

Running head: NONFATAL STRANGULATION AND COERCIVE CONTROL

Abstract

Strangulation is different to other types of physical violence as it often leaves no visible injuries, and is frequently motivated by coercive control. Few studies have explored nonfatal strangulation and coercive control, and no studies have explored these factors within a sample of stalkers. Given that stalking perpetrators exhibit many of the coercively controlling behaviors related to nonfatal strangulation, the current study explored nonfatal strangulation and other coercively controlling behaviors in a stalking sample. A police dataset of 9,884 cases of domestic violence that involved stalking was analyzed. Results revealed that coercive control, and related behaviors of excessive jealousy, victim isolation, victim fear, and victim's belief that the perpetrator will kill them, were associated with higher likelihood of having experienced nonfatal strangulation. These results may help first responders to identify victims at risk of nonfatal strangulation, and suggest a need for nonfatal strangulation to be a criminal offense.

Keywords: Nonfatal strangulation, coercive control, stalking, police

Nonfatal Strangulation in a Sample of Domestically Violent Stalkers: The Importance of Recognizing Coercively Controlling Behaviors

Strangulation in the context of domestic violence is an issue that has received increasing attention from scholars and law enforcement agencies over the last decade, though the existing research is not substantial (Armstrong & Strack, 2016; Pritchard, Reckdenwald, & Nordham, 2017; Strack, McClane, & Hawley, 2001). Studies have highlighted the importance of identifying victims of strangulation in intimate relationships due to the associated risk of long term negative health effects, as well as the increased likelihood of fatality (Pritchard et al., 2017). The act of strangulation itself is a way to exert power and control over the victim (Thomas, Joshi, & Sorenson, 2014). Such attempts to coercively control the victim are also exhibited by stalking perpetrators (Stark, 2013). Given that various dangerous coercively controlling behaviors are commonly seen in perpetrators who stalk their victims, it is interesting that nonfatal strangulation has not yet been explored in this population.

Nonfatal Strangulation

Strangulation is a type of mechanical asphyxia, in which the person is unable to breathe or where vascular occlusion occurs due to compression on the neck. Strangulation can result in numerous injuries varying in severity based on the force exerted, duration of restricted breathing or vascular occlusion, and the methods used (Funk & Schuppel, 2003; Iserson, 1984; Sauko & Knight, 2016). A mere four pounds of pressure are required to occlude the jugular vein, and 5-11 pounds of pressure are required for the occlusion of the carotid artery (Harle, 2017). The victim may lose consciousness after only 10-15 seconds, and death may occur within 3-5 minutes. This dangerous form of violence is gendered, with males typically being the perpetrators of the violence and females being the victims (Nemeth, Bonomi, Lee, & Ludwin, 2012; Pritchard et al., 2017; Sorenson, Joshi, & Sivitz, 2014). The

expanding research base on strangulation was initiated by a study of 300 nonfatal strangulation victims, conducted by Strack et al. (2001), which highlighted that 89% of the total sample had been victims of domestic violence. The findings indicated a strong connection between strangulation and domestic violence, precipitating further research into completed strangulation (resulting in death) and nonfatal strangulation (where the attack does not result in death). Furthermore, the authors suggested that the detection of strangulation is difficult, as half of the cases exhibited no visible injuries from the attack. It is perhaps because of this difficulty in detecting strangulation injuries, compared to other domestically violent injuries such as bruising and lacerations from being hit, that nonfatal strangulation began to be empirically investigated only recently.

