but also after the call had been resolved. A patrol supervisor for example explained that members of the PTU would be included in the GP debrief of the incident:

And they're critical when we have an incident that even, let's say, we deal with before [the PTU] gets there. And they participate in our debriefs, because there's always that sort of teaching element to it, that mentoring, that training element to it. (Participant 13- GP supervisor)

This sentiment was mirrored by tactical officers who attempted to debrief with patrol officers in a less formal setting. Interestingly, one officer also noted that the mentoring capacity was bi-directional in that the PTU would look for feedback from patrol members:

And, hey, honestly, if we're involved in a high priority call with general patrol, we will, a lot of times after, try and meet with general patrol members just to discuss what went good, what went wrong, what did they like, what can we do different? (Participant 8- PTU member)

Potential benefits and drawbacks of utilizing PTUs. When discussing the potential consequences of utilizing members of a tactical team, it became apparent that they varied as a function of the call priority the PTU was responding to.

High-risk incidents. Five themes were identified within participant responses related to the tactical members responding to high-risk events. These included the optics regarding PTU members, safer outcomes, issues related to police resources, reduced liability, and a loss of abilities in GP members.

Optics of PTUs. Nearly all participants ($n = 21$) discussed the optics regarding tactical team members responding to calls. However, two opposing perspectives were discussed relating to the appearance of tactical officers.

The first perspective described public concerns of police militarization ($n = 15$). The manner in which participants described the optics of PTUs was consistent regardless of the officer position, however, less GP members discussed this issue. Participants primarily highlighted how the appearance of tactical officers responding to high-risk calls may result in the public perceiving that PTUs are aggressive. For example, one tactical member suggested that utilizing PTUs "...may look more aggressive because it's more intimidating. People don't like the balaclavas and the helmets, and it comes across as very aggressive" (Participant 19- PTU member). Similarly, a patrol member suggested that "the drawbacks [of using a tactical team] would just be the image of having a [tactical] team there, essentially. And I know in [Location], at least that upsets a lot of people just seeing armed patrol members" (Participant 4- GP member). Similarly, the use of the armoured vehicle was suggested by numerous participants to be a focal point for public criticism:

And another few of the drawbacks I guess, in the public perception, people see that [referring to the PTU using its armoured vehicle] coming down the street and they're like, oh great, it's their personnel carrier and the cops are mounting the thing with carbines sticking out of it. And it might translate to them to something like a war zone for a day or two. (Participant 12- GP member)

Despite the concerns of a negative image to the public, some ($n = 9$) participants suggested that the appearance of PTUs has a civilizing effect on the public. For example, a patrol officer described how the PTUs "presence alone is enough sometimes to just have people give up

or turn themselves in” (Participant 12- GP member). This sentiment was similarly described by officers from all positions within their respective service. Interestingly, both patrol and tactical members believed that the appearance of PTUs were particularly effective when interacting with members of criminal organizations. For example, a patrol member noted that “with criminals, they understand when they see that uniform, they see that vehicle pull up, that they're not dealing with just some guy that's fresh out of the academy” (Participant 4- GP member). This idea was echoed by one of the tactical members as well:

When we approach at times, their compliance level increases. Just by our presence there... Because they know who we are and they won't give... Like gang members, for example, that we deal with to back up general patrol members, they might give general patrol a hard time but then when we show up in a different uniform, they'll recognise us and change their tune on the spot and show more respect to our unit. (Participant 15- PTU member)

Safer outcomes. Nearly all participants ($n = 21$) discussed how utilizing members of a PTU resulted in safer outcomes for the public, the subject, and the police. Regardless of the officer's position in the service, there was a consistent message that PTUs have the “ability to resolve that incident with as little chance of injuries as possible for us and them” (Participant 19- PTU member).

The manner in which tactical members facilitated better outcomes was described in various ways. Participants from all positions explained that the additional equipment provided to PTU members created a safer environment by providing additional protective equipment such as body armour and the armoured vehicle. For example, one tactical officer remarked:

Back in November we actually had a call where there was a male inside of a house who was armed and was firing out of the house at us and shot our armoured vehicle and hit it three or four times while the guys were in it. A few years ago those guys might have been seriously hurt. Now, they were completely protected and it just proves that things are changing and it's unfortunate that we need it, but we do need it. (Participant 8- PTU member)

Additional equipment, in the form of less-lethal force options, was also thought to result in safer outcomes. These options were described by officers as providing more alternatives when a subject is displaying violence towards the police. For example, a tactical officer explained that due to the equipment, officers are better able to position themselves to communicate with the subject.

We are able to safely approach. All the officers... If you don't have intermediate weapons or something that you could defend yourself with from a reasonable distance, or with a partner, then you're forced to communicate from such a distance, it makes it difficult. (Participant 14- PTU member)

Similarly, the increased options for less-lethal interventions was described as providing more flexibility in the officer's response to the subject. A tactical officer succinctly made this point when stating "again, like I said before, we have better and more less lethal options to deal with persons, rather than just defaulting to, you either have a Taser or a firearm type of thing, or a fist fight" (Participant 5- PTU member). This point was reiterated by a patrol member who suggested that patrol members responding to a high-risk call can cause problems, "putting all your members and...the subject at risk, because you have a less lethal option, like a taser or a beanbag and then you have a pistol" (Participant 4- GP member).

