

Defining stalking for research purposes

Defining Relational Stalking in Research: Understanding Sample Composition
in Relation to Repetition and Duration of Harassment

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Abstract

Due to ambiguities in stalking laws and the concept of stalking more generally, it is difficult for researchers to operationalise stalking for the purpose of selecting samples of perpetrators or victims. In an attempt to develop an empirical basis for operationalising relational stalking, this study examined unwanted intrusions in a community and student sample. Participants ($N = 1738$) completed a questionnaire assessing the repetition and duration of their unwanted intrusive behaviour following the termination of a relationship or pursuit of a romantic relationship. The consequences of applying different cut-points of repetition and duration of harassment was examined in relation to the proportion of participants who self-reported intent to frighten, intimidate or harm the target, perceived target fear or harm and the use of violence and/or threats. Engaging in some form of unwanted pursuit was almost normative (75% of the sample). However, when higher levels of repetition were used to define stalking, the sample comprised participants who reported engaging in more serious forms of intrusive behaviour. Applying different cut-points of duration appeared to have less of an effect on sample composition than did repetition. Criteria that may help to capture more serious forms of stalking behaviour, as opposed to normative behaviour, are discussed.

Key words: relational stalking, stalking definitions, repetition, duration, intent, violence, threats

A recurring problem in stalking research, and one experienced by law makers alike, is how to define stalking. This is because the behaviours encapsulated within stalking exist on a continuum ranging from normal or acceptable behaviours, to those which are more ambiguous, through to persistent, unwanted behaviours that are likely to arouse fear and that most people would perceive as stalking (Ogilvie, 2000). As only a small proportion of stalking research is conducted with convicted stalkers, the difficulty for researchers is that they must somehow interpret stalking laws to operationalise the crime, or identify and define a point on a continuum at which behaviour becomes stalking. This has resulted in much of the research on stalking being based on different definitions, thereby limiting the generalisability of findings. The purpose of this paper is to apply varying definitions of stalking to self-reports of unwanted pursuit behaviour following the termination of a relationship or pursuit of an unwanted relationship in a large community and student sample. Using this data, the merits and limitations of the various ways to define stalking in research on relational stalkers will be discussed.

Stalking laws can differ markedly not only across countries but also across jurisdictions. Although the extensive list of behaviours that may comprise stalking are captured in most stalking laws, other key elements differ. For example, in the United States, most jurisdictions concentrate on the intentions of the perpetrator (including but not limited to threats), the arousal of victim fear, and that the perpetrator's actions constitute a pattern of behaviour (Beatty, 2003). In Australia, the focus has typically been on the intentions of the perpetrator to arouse fear or cause harm and that the behaviour has been repeated. However, in the State of Queensland there is no requirement of intent, but rather a requirement that the behaviour would reasonably cause apprehension, fear or detriment to a stalked person (*Criminal Code [Stalking]*

Amendment Act 1999). Meanwhile, in England and Wales stalking falls under the umbrella of 'harassment' which proscribes behaviour which a person knows or ought to know would lead to the harassment of another (*Protection from Harassment Act, 1997*).

While the associated problems of stalking laws have been reviewed elsewhere (e.g., Dennison & Thomson, 2005), there are essentially four key issues central to defining stalking that arise out of existing laws. The first issue pertains to the intentions of the perpetrator to arouse fear or cause harm to the victim. Subjective reports of intentions by the perpetrator are likely to be unreliable, as a perpetrator may cite (and indeed have) various other motives for the behaviour, such as trying to prove their love or seeking an explanation for a break-up (Goode, 1995; Finch, 2001). In court the presence or absence of intent is decided upon by a judge or jury using an objective standard, typically based on the behaviours of the perpetrator and what a reasonable person ought to have known (Brown, Farrier & Weisbrot, 1996). Unfortunately, when defining stalking for research on unconvicted perpetrators a researcher is reliant on the self-reported intentions of the perpetrator. Therefore employing a definition that includes intent is likely to dramatically reduce the sample of potential perpetrators.

The second issue is that of victim fear, such as whether the behaviour did, or would be likely to, arouse apprehension or fear in the victim. Using victim fear in a definition of stalking is potentially problematic because the behaviour that engenders fear in a person is likely to vary according to their particular psychological constitution (Dennison & Thomson, 2005). Furthermore, there is some evidence that thresholds for fear differ according to gender (e.g., Tjaden, Thoennes & Allison, 2000; Davis & Frieze, 2000; Dennison, 2007). Additionally, victims may experience a

range of emotional and physical reactions to stalking, which may not necessarily include fear (Dietz & Martin, 2007). Therefore, whether and how victim fear should be incorporated in a definition of stalking is an issue for researchers. Reliance on perpetrator accounts may again be unnecessarily restrictive on sample selection, as they tend to have little insight into the effect of their intrusions on the victim (Davis, Ace & Andra, 2000; 2002; Langhinrichsen-Rohling, Palarea, Cohen & Rohling, 2002; Sinclair & Frieze, 2005).

