

# A Study of the Predictors of Persistence in Stalking Situations

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**Abstract** Stalkers engaging in persistent campaigns of harassment have the potential to cause immense harm to their victims and themselves. Being able to estimate which stalkers are likely to persist longest is important to clinicians dealing with both perpetrators and victims. This study of 200 stalkers investigated characteristics of the stalkers and their behaviour that were associated with increased persistence. Logistic regression models were developed to predict low, moderate, and highly persistent stalking. The results supported previous research indicating that the type of prior relationship between stalker and victim is strongly associated with persistence, with prior acquaintances the most persistent, and strangers least. Being aged over 30, sending the victim unsolicited materials, and having an intimacy seeking or resentful motivation was also associated with greater persistence, as was the presence of psychosis.

**Keywords** Stalking · Risk assessment · ROC curve · Management of stalkers

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Stalking is a common but variable behaviour which is often associated with psychological and social damage to both victims and perpetrators. The danger of the stalker attacking their victim has understandably dominated the stalking risk assessment literature, but it seems that the major source of harm to the greatest number of victims is not from assault, as might be expected, but from prolonged, unwanted, and unpredictable intrusions that produce a sense of powerlessness and fear (Kamphuis & Emmelkamp, 2000; Pathé & Mullen, 1997). Research suggests that the longer stalking continues, the greater the potential for psychological, social, and physical damage, making gauging the potential for persistence an important aspect of stalking risk assessment (Blaauw, Winkel, Arensman, Sheridan, & Freeve, 2002; Hall, 1998; Kamphuis, Emmelkamp, & Bartak, 1998; Pathé, 2002; Purcell, Pathé, & Mullen, 2004, 2005).

Stalking rose to prominence in the legal and popular media due to its perceived association with violence. The attack on Teresa Saldana and murders of Rebecca Schaffer and a number of women at the hands of their ex-partners in California prompted the introduction of the first anti-stalking legislation (McAnaney, Curliss, & Abeyta-Price, 1993; Saunders, 1998). Similar incidents in other jurisdictions hastened the introduction of equivalent measures (McMahon & Davids, 1993). The various anti-stalking laws enacted over the course of the 1990s were intended to not only prevent unwanted harassment, but give police powers to intervene before a stalking situation escalated to homicide.

The creation of a new offence category prompted investigative studies of stalking in Australia, Britain, and the United States during the 1990s (Budd & Mattinson, 2000; Purcell, Pathé, & Mullen, 2002; Tjaden & Thoennes, 1998). These surveys revealed that stalking was far more

prevalent than first thought, and that the majority of victims did not experience violence. Rather, stalking victims reported campaigns involving (but not limited to) telephone calls, unwanted gifts, threats, following, approaches, letters, and property damage, the sum of which was a charged atmosphere in which attack often seemed imminent, even if it never eventuated. A significant minority of stalkers were found to attack their victims, reinforcing the focus in the nascent stalking risk assessment literature on assessing and managing the risk of violence. But the anxiety and stress caused by prolonged stalking situations has been shown to occur even in the absence of stalking violence (Blaauw et al., 2002; Kamphuis & Emmelkamp, 2000; Pathé & Mullen, 1997). While the real possibility of assault often dominates concerns in any stalking situation, clinicians working with stalkers or victims must also recognise that both parties face other forms of injury, primarily psychological and social damage.

The degree of psychosocial damage sustained by any victim or stalker depends on a range of factors, such as personal resilience, existing psychiatric illness, intensity and intrusiveness of the stalking behaviours, and the response of agencies the victim might turn to for support. There is also evidence that stalking duration itself is associated with post-traumatic stress symptoms in some stalking victims (Kamphuis, Emmelkamp, & Bartak, 2003). Kamphuis et al. (2003) suggested that prolonged stalking may precipitate cognitive changes in victims, such as more fearful appraisals of others' intentions, and a revised view of their own personal capabilities and level of control. In a prolonged stalking situation victims may also find it difficult to obtain ongoing assistance and understanding from their usual social supports, which can lead to changes in support networks and the failure of familiar coping strategies (Kamphuis et al., 2003; Mullen, Pathé, & Purcell, 2000). It is therefore in the interests of victims (and stalkers) to intervene and prevent a persistent episode from developing.

