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Persistence in stalking: a comparison of associations in general forensic and public figure samples

David V. James[a]*, Troy E. McEwan[b], Rachel D. MacKenzie[c],
J. Reid Meloy[d], Paul E. Mullen[c], Michele T. Pathé[e], Frank R. Farnham[a],
Lulu F. Preston[a] and Brian J. Darnley[a]

[a]*North London Forensic Service, London, EN2 8JL, UK;* [b]*Centre for Forensic Behavioural Science, Monash University, Victoria, Australia;* [c]*Victorian Institute of Forensic Mental Health, Melbourne, Australia,* [d]*University of California, San Diego, USA;* [e]*University of Queensland, Herston, Australia*

In stalking research, the risk domain of persistence concerns the likelihood that intrusive behaviours will continue towards the same target. This is a major source of anxiety to victims, and is of practical importance in the allocation of expensive protective resources. This study examines the associations of persistence in two different samples: a public figure sample concerning inappropriate communications and approaches to members of the British Royal Family, and a sample concerning similar behaviours in a general forensic population. Despite differences in methodology and definition, factors associated with persistence proved similar: psychotic illness, intimacy-seeking motivation and multiple or intrusive forms of communication. The results contribute to the emerging literature on the common ground between risk associations in general population and in public figure samples. They underline the prime importance of motivation and of mental health issues in assessing and managing risk. We recommend the adoption of a common conceptual framework in future research.

Keywords: stalking; risk assessment; threat assessment; persistence; fixated; public figure

Introduction

Unwanted contacts and intrusions are experienced not only by the general population and by celebrities of the entertainment world, but also by the prominent, such as politicians and heads of state. Where the victims are

*Corresponding author. Email: david.james5@ntlworld.com

members of the public or celebrities, this phenomenon has generally been termed 'stalking'. The literature on harassment and threats to public figures has grown separately from that on stalking in other groups, perhaps because of the concentration in the US research on attack and assassination, which are extremely rare (Meloy et al., 2004), rather than the more mundane, but nevertheless destructive, effects on individuals or their protection staff of the intrusion, anxiety and sense of threat that stalking behaviours produce.

In cases of harassment or inappropriate attention to public figures, as in stalking in general populations, the question as to whether or not the intrusive behaviour is likely to continue is a central one. Uncertainty as to the future creates anxiety and distress in victims. To those charged with their protection, the issue is of practical importance. Specifically, it is desirable to have some indication as to whether abnormal attention is likely to represent a self-limiting episode or to become an entrenched behaviour, in order most effectively to allocate expensive protective resources. This domain of risk, the likelihood that intrusive behaviours will continue, is referred to as 'persistence' (MacKenzie et al., 2009; McEwan et al., 2009).

Although the harassment of the prominent differs in certain aspects from stalking of other groups, it is desirable that it should be encompassed in the stalking discourse in order that important insights obtained in the study of one group should not be lost to the other. To accomplish such an integration of the two fields, it is necessary to adapt the definition of stalking to the public figure arena and to exclude a specific sub-group of general stalking cases from any comparative endeavour. The fact that public figures may not be made aware of worrying correspondence or approaches, as these may be filtered out by layers of protective security, necessitates a re-framing of the definition of stalking with respect to the prominent as: 'Repeated attempts to make inappropriate communications, contact or approach in a manner which creates concerns and/or fear, either in the public figure or those that protect them' (Mullen, Pathé, & Purcell, 2009, p. 197). Second, it is necessary to take account of the fact that an important proportion of general stalker cases are ones involving the rejection of the stalker by someone with whom they have previously had sexual relations. While public figures are far from immune to troubles in their private lives, such cases are few and far between in public figure stalking samples. For this reason, it is necessary for any comparison of public figure samples with general population samples to exclude from the latter cases involving previous sexual partners.

In the general stalking literature, findings about persistence are available both in epidemiological data (Budd & Mattinson, 2000; Purcell, Pathé, & Mullen, 2002; Tjaden & Thoennes, 1998) and in forensic case samples (McEwan et al., 2009). However, these are not directly comparable with

public figure samples, because of their inclusion of substantial proportions of ex-intimate cases. In addition, the only study that examines statistical associations of persistence is that by McEwan and colleagues. The current study examines two issues. First, it investigates the associations of persistence in a sample of those intruding inappropriately, through approach or communication, into the lives of the British Royal Family (James et al., 2009). It examines the differences between 'one-off' intrusions and those that persist. Second, it considers the associations of persistence in a sample of stalkers from a problem behaviours clinic (Warren, MacKenzie, Mullen, & Ogloff, 2005), from which cases involving previous sexual contact have been excluded. This enables it to be established whether there are associations of persistence which are common to both groups.

Comparisons between different studies in this area are rendered more complicated by the absence of a common terminology and differences in the ways in which data are collected. The current study is no exception. However, such exercises in comparison have been shown to be both possible and fruitful in this field (Meloy et al., in press), which is as yet underdeveloped. The aim of the current endeavour is to indicate directions for future research exercises, of which definitional commonality may be a feature.