Wilbur et al. (2001) were the first to specifically explore strangulation within a domestic violence context. In this work, 68% of a sample of domestic violence victims ($n = 62$) reported experiencing nonfatal strangulation. Many of these victims had experienced multiple such attempts, with the average number reported as 5.3 (Wilbur et al., 2001). Research has since expanded the findings of Strack et al. (2001) and Wilbur et al. (2001), with a number of studies reporting a high prevalence of strangulation in domestic violence situations (Douglas & Fitzgerald, 2014; Glass et al., 2008; Hawley, McClane, & Strack, 2001; Joshi, Thomas, & Sorenson, 2012; Mcquown et al., 2016; Messing, Thomas, Ward-Lasher, & Brewer, 2018; Pritchard, Reckdenwald, Nordham, & Holton 2018; Shields, Corey, Weakley-Jones, & Stewart, 2010; Smith, Mills, & Taliaferro, 2001; Sorenson et al., 2014; Sutherland, Bybee, & Sullivan, 2002; Thomas et al., 2014). The prevalence of nonfatal strangulation varies across studies, with rates ranging from 3-68%, depending on the nature of the sample, although research that relies on police reports tends to report lower prevalence (11.5%) of nonfatal strangulation, as described by Pritchard et al. (2018).

Strangulation is a painful experience (Turkel, 2010), and may cause immediate symptoms such as loss of consciousness and loss of sphincter control, however symptoms may appear days and even weeks afterwards, including bruises, brain injury, bleeding, stroke, difficulty swallowing, memory loss, and internal injuries that may result in death (Armstrong & Strack, 2016, Joshi et al., 2012; Scannel, MacDonald, & Foster, 2017; Wilbur et al., 2001). The seriousness of nonfatal strangulation in the context of domestic violence has been further supported by studies that have shown a link between experiencing nonfatal strangulation during a domestically violent relationship, and an increased likelihood of intimate partner homicide (Campbell, Glass, Sharps, Laughon, & Bloom, 2007; Glass et al., 2008).

In a case-control study, Glass et al. (2008) explored nonfatal strangulation among homicide victims, attempted homicide victims, and abused controls. The study showed that the odds of homicide were seven times higher for victims who had previously been strangled by their abusive partner compared to victims who had not experienced nonfatal strangulation. Furthermore, the odds of attempted homicide were almost seven times higher if the victim had been strangled during the domestically violent relationship, compared to victims who had not been previously strangled (Glass et al., 2008). These findings show that victims of nonfatal strangulation are essentially treading on the edge of homicide, which is consistent with Wilbur et al.'s (2001) conclusion that nonfatal strangulation typically occurs towards the latter stages of a violent relationships. Indeed, it is the lack of visible injuries in the majority of cases, as well as the high risk of fatality that makes nonfatal strangulation different to other forms of violence (Strack et al., 2001; Wilbur et al., 2001). Given that research has consistently demonstrated the occurrence of nonfatal strangulation in the context of domestic violence (see references above), and indicated that nonfatal strangulation is a significant risk factor for serious injury and homicide (Campbell et al., 2007; Glass et al., 2008; McFarlane et al., 1999; Strack et al., 2001), it is imperative that early warning behaviors and 'red flag'

indicators are identified by adequately trained responders (i.e., police officers, ambulance officers), so that nonfatal strangulation is recognized even when physical injury is not visible.

Coercive Control

As already noted, nonfatal strangulation differs from other forms of violence in that it often leaves no physical signs of the attack, but it also differs from other forms of violence in the way that it is used to coercively control the victim (Thomas et al., 2014). Thomas et al. (2014) described coercive control as more than just a tactic, arguing that coercion and control provide information on the motive of the attack, and define the context of the intimate relationship. Coercion is the attempt to elicit or eliminate a desired response from the victim through the use of threats (both implicit and explicit) or force (Stark, 2007). Control on the other hand, is defined as “structural forms of deprivation, exploitation, and command that compel obedience indirectly by monopolizing vital resources, dictating preferred choices, microregulating a partner’s behavior, limiting her options, and depriving her of supports needed to exercise independent judgements” (Stark, 2007, p. 229). Together, coercive control forms a condition of ‘entrapment’ (Stark, 2007, p. 205).