The final two issues are interrelated, and comprise the elements of repetition and persistence. Virtually all stalking laws require that behaviour is repeated, persistent or constitutes a pattern. Repetition and persistence do not necessarily have the same meaning. *Repetition* implies a frequency to the behaviour, such that it occurred two or more times. In stalking research, *persistence* is often used to describe repetition, but it is also used to imply some degree of duration of the behaviour. While stalking laws do not require that the unwanted behaviours took place over a certain time period, the use of the term 'persistent' in some jurisdictions (e.g, *Protection From Harassment Act, 1997*) requires interpretation both from a legal and research standpoint.

A question arising from the interpretation of stalking laws is whether there is an optimal cut-off point at which most would agree that the behaviour is sufficiently repetitious or persistent to constitute stalking? In the absence of sufficient research to provide empirical guidance, a number of researchers have applied their own margins when defining stalking. For example, in earlier research on victims of stalking Mullen, Pathe, Purcell and Stuart (1999) used both the concepts of repetition and duration to restrict their sample to victims who reported 10 or more events over a four week period. This definition has been used extensively in other studies (e.g, James &

Farnham, 2003; Roberts, 2002; 2005a; Sheridan & Davies, 2001; Sheridan & Grant, 2007). However, in a later study, Purcell, Pathe and Mullen (2004) indicated that a duration of two weeks was the critical point at which victims experienced more threatening, violent and intrusive behaviours, greater lifestyle changes and more serious psychological impairment. Therefore, duration of the behaviour appears to be central to defining stalking. However, in Purcell et al's (2004) study the median number of intrusions experienced by participants subjected to intrusive behaviour for less than two weeks was five, compared to 20 for participants subjected to intrusions for two or more weeks. Therefore, it is possible that repetition accounts for some differences in lifestyle changes and psychological impairment rather than duration alone.

Other studies have provided a more literal interpretation of stalking laws, focusing only on repetition and requiring two or more events (e.g., Jasinski & Mustaine, 2001; Logan, Walker, Stewart, & Allen, 2006; Meloy, Davis & Lovette, 2001; Mohandie, Meloy, Green McGowan & Williams, 2006; Purcell, Pathe & Mullen, 2000; Roberts, 2005b; Tjaden & Thoennes, 1998; Tjaden et al., 2000) or categorising the behaviour into 'nothing', 'harassment' and 'stalking' based on repetition (Roberts, 2005b) or a combination of repetition, duration and fear (Roberts, 2002). One study combined the notion of repetition with degree of distress, such that less repetition was required for more distressing behaviours (Turmanis & Brown, 2006). Other researchers have used various combinations of repetition and duration to define stalking (e.g., Blaauw et al., 2002; Farnham, James & Cantrell, 2000; Kuehner, Gass & Dressing, 2006; Purcell, Powell & Mullen, 2005; Dressing, Kuehner & Gass, 2005). While it is unlikely that a person committing two unwanted intrusions would be charged and convicted of stalking, there are cases which have been successfully

prosecuted with less than 10 intrusions (e.g., Swanwick, 1996). Whether another point on the continuum, representing a middle ground between two and 10 repeated intrusions, is more appropriate remains to be investigated.

Defining stalking is perhaps complicated more by the findings of research on community perceptions of stalking. A number of studies have been conducted using vignettes of potential stalking incidents and manipulating variables such as intent, threats, fear, repetition and victim and perpetrator gender (e.g, Hills & Taplin, 1998; Dennison & Thomson, 2000; Dennison & Thomson, 2002; Phillips, Quirk, Rosenfeld & O'Connor, 2004; Dennison, 2007). Other studies have examined participant ratings of lists of potentially intrusive behaviours (e.g., Sheridan, Davies & Boon, 2001a; Sheridan & Davies, 2001; Sheridan, Gillett & Davies, 2002; Sheridan, Gillett, Davies, Blaauw & Patel, 2003). While a clear summary of the findings is limited by the differences in methodology and vignette content, a pattern seems to be emerging based on an interaction between intent and repetition.

Vignettes containing limited repetition (i.e., two events) were unlikely to be perceived as stalking even in the presence of the perpetrator's intention to arouse fear or harm, depicted by threatening phone calls (Dennison, 2007). Whereas, moderate forms of repetition (i.e., less than 20 acts over a five month period) were more likely to be perceived as stalking when intent was present (Dennison & Thomson, 2002). High repetition (i.e., several acts each week, for a period of five months) was generally sufficient to identify stalking irrespective of the intentions of the perpetrator (Dennison & Thomson, 2000). Furthermore, participants were more likely to perceive that the alleged perpetrator anticipated causing fear when higher rather than lower levels of repetition were depicted (Dennison, 2007). However, conclusions are further limited by interactions with gender, the relationship between the perpetrator and

victim, and that the manipulations of repetition are intertwined with duration of the behaviour (for a more comprehensive review, see Dennison & Thomson, 2005).