Method

Origins of the samples

(1) Public figure sample

The source material comprised 5702 files held by the UK Metropolitan Police Service on individuals who had engaged in inappropriate or threatening communications or intrusions towards the British Royal Family and their residences or public appearances between 1988 and 2003. These files concerned cases which had triggered police intervention, either in consequence of inappropriate approach or because communications deemed inappropriate by those that filtered them had been referred on to the police. The original pool of 5712 files was read, sorted and divided into behavioural groups – those that only corresponded; those that both corresponded and approached, without attempting to breach security barriers; those that approached in similar fashion, but did not correspond; those that tried unsuccessfully to breach security barriers and those that did so successfully (James et al., 2009). A random stratified sample was drawn from the file pool until approximately 50 cases had been selected from each group. A final sample of 275 cases was obtained. A 125-item data sheet was completed on each case, comprising demographic and historical items, descriptors of behaviour, mental state items and psychiatric and offending histories. Data were entered into an SPSS database for analysis.

(2) General forensic sample

The sample comprised stalkers referred to a community forensic mental health clinic between 2002 and 2007 by courts (36%), community corrections services (36%) and mental health services (27%), there being in addition two self-referrals (1%).

All stalkers underwent a prospective, detailed semi-structured interview and were evaluated using a number of standardised psychological instruments (McEwan et al., 2009; Mullen et al., 2007). Patients were excluded if they were unable to give informed consent. Collateral information was obtained from medical records and police reports. The full sample comprised 211 cases. For the current study, those cases in which the stalkers had had previous sexual relations with the victims were excluded. This gave a final sample size of 140 cases.

Measures of persistence

(1) Public figure sample

Persistence was defined as whether or not the behaviour comprised a single, 'one-off' incident or multiple incidents. Cases were considered in terms of those involving repeated communication and those that involved repeated approach, the two categories not being mutually exclusive. The repeated approach cases by definition involved individuals who had been warned by police to desist from their behaviour. Both communication cases and approach cases were then combined into a single variable, in order to enable comparison with the general sample.

(2) General forensic sample

Persistence was considered as a single item, which did not distinguish between communications and approaches. Persistence was measured according to three cut-off points: behaviours that persisted for more than 2 weeks, more than 12 weeks and more than 52 weeks. These cut-offs were chosen from consideration of the findings of Purcell et al. (2002, 2004). These authors identified 2 weeks as the cut-off beyond which the continuation of intrusive behaviours might justifiably be termed stalking, and found that 70% of stalking episodes ended within 12 weeks. The final cut-off of 52 weeks was chosen arbitrarily, although grounded in the belief that 1 year is a meaningful period of time for victims facing an extended period of stalking, the individual engaged in the pursuit and professionals dealing with the stalker. In all cases, the behaviours persisted despite warnings that this should not occur. Where stalkers were referred by courts or corrections, they were initially warned about the inappropriate nature of

their behaviour by the police. Among those referred from general mental health services, warnings typically came from health professionals and in some cases directly from victims. The two self-referrals had previously had contact with the police for stalking matters and were aware they were beginning to engage in similar behaviour again.

Motivational typology

The general forensic sample was classified according to the motivational typology of Mullen, Pathé, Purcell, and Stuart (1999) and Mullen, Pathé and Purcell (2009), which divides stalkers into five groups: the Resentful, Intimacy Seekers, Incompetent Suitors, the Rejected and Predators. The Royal Family sample was classified according to the public figure adaptation of that typology (MacKenzie et al., 2009), which adds three further groups: Help Seekers, Attention Seekers and the Chaotic. It should be noted that the Rejected group does not include those angry at perceived rejection from delusional relationships. The basis of the typology is that the underlying motivation is what determines risk, and cases where the relationship is delusional are therefore classified as Intimacy Seekers. Real and delusional relationships are fundamentally different, resulting in different associations and different patterns of risk.

Data analysis

A common procedure was adopted with both samples. To determine differences between groups on categorical variables, analyses were performed using Pearson's chi-square (χ^2) where the appropriate assumptions were met. Where assumptions were violated, exact tests were used.

Effect sizes were also calculated for each measure of association, because the group sizes in some of the analyses performed were uneven and some relatively small, thus reducing power and increasing the probability of making Type II errors (i.e. failing to detect relationships where these exist). The use of effect sizes enabled interpretation of the data beyond, and independently of, the information provided by p values (Cohen, 1992), providing further indications as to the strength of associations. The measure of effect size used for 2×2 analyses was phi (ϕ) (Siegel & Castellan, 1988). Odds ratios were calculated with 95% confidence intervals.