To facilitate prompt and targeted interventions, it is essential that clinicians conducting risk assessments can recognise which individual stalkers are most likely to persist. Unfortunately, there is limited information available about the characteristics of stalkers and stalking episodes associated with greater persistence. Currently, the best predictor of stalking duration is the type of prior relationship shared by stalker and victim, with rejected ex-partners thought to be the most persistent, and strangers least (Budd & Mattinson, 2000; Pathé & Mullen, 1997; Purcell et al., 2002, 2004; Tjaden & Thoennes, 1998). Mohandie, Meloy, Green-McGowan, and Williams (2006) examined stalking recidivism, recording instances where a stalker made further intrusions following legal intervention. Using this definition, they identified a recidivism rate

of 60%, with modal time to recidivistic contact of 1 day, and an average time of 2 months. These authors also identified ex-intimates as most likely to contact the victim following legal intervention, and strangers least likely; however, they did not record how long the stalking behaviour then continued, nor did they attempt to isolate predictors of recidivism. Rosenfeld (2003) did examine factors associated with stalking recidivism in his New York study. He found that ex-intimate partners and those with personality disorders were most likely to be charged with further stalking offences, indicating that these individuals might be more persistent in their stalking behaviour. Unfortunately in both studies it is impossible to determine whether subsequent stalking behaviour was the result of a persistent stalking episode or recurrent stalking.

In the authors' clinic, we refer to multiple intrusions within a single episode of stalking as persistence rather than recidivism or recurrence, as clinical management benefits from considering ongoing stalking as a single episode with common causative factors. Distinguishing between persistence, recurrence, and recidivism may appear pedantic, but it is important to differentiate between persistent stalkers and recurrent stalkers when choosing what management strategies to pursue. Using the term recidivism tends to conflate the two types of stalking behaviour.

A persistent stalker is one whose behaviour continues in spite of intervention (there may be fluctuations in intensity, but there are no significant periods when the stalker poses a risk but does not intrude). Persistent stalkers are defined by the fact that they continue to harass the victim in the face of interventions intended to make them desist; they do not voluntarily cease their harassment, their aims are merely occasionally thwarted by other parties. A recurrent stalker differs in that they have chosen to cease their previous stalking behaviour for some reason. Their motivation to desist may be aided by the presence of a legal injunction, medication, or the victim having a threatening new partner, but for whatever reason, they decide to refrain from intruding upon the victim. The new stalking episode, which may be against the same or a different victim, usually signifies a return to the thought and behaviour patterns seen in the previous episode.

Often, persistence can only be differentiated from recurrence during a clinical assessment, yet making this determination is important as management strategies may differ significantly between the two groups. For example, the recurrence of stalking behaviour may signify non-compliance with antipsychotic medications which, when taken, suppress psychotic symptoms that drive the stalking. Management in such a case could be as (relatively) simple as ensuring the patient complies with medication, preventing a persistent episode from developing. Conversely,

a stalker whose delusional beliefs persist despite appropriate antipsychotic medication could not be managed effectively by ensuring medication compliance. Such a stalker may persist in the face of this type of mental health intervention, meaning that other management strategies, such as legal or more restrictive mental health interventions, might be necessary.

Highly persistent stalkers often require the greatest resources, as management is more intensive and frequently requires involvement of multiple agencies. Persistent stalkers are likely to return to the criminal justice system on several occasions with a variety of other charges (such as breach of restraining order, property damage, and assault), costing society a considerable sum. This is borne out within the authors' publicly funded clinic where some stalkers are subject to new charges relating to their behaviour even whilst they are being managed under court order for the original stalking offence. Many of these individuals require ongoing management over the course of many months or even years while they continue to intermittently intrude on the victim.

Given the costs of persistent stalking to victims, perpetrators, and society generally, it would be useful if those stalkers presenting the greatest risk of persistent intrusive behaviour are recognised at an early stage so that management resources can be directed appropriately. Due to the lack of prior research, the present study was exploratory and sought to establish whether specific characteristics of stalkers and stalking episodes were associated with increased persistence of stalking behaviours. Based on the findings of the small body of existing research, it was hypothesised that stranger stalkers would be least persistent and acquaintances and ex-intimates most persistent.

## METHOD

### Participants

Data were collected from stalkers referred to a community forensic mental health clinic between 2002 and 2007. Referral came from courts, community corrections services, other mental health services, and in two cases, following self-referral. Inclusion criteria were the presence of a stalking offence under section 21A of the Victorian *Crimes Act* (1958), or evidence of multiple intrusive behaviours. Patients were excluded if their mental state, intellectual functioning, or language difficulties precluded the possibility of obtaining fully informed consent. Data were collected from evaluations by the authors, who assessed or managed 180 of the 200 stalkers in the sample. Collateral information was gathered from patient files, referral information, and police reports.

### Procedure

Stalking behaviour was recorded as forms of unwanted communication (consisting of telephone calls, written correspondence, mobile phone text messages, ordering or cancelling goods and services, and sending unsolicited materials) and unwanted contact (including loitering or spying, stalking by proxy, following, approach, property damage, and entering the victim's home). Additionally, the presence and nature of explicit threats and/or violence was recorded.