The current study utilizes Dutton and Goodman’s (2005) model of coercive control, which suggest that coercive control is multifaceted, and involves behaviors such as isolation, intimidation, excessive monitoring, and threats. The model suggests that a coercively controlling perpetrator begins with sending the victim a message, which can be achieved through creating an expectation of negative consequences in the victim, exploiting their vulnerabilities, wearing down resistance, and by facilitating dependency. The perpetrator then monitors the victim and their activities to ensure compliance with any demands made (Dutton & Goodman, 2005). Finally, a negative consequence is instigated towards the victim (such as nonfatal strangulation) as a result of a previous threat to give credibility to future coercive control and to ensure that such acts are effective in asserting compliance (Dutton &

Goodman, 2005). In a case of nonfatal strangulation, restricting blood flow and ability to breathe with relatively little force shows the victim the ease with which the perpetrator can take their breath away, giving credibility to future threats (Nemeth et al., 2012; Pritchard, Reckdenwald, & Nordham, 2015; Thomas et al., 2014).

As coercive control aims to demonstrate a position of power, it is not surprising that coercive control often involves the use of death threats (Dutton & Goodman, 2005; New Zealand Law Commission, 2016; Stark, 2012). Indeed, more than half of the nonfatal strangulation victims interviewed in Thomas et al.'s (2014) study stated that death threats were a common feature of the controlling partner's behavior. This is further supported by Wilbur et al.'s (2001) study, which showed that 87% of women who experienced strangulation were also experiencing death threats. According to Dutton and Goodman (2005), this creates an expectancy for negative outcomes, which is made even more believable when the perpetrator has strangled the victim. By creating the expectancy for serious negative outcomes, it is likely that the perpetrator has created a significant fear of death and future harm within the victim (Dutton & Goodman, 2005; Stark, 2013). Indeed, a study by Stansfield and Williams (2018) found a link between death threats and ongoing nonfatal strangulation in a sample of intimately violent offenders.

The current study expands on the limited prior works that have explored coercive control in intimate partner settings by including a range of coercively controlling behaviors within a single study. According to Dutton and Goodman (2005), another coercively controlling behavior that is often seen in intimate relationships is isolation of the victim from friends and family. This is often done with the intention to exploit the victim's vulnerabilities and limit opportunities for the victim to seek help, which further assists in coercively controlling the victim (Dutton & Goodman, 2005; Stark 2012; Tahna, Beck, Figueredo, & Raghavan, 2010). Research by Thomas et al., (2014) supported Dutton and Goodman's

(2005) notion that isolation is indeed a form of coercive control, with the majority of victims stating that the perpetrator would often forbid the victim from leaving the house and would constantly monitor the victim to ensure compliance with demands. Finally, morbid jealousy, which is a more severe and hypersensitive form of normal jealousy, has also been used as a trigger for coercive force by domestically violent offenders (Nemeth et al., 2012). It is often seen in conjunction with isolating the victim socially to prevent them from communicating with family and other men/women, as well as threatening the victim when the perpetrator's fear of infidelity triggers the morbid jealousy (Macmillan & Gartner, 1999; Nemeth et al., 2012; Nicolaidis et al., 2003). Although this is not specifically mentioned in Dutton and Goodman's (2005) model, morbid jealousy has been deemed as important in understanding coercive control as it may be a trigger for behaviors such as limiting the victim's freedom through constant monitoring and isolation, in order to prevent infidelity and consequently prevent victim from leaving (Easton & Shackelford, 2009; Gage & Hutchinson, 2006; Macmillan & Gartner, 1999; Nemeth et al., 2012).

Coercive Control in Stalking Situations

Stalking is defined as a behavior in which a person repeatedly contacts, follows, or intrudes on a victim, leading to the victim feeling fear or distress as a result of the repetitive intrusions (McEwan, Mullen, Mackenzie, & Ogloff, 2009). The relationship between stalking and domestic violence is well established in the literature (Davis, Ace, & Andra, 2000; Douglas & Dutton, 2001; Groenen & Vervaeke, 2009; Logan, Leukefeld, & Walker, 2000; Mechanic, Weaver, & Resick, 2000; Melton, 2007; Norris, Huss, & Palarea, 2011; Roberts, 2005; Tjaden & Thoennes, 2000; Woodlock, 2017), with intimate or ex intimate partners being at a significantly higher risk of experiencing stalking than family, strangers, or acquaintances (James & Farnham, 2003; Resnick, 2007; Rosenfeld, 2004; Sheridan & Davies, 2001). In a study by Tjaden and Thoennes (1998), it was reported that 80% of

stalking victims who reported being stalked by their partner were also physically assaulted by the same partner.