To identify potentially useful predictive models, multivariate logistic regression was undertaken on one data set each for the two study groups, chosen according to its apparent discriminant strength. The predictors identified in the logistic regression were then used to construct improper models and the discriminatory accuracy of these models was separately assessed. Individual predictors were selected for the regression equation if their univariate association was significant (significant odds ratio and

χ^2 significant at $p < .25$ [per Hosmer & Lemeshow, 2000, p. 95]). Discriminatory accuracy of the improper models was assessed using receiver operating characteristic (ROC) curve analysis. The area under the curve (AUC) in a ROC analysis is taken to indicate the probability that a randomly selected case from the group with the outcome variable will have a greater number of predictors included in the model than a randomly selected case without the outcome variable (i.e. the true positives as a function of the false positives, or sensitivity as a function of 1 – specificity). An improper model is one where the weights assigned to variables are obtained by a non-optimal method. Here, all were made equal to one. By setting the weights equal to one and retaining only the direction of the relationship of each predictor to the outcome variable, the influence of sample-specific variance is reduced and the model is more easily applied and tested outside the originating sample (Dawes, 1979; Dawes & Corrigan, 1974).

Multiple testing

Persistence in stalking is a virtually unexplored area. The purpose of the exercise was an exploration of possible associations, rather than the testing of hypotheses. As such, multiple testing was used. No corrections to significance values were incorporated in order to compensate for multiple testing. In consequence, conclusions drawn in the account below from *p* values larger than 0.01 should be treated with caution.

Results

Description of samples

(a) Royal Family sample

(i) Approachers. There were 222 approachers. One hundred and sixty (72.1%) were males. The mean age was 39.1 (range 15.1–84.8; *SD* 12.8). Seventy-six cases (34.2%) had a criminal record. Eighty (36.0%) had also engaged in some form of communication. Ninety-eight (44.1%) had engaged in repeated approach. Twenty (9%) had come into proximity with a member of the Royal Family, 12 (5.4%) within 3 metres. Fourteen (6.3%) had a weapon in their possession when engaging in approach behaviour. Sixteen (7.2%) were assaultive towards third parties (police and security personnel).

A majority exhibited overt evidence of serious mental illness (193, 86.9%). Of the whole sample, 151 (68%) showed evidence of delusional beliefs and 135 (60.8%) of grandiosity. A minority felt persecuted (47, 21.2%). There was hostile or aggressive behaviour in 61 (27.5%), and 76 (34.2%) showed evidence of being rambling or limited in coherence. Homicidal ideation was apparent in only eight (3.6%) and suicidal ideation in seven (3.2%).

Of the approachers, 174 (78.4%) were fixated on a person and only 26 (11.7%) were clearly fixated on a cause. Motivational classification was available on 196 cases. Of these, 135 (68.5%) fell into the category of intimacy seeker, 19 (9.6%) resentful, 14 (7.6%) help seekers and 28 (14.2%) chaotic. Nearly half of the intimacy seekers (61) claimed (or believed themselves) to be close relations of the objects of their attention.

(ii) Communicators. There were 133 communicators, of which 66.4% were males. No data were available about age or criminal record in the majority of cases. Sixteen (12%) were threatening in content, 39 (29.3%) demanding and 14 (10.5%) abusive. A majority (82.7%) showed evidence of major mental illness, 90 (67.7%) were deluded, 73 (54.9%) grandiose, 78 (58.6%) were rambling or incoherent, 35 (26.3%) were feeling persecuted, seven (5.3%) expressed homicidal ideation and two (1.5%) suicidal ideation.

Of all communicators, 117 (88%) were fixated on a person. A third communicated only once. Motivational classification was available in 130 (98%). Of these, 94 (72.3%) fell into the intimacy seeking category, with 30 cases concerning beliefs that the individual was related to the Royal Family, 21 seeking sexual relationships and 21 seeking a non-sexual relationship. Nine (6.9%) fell into the resentful category, 14 (10.8%) were help seekers, and in 13 (10%) no singularity of purpose could be ascertained (the 'chaotic').

(b) General forensic sample

Of the 140 stalkers, 122 (87.1%) were males. The mean age was 35.6 (range 19–70; SD = 11). One-hundred and sixteen (82.9%) persisted beyond 2 weeks, 70 (50%) beyond 12 weeks, and 38 (27.1%) beyond 52 weeks. Fifty-one (36.4%) only communicated with the victim, 46 (32.9%) only engaged in approach and 43 (30.7%) used both approach and communication behaviour in their campaign. Threats were relatively common, being present in 51 cases (36.4%), but violence towards the victim occurred in only nine cases, and to a third party in three. Forty-four (31.4%) had a history of stalking behaviour, in nine cases against the same victim. Forty-eight had a history of violence and 22 a history of uttering threats (identified through police records and clinical interview).

The majority met criteria for at least one mental disorder (116, 82.8%), with personality disorder or marked problematic traits most prevalent (58, 41.4%). Cluster B disorders (antisocial, borderline, histrionic and narcissistic types) were identified in 25 cases and mixed personality disorder in 20 cases. Psychotic disorders were present in 40 cases (28.6%). Thirty-two were diagnosed with schizophrenic illnesses, 11 involving secondary erotomanic delusions. The remaining eight individuals had mono-delusional

disorders, six of erotomanic type, one persecutory and one unspecified. Other prevalent mental disorders were depression (10.7%), substance use disorders (10%), and paraphilias (8.6%). Suicidal ideation was present at the time of the assessment for 8.3%.