Mental disorder was recorded using the DSM-IV-TR (American Psychiatric Association, 2000) nosology. Personality disorder was recorded in the presence of either a diagnosis or problematic traits based on clinical examination and psychometric testing (MMPI-2 or MCMI-III).

Stalkers were classified by motivation type according to the Mullen, Pathé, Purcell, and Stuart (1999) typology into 'rejected', 'resentful', 'intimacy seeking', 'incompetent suitor', or 'predatory' using the decision tree provided in Mullen et al. (2006) to maintain rating consistency. Where motivational type was ambiguous, the case was discussed by the clinical team (including the authors) and the majority decision accepted. To determine inter-rater reliability in classification, seven cases were distributed between five clinicians trained in the typology. Agreement on motivational type was reached in 92% of cases, with only one clinician disagreeing with classification of one case. Stalkers were also classified by relationship type per Pathé (2002) and alternatively, Mohandie et al. (2006), to ascertain whether motivational type or prior relationship provided greater predictive value (the Mohandie typology was simplified into ex-intimate, acquaintance, and stranger due to the infrequency of public figure stalking in the sample [ $n = 4$ ]).

The duration of stalking was considered as greater or less than 2 weeks, greater or less than 12 weeks, and greater or less than 52 weeks. Persistence was dichotomised at a number of temporal points for two reasons. First, the distribution of episode persistence was severely positively skewed, as can be seen by the descriptive statistics in the 'Results' section. This violated the assumption of multivariate normality required for conducting a linear regression with persistence as a continuous dependent variable. Second, there are practical and theoretical reasons for categorising persistence. A tenet of the risk management literature is that the most resources should be directed towards those presenting the greatest risk (Andrews, Bonta, & Hoge, 1990). In this context, the greatest risk refers to prolonged stalking with the potential to cause significant psychosocial damage. Any predictive model should therefore be able to differentiate between those presenting low, moderate, and high risk, so as to allow for the best

allocation of resources for management. Analysing persistence as a single continuous variable, while useful for research purposes, does not make for a terribly effective predictive model in a clinical setting. An example standardised regression equation with persistence as a single continuous variable might be:

$$\begin{aligned} \text{Predicted stalking duration} = & .36 \text{ Follow} \\ & + .07 \text{ Telephone call} \\ & + .87 \text{ Psychosis} \end{aligned}$$

where the figure preceding each predictor variable is the standardised regression coefficient ( $\beta$ ). Using this model, if all other values were held constant, the predicted duration of the stalking episode would increase by .36 of a week if following was present, by .07 of a week if the stalker made telephone calls, and by .87 of a week if the stalker had a psychotic disorder. Such a model would be complex to apply in practice and its application constrained by the characteristics of the originating sample. Furthermore, knowing that persistence is predicted to increase by a matter of days to weeks is not overly useful when deciding who poses the greatest risk over the medium to long term. It is more informative for a clinician to determine whether a particular stalker has characteristics shown to be associated with low, moderate, or high persistence in a broader stalking sample.

The 2-week cut-off was chosen based on the results of Purcell et al. (2004), and a 12-week cut-off based on Purcell's (2001) finding that 70% of stalking episodes ended within 3 months. A final cut-off of 52 weeks was chosen arbitrarily, although grounded in the belief that 1 year is a meaningful period of time for both victims facing an extended period of stalking, the individual engaging in the pursuit, and professionals dealing with the stalker.

## Analyses

Univariate analysis was by way of odds ratios and  $\chi^2$  likelihood ratio tests, and a series of multivariate logistic regressions were undertaken with the various duration categories as dependent variables. Individual predictors were selected for the regression equation if the relationship shown by the  $\chi^2$  value was significant at  $p < .25$  (per Hosmer & Lemeshow, 2000). To control multicollinearity, predictors were only entered into the regression equation if they were correlated with other predictors  $< .3$ . Where a larger correlation existed, one variable of the pair was chosen for inclusion based on greater clinical utility. Receiver operating characteristic (ROC) analysis was used to ascertain the predictive accuracy of the full logistic regression models (see Mossman, 1994, for a review), and also the predictive accuracy of improper models. An

improper model is one where the weights assigned to variables are obtained by a non-optimal method—in this case, they were all made equal to one. By setting the weights equal to one and retaining only the direction of the relationship to the criterion variable, the influence of sample-specific variance is reduced and the model may have greater applicability outside the originating sample (see Dawes, 1979, for discussion of improper models).