Closely related to the idea that additional options provided to members on a tactical team enhances safety, participants from all positions believed that the introduction of PTUs reduced the likelihood that force would be used in encounters with the public. Numerous participants highlighted that the lack of training for patrol members may lead to situations of officer-induced jeopardy in which the officer's actions or decisions creates a situation where the chances of using force are increased:

...like a barricade, they [referring to GP] would negotiate as best they can.

Eventually they would have to breach a door and then they would have to put themselves and the subject at risk by essentially officer-induced jeopardy at that point where... If that is creating an incident. But if they [referring to PTU members] can use stuff like robots and gas and time and negotiators, chances are better of safe resolution for everyone involved. (Participant 4- GP member)

A tactical member further elaborated on how the use of a tactical team may reduce the chances of using force when responding to a similar type of incident:

It's the fact that we operate as a team, the fact that we have access to a lot more equipment, and the fact that we're better trained. So, a good example of that is if a guy is barricaded in a house with a knife, we go in there. Prior to going in, I'll designate a less lethal guy. We can have an ARWEN, which shoots the big rubber bullets, a Taser guy, so a guy with a CEW who can Taze. We can have a shield, so that if we get close enough we can use it to pin a person. We'll have obviously our lethal cover, but we'll go in as a team. We've practised doing this, and we're very proficient at it. Whereas a patrol officer is going to go in there, he may have a Taser and a pistol, and be with maybe one other officer. And the chances of a

shooting occurring with them are much higher than the chances of us shooting them, because we have so many other options, and we're so used to doing it.

(Participant 19- PTU member)

Another factor that was described as resulting in safer outcomes was the experience tactical members have operating under conditions of stress, such as during a high-risk incident. The belief that tactical members possess an increased ability to handle stress was not mentioned by GP members. However, tactical members and supervisors suggested that this was a crucial factor in safely resolving incidents:

And I think, again, not to slight our Patrol members, but I have someone eight months on my team; they're going to get panicked, they're going to get scared faster than a member of our [PTU], and they might make a decision while they're panicked or scared. They're more likely to make their decision in those circumstances than someone of our tactical team. (Participant 13- GP supervisor).

So we have training that leads us to be calmer, just because we're going in at a... We're going in relaxed, but still, we're facing stuff that we face in training all the time, and we do scenarios every week, we train every week. So, we were talking about performance with the stress level. Our stress level is reduced. We can see a big difference with a junior guy joining the team the first year and a senior guy that has ten or 12 years. The way they go in, they're much... The guy with ten or 12 years is much calmer, much more relaxed. The new guy is somewhat relaxed, but he's got three months of training behind him. Take patrol to go in the same situation. They won't have that capability. They're going to go in and the risk for them and for the person inside the residence or who they're facing with is

increased. So the main factor I think is safety, both for officer and citizens, public, general public and the suspects or whoever we're dealing with. (Participant 10-PTU member)

Resources. The additional resources that are associated with the use of tactical teams was described by a number of interviewees ($n = 10$). The comments focused on two key issues. First, despite the belief that PTUs bring a lot of value to successfully resolving incidents, there were some perceived negative impacts when the tactical team responds to calls. The belief that utilizing the PTU places strains on the resources of the police service was mentioned exclusively by officers operating in a patrol capacity. Numerous patrol members highlighted the additional time often required when the tactical team takes control of a high-risk incidents. This belief is best described by one of the members who stated that “for us, honestly, anytime we call out [the PTU], there's always that stigma that, oh, this is going to take forever now, because everything slows right down” (Participant 11- GP member). Additionally, patrol officers highlighted that the resources required for a large operation, such as closing a bridge in response to a suicidal individual, limits the resources that the service has to respond to other calls:

And the drawbacks from that could be the fact that we tie up a lot of resources that are taken away from patrol. The way we do things, it takes a lot of manpower and often times that drains resources throughout the squads or throughout the city, ultimately leaving other calls to either wait or other priority calls, people not being able to respond to them immediately. So a drawback would be, it's obviously a tie in resources. (Participant 6- GP member)

The drawbacks are sometimes a call that can be cleaned up in half an hour, is now drawn out for hours, 12, 15 hours, where we're now on outer perimeter dealing

with an armed and barricaded. Or dealing with a suicidal male, right? But that's more of just a time thing. And that's coming from a general duty constable who wants to just go, go, go at each call, right? (Participant 12- GP member)

Secondly, the use of tactical teams was described as impeding investigative units ($n = 3$). Specifically, the policy that PTUs execute all high-risk entries was believed to restrain the ability for investigative units to conduct their search warrants in a timely manner. Two of the tactical members noted that investigative units have expressed their displeasure with the time required for the tactical team to execute a search warrant so that the unit may continue their investigation:

...we have people that are saying, well, if we're calling you to assist us on this call or on this warrant or something, we know that we're going to have to have a main briefing, we're going to have to get you some intel that we wouldn't give to patrol or to us. We have to call the duty inspector. We have a formal briefing for that. We're going to wait. So, sometimes the drawback that I've heard from people that work with us, stuff that should take 15 minutes takes about two hours because we have to call more guys in. (Participant 10- PTU member)

An officer who had previously worked in a drug unit mirrored the sentiments expressed by the tactical officers. Specifically, this participant who did not consent to be quoted, suggested that the procedures of PTUs hinder criminal investigations due to the priorities of safety. This participant further noted that the PTU conducting the warrant would rather be 100% safe than take any kind of risk in order to find drugs to facilitate the investigation.