Achieving consensus on a definition of stalking that can be operationalised consistently in research is improbable, given that what is perceived or experienced as stalking is dependent on many factors that interact with each other. Nevertheless, it may be possible to form a more justifiable basis for selecting particular definitions by being guided by research rather than selecting arbitrary cut-off points. As already noted, perpetrator accounts of their intentions to cause harm or arouse fear, as well as whether their behaviour did have such an effect, is likely to be unreliable. Therefore in conducting research on stalking perpetration, researchers must typically rely on some aspect of repetition and/or duration of harassment to define stalking. The questions that therefore arise are (a) where along the continuum of repetition and duration is stalking best defined?; and (b) how do these factors impact on the sample of stalkers that we obtain and the types and severity of their intrusive behaviour that we subsequently investigate? For example, although violence is not, and should not, be a requirement in defining stalking, some researchers may wish to investigate the risk of violence occurring in stalking. It may therefore be necessary to understand how the definition of stalking employed in their research may affect the proportion of stalkers obtained in their sample who report using violence. Clearly, the definition of stalking employed in research will subsequently affect the level of innocuous versus potentially fear-inducing or harmful behaviour obtained in sample of potential stalkers.

The present study examines the self-reported behaviour of a large community and student sample. The number of participants who report engaging in unwanted behaviour following a relationship termination or to pursue a romantic interest is

examined by retrospectively applying different definitions of stalking. The context of relational stalking was selected as relationship terminations and the pursuit of relationships often involve a range of ambiguous behaviours that may be perceived as stalking. In fact, Emerson, Ferris and Gardner (1998) have suggested that miscommunications and other complications arising out of relationships constitute much of the behaviour that is labelled stalking. In these situations, normal interactions may give way to dysfunctional behaviour. Furthermore, research with victims of stalking has revealed that the majority of victims know their stalker, many of whom are ex-intimates (Pathé & Mullen, 1997; Purcell, Pathé & Mullen, 2002; Tjaden et al., 2000).

In this research, the retrospective application of different combinations of repetition and duration are examined in relation to attrition in perpetrator sample size, intentions to frighten or harm the target, perceived fear or harm, use of violence and threats. Five research questions are addressed: (1) What is the extent of repetition and duration of stalking-like behaviours in a community and student sample? (2) What is the impact of applying different cut-points of repetition and duration on the proportion of participants who report intentions to cause fear or harm? (3) What is the impact of applying different cut-points of repetition and duration on the proportion of participants who perceived the target was frightened, intimidated or harmed? (4) What is the impact of applying different cut-points of repetition and duration on the proportion of participants who report violence perpetration? (5) What is the impact of applying different cut-points of repetition and duration on the proportion of participants who made threats to the target?

Method

Participants

The sample comprised 1738 participants from the South-East Queensland community ($n = 932$; 53.6%) and Griffith University student community ($n = 712$; 41.0%; 5.4% missing data). The ages of the participants ranged from 17 to 62 years ($M = 25.89$ years, $Mdn = 22$ years, $SD = 9.00$ ¹). The majority of participants were female (70.2%, $n = 1220$), with males comprising 24.4% ($n = 424$) of the sample (missing data = 5.4%; $n = 94$). Participants were treated in accordance with the ethical requirements of the Griffith University Human Research Ethics Committee and the ethical principles of the National Health and Medical Research Council.

Materials

The present study is part of a larger project examining violence in relational stalking. A 31-page self-report questionnaire was utilised to assess participants' engagement in stalking-like behaviours and other relevant factors associated with this behaviour. Only portions of the questionnaire relevant to this study will be described. The questionnaire limited the stalking-like behaviours to those perpetrated after the dissolution of a participant's intimate relationship or after a participant was rejected by someone with whom they pursued an intimate relationship.

A series of items in the questionnaire measured participants' perpetration of relational stalking-like behaviours. First, the questionnaire asked whether the participant had *ever* engaged in a range of behaviours that they *knew were unwanted* after they had *broken up with an intimate partner* or had been *rejected by someone they wanted a relationship with*. The behaviours included in the list were largely derived from Spitzberg and Cupach's (1997) Relational Pursuit – Pursuer Short Form (Version 2), amended to include some additional behaviours typically used in stalking legislation and research (Davis et al., 2000; Davis & Frieze, 2000; Dennison &

¹ Missing data = 100 (5.8%)

Stewart, 2006; Palarea, Zona, Lane & Langhinrichsen-Rohling, 1999; Pathe & Mullen, 1997; Pathe, Mullen & Purcell, 1999; Purcell et al., 2000; Sheridan, Davies & Boon, 2001a; 2001b; Sinclair & Frieze, 2000; Tjaden & Thoennes, 1998, *Criminal Code [Stalking] Amendment Act 1999* [Queensland]). Participants' engagement in these behaviours was assessed over the participant's lifetime, thus the checklist measured the lifetime prevalence of relational stalking-like behaviour.