Motivational classifications could be made in 139 cases. Forty-five (32.1%) stalkers were classified as Resentful, 40 (28.6%) as Incompetent Suitors, 28 (20%) as Intimacy Seekers, 19 (13.6%) as Predatory and seven (5%) had a Rejected motivation in the absence of a previous sexual relationship.

Associations with persistence

Both study samples had collected similar groups of variables, although the number in the Royal Family study was greater. The results reported here include all the significant associations identified, except where two items were obviously repetitive and, in the general forensic group, the significance of relational groups (acquaintances versus strangers), gender of victim and years of schooling, as these were not comparable with the Royal Family sample.

(a) Royal Family sample

Associations for persistence are set out in Table 1 for three different groups: persistent communicators, persistent approachers and persistence in both categories combined. The principle associations of persistent communication and persistent approach were fixation on a person, overt mental illness, delusional beliefs, grandiosity and being in the Intimacy Seeking motivational group. Neither persistent communication nor persistent approach was associated with paranoia, hostility, suicidal ideation, homicidal ideation or the help-seeking motivational group. Unlike persistent communication, persistent approach was associated with being rambling or confused, and negatively associated with the chaotic and the resentful motivational groups.

Both persistent communication and persistent approach were associated with communication with other public figures in addition to the Royal Family. Persistent communication was associated with telephoning. Persistent approach was associated with communicating and with multiple communications. The amalgamated overall persistence category summates these results, but adds no new information.

The information given in the tables is intentionally inclusive in order to ensure a sufficient degree of detail and transparency to those wishing to incorporate the findings into the design of future studies. Those wishing to dispense with statistical detail are advised to focus on the significance figure in the second line of each box.

Table 1. Persistence in public figure sample.

	Persistent communication	Persistent approach	Overall persistence
	Number (per cent) of cases in row variables falling into the column stalking category: persistent, non-persistent		
	Chi-square, significance value		
	Effect size		
	Odds ratio (95% confidence interval)		
Focus			
Fixated on a person	82 (92.1%), 35 (79.5%) 4.410, 0.036 0.182 3.012 (1.039–8.730)	88 (89.8%), 85 (69.1%) 13.733, 0.000 0.249 3.934 (1.844–8.393)	127 (89.4%), 92 (69.2%) 17.389, 0.000 0.251 3.773 (1.971–7.224)
Fixated on a cause	10 (11.2%), 6 (13.6%) NS −0.035	6 (6.1%), 20 (16.3%) 5.400, 0.020 −0.156 0.336 (0.129–0.873)	12 (8.5%), 21 (15.8%) NS −0.113
Mental State			
Overt mental illness	78 (87.6%), 32 (72.7%) 4.578, 0.032 0.186 2.659 (1.064–6.644)	91 (92.9%), 101 (82.1%) 5.522, 0.019 0.158 2.832 (1.155–6.940)	129 (90.8%), 101 (75.9%) 11.148, 0.001 0.201 3.144 (1.569–6.301)
Deluded	66 (74.2%), 24 (54.5%) 5.176, 0.023 0.197 2.391 (1.119–5.112)	78 (79.6%), 72 (58.5%) 11.089, 0.001 0.224 2.763 (1.504–5.075)	106 (74.6%), 99 (51.9%) 15.385, 0.000 0.237 2.731 (1.642–4.542)

(continued)

Table 1. (*Continued*).

	Persistent communication	Persistent approach	Overall persistence
Grandiose	55 (61.8%), 18 (40.9%) 5.188, 0.023 0.198 2.337 (1.118–4.885)	72 (73.5%), 62 (50.4%) 12.154, 0.000 0.235 2.725 (1.539–4.823)	94 (66.2%), 55 (41.4%) 17.075, 0.000 0.249 2.777 (1.702–4.533)
Paranoid/persecuted	26 (29.2%), 9 (20.5%) NS 0.094	23 (23.5%), 24 (19.7%) NS 0.046	34 (23.9%), 24 (18.2%) NS 0.070
Hostile/aggressive	23 (25.8%), 12 (27.3%) NS −0.015	22 (22.4%), 39 (31.7%) NS −0.103	36 (25.4%), 42 (31.6%) NS −0.069
Rambling/incoherent/confused	54 (60.7%), 23 (52.3%) NS 0.080	48 (49.0), 27 (22.0) 17.773, 0.000 0.284 3.413 (1.907–6.111)	74 (52.1%), 35 (26.3%) 19.102, 0.000 0.264 3.047 (1.835–5.061)
Suicidal ideation	1 (1.1%), 1 (2.3%) NS −0.044	5 (5.1%), 2 (1.6%) NS 0.099	6 (4.2%), 1 (0.8%) NS 0.110
Homicidal ideation	6 (6.7%), 1 (2.3%) NS 0.094	3 (3.1%), 5 (4.1%) NS −0.027	8 (5.6%), 5 (3.8%) NS 0.004

(*continued*)

Table 1. (Continued).