## RESULTS

### Descriptive Statistics

#### *Demographic Characteristics*

Inclusion criteria were met by 221 individuals, although 21 refused to participate. One hundred and seventy-eight of the sample of 200 were male (89%). Ages ranged from 19 to 76 ( $m = 35.9$ ,  $SD = 10.7$ ). One hundred and eighty-nine (94%) identified themselves as heterosexual, and 136 (68%) were single at the time of interview. Only 22 (11%) were partnered at the time of the stalking episode. Forty-nine (24.5%) participants had never had a relationship lasting longer than 12 months, a further 71 (35.5%) had had one such relationship, and the remainder had maintained multiple relationships lasting longer than a year. Only 73 (37%) stalkers had completed secondary schooling, and the sample was evenly divided between those in full time employment (82; 41%) and those who were unemployed (68; 34%), with an additional 20 (10%) reporting part time employment and 30 (15%) receiving some form of government pension. Twenty-one (10%) stalkers spoke English as a second language.<sup>1</sup>

#### *Nature of Stalking Behaviours*

Duration of stalking ranged from less than 1 week to 832 weeks (mean = 58.3, median = 14, mode = 4). Descriptive statistics for duration by stalker motivation type and relationship type are shown in Table 1. The mean number of harassment methods was 3.4 ( $SD = 1.8$ ). The most common forms of unwanted communication were telephone calls ( $n = 104$ ) and written missives (e-mails, letters, or faxes;  $n = 61$ ). Mobile text messaging (SMS),

<sup>1</sup> Information about the racial and ethnic breakdown of the sample was not available as this information was not collected at the community mental health clinic. This is typical of Australian settings where division into 2–3 broad ethnic groupings is not particularly relevant due to the multicultural nature of the society. Australian medical settings only tend to record indigenous ethnicity as a matter of course, and there were no indigenous Australians in the current sample.

**Table 1** Descriptive statistics for stalking duration (in weeks) by motivational and relationship category

	<i>n</i>	Median	Mode	<i>m</i>	<i>SD</i>
Intimacy seeking	27	77	260	164.7	187.5
Incompetent suitor	37	8	1	13.9	19.4
Rejected	70	18	4	42.6	56.9
Resentful	46	25.5	4	74	121
Predatory	19	2	1	16.2	36
Ex-intimate	69	20	4	45.7	61.7
Stranger	61	7	1	25.5	63.6
Acquaintance	70	32.5	4	99.6	151.1

present in 31 cases, was almost wholly the domain of ex-intimate stalkers, who accounted for 81% of harassing SMS. Unwanted contact was most frequent in the guise of loitering near or spying on the victim (*n* = 95) or approaching them in a public place (*n* = 77). Approaches were usually attempted introductions or reconciliations and generally made without hostile intent. Following the victim or entering their home were less common, although still occurred in a significant proportion of cases (19.5% and 14.5%, respectively).

Explicit threats were made by 97 stalkers (49%). Forty-seven individuals (24%) directed threats towards the primary victim, 12 (6%) to a third party, and 38 (19%) to both victim and a third party. Attacks were made by 37 stalkers (18.5%). In 25 (13%) instances, violence was against the primary victim, in 8 (4%) against a third party (such as a member of the victim’s family or a police officer), and in 4 (2%) against both primary victim and a third party. Violence usually involved slapping, hair-pulling, and pushing; however, there were nine cases of serious violence, involving attempted murder, rape, siege situations, and attacks against victims with knives or other weapons.

*Relationship to Victim and Motivational Type*

The sample was evenly divided between ex-intimates (34.5%), strangers (30.5%), and prior acquaintances (35%; including casual, workplace, or professional contacts, neighbours, and estranged family or friends). Each motivational category was principally composed of a particular relationship type; rejected by ex-intimate (90%), incompetent and predatory by strangers (73 and 94%, respectively), and resentful and intimacy seeking by acquaintances (69 and 74%, respectively). Breaking acquaintances down further using Pathé’s (2002) categorisation showed that intimacy seekers usually stalked professional contacts (42% of all intimacy seeking acquaintances), while resentful stalkers were equally likely to target any acquaintance type.

*Psychiatric Status*

A diagnosis was made in 167 cases (83.5%) and 40 individuals (20%) were diagnosed with personality disorder or problematic personality traits alone. Intellectual disability was present in 13 cases (7%). Multiple diagnoses were common, both between different Axis I disorders and between Axis I and II disorders. Fifty-two stalkers (26%) had both an Axis I and a personality disorder diagnosis, most commonly substance use disorder (27% of comorbid diagnoses), but also frequently depression or a psychotic illness (23% and 19%, respectively). Schizophrenia was the most common Axis I disorder (16% of the sample), closely followed by depression (14%) and substance use disorder (11%). Delusional disorder (erotomantic type) was present in six cases (3%).