The checklist incorporated 25 behaviours such as following him/her around, leaving unwanted threatening messages and stealing or damaging his/her possessions. To measure repetition, participants indicated the frequency that they had engaged in these behaviours on a scale of never (scored 0), once (1), two or more times (2), five or more times (5), or ten or more times (10). Repetition was then calculated by adding the frequency score for each type of behaviour. For example, two types of behaviour each performed five times resulted in a total repetition score of '10 or more' intrusions. While this results in a conservative measure of repetition, it was deemed more realistic than requesting participants to give the exact frequency of their intrusions. Those participants who had engaged in behaviours towards multiple people were asked to select one person who "had the biggest impact on them" and complete the checklist again for this person only. This ensured that the data was obtained for one stalking episode, as opposed to an accumulation of behaviours perpetrated against multiple people. Where applicable, the second checklist was used in the present study. The relational stalking checklist had a Cronbach's alpha coefficient of .83.

Participants' repetition of stalking-like behaviours were then categorised into 'two or more intrusions', 'three or more intrusions', 'five or more intrusions' and 'ten or more intrusions'. These categories were NOT mutually exclusive, whereby

participants could be classified under multiple categories. For example, participants who perpetrated five or more intrusions had also perpetrated three or more intrusions and two or more intrusions, thus these participants were included in analyses using each of these cut-points.

To assess the duration of the participants' relational stalking-like behaviour, participants were asked "How long did you act this way?" and were provided with 10 timeframes from which to select the most appropriate. Answers were then categorised into 'no timeframe', 'one or more weeks' and 'one month or more'. These categories were NOT mutually exclusive, whereby participants could be classified under multiple categories. For example, participants who persisted for one month or more had also persisted for one week or more, and they had persisted over any timeframe. Consequently, these participants were included in samples defined according to each of the duration categories.

To assess violence, participants who had engaged in relational stalking-like behaviours were asked whether they had ever *attempted to, or actually did*, a range of physically violent behaviours to the person to whom the unwanted behaviours were targeted towards, or towards someone for whom this person cared, during the stalking campaign. The violence checklist included in the questionnaire was an amended version of two subscales from the Revised Conflict Tactics Scale (CTS2., Straus, Hamby, Boney-McCoy, & Sugarman, 1996); the physical assault subscale and the sexual coercion subscale. The CTS2 is a psychometrically sound tool designed to assess domestic violence. The two subscales utilised from the CTS2 were amended and re-worded to be applicable to the present research on stalking violence and to incorporate some additional violent acts reported in stalking violence research, including violence towards pets. These amendments render the psychometric

properties inapplicable. The complete violence checklist included in the questionnaire had a Cronbach's alpha co-efficient of .83.

To measure threats, participants were asked whether they had made a range of threats, including threats of self-harm, property damage, harm to the target or someone the target cared about, or death threats to the target or someone the target cared about. The threat checklist included in the questionnaire had a Cronbach's alpha co-efficient of .62.

Additional characteristics of the stalking-like behaviour were assessed using non-standard questions devised for the present research. To measure the participants' intention to cause fear and harm, participants were asked "Did you intend to frighten, intimidate or harm this person?" To measure perceived target fear or harm, participants were asked "Do you think your behaviour did frighten, intimidate or harm this person?" The questionnaire also included a series of questions that measured demographic information and the characteristics of both the participant and the target. Two versions of the questionnaire were available; a web-based version and a paper-based version.

Procedure

The sample was a non-random, non-representative convenience sample recruited through several sampling techniques between July 2006 and May 2007. The Griffith University student sample was recruited through (1) research participation schemes in three undergraduate criminology courses, (2) a university-wide student email, (3) an advertisement on the university computer laboratory homepage, and (4) attending five undergraduate lectures to invite student participation. The community sample was recruited through (1) handing out 800 brochures advertising the web-based questionnaire in areas frequented by large numbers of people, including the

Brisbane city mall, three inner-city train stations and two busy Brisbane city footpaths (2) the distribution of 600 letterbox drops advertising the web-based questionnaire in four randomly selected Brisbane suburbs, (3) a university-wide staff email, and (4) an e-mail distributed to members of the 'Crimnet' mailing list, comprising a network of academics, professionals, practitioners and students in the criminal justice field. All participants entered a draw to win one of three \$100 cash prizes for their participation. Where applicable, students also obtained credit points for undergraduate courses for their participation. A response rate could not be calculated for the present procedure as the recruitment process utilised several sampling techniques that prevented such estimations, such as group e-mails, electronic noticeboards and verbal invitations for participation announced at student lectures.

