

Stalking: Developing an Empirical Typology to Classify Stalkers

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ABSTRACT: Stalking has received a great deal of attention from the media and its harmful effects on victims have been well documented. Stalking is also more common than previously thought, leading researchers to classify stalkers into groups in an attempt to predict future behavior. Previous research has grouped stalkers based on theoretical models rather than trying to empirically examine stalking behaviors along with other factors such as motivation, type of relationship, and attachment style in determining a typology of stalkers. Female college students ($N = 108$) who had experienced stalking behaviors responded to questions regarding their perceptions of those behaviors. First, these victim perceptions were factor analyzed. Then, cluster analysis grouped those factors to produce a four-cluster typology of stalkers. Cluster 1 (Harmless) appeared to reflect a more casual, less jealous pattern of behavior. Cluster 2 (Low Threat) appeared the least likely to become physically violent or threatening, or to engage in illegal behaviors. Cluster 3 (Violent Criminal) appeared to be the most likely to engage in physically threatening and illegal behaviors. Cluster 4 (High Threat) was characterized by a more serious type of relationship and may attempt to be more restrictive of their partner when first meeting them.

KEYWORDS: forensic science, stalking, typology, empirical

Since the murder of actress Rebecca Shaeffer (by John Bardo in 1989), stalking has received a great deal of attention from both the media and within the community. Despite all this attention, stalking has been difficult to define. Definitions usually include references to the repeated, unwanted, and intrusive nature of the harassing behavior that induce fear or concern in the individual (1). While the media tends to sensationalize high profile cases like that of Rebecca Shaeffer, the majority of women's stalking incidents (80%) are perpetrated by a previous romantic partner (2). As a crime, stalking may consist of many different behaviors ranging from harassing phone calls or break ins, to assaults resulting in death, all of which are unwanted and threatening. Despite the variability in the different stalking behaviors (phone calls, following, physical harm) and characteristics of stalkers (male, female, stranger, ex-lover) researchers have already attempted to group stalkers into categories based on theoretical models to help prevention, treatment, and research.

Prevalence and Victims

Studies on the prevalence of stalking suggest that it is quite common. Fremouw, Westrup, and Pennypacker (3) surveyed under-

graduates at West Virginia University. Using the West Virginia legal definition (3), results indicated that 30% of females and 17% of males had been stalked. A national survey of 16 000 people, using a stricter definition requiring that the harassment be a credible threat, revealed that 8% of women and 2% of men have been stalked in their lifetime (2).

In addition to being common, these harassing behaviors can cause a great deal of stress for the person. In Australia, Pathe and Mullen (4) found that victims made major changes to their social and work lives, with 53% either changing or ceasing employment. Suicide was seriously considered or attempted in 24% of the sample. Westrup, Fremouw, Thompson, and Lewis (5) reported that victims of stalking had significantly more post traumatic stress disorder symptoms and had higher scores on several subscales of the Symptom Check List-90 (SCL-90) including interpersonal sensitivity and depression than either the harassed or the control group.

Stalkers

According to Meloy (6) and Meloy and Gothard (7), stalkers tended to be male (72%) averaging between 35 and 40 years old. Half of the subjects were never married or were divorced, and 75% of the individuals were without an intimate partner at the time of their evaluation. Stalkers also tended to be better educated than a random group of offenders with mental disorders. Harmon, Rosner, and Owens (8) reported that 40% of their sample were college graduates. The data compiled by Meloy (6) also suggested that stalkers were unemployed or underemployed and that a majority of their sample had "very unstable work histories."

Typologies

A commonly used typology that separates individuals into three categories; erotomaniac, simple obsessional, and love obsessional was developed by Zona, Sharma, and Lane (9). Table 1 summarizes this and other typologies. The first group, erotomaniac (10%), met the Diagnostic and Statistical Manual-III-R (10) criteria for Delusional Disorder, Erotomania type. In the second group, simple obsessional (47%), a prior relationship existed between the victim and the stalker. Zona et al. (9) postulated that the motive for this group of stalkers appears more hostile than the other groups, with 30% following through with bodily harm or property destruction. The third group is the love obsessional group (43%). This group holds the delusion that they are loved by their victim but does not qualify for a diagnoses of erotomania based on the criteria in the DSM-III-R.