*Prior Stalking, Violence, and Threats*

Sixty-five stalkers (33%) had previously engaged in stalking behaviours, 19 of these against the same victim. Forty-one (21%) had previously made explicit threats outside the context of the current stalking episode, and 81 (41%) presented with evidence of previous violent behaviour.

**Analysis of Duration**

*Less than 2 Weeks*

The majority of stalkers (87.5%) persisted beyond 2 weeks, making it most useful to try to identify those who desisted within this time. Logistic regression showed this brief duration was associated with stalkers who were single, strangers, aged under 30, and who followed the victim but did not communicate through writing (see Table 2). The

**Table 2** Logistic regression model for stalking duration less than 2 weeks

	$\beta$	Wald	<i>p</i>	OR	95% CI
Stranger	1.0	4.1	.04	2.7	1.0–7.1
Single	1.5	5.6	.02	4.6	1.3–16.5
Following	1.0	3.5	.06	2.7	.95–7.7
Writing	–2.4	5.3	.02	.1	.01–.70
Aged more than 30	–1.2	5.6	.02	.3	.11–.82
Constant	1.8	2.2	.13	6.1	
Goodness-of-fit statistics		<i>df</i>	$\chi^2$		
Model		34.6	5	.00	
Hosmer-Lemeshow		6.5	6	.4	
Nagelkerke <i>R</i> <sup>2</sup>		.3			

results of ROC analysis of the full model produced an AUC = .84 (95% CI = .76–.92). Conversion to an improper model caused only slight attenuation, with an AUC = .81 (95% CI = .72–.91), indicating that the model may be robust in other samples.

#### More than 12 Weeks

One hundred and seven stalkers (53.5%) persisted beyond 12 weeks (median duration 52 weeks, modal duration 104 weeks). Partial correlations controlling for motivational type were calculated, revealing that many of the significant associations between individual predictors and stalking duration longer than 12 weeks could be explained by the stalkers' motivational type. The only behavioural variables to retain a statistically significant relationship to stalking duration were writing to the victim ( $r = .17$ ,  $p < .05$ ), sending them unsolicited materials ( $r = .20$ ,  $p < .01$ ), and previous stalking of the same victim ( $r = .16$ ,  $p < .04$ ). Logistic regression showed that stalkers who were single, aged over 30, had completed secondary school, stalked with an intimacy seeking motive, and sent unsolicited material to their victim were most likely to persist past 12 weeks (see Table 3). Receiver operating characteristic analysis produced an AUC = .76 (95% CI = .70–.83) for the full model, and AUC = .75 (95% CI = .68–.82) for the improper model.

The rejected stalker group were divided between those who stalked for less than 12 weeks ( $n = 30$ ) and those who stalked for more ( $n = 40$ ), meaning that neither the motivational type nor the relationship category had predictive value. Logistic regression showed that an ex-intimate partner aged over 30, with problematic personality traits or personality disorder who loitered near or spied upon, and wrote to their victim, was the most likely to continue past the 12 week threshold (see Table 3). This combination of characteristics was shown to have a good predictive accuracy in ROC analysis, with an AUC = .75 (95% CI = .64–.87) for both the full and improper models.

#### More than 52 Weeks

Only 53 stalkers (26%) persisted for longer than 1 year. Significant correlations between predictor variables limited the number of variables that could be entered to the logistic regression. The final analysis produced the model shown in Table 4, which combines an intimacy seeking motivation, prior acquaintance relationship, and age over 30, with female stalker gender and the presence of prior threats to predict stalking duration of longer than 52 weeks. The ROC curve produced an AUC = .72 [95% CI = .64–.80] for the full model, and AUC = .70 [95% CI = .62–.78] for the improper model. Identical AUCs were obtained by

**Table 3** Logistic regression models for stalking duration greater than 12 weeks amongst the whole sample and only rejected stalkers

Whole sample	$\beta$	Wald	$p$	OR	95% CI
Aged over 30	.9	6.7	.01	2.6	1.3–5.2
Intimacy seeking	1.8	7.2	.01	5.9	1.6–21.4
Finished high school	.8	6.3	.01	2.3	1.2–4.5
Single	1.2	2.4	.02	3.6	1.2–10.8
Unsolicited materials	1.2	5.6	.02	3.2	1.2–8.3
Constant	–1.1	10.1	.00	.3	
<hr/>					
Goodness-of-fit statistics	$df$	$\chi^2$			
Model	41.7	5	.00		
Hosmer-Lemeshow	6.1	6	.95		
Nagelkerke $R^2$	.26				
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Rejected stalkers	$\beta$	Wald	$p$	OR	95% CI
Aged >30	1.4	3.9	.05	4.0	1.0–15.5
Personality disorder	1.1	3.9	.05	3.1	1.0–9.4
Ex-intimate relationship	1.8	3.2	.07	6.2	0.9–44.5
Loiter/spy	1	2.7	.10	2.6	0.8–8.0
Writing	1.4	4.6	.03	4.1	1.1–15.1
Constant	–3.8	7.9	.01	.02	
<hr/>					
Goodness-of-fit statistics	$df$	$\chi^2$			
Model	18.4	5	.00		
Hosmer-Lemeshow	2.4	8	.97		
Nagelkerke $R^2$	.30				

substituting psychosis for intimacy seeking motivation, indicating that these two variables may capture the same offenders.