	Persistent communication	Persistent approach	Overall persistence
Stalking Risk Profile typology, MacKenzie et al., 2009			
Intimacy Seekers	68 (76.4%), 26 (59.1%) 4.259, 0.039 0.179 2.242 (1.033–4.866)	73 (83.5%), 61 (56.5%) 15.714, 0.000 0.283 3.75 (1.912–7.353)	103 (72.5%), 63 (47.4%) 18.180, 0.000 0.257 2.934 (1.777–4.846)
Resentful	6 (6.7%), 3 (6.8%) NS −0.001	0 (0.0%), 19 (17.6%) 17.143, 0.000 −0.296 *	6 (4.2%), 18 (13.5%) 7.470, 0.006 −0.165 0.282 (0.108–0.734)
Help-seekers	7 (8.0%), 7 (16.3%) NS −0.125	10 (11.4%), 5 (4.6%) NS 0.126	11 (8.4%), 11 (9.3%) NS −0.016
The chaotic	6 (6.9%), 7 (16.3%) NS −0.147	5 (5.7%), 23 (21.3%) 9.655, 0.002 −0.222 0.223 (0.081–0.613)	11 (8.4%), 26 (22.0%) 9.125, 0.003 −0.191 0.324 (0.152–0.690)
Communications			
Some form of communication		52 (53.1%), 27 (22.0%) 22.983, 0.000 0.322 4.019 (2.244–7.199)	96 (67.6%), 37 (27.8%) 43.531, 0.000 0.398 5.415 (3.229–9.081)

Table 1. (*Continued*).

	Persistent communication	Persistent approach	Overall persistence
Multiple communications		45 (86.5%), 17 (63.0%) 5.849, 0.016 0.272 3.782 (1.239–11.537)	
Communicated also to a non-royal prominent person	30 (33.7%), 5 (11.4%) 7.581, 0.006 0.239 3.966 (1.417–11.104)	21 (40.4%), 5 (18.5%) 3.848, 0.050 0.221 2.981 (0.975–9.116)	30 (31.3%), 5 (13.5%) 4.333, 0.037 0.180 2.909 (1.032–8.203)
Telephoned	23 (25.8%), 3 (6.8%) 6.776, 0.009 0.226 4.763 (1.345–16.869)	16 (30.8%), 6 (23.1%) NS 0.081	23 (24.2%), 3 (8.1%) 4.365, 0.037 0.182 3.620 (1.016–12.896)

*Odds ratio cannot be calculated, as one value is zero.

(b) General forensic sample

These are set out in Table 2. Those who showed moderate to high persistence (stalking for longer than 12 or 52 weeks, respectively) were more likely to be Intimacy Seekers or Resentful stalkers, to suffer from a psychotic disorder and to be female. Behaviourally, more persistent stalkers were remarkable for their tendency to communicate with the victim through writing or sending materials and for involving others in their pursuit (stalking by proxy). There was a significant negative association between violence and persistent stalking (possibly because violence resulted in official intervention and an end to the stalking episode), but uttering threats was positively associated with high levels of persistence.

Logistic regressions

In choosing the strongest measure in the Royal Family sample upon which to conduct a logistic regression, the figures examining approach were selected. The measure of general persistence, which had been calculated in order to facilitate comparison with the general sample, proved to blur distinctions between persistent communication and persistent approach, and was therefore dropped for the purposes of logistic regression.

In the general forensic sample, the 12-week cut-off appeared to discriminate clearer associations with persistence. This also made clinical sense and appeared better to match the time-periods under consideration in the Royal Family sample. The 12-week cut-off was therefore chosen for the logistic regression analysis.

(a) Royal Family sample

A logistic regression model predicting persistence is shown in Table 3. It comprised inappropriate communications, grandiosity, rambling presentation and not belonging to the chaotic group. The model correctly predicted 64.8% of persistent cases and 77.8% of non-persistent cases, with an overall correct classification of 71.9% of cases. The ROC curve from the full model produced an AUC of .79 (S.E. .32), and for the improper model an AUC of .77 (S.E. .33).

(b) General forensic sample

The full multiple logistic regression model predicting persistence beyond 12 weeks is shown in Table 4, with fit statistics. A combination of intimacy-seeking or resentful motivation and writing to the victim predicted persistence beyond 12 weeks with a sensitivity of 75%, specificity of 71% and correct classification in 67% of the cases. The ROC curve derived from

Table 2. Persistence in general forensic stalking sample.