Participants were told that the purpose of the study was to examine the behaviours and tactics used by individuals after breaking up from an intimate/romantic relationship or in the pursuit of a new intimate/romantic relationship. At no time was the behaviour labelled 'stalking'. This decision was made to circumvent error that may arise from individuals' preconceived notions of what constitutes stalking. Participants were informed that some of the items in the questionnaire may ask them about difficult times in their lives or stressful life events and that they were free to withdraw from the study at any time. Participants were also provided with contact details for support services in the event that they experienced distress or discomfort due to the nature of the questionnaire.

All participants were given a choice between completing a paper-based questionnaire or an online questionnaire. In the case that a participant requested a paper-based questionnaire, participants were also provided with a reply paid envelope

to return the completed questionnaire. The entire questionnaire took between 30 and 60 minutes to complete, depending on the answers supplied by the participant.

Results

Initial screening of data revealed that the community sample was significantly older ($M = 27.88$, $SD = 10.13$) than the student sample ($M = 23.28$, $SD = 6.38$), $t(1582.47) = -11.23$, $p = .001$, $d = -0.54$. However, there was no significant variability in sex, frequency of intrusions or duration of stalking-like behaviour between the two groups. Therefore, for the purpose of all analyses, the two samples were combined.

In the present study, the effect of different cut-points for repetition and duration were examined in relation to (1) attrition in sample size (2) the proportion of participants who reported their intentions to frighten or harm the target, (3) the proportion of participants who reported perceived fear or harm, (4) the proportion of participants who reported the use of violence and (5) the proportion of participants who reported the issuance of threats. As each of the repetition and duration categories are not mutually exclusive, analyses of statistical significance could not be performed. Therefore, 95% confidence intervals for proportions were calculated to examine where meaningful differences may exist between groups (Agresti, 1996).

Research Question 1: What is the extent of repetition and duration of relational stalking-like behaviours in a community and student sample?

One quarter of participants (24.7%) did not report engaging in any stalking-like behaviours, with 75.3% of participants indicating that they had engaged in one or more behaviours. The percentages and 95% confidence intervals were calculated for self-reported stalking-like behaviours with respect to repetition and duration (see Figure 1). There appears to be meaningful differences in the number of participants who could be classified as stalkers across repetition and duration categories. As would

be expected, the greater the restrictions imposed, the fewer the participants that would be classified as relational stalkers. Using a definition of 10 or more intrusions over at least four weeks results in a sample less than one quarter of the size of that attained using a definition of 2 or more intrusions over any timeframe.

INSERT FIGURE 1

When examining repetition in isolation, it is apparent that the majority of participants engaged in stalking-like behaviours on at least two or three occasions. Therefore, if these cut-off points were adopted, the majority of participants could be classified as stalkers. When more intrusions are required in a stalking definition this results in a smaller sample size. A definition using a cut-off of five or more intrusions, results in a reduction in sample size of approximately 40% of that using a definition of two or more intrusions. A definition using a cut-off of ten or more intrusions, in turn, reduces the sample size by almost half of that obtained when using a definition of five or more intrusions. When repetition has no temporal requirements, there are no overlaps in the confidence intervals across repetition categories. This suggests that the reductions in sample size are quite meaningful. When a duration of one week is used, the reduction in sample size is small between two and three intrusions, where the confidence intervals nearly overlap. When a duration of one month is used, the confidence intervals overlap for two and three intrusions, suggesting that this reduction may not be meaningful. Due to the similarities in sample size attained using cut-off points of two and three intrusions, the cut-off point of three intrusions will be excluded from analyses of subsequent research questions.

Longer temporal requirements adopted in the stalking definition also results in smaller sample sizes. When a definition is adopted of two or more intrusions over any timeframe, two thirds of the sample would be classified as stalkers. With a temporal

requirement of one month the number of participants classified as stalkers would be halved. A temporal requirement of one week has a lesser, but still substantial, impact with almost a 30% reduction. A similar trend is exhibited across the three durations using all repetition cut-off points. However, as the frequency of intrusions increases, the impact of the duration appears to decrease. It is likely that as the number of intrusions participants engaged in increases, so too does the duration of the behaviours. In fact, for ten or more intrusions, the confidence intervals overlap for no duration and one week, and almost overlap for the reduction between one week and one month.

Research Question 2: What is the impact of applying different cut-points of repetition and duration on the proportion of participants who report intentions to cause fear or harm?