While intimacy seekers were overrepresented amongst those who stalked for longer than a year (17 of 53; 32%), 36 stalkers with non-intimacy seeking motivations also continued past the 52 week threshold. This group were analysed separately and logistic regression (shown in Table 4) identified the combination of resentful motivation, a prior professional relationship with the victim, age over 30 and completion of high school as having a satisfactory level of correct classification. The full model AUC = .70 (95% CI = .60–.80), and the improper model AUC = .69 (95% CI = .59–.79). Although no predictors were correlated  $>.3$  (to overcome issues of multicollinearity), there was a significant correlation of  $r_{pb} = .28$  ( $p < .05$ ) between a resentful motivation and prior professional relationship, indicating that these two variables may not contribute significant independent information to the model.

**Table 4** Logistic regression models for stalking duration greater than 52 weeks amongst whole sample and non-intimacy seeking stalkers only

Whole sample	$\beta$	Wald	$p$	OR	95% CI
Aged more than 30	.7	2.4	.12	2.0	0.8–4.7
Female stalker	1.0	3.4	.06	2.4	1.0–5.3
Prior threats	.86	4.4	.04	2.4	1.0–7.5
Intimacy seeking	1.9	14.4	.00	6.7	2.5–17.8
Acquaintance	.8	4.2	.04	2.2	1.0–4.6
Constant	–2.5	29.1	.00	.09	
<b>Goodness-of-fit statistics</b>					
Model	$df$	$\chi^2$			
Hosmer-Lemeshow	5	37.5	.00		
Nagelkerke $R^2$	2.0	5	.85		
	.25				
Non-intimacy seeking	$\beta$	Wald	$p$	OR	95% CI
Aged more than 30	1.0	3.6	.06	2.7	1.0–7.7
Professional relationship	.9	1.7	.20	2.5	0.6–10.4
Resentful	.7	2.3	.13	1.9	0.9–4.3
Completed high school	.7	2.6	.10	1.9	0.9–4.3
Constant	–2.6	26.7	.00	.07	
<b>Goodness-of-fit statistics</b>					
Model	$df$	$\chi^2$			
Hosmer-Lemeshow	4	16.0	.00		
Nagelkerke $R^2$	4	2.4	.66		
	.14				

**DISCUSSION**

The persistence of stalkers in this sample was largely comparable with those gathered in other locations. The modal duration of 4 weeks echoed that found in both Purcell and colleagues’ (2002) community study, and Mohandie and colleagues’ (2006) large file-based review. The findings support those of prior studies which reported stalking duration to be predicted to some extent by the relationship between stalker and victim (Mohandie et al., 2006; Tjaden & Thoennes, 1998). As hypothesised, strangers stalked for the shortest period; however, there was a distinct difference in duration of stalking by acquaintance and ex-intimate stalkers. The majority of ex-intimate stalkers in this sample stalked for between 2 weeks and 1 year, with less than a quarter continuing past that point, while 42% of acquaintance stalkers persisted for over a year. Although prior relationship was a useful means of determining potential duration, this study shows that prediction can be improved by attending to

other aspects of the stalking situation, most notably, the stalker’s motivation, behaviour, and mental health status. Individual variables, like previous stalking of the same victim, were also strongly associated with a more persistent current episode. While only 19 stalkers repeatedly offended against the same victim, they were marked by unusual persistence, being over three times more likely to persist beyond 1 year. Combining these elements with the type of prior relationship to the victim may provide predictive models with greater sensitivity and wider clinical applicability.

**Limitations**

The study’s pseudo-prospective design impacts on its reliability and validity. Although information was drawn directly from participants, weeks or months had often passed since the stalking behaviours leading to referral had ceased. Furthermore, while file-based information was richly descriptive and from numerous sources (including psychiatric, psychological, nursing, legal, correctional, and police reports, as well as victim impact statements in some cases), the nature of the design meant that raters were not blind to the presence of criterion variables when recording potential predictors.

This research was clinically based in a forensic setting using a sample of stalkers that likely overestimates the prevalence of both mental disorder and the severity of stalking behaviour in the general stalking population. Participants are likely to be more disordered than individuals who intrude but do not come to the attention of forensic mental health services. The sample does, however, represent those stalkers most likely to come into contact with mental health professionals, making the sample composition a potential strength. This systematic evaluation was intended to assist others, who, like the authors, must treat and manage the behaviour of stalkers in a clinical context.