	More than two weeks	More than twelve weeks	More than one year
	Number (per cent) of cases in row variables falling into stalking cut-off category column: yes, no / Chi-square, significance value / Effect size / Odds ratio (95% confidence interval)		
Personal characteristics			
Male gender	NS −0.118	56 (80%), 66 (94.3%) 6.375, 0.012 −0.213 0.242 (0.075–0.779)	28 (73.7%), 94 (92.2%) 8.432, exact 0.008 −0.245 0.238 (0.086–0.661)
Participant partnered	9 (7.8%), 6 (25.0%) 6.179, exact 0.023 −0.210 0.252 (0.080–0.795)	NS −0.115	NS −0.056
Mental state			
Psychotic	40 (34.8%), 0 (0.0%) 11.721, 0.001 0.290 1.533 (1.342–1.752)	30 (43.5%), 10 (14.3%) 14.448, 0.000 0.322 4.615 (2.030–10.494)	21 (55.3%), 19 (18.8%) 17.900, 0.000 0.359 5.331 (2.369–11.988)
Axis 1 disorder (excluding psychosis)	43 (37.4%), 15 (62.5%) 5.148, 0.023 −0.192 0.358 (0.144–0.889)	21 (30.4%), 37 (52.7%) 7.185, 0.007 −0.277 0.390 (0.195–0.782)	NS −0.159

Table 2. (*Continued*).

	More than two weeks	More than twelve weeks	More than one year
Motivation			
Intimacy seeking	27 (23.5%), 0 (0.0%)	24 (34.8%), 3 (4.3%)	18 (66.7%), 9 (33.3%)
	6.993, exact 0.004	20.649, 0.000	26.092, 0.000
	0.224	0.385	0.433
	1.307 (1.181–1.446)	11.911 (3.384–41.919)	9.2 (3.612–23.432)
Resentful	NS	28 (40.6%), 17 (24.3%)	NS
	0.072	4.214, 0.040	0.093
		0.174	
		2.129 (1.029–4.407)	
Incompetent suitor	NS	12 (17.4%), 28 (40.0%)	1 (2.5%), 39 (97.5%)
	−0.046	8.666, 0.003	17.442, exact 0.000
		−0.250	−0.354
		0.316 (0.144–0.692)	0.043 (0.006–0.326)
Predatory	9 (7.8%), 10 (41.7%)	3 (4.3%), 16 (22.9%)	2 (10.5%), 17 (89.5%)
	19.269, exact 0.000	10.088, 0.001	NS
	−0.372	−0.269	−0.150
	0.119 (0.041–0.343)	0.153 (0.042–0.554)	
Communications			
Some form of communication	82 (71.9%), 10 (41.7%)	52 (75.4%), 40 (58.0%)	NS
	8.171, 0.004	4.696, 0.030	0.057
	0.243	0.184	
	3.588 (1.446–8.899)	2.218 (1.072–4.587)	

Table 2.   (*Continued*).

	More than two weeks	More than twelve weeks	More than one year
E-mails, letters, faxes	40 (35.1%), 2 (8.3%) 6.703, 0.010 0.220 5.946 (1.330–26.588)	28 (40.6%), 14 (20.3%) 6.708, 0.010 0.220 2.683 (1.257–5.727)	NS 0.086
Unsolicited materials	21 (18.4%), 0 (0.0%) 5.215, exact 0.025 0.194 1.226 (1.123–1.338)	16 (23.2%), 5 (7.2%) 6.796, 0.009 0.222 3.864 (1.328–11.244)	10 (26.3%), 11 (11.0%) 5.007, 0.025 0.190 2.890 (1.111–7.516)
Behaviours			
Stalking by proxy	NS 0.106	7 (10.1%), 0 (0.0%) 7.374, exact 0.013 0.231	4 (57.1%), 3 (42.9%) NS 0.153
Threats	NS 0.069	NA NS 0.104	19 (50%), 32 (31.4%) 4.148, 0.042 0.172 2.188 (1.022–4.683)
Assault	7 (6%), 5 (20.8%) 5.557, exact 0.034 −0.199 0.244 (0.070–0.849)	2 (2.9%), 10 (14.3%) 5.833, 0.016 −0.204 0.176 (0.037–0.838)	NS −0.072

the full model produced an AUC = .79 (SE = .04), and from the improper model, an AUC = .74 (SE = .04). Psychosis was excluded from the model due to its strong correlation with intimacy-seeking motivation (r = .49).

A second model was developed examining variables more directly comparable to those used in the Royal Family sample (see Table 5). The resentful variable was retained, but psychosis was substituted for intimacy-seeking motivation, and general communication for writing. The resultant full model correctly classified 69%, with sensitivity of 69%, specificity of 70% and a full model AUC of .72 (SE of .04). The improper model produced an AUC of .70 (SE of .05).

Discussion

The strongest associations of persistence in this study were the presence of psychotic illness and of an intimacy-seeking motivation. These findings were common to both general and public figure samples. In the Royal Family sample, where mental state was separated into components, it was the

Table 3. Logistic regression model for persistence in Royal Family approach cases.