Loss of abilities for GP members. Another theme that emerged from participant responses regarding the use of PTUs during high-risk incidents is the belief that the ability of GP members to safely respond to these calls may diminish ($n = 5$). Primarily, tactical members and

supervisors suggested that some GP members do not fully develop the necessary skills to keep themselves and the public safe. The beliefs of the tactical members are best described with the following statement made by a PTU member:

...we are conscious of wanting to have patrol get the experience they need and gain the confidence to deal with certain calls like this because we won't always be there. When we're responding to support patrol, we are conscious of not trying to step on them in the first instance, and they're handling it well because they do get a lot of training. But our police service right now, and probably it's the same throughout Canada, is fairly junior. We've had a big turnover. We've lost a lot of senior experience. We have a lot of younger members who may not have the experience to handle this type of call. We're trying to balance that relationship with patrol so that they feel valued, that they get the experience they need.

(Participant 3- PTU member)

Relatedly, a patrol officer mentioned that when the tactical team was not available then GP would "... have to do their [referring to PTU] job when they're not here and when you're not always practising that [referring to high-risk calls], you're not at your best" (Participant 23- GP member).

Liability. Some participants ($n = 4$), primarily from patrol, described the use of PTUs as a shield from liability for the police service as well as individual officers. Often the PTU was mentioned in this capacity during calls where the subject was suicidal. For example, when responding to a suicidal individual on a bridge, participants stated:

...a lot of it is about liability, right? We have the [oversight body] to consider, and that's always going to be in the back of your mind. If you're there, and the guy

jumps, then you're going to be investigated as to what you've done. (Participant 11- GP member).

And then, if something were to happen, and there was a coroner's inquest and oversight, and that question would come up, well, you know, you're a patrol officer, are they trained in negotiation? Well, no. Well, why didn't you have a negotiator there? We'd have to answer that. Either they weren't available or they were on call, they were coming. Obviously, at the end of the day, if our [tactical] team is not available, the police still have to respond and deal with it. So members can do it, but if you have people with the training, so that their level of success is higher, and you've got the tactics with the negotiations, then why would you not go for that? (Participant 7- GP supervisor).

Assisting patrol. Two themes were present in participant responses when discussing PTU members assisting patrol during non-priority calls. These themes included issues related to the relationship between GP and PTUs and the reduced abilities of PTU members.

The relationship with GP. Approximately half of participants ($n = 10$) described the relationship between the PTU and GP with respect to responding to non-priority (i.e., relatively low risk) calls. Tactical officers were primarily concerned with patrol members' perceptions regarding a tactical member's inability to be the primary officer during a non-priority call as they felt they need to be able to quickly respond to a high-risk call if it arises:

Our job is to be ready for that high threat, low frequency call. So we're not here to cruise the night district and quote unquote break up fights and, for lack of a better term, peacock around, like just be seen, but then when it's time to actually pick up

a shovel and start digging, we're dropping an... Dropping a smoke bomb and leaving. (Participant 11- PTU member)

... even if it's something as simple as a shoplifter, oh, you're there, you arrest the guy, but then when it comes down time to put pen to paper, go through the monotony of creating the report to crown council, as soon as the paperwork, the tons of paperwork, [the PTU] just can be seen as sloughing off that work to patrol members, which doesn't really build a lot of bridges. (Participant 2- PTU member)

Patrol officers confirmed the concerns of tactical officers regarding the inability to process arrests. For example, one stated:

We have our own stuff we want to get done within a day and if they are out there doing self-generated work, whether it be a spot check or like they get say a male in custody for a warrant, they automatically turn it over to us, so they don't touch any of it. So that does kind of put a little rift between a general patrol officer and [the PTU]. (Participant 23- GP member)

Similarly, when PTU members are able to assist GP in completing paperwork it appears to help repair the relationship between GP and PTU members:

And I've even gone to a couple of calls where it's a non-criminal domestic and they've [referring to the PTU] offered to write the quick little report themselves. And I think that speaks to the fact that a lot of them are coming out of general patrol and they know it's not that much work and we appreciate it. (Participant 16- GP member)

Loss of abilities for PTU members. Five officers described how assisting patrol officers would diminish the ability for PTU members to train and develop their competencies for high-risk incidents:

I'm of the opinion that as a [tactical] unit you need the team to be as proficient as possible. And while it's nice to have us out there on general patrol, I don't think we should be relied on to do that. I think we need to focus on the very high-risk, low frequency stuff, because when the high-risk stuff happens, you want your team to be as proficient as possible. (Participant 19- PTU member)

Relatedly, a patrol supervisor highlighted the trade-off between tactical members assisting patrol and reducing response times to calls for service and the abilities of PTU members:

But then the downside to that is during that time when they're taking patrol calls, they're not training. So I think we would gain efficiency and productivity at the operational level, but where we would lose is their skillset and their expertise and their training. (Participant 13- GP supervisor)

Discussion

Despite the growing academic attention focused on the use of PTUs, the perspective of police officers has largely been neglected (Brimo, 2012; Phillips, 2018). Following the call to provide qualitative data in order to better interpret quantitative findings (Bieler, 2016; den Heyer, 2014), the current study sought provide context to the claims made by Roziere and Walby (2018) by gaining an understanding of officer perspectives from three Canadian police services about the types of incidents PTUs respond to, the factors considered in determining whether a PTU is necessary, and the potential consequences of utilizing tactical teams.