Intentions to frighten, intimidate or harm the target were examined for each combination of repetition and duration, therefore sample sizes differ. The sample size for each category is as per Figure 1. Various cut-points for repetition and duration were retrospectively applied to the sample and percentages and 95% confidence intervals were calculated for the proportion of participants who self-reported intentions to cause fear or harm (see Figure 2). Very few participants reported that they intended to frighten, intimidate or harm the target. Depending on the frequency of intrusions applied to the sample, between 90-94% of participants stated that they did NOT intend to frighten, intimidate or harm the target. Figure 2 demonstrates that the higher the repetition of unwanted intrusions used to define stalking, the greater the proportion of participants in the sample who intended to frighten, intimidate or harm the target. However, caution must be taken in interpreting these differences because the confidence intervals overlap across all repetition categories in all three graphs.

Furthermore, low rates of intent are likely to affect the confidence intervals attained for this variable. The proportion of participants who reported that they intended to frighten, intimidate or harm the target varied little according to the level of duration subsequently applied, whereby the confidence intervals overlap across duration categories.

INSERT FIGURE 2

Research Question 3: What is the impact of applying different cut-points of repetition and duration on the proportion of participants who perceived the target was frightened, intimidated or harmed?

Perceived target fear, intimidation or harm were examined for each combination of repetition and duration, therefore sample sizes differ. The sample size for each category is as per Figure 1. Various cut-points for repetition and duration were retrospectively applied to the sample and percentages and 95% confidence intervals were calculated for the proportion of participants who reported perceived target fear, intimidation or harm (see Figure 3). Across the categories, between 75-86% of participants stated that they believed that they did NOT frighten, intimidate or harm the target. As illustrated in Figure 3, higher repetition is associated with greater proportions of participants who believed they frightened, intimidated or harmed the target. There is no overlap between the confidence intervals of two or more intrusions and five or more intrusions across no timeframe. Care must be taken in interpreting how meaningful these differences are because the confidence intervals do overlap across almost all of the repetition categories in all three graphs. Again, the proportion of participants who reported their belief that they frightened, intimidated or harmed the target varied little according to the level of duration subsequently applied, as the proportions and confidence intervals are very similar across duration categories.

INSERT FIGURE 3

Research Question 4: What is the impact of applying different cut-points of repetition and duration on the proportion of participants who report violence perpetration?

Levels of self-reported violence were examined for each combination of repetition and duration, therefore sample sizes differ. The sample size for each category is as per Figure 1. Various cut-points for repetition and duration were retrospectively applied to the sample and percentages and 95% confidence intervals were calculated for the proportion of participants who reported engaging in violence (see Figure 4). The number of participants who reported engaging in violence ranged from 34% to 49% across categories. As demonstrated in Figure 4, higher repetition is associated with greater proportions of violent participants. For example, around one third of participants are violent using a cut-off of two or more intrusions, but almost half of the participants are violent using a cut-off of ten or more intrusions. The rate of violence using a cut-off of five or more intrusions falls in between these two cut-points. These patterns must be interpreted with caution, however, as there are overlaps across repetition categories. Once again, the proportion of participants who reported engaging in violence varied little according to the level of duration subsequently applied, with similar proportions and confidence intervals across duration.

INSERT FIGURE 4

Research Question 5: What is the impact of applying different cut-points of repetition and duration on the proportion of participants who made threats to the target?

The use of threats were examined for each combination of repetition and duration, therefore sample sizes differ. The sample size for each category is as per Figure 1. Various cut-points for repetition and duration were retrospectively applied

to the sample and percentages and 95% confidence intervals were calculated for the proportion of participants who reported the use of threats with respect to repetition and duration (see Figure 5). The number of participants who reported making threats ranged from 32% to 49% across categories. Figure 5 demonstrates that the higher the repetition of unwanted intrusions, the greater the proportion of participants remaining in the sample who threatened the stalking target or someone the target cared about. While there are some overlaps in confidence intervals across repetition categories, there is no overlap between confidence intervals of two or more intrusions and five or more intrusions across no timeframe and one week. Similar to violence, around one third of participants made threats using a cut-off of two or more intrusions, but almost half of the participants made threats using a cut-off of ten or more intrusions. Rates using a cut-off of five or more intrusions fall in between these two cut-points. Once again, the proportion of participants who reported issuing threats varied little according to the level of duration subsequently applied, with quite similar proportions and confidence intervals across duration.

INSERT FIGURE 5

Discussion

This study examined how the application of different definitions of stalking affects the size and characteristics of a sample of potential relational stalkers obtained by researchers. The effects of different cut-points for repetition and duration of stalking-like behaviours were examined in relation to participants' intent to frighten, intimidate or harm the target, perceived fear or harm to the target, and the use of violence or threats. The aim of the study was to use empirical data to inform the selection of stalking definitions for research purposes. When higher levels of

repetition were used to define stalking, the sample comprised participants who reported engaging in more serious forms of intrusive behaviour. Applying different levels of duration to the sample appeared to have less of an effect on sample composition than did repetition, although it is apparent that duration and repetition are related. More generally, participants reported low levels of intent to frighten or harm the target as well as perceived fear or harm to the target. Moderate levels of violence and threats were reported.