	β	p	OR	95.0% CI
Inappropriate communications	.965	0.005	2.625	1.338–5.150
Grandiosity	.824	0.026	2.280	1.105–4.704
Rambling/confused	1.341	0.000	3.822	1.870–7.810
Chaotic motivational group	−1.426	0.016	.240	0.075–0.766
Constant	−1.915	0.176	.147	
Goodness of fit statistics	χ^2		df	p
Hosmer-Lemeshow	6.980		5	0.222
Nagelkerke R^2			0.302	

Table 4. Logistic regression model predicting persistence longer than 12 weeks among general forensic sample.

	β	p	OR	95.0% CI
Intimacy seeker	3.023	.000	20.544	5.414–77.949
Resentful	1.518	.000	4.564	1.994–10.446
Writing	.779	.078	2.179	.917–5.173
Constant	−1.260	.000	.284	
Goodness of fit statistics	χ^2		df	p
Hosmer-Lemeshow	3.129		4	.536
Nagelkerke R^2			.334	

Table 5.   Logistic regression model for general forensic sample comparable to Royal Family sample for persistence.

	β	p	OR	95.0% CI
Psychotic disorder	1.591	.000	4.911	2.097–11.502
Resentful	.797	.047	2.218	2.011–4.868
Communication	.684	.093	1.987	.893–4.394
Constant	−1.188	.002	.305	
Goodness of fit statistics		χ^2	df	p
Hosmer-Lemeshow		1.044	5	.959
Nagelkerke R^2			.202	

presence of active delusions and of grandiosity which was associated with persistence. There was no association with paranoid ideation, hostility, suicidal ideation or homicidal ideation. The prominence of psychosis in both samples reflects the clinical realities in managing stalkers that, where a serious mental illness is present, the stalking behaviours are likely to continue unless the psychosis is treated; and that, the more prominent the symptoms, the more enduring the associated behaviour.

In terms of motivation, intimacy-seeking is strongly associated with persistence in both samples, with an odds ratio in the Royal Family sample of three and in the general sample from 1.3 to 12, depending on the threshold for persistence. This is reflected in the Royal Family sample by the over-whelming preponderance of cases fixated on a person, rather than a cause.

The other principal association with persistence that the two groups have in common concerns the prevalence of various forms of communication. In the Royal Family sample, communication is associated with persistent approach, telephone calls are associated with persistent communication and writing to other public figures as well as members of the Royal Family is associated with both persistent approach and persistent communication. In the general forensic sample, the sending of unsolicited materials is associated with persistence at all three cut-off points, with written communication being significant at two. It is likely that more extensive communication and more intensive forms of communication are representative of a more intense underlying drive that fuels persistence.

Given the common univariate predictors of persistence across the two samples, it is unsurprising that the logistic regression models were also somewhat similar, featuring psychotic symptomatology and inappropriate communications. Grandiosity in the Royal Family sample, together with being rambling or confused, probably reflects intimacy seeking motivation, in that both these illness features have been found to be significantly associated with intimacy seeking (James et al., 2009). Similarly, the overlap

between Intimacy Seekers and psychosis in the general forensic sample was such that the two variables were more or less interchangeable. These results provide further evidence that an intimacy-seeking fixation on a person arising from symptoms of psychosis is the strongest predictor of persistent stalking behaviour by those without a previous sexual relationship with the victim.

Behavioural variables were also shown to be of some use in the multi-variate analyses, with inappropriate communication adding significantly to models predicting persistence in both samples. Among the general forensic sample, writing to the victim was a particularly useful predictor, although communication more generally did retain some predictive value. Variation between the two samples' methods of communication might account for some of the models' differences. Telephoning the victim was far less common in the persistent Royal Family sample than among persistent general forensic stalkers (24.2% vs. 47.8%), and it was not significantly related to persistence in the latter group. Given the ease of telephone-based communication in the general community, it may be that writing or sending unsolicited materials to the victim more closely reflects the level of investment required to engage in persistent stalking.

There are evidently some major differences between the general forensic sample and the Royal Family sample. Psychosis is more prevalent in the Royal Family sample and the range of motivations differs, with there being no predatory cases and Incompetent Suitors being difficult to discern from the material available. However, the fact that the three main associations of persistence (psychosis, Intimacy Seeking and communication) were the same in both samples indicates that the phenomenon with which each group was concerned must be substantially similar. In other words, this study offers some evidence that stalker samples from which ex-intimates have been excluded are sufficiently similar to public figure samples for conclusions reached with one group to be tentatively applied to the other.

There are further differences between the two samples which require future exploration. In the Royal Family sample, there is a negative association between the Resentful and persistent approach, but not persistent communication. This is reflected in the negative association between fixation on a cause and persistent approach, which is absent in persistent communication. In the general sample, there is no relation between the Resentful category and persistence at two of the three cut-off points, but a positive association at a cut-off of 12 weeks. In the logistic regressions, a resentful motivation added significantly to both models developed in the general community sample, but was not relevant to the Royal Family sample. This may reflect a bias in the way the data were collected. There is likely to be an under-recording of resentful communications in the Royal Family sample, given the fact that many will have appeared at least superficially rational to the correspondence clerks who opened them and may not therefore have triggered police referral.