Violence in stalking situations often involves minor to moderate physical attacks such as punching and kicking (McEwan et al., 2009; Mullen, Pathe, & Purcell, 2000), however in some cases it can involve serious acts of violence, and even homicide (James & Farnham, 2003; McFarlane et al., 1999; McFarlane, Campbell, & Watson, 2002). Stalking may encompass a number of different behaviors, including sending unwanted gifts, repeated communications, loitering, constant surveillance (Purcell, Pathe, & Mullen, 2010). These behaviors are often used as a form of coercive control, in which the perpetrator prevents physical separation from the victim, creating a sense of omnipresence (Stark, 2013). The constant surveillance makes it difficult for the victim to seek help or engage with support systems, particularly when the stalking offender has threatened the victim with death; it also ensures a sense of intimidation and fear within the victim (Stark, 2013). Like strangulation, stalking behavior can be used as a form of coercive control (Davis et al., 2000). The current study focuses on a population of intimately violent perpetrators who have engaged in stalking of the victim. This is because stalkers are likely to exhibit other coercively controlling behaviors, which may assist researchers in understanding how such behaviors link with the highly dangerous experience of nonfatal strangulation.

Given the minimal force needed to strangle a victim, and the lack of visible or photographable injuries in the majority of cases, perpetrators use this form of violence as they know they are not likely to get caught (Farr, 2002). This means that police officers and medical personnel need adequate training to notice any signs of strangulation. Furthermore, first responders need to be aware of the behaviors that are related to such serious forms of violence, as the physical evidence is not reliable. As such, prevention strategies of serious harm to victims of nonfatal strangulation may be significantly improved if there is a lower

reliance on identification of visible injury, and more attention is paid to the presence of other coercively controlling behaviors that may pose a ‘red flag’ for potentially serious and permanent injury to the victim. The findings may also assist in forming recommendations that may be useful for first responders in recognizing victims and perpetrators of this potentially lethal form of violence, with the intention of identifying those at high risk of serious harm and permanent injury, even death.

The Current Study

In summary, coercive control is multifaceted and comprises a number of different behavioral and psychological factors, such as threats, isolation, morbid jealousy, victim fear, expectancy for negative outcomes, and nonfatal strangulation. The current study aims to expand on prior work such as Stansfield and Williams (2018) by including a wide range of variables to capture the multifaceted behavior of coercive control. Given that nonfatal strangulation has a high risk of serious injury and death, the aim of this research is to explore the link between victims having experienced nonfatal strangulation, and the presence of other coercively controlling behaviors among perpetrators. The study focuses on domestically violent reports where stalking was indicated, as the presence of other coercively controlling behaviors is often seen among this population (Davis et al., 2001; Stark, 2013). Specifically, it is hypothesized that the presence of jealousy, isolation, threats, victim beliefs that perpetrator will kill them (expectancy for negative outcomes), victim fear, and victim/police identification of the presence of coercive control will be related to a higher likelihood of having experienced nonfatal strangulation.

Method

The study is based on a dataset provided by the Western Australia Police Force. The dataset consists of Family Violence Incident Reports (FVIRs) that were collected from

18/08/2013 (the date at which current FVIR recording procedures began) to 24/08/2017 across Perth, Western Australia.

Sample

In order to explore non-fatal strangulation within a sample of stalkers, the dataset comprises domestically violent incident reports that indicated the presence of stalking behavior by the perpetrator, towards the victim, at the time of the reported incident. According to section 338E of the Western Australian Criminal Code, stalking behavior is defined as pursuing another person with the intent to intimidate that person. Over the four year period covered, a total of 13,768 FVIRs with an indication of stalking behavior were documented. The sample was reduced to 9,884 incident reports after deletion of multiple reports pertaining to matching offender-victim dyads. The final dataset contained 8,954 different perpetrators, including five cases where no perpetrator ID was recorded due to the lack of sufficient personal information available to identify a particular person as an offender. Of the final sample of 9,884 reports, 6,157 (62.3%) reported the perpetrator as being a male, and 3,539 (35.8%) reported the perpetrator as being a female, with 188 (1.9%) reports containing no identification of gender.