When there were no temporal requirements, approximately two thirds of participants reported engaging in two or more unwanted intrusions towards a target following a relationship termination or in the pursuit of a romantic relationship. When the stalking criteria applied to the sample required 10 or more intrusions, the sample size decreased dramatically to less than a quarter of participants. A similar pattern for repetition was found across duration categories, although the sample sizes decreased with longer temporal requirements. Approximately a third of participants reported engaging in two or more intrusions over a period of one month or more, which decreased to almost 15% of participants when a stalking criterion requiring 10 or more intrusions was applied. It is apparent that engaging in some form of unwanted intrusive behaviour was almost normative in our sample following the dissolution of a relationship or in the pursuit of a romantic relationship. This is consistent with the findings of Sinclair and Freize (2000) who reported that the majority of men and women in a college sample engaged in behaviours that could be perceived as stalking, or 'pre-stalking', when rejected by someone they loved. Using a stalking definition that requires as few as two unwanted intrusions with no temporal requirements may capture a wide range of behaviours that are part of acceptable relationship processes, although such a definition would necessarily be limited in most cases by requirements

of intent. Nevertheless, Dennison (2007) found that two unwanted contact events are unlikely to be perceived as stalking by community members, even in the presence of intent to arouse fear or cause harm. Given the results of the current study, basing definitions of stalking on stalking laws that do not simultaneously contain an intent requirement (e.g., *Criminal Code [Stalking] Amendment Act 1999 [QLD]*), may be too broad.

Despite the limiting effect of duration on sample size, there is not necessarily a case for including duration in a definition of stalking since sample size can be similarly restricted by using a definition with higher levels of repetition. In fact, it appears that repetition of intrusions may underpin any effect of duration, since the most dramatic decreases in sample size can be found between the duration categories of ‘no time frame’ and ‘one month or more’ when repetition consists of two or more intrusions, and three or more intrusions. The effect of duration appears to be much smaller when repetition is higher. This finding raises questions about the benefit of using duration to distinguish between less severe intrusiveness and more damaging forms of stalking as advocated by Purcell et al (2004). It is possible that repetition rather than duration was the critical factor in understanding the effects of intrusive behaviour on victims, yet in that study the effect of duration independent of repetition was not investigated. Further research is required to investigate how these factors operate independently and together in constructing stalking in relation to both perpetrator behaviour and subsequently, a victim’s perception of being stalked.

It is likely important to researchers to understand how the definition of stalking they employ in their research might shape the characteristics of the participants obtained in their sample. We can be further informed by examining participants’ reported intent to frighten, intimidate or harm the target, perceived

victim fear or harm, and the use of violence and threats. When higher levels of repetition were applied to sample, the proportion of participants who indicated that they intended to frighten, intimidate or harm the target was higher, although self-reporting of these intentions was generally low. It is possible that this greater number of participants reporting intent was not significant when considering the overlap in confidence intervals across the repetition categories. Self-reported intentions appeared to be unrelated to duration. Across the three duration categories, approximately 10% of the participants who reported engaging in 10 or more unwanted acts indicated that they intended to frighten, intimidate or harm the victim. Confidence intervals were larger for these proportions, reflecting the decrease in sample sizes across the repetition categories in particular. From a sampling perspective, there would be an advantage in refraining from using a criterion of duration. For example, without any temporal requirements, the sample size was larger for 10 or more unwanted acts compared to when durations of one week or more, or one month or more, were applied to the sample. Therefore, a larger sample of participants who engaged in repetitive unwanted acts (5 or more, or 10 or more) and intended to frighten, intimidate or harm the victim was obtained in the absence of a duration requirement.

Self-reports of perceived fear, intimidation or harm being caused to the victim were also reasonably low. Proportions were at their highest (25%) when 10 or more unwanted acts were committed, regardless of duration. Similar to intent, the proportion of participants who reported causing fear or harm to the victim was higher with higher levels of repetition, but appeared to be unrelated to duration. It is likely that actual victim fear, intimidation and harm was higher than that reported by participants, especially when considering the reported use of threats and violence. For example, of the 389 participants who reported engaging in 10 or more unwanted acts,

approximately 50% reported using violence, almost 50% reported using threats, and yet only 25% reported that the victim likely experienced fear, intimidation or harm and only 10% reported that they intended to frighten, intimidate or harm the victim.

The above findings demonstrate that a perpetrator's intentions and behaviour and the perceived consequences to the victim may differ considerably and that their ability to foresee the potential consequences to the victim may be quite poor. The low levels of reported intent highlight the criticisms that have been raised in relation to using an intent requirement to proscribe stalking (e.g. Goode, 1995; Finch, 2001). A criterion that focuses on what a perpetrator should have known rather than what they actually intended or foresaw may be more useful in protecting victims from ongoing harassment.