Overall, there was very little discrepancy in the manner different types of officers described the sorts of instances PTU members respond to, the factors considered when deciding if PTU members should respond, as well as the potential consequences of utilizing PTU members. For example, in the responses that were pertinent to the first research question nearly all participants described PTUs as responding to high-risk incidents which participants defined as any call where there was a greater than normal risk to the public, the subject, or the officers. Interestingly, when describing these instances, members with tactical experience often suggested these high-risk calls went beyond the abilities for GP members to safely respond to. It also became apparent that, to some extent, PTU members assist patrol members during non-priority calls.

Additionally, regardless of the officers' position, there was a strong convergence in the types of factors that are evaluated when considering if the call is high-risk, thus necessitating a PTU response (Research Question Two). These factors included the belief that weapons, specifically firearms, were present, the subject's propensity for violence, environmental considerations, and organizational policy. Interestingly, patrol members identified environmental considerations, such as a lack of access to the subject, and their organization's policy less frequently than officers with tactical experience. However, when GP members did discuss these issues, they did so in a manner that was consistent with the tactical members. The fact that less GP members noted these considerations is likely due to less exposure to policy regarding warrants or the special environments that tactical members are trained to operate in.

Two themes emerged regarding the role PTUs fulfill when responding to calls (Research Question Three). Participants generally believed that PTU members relieve GP members of the inner perimeter and assume responsibility during high-risk calls or act in a mentoring capacity by

providing guidance to GP members who have less experience and training. Interestingly, less patrol members mentioned the role that PTU members play during calls. However, when they did discuss the role tactical members played, they expressed the same beliefs as tactical members and supervisors.

The greatest variation in participant responses occurred when discussing the potential consequences of utilizing PTUs during both high-risk incidents and when assisting patrol during non-priority calls (Research Question Four). For example, patrol officers described the strain on police resources during a protracted event in which police cordon off the area to the public to safely resolve the situation. However, while tactical members mentioned they had heard complaints regarding the time and resources required to complete a PTU operation, members of tactical teams did not personally express this concern. Similarly, participants who were patrol members or supervisors described PTUs as a strategy to minimize the liability to individual officers and to the organization to a much greater extent than tactical members. Additionally, the loss of operational abilities in responding to high-risk calls was highlighted in one of two possible ways. First, concerns were raised about GP members gaining the experience and abilities to respond to high-risk incidents if PTU members did not provide mentorship to them. Additionally, the ability for PTU members to maintain their skillset in responding to high-risk events was highlighted when discussing the implications of PTUs assisting patrol members during non-priority calls.

Considering the idiosyncrasies in participant responses regarding the potential consequences in utilizing PTUs, it appears that the position held by the participant influences the lens through which officers view tactical teams (Research Question Five). However, the extent to which this is true appears to vary as a function of the topic being discussed. It is possible that,

due to the training received by police officers, all members of a police service are generally aware of the circumstances that PTUs respond to and the factors to consider when deciding if officers should request the specialized teams. Considering this, there was little variation in the responses provided by officers regardless of their position.

Limitations. While this project provides an initial understanding of officer perspectives regarding the situations in which PTUs are utilized, the factors considered, and the possible consequences of using tactical teams, the project is not without limitations. Specifically, the participants interviewed could potentially be biased in the sense that they may be more supportive of PTUs than the typical officer. As such, the themes identified, particularly concerning the benefits of PTUs, may not be reflective of the broader population of Canadian officers. However, considering that nearly all of the officers interviewed did voice criticisms regarding the use of PTUs, the concern that these participants were providing a one-sided account is mitigated. That being said, future research would still benefit from interviewing a larger sample of officers from across the country.

Additionally, other stakeholders impacted by PTUs in Canada (e.g., citizens that come into contact with PTUs, government officials who fund policing, etc.) are likely to have different views than the sampled officers. For example, Turner and Fox (2017) found that members of Congress were significantly less supportive of police militarization (e.g., the use of military equipment and PTUs) than officers and police executives. Therefore, police officers represent one critical voice in the dialogue concerning the use of tactical teams in Canadian society, but there are many others that should be considered in future research. Relatedly, research should also explore the reasons why government officials and the public seem to support the use of PTUs to a lesser extent than officers.

Finally, the sample drawn on in this study was not particularly diverse. For example, the sample lacks female representation as only two female officers participated (of course, this is not inconsistent with the fact that female officers are the minority in policing). Additionally, while more junior officers may not have had sufficient exposure to the use of tactical teams to provide useful responses to some of the questions, all of the respondents were relatively senior in their respective police service. Furthermore, there were limited interviews with members of investigative units, which appear to be a large contributing factor to the workload for PTU members. Considering some of the participants highlighted the strain between investigators and PTUs, this relationship should be further examined, and more diverse samples should be recruited in future research.