Data Collection

Police officers in the Western Australia Police Force complete a FVIR when called to a domestic disturbance. These reports are completed using a combination of observation, victim statements, perpetrator statements, and third party statements. The FVIRs consist of information relating to the incident itself (e.g., if weapons were used), information relating to the victim (e.g., was victim frightened), information relating to the perpetrator (e.g., was the perpetrator under the influence of alcohol), and information on the date and time of the incident. As coercive control is still developing conceptually and there is no standard approach to operationalization (Hardesty et al., 2015), we have decided to utilize Dutton and

Goodman's (2005) model of coercive control to theoretically inform the chosen variables for the study. The variables from the FVIR that are used in this analysis indicate whether the officer or victim believed that the perpetrator was coercively controlling the victim (coercive control), whether the victim was frightened at the time (fear), whether the victim held the belief that the perpetrator would kill them (kill victim belief), whether the perpetrator was excessively jealous (jealousy), whether the victim was isolated from friends and family (isolation), whether the perpetrator had threatened to kill or hurt the victim (threats), and finally, whether the perpetrator had ever attempted to strangle the victim (non-fatal strangulation). Each of these variables is a dichotomous variable, indicating whether the factor was recorded in each case.

Data Analysis

Multicollinearity among the variables was assessed using the Phi-coefficient. All correlations were below .6 and not deemed problematic given that some level of correlation is expected among the theoretically bound independent variables (Berry & Feldman, 1985). Descriptive statistics were used to describe the presence of each independent variable in cases where the victim reported non-fatal strangulation, and cases where the victim did not report non-fatal strangulation. These frequencies were summarized as percentages. A binomial logistic regression was used to examine associations between non-fatal strangulation and coercive control, jealousy, threats, kill victim belief, isolation, and fear. All analyses were conducted using SPSS 24.

Missing data

The FVIR reports used by Western Australia Police Force contain a number of variables which help to describe the nature of the incident, the victim, and the perpetrator. Though most fields are mandatory and require a response of Y = present, N = not present, or U = unknown or not asked, officers do not read out each variable to the victim in the style of

an interview as this is not practical. Instead, FVIRs are completed based on a mixture of questions asked by the officer, narratives provided by the victim, perpetrator and/or other witnesses, as well as police officer observations. This means that some variables may be left blank as there may be no clear indication of presence of a variable based on narratives, police observations, or police questions. As a result, the dataset was collapsed into “clear presence” of a variable, in which officers clearly indicated a “Y” response, and “unclear presence” of a variable, in which officers either indicated “N”, “U”, or left the field blank.

Results

A total of 9,884 stalking FVIRs were analyzed, with 16.6% ($n = 1,638$) indicating that the victim had experienced nonfatal strangulation. A descriptive summary of the frequencies of reported presence of jealousy, coercive control, isolation, victim fear, threats, victim belief that the perpetrator will kill them and perpetrator gender among victims who had and had not experienced nonfatal strangulation can be seen in Table 1.

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Binomial Logistic Regression

A binomial logistic regression was conducted to ascertain the effects of reported coercive control, victim isolation, perpetrator jealousy, victim fear, victim beliefs, and threats towards victims on the likelihood of reporting having experienced nonfatal strangulation, controlling for gender. The model was found to be significant, $\chi^2(7) = 1577.30, p < .001$. The model explained 25.3% (Nagelkerke R^2) of the variance in nonfatal strangulation, and correctly classified 84.0% of cases. The results of the binomial regression revealed that each of the six independent variables were statistically significant (see Table 2). Gender was also significantly related to nonfatal strangulation with female perpetrators being associated with a higher likelihood of nonfatal strangulation, although the odds were only marginally higher (odds ratio [OR] = 1.18, 95% CI = [1.04, 1.33], $p = .010$). The odds of victims reporting