This would contrast with the general stalking situation, where an individual is unlikely to disregard the fact of previous communication from an offending individual. The particular role of resentful motivation in persistent stalking situations warrants further attention. For a significant proportion of resentful stalkers, personality vulnerabilities and social context rather than psychosis may play a central role in the development of the stalking behaviour (Mullen et al., 2009). The drivers and sustainers of persistent querulant and vexatious behaviour are under-researched areas (Mullen & Lester, 2006).

In the Royal Family sample, further differences between persistent communicators and persistent approachers concerned coherence. The persistent approachers were more likely to appear rambling and confused, whereas the persistent communicators were not. It is possible that this could represent the availability of more evidence upon which to draw conclusions in a personal interaction than a written one, but practical experience of reading thousands of such letters in the course of studying police files indicates that this is unlikely to be the case. Coherence reflects disorders of thought and the expression of ideas, yet the degree of incoherence in the persistent approachers was not such as to render their purpose opaque, as the Chaotic (those in who no singularity of purpose could be determined) were significantly less likely to be found among persistent approachers. It may be that the difference in coherence reflects real differences in the mental states of those that repeatedly write as opposed to those that repeatedly approach.

Limitations

The obvious weaknesses of this study are the differences in definition of persistence and in method of measurement. These are mitigated somewhat by the evidence of the study that the similarities in associations with persistence between the two groups are sufficiently strong to remain apparent despite such weaknesses. In addition, this is a preliminary study of an area not previously researched, and as a pilot exercise, it is of value in suggesting avenues for future research using more robust methods.

There are weaknesses in the Royal Family data arising from the fact that they are based on police referral. This applies in particular to communications. At the time the data were gathered, there were no standard mechanisms in place to ascertain whether a particular correspondent had also written to, or communicated with agencies or individuals other than that to which the communication under consideration was addressed. Nor were there any comprehensive logs of previous communications, information in this regard relying on the memory of those in the correspondence offices of the palaces concerned. Furthermore, letters which were obviously deranged in content are more likely to have attracted attention than those expressing grievances in more logical terms, therefore resulting in a referral bias. These factors are unlikely to have applied to such a degree to

approach, given that this is a more intrusive form of behaviour which is routinely logged in police databases.

The weaknesses in the data on communication in the Royal Family sample are carried over into the measure of general persistence. The latter was provided in order to enable a more direct comparison with the general forensic sample. While its use underlines the fact that differences between repeated communication and repeated approach are likely to be hidden in the general forensic sample by their combination into one measure, it provides no additional information in itself.

In the general sample, the use of cut-off points rather than a continuous measure was a necessary weakness, in terms of sample size and choice of statistical method. The failure to discriminate in the data set between persistent approach and persistent communication was a disadvantage and may have dulled distinctions.

Conclusions

This study adds to accumulating evidence (James et al., in press; MacKenzie et al., 2009; Meloy et al., in press) that the characteristics of those who harass public figures and those who harass members of the general community (in the absence of a former sexual relationship) may be similar. Certainly, the main factors that drive a persistent course of harassment appear to be the same, with persistence in both groups associated with intimacy-seeking motivation and the presence of psychosis. The findings of this study indicate the primacy of motivation in considering risk. They also offer support for the routine consideration of mental health solutions in cases of persistent stalking. Identifying and treating the psychopathology driving the stalking behaviour, thereby removing its impetus, has the potential to improve outcomes both for victims in the general community, and for security services involved in protecting public figures.

This and other recent studies in this area have considered what might be termed 'first order' factors, in the form of motivation and psychopathological grouping. There remain gaps in knowledge about specific areas within these, such as the psychopathology and behaviour of the resentful in the public figure arena, a group which includes the querulent and the vexatious (Glueck, 1916/2007; Mullen & Lester, 2006). However, where first-order factors such as psychosis are particularly prevalent, more attention needs to be paid to 'second order' factors and to dynamic factors and to precipitants. Second-order factors in terms of psychosis would include the influence of different forms of psychotic symptomatology. Examples within the current study, for instance, might include the relative importance of grandiosity and the relevant lack of importance of paranoid symptoms. Within the general stalking literature, there has been little investigation of the role of specific types of psychotic experience and how these are related to patterns of

behaviour. In terms of dynamic factors, further investigation is needed as to what precipitates and/or sustains individual intrusions, whether this be aspects of the reaction of the targeted individual, outside events as stressors, or changes in affective state, defences or internal object relations.

There is a need for the adoption of common terminologies and concepts in the design of future research into inappropriate behaviours and stalking towards the prominent and towards the members of the general population. A suitable framework for the consideration of these issues has recently been published (MacKenzie et al., 2009) which considers risk according to underlying motivation, and considers the very often different factors that apply depending on the domain of risk in question (persistence, escalation, violence, psycho-social damage, etc.). It is ideas such as these that could provide a model around which research efforts into general stalking and public figure threat might usefully coalesce.

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