Generally, because of the sampling issues described above, I cannot determine the extent to which the themes that emerged from the interviews in my study transfer to other police officers within the same police services, to other Canadian police services, and to Canadian society more broadly.

General Discussion

Despite very limited empirical data, there have been serious concerns raised regarding the use of PTUs in Canada (e.g., Roziere & Walby 2017, 2018). In order to develop more informed views about the use of PTUs, and allow for evidence-based decision making, police services and the public require higher quality examinations pertaining to the role of PTUs in contemporary policing. The crude approaches that have previously been utilized to determine the types of instances PTUs respond to has resulted in claims that PTUs have become ‘normalized’ and frequently respond to ‘routine’ calls (e.g., Roziere & Walby, 2018). Responding to calls such as

domestics, mental health calls, and traffic stops are suggested to extend far beyond the original mandate of tactical teams (Kraska & Kappler, 1997; Kraska, 2007; Roziere & Walby, 2018).

Consistencies and Inconsistencies with Previous Research

Our analyses suggest that while PTU members may assist GP when they are not training or required at high-risk calls, generally the assertions described above are not supported. For example, when sufficient information was provided by the WPS, weapons were believed to be present during nearly two-thirds of calls PTU members responded to. Therefore, tactical officers are frequently responding to calls where risk factors are present. Consistent with this notion, the introduction of specialized units within some jurisdictions in the US for responding to mental health calls did not reduce the use of the tactical team (Compton, Demir, Oliva, & Boyce, 2009); in other words, as opposed to what some would suggest, PTUs do not appear to be responding to calls because someone is experiencing a crisis (mental health or otherwise), but because certain risk factors are identified in the call (such as the presence of a weapon that the individual is threatening to harm themselves with). As previously mentioned, relying on the original call types neglects the qualitative variation that exists during encounters of a similar nature (e.g., traffic calls, mental health calls, domestic calls). Considering that call type does not often indicate of the presence of risk factors (at least in our study) it is simply not feasible to determine if PTUs are becoming ‘routinized,’ or ‘normalized,’ as Roziere and Walby (2018) have argued.

Interestingly, the risk-factors identified in relevant literature, as well as the operational data analyzed in Study 1, converged with the factors present in the interviews. For example, during the interviews, it became clear that information regarding the presence of weapons was a critical factor in determining whether GP members should request the support of a PTU. Similarly, the subject’s propensity for violence was commonly reported during interviews.

Officers similarly described the history of the subject, including previous violent encounters with the police, gang affiliations, and whether the subject has made threats to the public or officers. Unfortunately, the literature review did not suggest the extent to which the environment influenced the use of PTUs, and therefore while there were instances where the environment was mentioned during interviews (e.g., in explaining there was a suicidal individual on a bridge), these environmental factors were not systemically coded for. Considering this, future evaluations examining the presence of risk-factors in operational police data should include environmental considerations.

As previously mentioned, there are limitations to our re-analyses of the operational data previously examined by Roziere and Walby (2018). However, considering the illuminating findings with respect to the presence of risk-factors such as weapons in the PTU records, it is reasonable to argue that previous attempts at measuring the activity of PTUs through call for service data has resulted in erroneous conclusions.

Challenging Negative Definitions of Police Militarization

The most prominent perspective in the literature considers police militarization as the antithesis of community policing (Buerger, 2000; Williams, 2007). Often, PTUs are considered the physical embodiment of police militarization, due to their adoption of specialized training, tactics, and equipment (Hill & Beger, 2009; Scobell & Hammitt, 1998). Proponents of this perspective suggest that the incorporation of equipment and training derived from the military increases an officers' propensity to use force when interacting with the public (Hill & Beger, 2009; Kraska, 2007) and thus, that the use of PTUs should be minimized (e.g., McCulloch, 2001; Roziere & Walby 2018).

However, our analysis clearly suggests that officers in our sample do not support this assertion and instead adopt the perspective that PTUs are an indicator of the professionalization of police (while still recognizing that there are challenges associated with the use of PTUs). Consistent with the limited research that views PTUs in this fashion, the officers in our study believe that tactical teams are an effective risk-mitigation strategy (Alvaro, 2000); they also believe that PTUs represent an appropriate use of specialized resources and highly-trained personnel (den Heyer, 2014).

Many suggest that due to their elite status within policing and the emphasis on UoF, PTUs should be quarantined from the rest of the police service and should only appear during infrequent but high-risk events such as hostage takings and terrorist events (Dodge et al., 2010; McCulloch, 2001). In contrast to this perspective, utilizing tactical team members during non-priority calls may be considered an efficient use of limited police resources. Numerous participants, for example, mentioned the lack of officers on shift, while others explicitly mentioned the hundreds of calls waiting to be dispatched. These sentiments are consistent with a general trend across Canada (Statistics Canada, 2018).