nonfatal strangulation were 2.32 times greater when the perpetrator was coercively controlling (95% Confidence Interval [CI] = [2.00, 2.68], $p < .001$), compared to when perpetrators were not coercively controlling. The likelihood of reporting nonfatal strangulation was also higher when the perpetrator was excessively jealous (OR = 1.80, 95% CI = [1.55, 2.09], $p < .001$), compared to cases where excessive jealousy was not indicated. When comparing victims who had experienced threats from the perpetrator to victims who had not, results showed that reports of nonfatal strangulation were 3.37 times more likely when threats towards the victim were indicated (95% CI = [2.92, 3.89], $p < .001$). Reports of nonfatal strangulation were 1.34 times more likely when the victim had been isolated from friends and family, compared to when victims were not isolated (95% CI = [1.15, 1.56], $p < .001$). Finally, the victim's belief that the perpetrator will kill them (OR = 2.00, 95% CI = [1.74, 2.30], $p < .001$), as well as victim fear (OR = 1.71, 95% CI = [1.45, 2.03], $p < .001$), were associated with significantly higher likelihood of reporting nonfatal strangulation.

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Discussion

Using a police dataset consisting of 9,884 domestic incidents where stalking behavior was indicated, the current study found that the victim reported previous nonfatal strangulation in 16.6% of these incidents ($n = 1,638$), a figure similar to other research based on police data (Pritchard et al., 2018). The prevalence of nonfatal strangulation among intimate partners varies within the research, often depending on the nature of the sample. A meta-analysis by Sorenson et al. (2014) specifically explored nonfatal strangulation among intimate partners, and found that the lifetime prevalence of nonfatal strangulation was between 3.0 and 9.7%. However, the prevalence of nonfatal strangulation tends to be much higher, around 68%, when the sample consists of women who have survived intimate partner violence (Messing et al., 2018; Wilbur, 2001). Research relying on police identification of nonfatal strangulation

report much lower (11.5%) rates of nonfatal strangulation (Pritchard et al., 2018). As the sample in the current study is not restricted to individuals who have survived intimate partner violence, but rather domestic incidents in general, it was expected that the rate of nonfatal strangulation would be lower. Given that the sample in the current study includes only domestic incidents where stalking was also recorded, the higher rate of strangulation compared to Pritchard et al.'s (2018) study may be due to the overlap of coercive control in stalking behavior, and strangulation attacks. Consequently, it is possible that the sample in this study are more coercively controlling in nature compared to samples that are not restricted to stalking situations.

In line with the conclusions of Pritchard et al., (2018), the generally low prevalence of nonfatal strangulation seen in the current study and in Pritchard et al.'s (2018) research suggests that police officers may be overlooking incidents of strangulation among intimate partners. Given that visible injury is only seen in approximately half of strangulation cases, it seems plausible that officers may not be correctly identifying all nonfatal strangulation attacks. As the nonfatal strangulation data of this study was often collected by asking the victim verbatim whether they had experienced nonfatal strangulation, it may be that the victim did not always understand the question, or perhaps was reluctant to disclose such information to the officer at the scene due to the coercively controlling nature of strangulation perpetrators, with victims likely to be fearful and potentially experiencing threats from the perpetrator (Armstrong & Strack, 2016; Davis et al., 2000; Dutton & Goodman, 2005; Nemeth et al., 2012; Stark, 2013; Thomas et al., 2014). Indeed, interviews with strangulation survivors indicated that victims felt a sense of betrayal by their intimate partners, which resulted in the victim feeling they could not trust people in general, and consequently developing a pervasive fear throughout their daily lives (Vella, Miller, Lambert, & Morgan, 2017).