**Implications for Risk Assessment**

This study offers a potentially simple guide for clinicians who are trying to predict the duration of a stalking episode. Stalkers fall into one of three categories: those with low risk of persisting, who usually stop within days to a week or so, those who are moderately persistent, continuing for weeks to months, and those highly persistent stalkers who continue for more than 1 year.

Stalkers with a low risk of persisting tend to be individuals aged under 30, single, who are strangers to the victim, and follow but do not communicate with them. These characteristics are typical of predatory and incompetent suitor stalkers who stalk with the aim of obtaining

some sort of sexual gratification. Although they usually present low risk of persistent stalking, the incompetent often pose heightened risks of recurrent stalking, and the predatory of stalking violence (McEwan, Mullen, MacKenzie, & Ogloff, in submission; Morrison, 2007; Mullen et al., 2000).

The moderately persistent stalkers tended to be older than the general population of offenders, usually aged over 30. They most frequently pursued a prior acquaintance and were a workplace, professional, or casual contact, or a neighbour of the victim. They were usually motivated by resentment or a desire for intimacy and often pursued the victim by sending or leaving unsolicited gifts and other materials. Ex-intimate stalkers engaging in moderately persistent pursuit exhibited different behaviours, frequently loitering near or spying on their former partner or writing to them, and often evinced problematic personality traits which maintained their behaviour.

Highly persistent stalkers tended to be aged over 30, were a prior acquaintance, and had either an intimacy seeking or resentful motivation. When the stalker was motivated by resentment, prior professional contacts were at greatest risk of highly persistent stalking. Highly persistent stalkers frequently suffered from erotomaniac or paranoid delusions, often in the context of schizophrenia. They exhibited no unique behaviours, although the results of this study suggest that a history of explicit threats may be a useful risk factor in conjunction with the presence of the above features.

The other characteristic associated with prolonged persistence was female stalker gender. Stalker gender is problematic as a risk factor, as it appears to capture variance that is better explained by other potentially ameliorable risk factors, such as psychiatric diagnosis. Female gender and psychotic disorder were weakly although significantly correlated ( $r_{pb} = .17$ ,  $p = .02$ ), but female stalkers were 2.5 times more likely have a psychotic illness than male stalkers (incidence of 41% versus 19%). Psychosis was generally associated with greater persistence, but excluded from the final model due to a strong correlation with intimacy seeking motivation ( $r_{pb} = .63$ ,  $p < .00$ ), which was shown to add marginally more to the model overall. As well as greater incidence of psychosis amongst female stalkers, proportionally more women were diagnosed with erotomaniac delusions (14% versus 8%), which have previously been associated with longer periods of stalking than other disorders (Mullen et al., 2000). The preponderance of psychotic illnesses in female stalkers has been noted in past studies (Purcell, Pathé, & Mullen, 2001) and suggests that gender should be perhaps considered a secondary factor in persistent stalking, with other factors, such as diagnosis, being given more weight as they can be targeted in risk management strategies.

These models are prototypical examples of stalkers who do not persist, are moderately persistent, or are highly persistent. While they may assist judgments about the potential for very persistent stalking, clinicians must apply them with sound clinical sense, taking into account other protective and aggravating factors relevant to the specific situation. Understanding the context of the stalking situation is essential to conducting a thorough risk assessment, and involves identifying idiographic factors that may limit or exacerbate damage to victim and stalker. Examples of such protective factors include the stalker having no knowledge of the victim's location; the stalker not having access to a telephone or the Internet; or the underlying delusional system motivating the stalking being currently well managed. Examples of aggravating factors include the stalker and victim sharing children or assets, increasing the opportunity for contact; or the stalker losing employment, potentially exacerbating illness such as depression, and allowing more time for stalking behaviour. Factors such as these are often specific to the situation at hand and should be considered when making an overall assessment about the potential persistence of a stalking episode.

### Implications for Management of Persistent Stalkers

Once a stalker has been identified as posing a moderate or high risk of persistence, the assessment should guide management of those factors thought to perpetuate their stalking behaviour. These might include dynamic factors highlighted in the above models (i.e., personality disorder, delusional belief systems, and the thoughts and beliefs that underlie resentful, rejected, and intimacy seeking motivations) as well as other dynamic idiographic factors (e.g., social incompetence, affective disorder that impacts on the stalker's thoughts and behaviour, or unavoidable ongoing contact with the victim). Management of stalkers posing a moderate to high risk of persistence will often require the involvement of multiple clinicians and agencies, including psychologists, psychiatrists, case managers, police, community corrections, and courts.