Related to the lack of officers, within Winnipeg the average time required for a police response during calls that present a potential risk of grievous bodily harm or death to members of the public ranges from 10.5 to 12.5 minutes (Griffiths & Pollard, 2013). Additionally, more than an hour typically passes before officers are able to respond to calls deemed ‘urgent,’ including domestics (Griffiths & Pollard, 2013). However, this issue does not appear to be unique to the WPS (e.g., Carruthers, 2019; St-Onge, 2018). Therefore, despite contentious debates surrounding PTU members responding to domestics (e.g., Roziere & Walby, 2018), the potential for a

quicker police response to such calls is a clear example of when additional police resources, in the form of PTU members, may be beneficial to not only the police service, but also the public.

In stark contrast with the assertion that police militarization breeds an ideology that increases the use of force (e.g., Delehanty et al., 2007; Kraska, 2007); the officers we interviewed strongly believe that PTUs reduce the likelihood that force will be used. In fact, officers argued that the specialized training, equipment, and tactics associated with PTUs ultimately results in safer outcomes for all parties involved. The experience of officers in our sample is consistent with interviews conducted with tactical officers from the US in which the purpose of PTUs was described as the preservation of life (Rojek, 2005). The perception that the use of tactical officers reduces the likelihood that force will be used is additionally supported by empirical examinations of the influence of specialized training on shoot/no shoot decision-making under stress, which consistently finds that tactical officers are more accurate in making the critical judgement as to whether a lethal threat is being presented to the officer (Vickers & Lewinski, 2012; Ward et al., 2011). Despite variations in geographic location and positions held within a police service, there is a consistent message in the research literature from officers that the use of PTUs reduce the need for force (e.g., Rojek, 2005).

Conclusion

Considering the limited attempts that have been made to gain an understanding of police officer perspectives regarding the use of PTUs (e.g., Phillips, 2018; Rojek, 2005), this project has both practical and theoretical implications. For example, from a practical perspective, it became apparent during the interviews that police services must balance the additional safety benefits associated with PTUs with the additional resources required to facilitate these safe outcomes, and the potentially negative impacts that PTUs can have on patrol officers and criminal investigators.

Theoretically, my findings contribute to the body of existing research examining PTUs, and the construct of police militarization more generally. The experiences of the officers I interviewed, in combination with the available empirical research discussed in the literature review, calls into question the validity of common definitions of police militarization and claims that the use of PTUs is analogous to the police waging war on the public they are meant to serve.

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Appendix A

Study 1 Risk Factor Coding Scheme

Police Service:

Call type:

		Present ^a	Absent ^a	Not Mentioned ^b	Additional Information ^a
Weapons believed on to be scene	Edged ^b				
	Firearm ^b				
	Impact (e.g., baseball bat) ^b				
	Other (e.g., bear spray) ^b				
Presence of Weapons on scene	Edged ^a				
	Firearm ^a				
	Replica firearm ^b				
	Impact (e.g., baseball bat) ^a				
	Other (e.g., bear spray) ^a				
Expressed Threats	To self ^a				
	To public ^a				
	To police ^a				
Current state of Subject	Drugs/alcohol ^a				
	Persons in crisis ^a				
	Suicidal ^a				
Previous history of Subject	Persons in crises ^a				

Suicidal^a

Violent^a

Drugs/alcohol^a

Anti-police^a

Extremist/anti-government^a

Gang affiliation^a

Possession of weapons^a

Previous training

(military/police)^a

Assault police officer^b

Shoot at police officer^b

Murder charges^b

Previous shooting^b

Assault charges^b

Attempted murder charges^b

^a denotes an item that was *a priori*. ^b denotes an item that was added in the coding process

Appendix B**Measures of Inter-rater agreement for OPS data**

Item	Cohen's Kappa	PABAK	Sample size
Deployment type	.976	-	166
Call type	.909	-	26
Planned event	.804	-	166
Additional units	1.00	-	158
Description provided	.052	.550	166

Measures of Inter-rater agreement for WPS data

Item	Cohen's Kappa	PABAK	Sample size
Call type	.930	-	725
Additional units 1	.945	-	213
Additional units 2	.888	-	51
Additional units 3	.720	-	14
Description provided	.925	-	725
Firearms believed	.876	.884	276
Impact weapon believed	.663	.986	276
Edged weapon believed	.892	.964	276
Other weapon believed	.717	.965	276
Firearm found	.709	-	276
Impact weapon found	.665	.986	276
Edged weapon found	.657	.964	276
Other weapon found	.744	.985	276
Threats made	.880	-	13
Subject history	.815	-	14
PTU role	1.00	-	52

Appendix C

Study 2 Informed Consent

Title: Canadian Police Tactical Units: The Normalization of Police Militarization or a Pragmatic Response to High-Risk Calls?

Research personnel. The following people will be involved in this research project and may be contacted at any time: Dr. Craig Bennell (Lead Researcher, email: craig.bennell@carleton.ca, phone: 613-520-2600, ext. 1769). If you should have any ethical concerns about this study please contact, Dr. Bernadette Campbell, Ethics Chair, Carleton University Research Ethics Board-B (by phone at 613-520-2600 ext. 4080 or via email at ethics@carleton.ca).