Though little research has explored coercively controlling behaviors and nonfatal strangulation in conjunction, studies suggest that nonfatal strangulation is related to coercively controlling behaviors (Thomas et al., 2014). The results of this research support this notion, with incidents of nonfatal strangulation being more likely to occur when the victim reported the perpetrator as coercively controlling, compared to victims who did not report coercive control. Dutton and Goodman (2005) explained that coercive control is not necessarily a single and distinct construct, but rather a subset of potential behaviors that may entail the overall experience of coercive control. In order to understand coercive control with more rigor, excessive jealousy, threats of death, victim fear, victim isolation, and victim belief that perpetrator will kill them, were also explored in this analysis. Each of the six variables were significantly associated with a higher likelihood of experiencing nonfatal strangulation, indicating that coercive controlling behaviors are related to nonfatal strangulation. The highest likelihood of nonfatal strangulation was associated with presence of death threats towards the victim, with threatened victims being more than three times more likely to experience nonfatal strangulation in their intimate relationship. The association of these coercively controlling behaviors with nonfatal strangulation is consistent with findings from the few studies that have explored coercive control in strangulation cases (Thomas et al., 2014). This finding suggests that perpetrators who nonfatally strangle their victims also tend to exhibit coercively controlling behaviors, and supports the notion that the strangulation attack is a display of power over the victim. Understanding the behavior and motivation of those who strangle victims may help in accurate identification of high risk cases, with less reliance on visible injury.

As there currently exists no literature exploring nonfatal strangulation and coercive control in a sample of stalking situations, this is the first study to highlight the prevalence of nonfatal strangulation in a police dataset of domestically violent stalking situations. Prior

works suggest that stalking is a form of coercive control, whereby the omnipresence of the perpetrator can result in difficulty seeking external support, particularly when stalking is accompanied with threats of death if attempts are made to make contact with supports (Dutton & Goodman, 2005). The current study shows that nonfatal strangulation was reported in 16.6% of incidents where stalking was also reported, a figure that is higher than percentages from previous research that has explored this distinctive form of violence in a general sample of intimate partner violence records (Pritchard et al., 2018). It also shows that aspects of coercively control often seen in stalking situations such as death threats, isolation, jealousy, victim fear, and victim's belief that the perpetrator will kill them, are significantly associated with an increased likelihood of having experienced the coercively controlling act of nonfatal strangulation. These conclusions further emphasize the necessity of appropriately trained officers who are able to recognize coercively controlling partners, as victims often may not exhibit visible injury, and may be reluctant to disclose information about nonfatal strangulation experiences due to fear and the controlling nature of the perpetrator.

Limitations

The current study recognizes a number of limitations. Firstly, the conclusions are not generalizable to all victims of nonfatal strangulation as the sample consists of domestic incidents in which stalking was indicated. It is also likely that the sample contains false negatives of nonfatal strangulation due to the difficulty in detecting nonfatal strangulation for reasons such as lack of visible injury, and because not all victims of nonfatal strangulation call the police. The true prevalence of nonfatal strangulation in this dataset is therefore likely to be higher than what is reported. Furthermore, the reported prevalence does not represent the prevalence of nonfatal strangulation in cases of intimate partner violence, as the dataset is limited to stalking situations. However, the study does provide useful information about police-identified and/or victim reported nonfatal strangulation in domestic incidents where

stalking was also indicated. As the completion of the FVIRs does not involve reading out each individual component verbatim, it may be that some behaviors related to the perpetrator, victim, or incident, may be missed.

Conclusions

Nonfatal strangulation has been described as walking on the edge of homicide (Strack & Gwinn, 2011), and is known to have severe effects on both the physical and mental health of the victim (Glass et al., 2008). The results of this research study show that victims are often threatened with death, isolated from social supports, and are fearful, which suggests that victims are unlikely to disclose attacks of nonfatal strangulation due to the coercively controlling nature of the perpetrator. As a result, first responders should not rely on victim disclosure, but rather, be able to recognize a victim who is involved with a coercively controlling partner, and take appropriate action to provide any available assistance to the victim at significant risk of nonfatal strangulation without waiting for an active confirmation of this violent act. These victims should be flagged and monitored by police officers, as stalking and isolation may prevent the victim from being able to access appropriate resources. The recognition and elimination of this distinctive and dangerous form of violence may improve, and save lives of numerous victims. It is important to note that although training is important, without adequate laws in place, police officers are limited in their ability to help victims and charge offenders. The current study highlighted the extent of coercively controlling behaviors seen in cases of nonfatal strangulation. Indeed, the current study provides support for the multifaceted nature of coercive control, in line with Dutton and Goodman's (2005) theory.