Treatment of stalkers usually occurs in the context of a court order as stalkers rarely present voluntarily for assistance. This provides the clinician with some room to challenge the cognitions that rationalise and justify the stalking behaviour from the very beginning of treatment. In our experience, intervention will often require early implementation of some form of behavioural management plan, devised in concert with the stalker. Such a plan might focus on precipitants of specific stalking behaviours, including identifying situations, thoughts, and emotions that precipitate an unwanted communication or contact, emphasising the negative consequences of pursuing that behaviour, and offering a positive alternative behaviour for

the stalker to engage in. This type of strategy is most likely to be useful for rejected stalkers seeking some form of reconciliation with the victim. For those who derive enjoyment or a feeling of righteousness from the stalking behaviour, this type of intervention is likely to be less successful, although remains a necessary first step.

If the clinician becomes aware that the stalker is persisting in their harassment during treatment, action needs to be taken to ensure the victim's safety. If it is determined that there is a risk of imminent violence, the police and referral source need to be notified and the victim warned. If the continued stalking is psychosis driven, it is necessary to establish the stalker's compliance with medication, if any. If they are taking the medication as prescribed, a medication review is required. If they are not compliant and local mental health laws permit, treatment may be mandated. If risk to the victim and stalker cannot be managed effectively in the community, the stalker may need to be hospitalised on either a voluntary or involuntary basis, until their mental state is stabilized. Alternatively, it may be necessary to seek legal recourse. In the experience of the authors, this is sufficient in some cases to bring an end to the harassment. However, if the stalker is already under legal order then harsher sanctions, such as incarceration, may be necessary. Therefore, it is essential that clinicians working with stalkers are familiar with the anti-stalking legislation, and the status of restraining orders, in their jurisdiction. Equally important is an understanding of how this legislation is applied in practice and what legal sanctions and services are available to assist in management of extremely persistent stalkers.

As with management of any ongoing problematic behaviour, management of persistent stalking is a case of building motivation for behavioural change, and then assisting the individual to act. Where there is no desire to change the problem behaviour, management often takes the form of ongoing legal intervention, until the stalker decides that the costs of continued stalking outweigh the benefits and either begins to engage with agencies trying to assist them, or stops voluntarily. Some of those who cease stalking only because of its legal consequences (such as some incompetent suitors and rejected stalkers) could pose an increased risk of recurrent stalking, as they are without strategies to manage similar situations in the future. Research is required investigating what works in the treatment of stalkers, and what predicts recurrence of stalking behaviour.

### Persistence and Violence in Stalking Situations

This study concerned only one facet of risk in stalking situations. It is evident that victims and perpetrators also face risks associated with stalking violence and stalking

recurrence. Analyses of stalking violence in this sample (described in McEwan et al., in submission) suggest that the risk of persistence is inversely related to the risk of violence. Predatory stalkers were amongst the least persistent but were the most likely strangers or acquaintances to commit an assault (21.1%). Conversely, those responsible for the longest stalking episodes in this sample, the intimacy seekers and resentful stalkers, rarely assaulted (incidence of 5.4%). This should not be taken as an indication that individuals with resentful or intimacy seeking motivation are always at low risk of violence, but does suggest that amongst non-rejected stalkers, increased time at risk is not associated with a higher rate of violence. Similarly, the 17 (24%) rejected stalkers who were highly persistent were significantly less likely to assault than those who were moderately persistent or did not persist (OR = .2, 95% CI = .03–.78). Twenty-four of the remaining 53 rejected stalkers assaulted, half of these in the first 12 weeks of the stalking episode and the remainder within a year of beginning stalking. Over the entire sample, assaults were 2.5 times more likely to occur amongst stalkers who desisted within 6 weeks (95% CI = 1.2–5.3). While this is an interesting finding, it is confounded by fact that those who assaulted were probably more likely to be brought to the attention of the police, potentially halting their stalking behaviour. This finding needs to be investigated in a random community sample of stalking victims to determine when violence is most likely to occur, and whether it often occurs on more than one occasion.

### Conclusion

Competent stalking risk assessment should highlight factors that are most important (causal) to a stalker's particular pattern of behaviour, provide guidance as to their management, and be repeated with sufficient frequency so as to be sensitive to change. They must also address the multiple domains of risk present in stalking situations. This study demonstrates that there are specific characteristics of stalkers and stalking episodes associated with variations in stalking persistence. These factors can be used to identify stalkers who pose the greatest risk of persistent stalking behaviour, and consequent psychological and social damage to victims. Incorporating persistence into risk assessment and management will allow forensic clinicians to provide informed risk management plans that can direct appropriate intervention measures for perpetrators, victims, law enforcement, and the judiciary.

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