Purpose. This study will examine the perceptions of Police Tactical Units (PTU) members, general patrol officers, and PTU supervisors to gain an understanding of when the specialized teams are used, the role PTUs play when deployed, and potential advantages/disadvantages of utilizing PTUs. With an understanding of the rationale for the use of PTUs, researchers and the public may be less critical of the use of these specialized teams.

Task requirements. If you agree to participate, you will be asked to respond to questions pertaining to the work of PTU officers in Canada. It is anticipated that the entire interview will take approximately 30-60 minutes. The interviews will be conducted either in person or via telephone at a day and time of your choosing. All interviews will be audio-recorded and this is a mandatory part of participation.

Potential risk/discomfort. There is a potential risk that your data will be seen by unauthorized persons. However, several safeguards are in place to ensure that this will be very unlikely, including storing all data management files in a locked cabinet in the Police Research Lab at Carleton University and the use of ID codes as participant identifier's. Therefore, nobody other than the participant and the research team will know your individual results, unless you choose to share them yourself.

Only the research team will have access to the raw research data obtained. All data will be de-identified before being taken off-site. The data will only be available to the researchers, all of which have been security cleared by the RCMP. Electronic study data will be kept on a secured server and consent forms will be kept for several years in a locked office at Carleton University. This time period is reasonable because the American Psychological Association guidelines for publication of data indicate that data should be kept for 6 years after publication. The several-year time frame allows for adequate time to analyze, write up, and publish the data in compliance with these guidelines.

What if I feel distress or anxiety while participating in this study? If you do feel any distress or anxiety while taking part in this study, please feel free to contact any of the researchers involved with this study (contact details above).

Anonymity/Confidentiality: While anonymity cannot be guaranteed given the way in which we will collect the data from you, all of the data that we do collect will remain confidential and will not be shared with anyone that is not involved with this project. We do plan to publish and

present this research, and it may be used for teaching purposes. Your name will never appear alongside your data in any of the documents or presentations we prepare.

Protection of Personal Information: Each volunteer will be assigned a participant number. All participant information will be identified using the assigned number. The only documents with the participant's name will be the informed consent and a master copy of names and ID numbers. The master list document will be secured with a password on a computer in the Police Research Lab at Carleton University. Consent documents will be kept under lock and key at the Principal Investigator's laboratory office.

All the data collected will be summarized in aggregate. However, anonymized examples may also be presented. The participant names or identifiers will never appear alongside their data in any of the documents or presentations we prepare.

If you would like a copy of the finished research project, you are invited to contact the researcher to request an electronic copy, which will be provided to you.

Right to withdraw. Your participation in this project is voluntary. Even after you agree to participate in the research, you may decide to not respond to any question or leave the study at any time without penalty or loss of benefits to which you may otherwise have been entitled. We will retain and analyze the information you have provided up until the point you have left the study unless you request that your data be excluded from any analysis and/or destroyed.

This study has received clearance by the Carleton University Research Ethics Board – B (CUREB-B) (Reference #18-109601).

Funding Source: N/A

Freedom of Consent: By signing this form, you are indicating you have read the above form, understand the conditions of your participation, and are giving your consent to participate in this study.

YOUR SIGNATURE

INVESTIGATOR SIGNATURE

Signature: _____

Signature: _____

Date: _____

Date: _____

I understand that I may be quoted anonymously in a future publication and that, if so, all attempts will be made to disguise my identity.

I consent to being quoted _____

I do NOT consent to being quoted _____

I consent to being contacted at a future date to review the findings of the study prior to publication. This review process will be completed as a form of quality control.

I consent to being contacted _____ I do NOT consent to being contacted _____

Appendix D

Interview Guide for General Patrol officers

- 1) What is your gender and age?
- 2) Do you have military experience?
- 3) How long have you served as a police officer?
- 4) What is your current rank?
- 5) What is your position within the police service (e.g., general patrol officer)?
- 6) Are you currently or have you been a member of a police tactical unit (PTU)?
- 7) From the perspective of a patrol officer, what is the nature of the calls PTUs attend?
- 8) From the perspective of a patrol officer, why are PTUs needed at those calls?
- 9) In your experience, what process leads to the calls?
- 10) From your perspective, what are the potential benefits/drawbacks of PTUs attending those calls vs. leaving the calls up to general patrol?
- 11) In your experience, is the PTU used more frequently than before?
- 12) In your opinion, has society changed (e.g., become more dangerous) that would explain in part the increase in PTU deployments (if they have increased)?
- 13) Explain the possible benefits/consequences of PTUs engaging in patrol like activities?
- 14) What does the term “police militarization” mean to you?
- 15) How would you respond to claims that the use of PTUs expose the public to aggressive policing styles and in turn higher rates of use of force?