The findings for use of violence and use of threats were similar and will be discussed together. The proportion of participants who reported using violence and/or threats was higher when definitions of greater repetitiveness were applied to the sample. Although, differences between '5 or more' intrusive acts and '10 or more' intrusive acts may not be meaningful given the overlap in confidence intervals. Duration appeared to have no effect on proportions. Similar proportions of participants who were violent or used threats were obtained regardless of temporal requirements, however, using a temporal requirement does reduce the sample size. For example, without any temporal requirements, 50% of the 389 participants who engaged in 10 or more unwanted acts reported committing violence, compared to 50% of the 267 participants who engaged in 10 or more unwanted acts over a period of one month or more. Therefore, from a sampling perspective, a greater number of participants who have engaged in more serious forms of unwanted acts could be obtained by refraining to use a temporal requirement. This is an important finding for

researchers who wish to investigate the occurrence of relational stalking at the more serious end of the spectrum, particularly if they wish to determine when stalking may also escalate to violence.

The results also revealed a possible advantage for sampling by using a definition requiring '5 or more' intrusions compared to '10 or more' intrusions. For example, without using any temporal requirement, a sample of approximately 195 participants who committed a violent act (50% of 389) would be obtained when repetition is defined as 10 or more intrusions. However, this sample increases to 293 participants who committed a violent act (42% of 703) when repetition is defined as five or more intrusions. While defining repetition as two or more intrusions appears too broad in that it captures the majority of participants, it may be that using a criterion of 10 or more behaviours is too restrictive and leads to a loss of participants who are violent or make threats to the target. Although this latter definition has been used extensively in past research (e.g, James & Farnham, 2003; Roberts, 2002; 2005a; Sheridan & Davies, 2001; Sheridan & Grant, 2007), this study demonstrates that violence is also associated with less repetitious behaviour. Researchers investigating violence and stalking may find that using a more moderate definition of repetition that focuses on five or more intrusions achieves a larger, but purposeful, sample.

Limitations and future research

The current study offers some empirical guidance for defining stalking for research purposes. However, there are four specific limitations in the study that should be considered when interpreting these findings. First, females comprised the majority of the sample. Results from victim surveys indicate that the majority of stalkers are male (Tjaden & Thoennes, 1998; Budd & Mattinson, 2000; Pathe & Mullen, 1997). Therefore, this study significantly under represents males, who

potentially comprise at least 50% of the potential stalker population. However, surveys of stalking in university samples have revealed that women and men engage in similar levels of intrusive behaviour (Haugaard and Seri, 2004; Sinclair & Frieze, 2000). Nevertheless, future research should examine how the application of various stalking definitions relates to males' and females' self-reported intrusive behaviour.

Second, the sample contained only those who engaged in unwanted acts following a relationship termination or in the pursuit of a relationship. Future research needs to examine the effect of the criterion of repetition and duration on defining stalking outside intimate relationships. Third, the measure of threat contained low internal consistency (0.62), possibly due to the small number of items used. As such, the results pertaining to threats should be interpreted with caution, although it is somewhat reassuring that the pattern of results for threats was similar to that for use of violence.

Finally, the study relied on self-reports of engagement in unwanted intrusive behaviour. We found that a criterion of repetition was more informative in understanding sample attrition than a criterion of duration. This finding is at odds with that of Purcell et al (2004) who have suggested that a duration of two weeks be used to distinguish more innocuous forms of harassment from potentially serious forms of stalking. However, their study was based on victim reports of intrusive behaviour and resultant consequences. Given the differences in samples, it would be useful to replicate the current study using victims' reports to ascertain the importance of repetition in relation to duration. Future research should also examine the potential continuum of stalking behaviours such that the usefulness of using criteria such as five or more intrusions, or 10 more intrusions, can be ascertained.

Conclusion

Defining stalking in order to conduct research with perpetrators or victims of stalking is a difficult task. Ambiguities associated with the interpretation of legislative criteria that pertain to intent, target harm, and persistent harassment means that many researchers have had to make arbitrary decisions regarding the operationalisation of stalking. This study examined implications for sampling participants from a community and student environment with regards to the perpetration of stalking-like behaviours in relation to various stalking criteria. The majority of participants reported engaging in two or more unwanted acts towards an ex-partner or towards someone with whom they wanted a romantic relationship. When higher levels of repetition were used to define stalking, the sample comprised participants who reported engaging in more serious forms of intrusive behaviour, including a greater use of violence or threats. Applying different cut-points of duration to the sample appeared to have less of an effect on sample composition than did repetition. Although more extensive research is required with a more representative sample of the community, it is anticipated that these findings will assist researchers to develop an appropriate definition of stalking for their research purposes.

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