Coercive control was recognized as a specific criminal offense in England and Wales in 2015, and psychological abuse has been recognized as a criminal offense in France since 2010 (McMahon & McGorrery, 2016). However, in parts of Australia and the U.S.,

coercively controlling behaviors have not been criminalized. Although no discrete law against coercive controlling behaviors exists in Western Australia, nonfatal strangulation is acknowledged as a distinct criminal offense in Queensland and New Zealand, separate from other forms of assault. Given that current domestic violence laws in Australia and the U.S. target discrete and usually physical assaults, police interventions aimed to assist victims who are oppressed by coercively controlling partners are very limited. Introduction of relevant legislation making nonfatal strangulation and other coercively controlling behaviors a criminal offense would be a step towards acknowledging the seriousness of these acts, and would perhaps encourage victims to seek help and feel protected with the knowledge that the perpetrator may be held accountable.

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Table 1

Descriptive Summary for the Sample (n = 9,884) and Prevalence of Non-Fatal Strangulation

| | All | | NFS = yes | | NFS = no | |
|---------------------------|-------------|------|-------------|------|-------------|------|
| | (n = 9,884) | | (n = 1,638) | | (n = 8,246) | |
| | n | % | n | % | n | % |
| Perpetrator Gender | | | | | | |
| Male | 6157 | 62.3 | 1008 | 61.5 | 5149 | 62.4 |
| Female | 3539 | 35.8 | 601 | 36.7 | 2938 | 35.6 |
| Coercive Control | | | | | | |
| Yes | 4304 | 43.5 | 1208 | 73.7 | 3096 | 37.5 |
| No | 5580 | 56.5 | 430 | 26.3 | 5150 | 62.5 |
| Jealousy | | | | | | |
| Yes | 4956 | 50.1 | 1235 | 75.4 | 3721 | 45.1 |
| No | 4928 | 49.9 | 403 | 24.6 | 4525 | 54.9 |
| Threats | | | | | | |
| Yes | 4771 | 48.3 | 1327 | 81.0 | 3444 | 41.6 |
| No | 5113 | 51.7 | 311 | 19.0 | 4802 | 58.2 |
| Isolation | | | | | | |
| Yes | 1363 | 13.8 | 372 | 22.7 | 991 | 12.0 |
| No | 8521 | 86.2 | 1266 | 77.3 | 7255 | 88.0 |
| Fear | | | | | | |
| Yes | 6777 | 68.6 | 1428 | 87.2 | 5439 | 64.9 |
| No | 3107 | 31.4 | 210 | 12.8 | 2897 | 35.1 |
| Kill victim belief | | | | | | |
| Yes | 1461 | 14.8 | 587 | 35.8 | 874 | 10.6 |

| | | | | | | |
|----|------|------|------|------|------|------|
| No | 8423 | 85.2 | 1051 | 64.2 | 7372 | 89.4 |
|----|------|------|------|------|------|------|

Table 2

Logistic Regression Predicting Non-Fatal Strangulation (n = 9,884)

| | Est | SE | Wald | p-value | OR | 95% CI | |
|--------------------|------|-----|--------|---------|------|--------|-------|
| | | | | | | Lower | Upper |
| Perpetrator Gender | .16 | .06 | 6.69 | .010 | 1.18 | 1.04 | 1.33 |
| Coercive Control | .84 | .08 | 125.60 | <.001 | 2.32 | 2.00 | 2.68 |
| Jealousy | .59 | .08 | 59.73 | <.001 | 1.80 | 1.55 | 2.09 |
| Threats | 1.21 | .07 | 274.45 | <.001 | 3.37 | 2.92 | 3.89 |
| Isolation | .29 | .08 | 14.51 | <.001 | 1.34 | 1.15 | 1.56 |
| Fear | .54 | .09 | 39.35 | <.001 | 1.71 | 1.45 | 2.03 |
| Kill victim belief | .70 | .07 | 95.92 | <.001 | 2.00 | 1.74 | 2.30 |