Interview Guide for PTU members

- 1) What is your gender and age?
- 2) Do you have military experience?
- 3) How long have you served as a police officer?
- 4) What is your current rank?
- 5) What is your position within the police service (e.g., general patrol officer)?
- 6) How long have you been a member of a police tactical unit (PTU)?
- 7) What is the nature of the calls PTUs attend?
- 8) From your perspective, why are PTUs needed at those calls?
- 9) In your experience, what process leads to the calls?
- 10) How does your police service keep record of PTU deployments?
- 11) What information is included in these records?
- 12) From the perspective of a PTU member, what are the potential benefits/drawbacks of PTUs attending those calls vs. leaving the calls up to general patrol?
- 13) In your experience is the PTU used more frequently than before?
- 14) From your perspective, have things changed over the years that lead to an increase in the number of PTU callouts (have definitions or policy changed lowering the threshold for calls PTUs can respond to)?
- 15) In your opinion, has society changed (e.g., become more dangerous) that would explain in part the increase in PTU deployments (if they have increased)?
- 16) Explain the possible benefits/consequences of PTUs engaging in patrol like activities?
- 17) What does the term “police militarization” mean to you?

18) How would you respond to claims that the use of PTUs expose the public to aggressive policing styles and in turn higher rates of use of force?

Interview Guide for PTU supervisors

- 1) What is your gender and age?
- 2) Do you have military experience?
- 3) How long have you served as a police officer?
- 4) What is your current rank?
- 5) What is your position within the police service (e.g., general patrol officer)?
- 6) Are you currently or have you been a member of a police tactical unit (PTU)?
- 7) From the perspective of a supervisor, what is the nature of the calls PTUs attend?
- 8) From the perspective of a supervisor, why are PTUs needed at those calls?
- 9) In your experience, what process leads to the calls?
- 10) How does your police service keep record of PTU deployments?
- 11) What information is included in these records?
- 12) From your perspective, what are the potential benefits/drawbacks of PTUs attending those calls vs. leaving the calls up to general patrol?
- 13) In your experience is the PTU used more frequently than before?
- 14) Are there challenges in deciding whether or not the PTU should be utilized? For example, balancing the public image of PTU deployments with officer/public safety?
- 15) From your perspective, have things changed over the years that lead to an increase in the number of PTU callouts (have definitions or policy changed)?
- 16) In your opinion, has society changed (e.g., become more dangerous) that would explain in part the increase in PTU deployments (if they have increased)?
- 17) Explain the possible benefits/consequences of PTUs engaging in patrol like activities?
- 18) What does the term “police militarization” mean to you?

19) How would you respond to claims that the use of PTUs expose the public to aggressive policing styles and in turn higher rates of use of force?

Appendix E

Audit trail for the interview and analytic process

June 13th 2019: I have conducted three interviews and as a result of these interviews questions have been added to the interview guide.

July 9th 2019: Based off interviews with OPS tactical team members I have decided to classify Form 1 and Form 2 executions as ‘undetermined’ in the operational dataset.

July 23rd 2019: due to an interview with a PTU supervisor, a question pertaining to the courts expectations of evidence was added for subsequent interviews with PTU members.

August 8th 2019: common themes identified based on my recollection of interviews without reviewing transcripts:

- Incidents responding to: PTUs respond to calls that are beyond the capabilities of GP
- Factors considered: subjects propensity for violence, access to weapons, mandated through policy for warrant executions.
- PTU role: assume responsibility of the call and may reshuffle members to optimize safety, or mentor members if they have control of the situation- allows for the development of GP
- Benefits/drawbacks: additional equipment/training/teamwork in PTU response

August 10th 2019: realized there were some errors in the transcription and listened to audio files to ensure the transcription was correct. Errors were mostly related to acronyms (e.g., R1 vs ARWEN).

August 19th 2019: Noticed that GP members describe the incidents as high-risk whereas PTU members additionally mention that the calls are outside the capabilities of GP. Seems to be a language difference there.

August 20th 2019: In reviewing the transcripts realized that some of the negatives of using the PTU included: a loss of competencies for GP in responding to high-risk calls and the PTU impedes investigative units.

-I also re-evaluated the themes and found that the codes relating the benefits/drawbacks of utilizing the PTU could be further condensed. As a result of reviewing the codes and the data, a second map of potential themes was created. This second concept map was sent to the research assistant and approved by her.

August 21st 2019: I realized that the optics of using PTUs was more related to high-risk calls instead of assisting GP and as such the theme was moved from assisting GP. This was because the officers focused on the equipment (e.g., carbines, helmets) that was only worn during high-risk incidents.

August 22nd 2019: Removed state of subject because it became clear that it was not an individuals' suicidal intentions that warranted a PTU response, but the persons intentions in combination with risk factors (e.g., weapons, location at heights) that lead to the PTU response.

-Removed risk assessment as this was not unique to PTU members, as all officers conduct a risk-assessment of the calls. The risk-assessment process of GP members identified the presence of risk-factors which would lead GP to request the PTU.

-Lessons learned was removed as the lessons learned were embedded within policy (e.g., the policy that the PTU would conduct all high-risk warrants).

Figure 1. The initial mapping of themes identified in participant responses.

Figure 2. The final mapping of themes identified in participant responses.

Appendix F

Measures of Inter-rater agreement for qualitative coding

Qualitative code	Cohen's Kappa
Assisting GP	.21
Assume responsibility	.63
Beyond capabilities	.30
Environment	.31
Equipment	.55
Experience	.56
High-risk	.11
Liability	.33
Mentorship	.36
Optics	.55
Policy	.48
Relationship with other units	.44
Resources	.20
Safer outcomes	.59
Tactics	.20
Teamwork	.42
Training	.64
Warrants	.40
Weapons believed	.54