A similar classification model was developed by Wright, Burgess, Burgess, Laszlo, McCrary, and Douglas (11) that again separated stalkers into three groups: domestic, nondomestic, and

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TABLE 1—*Stalking typology categories.*

Category	N	Population	Classification Criteria Utilized		
			Prior Relationship	DSM-IV Diagnosis	Motive
Holmes et al. 1993	120	"Stalking Cases"			
Celebrity			No	No	Love
Hit			No	No	Hostility
Lust			No	No	Love
Scorned			Yes	No	Hostility
Domestic			Yes	No	Varies
Political			No	Hostility	
Zona et al. 1993	74	Cases from the Threat Management Unit of the LAPD			
Erotomania			Varies	Yes	Love
Simple Obsessional			Yes	No	Varies
Love Obsessional			No	Love	
Wright et al. 1995	30	National Center for the Analysis of Violent Crime Cases			
Erotomania			Varies	Yes	Love
Domestic			Yes	No	Varies
Nondomestic			Varies	Varies	
Harmon et al. 1995	48	Court referred males in New York			
Amorous/Stranger			No	No	Love
Amorous/Nonstranger			Yes	No	Love
Hostile/Stranger			No	No	Hostility
Hostile/Nonstranger			Yes	No	Hostility
Coleman 1997	141	Stalked female undergraduates			
Stalked			N/A	No	N/A
Harassed			N/A	No	N/A

erotomania. Wright's nondomestic group is similar to Zona's love obsessional group in that there is no prior relationship. The nondomestic stalker may have some initial "incidental contact" that triggers the stalking behavior. The domestic and simple obsessional group are alike in that both have had prior relationships with the victim, and the stalker is attempting to continue the previous relationship. Wright's third group, erotomania, is identical to Zona's in that it qualifies for a diagnoses of erotomania based on the criteria in the DSM-III-R. Other typologies by Holmes (12) and Harmon et al. (8) continued to group stalkers based on theoretical variables such as type of relationship, motivation, intended fatal violence, and anticipated gain.

All of these typologies share a number of shortcomings, i.e., none report any form of inter-rater reliability of the categorizations and they failed to operationalize important dimensions, including prior relationship and motive. Most importantly, no attempt was made to assess the actual behaviors exhibited by the perpetrator. Stalkers who are fundamentally different may engage in different behaviors and these behavior patterns could be used to empirically classify stalkers into different categories for prevention and treatment.

Coleman (13) was the first to attempt to empirically determine if stalking behaviors formed unique factors. Coleman derived a stalking behavior checklist from anecdotal accounts and factor-analyzed the 25 items into two distinct factors: harassing behavior and violent behavior. The harassing behavior factor included calls to the victim's home, following, sending gifts, and appearing at the victim's work/school. The violent behavior factor contained items such as breaking into victim's home, attempted physical harm, violating restraining order, and stealing/reading victim's mail. The results showed that individuals in the stalked group experienced more behaviors from both the violent and harassing factors of the stalking behavior checklist than the control group after the relationship ended. Coleman concluded that the stalked group is sig-

nificantly different from the control group based on the behaviors reported by the victims. However, Coleman failed to replicate the results from the factor analysis with a second sample and she failed to include other variables, such as motivation, that had been previously suggested in the literature.

By analyzing the actual behaviors, Coleman began to move away from theoretical models toward an empirically testable typology. Other factors have not been empirically examined but are assumed to be important in separating stalkers into different categories. As suggested by Harmon et al. (8), the first area is the motivation of the stalker. Reasons could range from the pursuit of a romantic target (to win his or her love) to the malicious harassment of someone to "get her back" for hurting him. A second area suggested by Harmon et al. (8), Holmes (12), and Zona et al. (9) is the type of prior relationship. Would an ex-lover exhibit different behaviors when compared to an acquaintance or a stranger? Behavioral theory would predict that an ex-lover, who may have been rewarded in the past for some of the stalking behaviors, would be more likely to persist longer than one who has not had this past reinforcement history from the victim.

Another area that may be important is the attachment style between the stalker and victim. Attachment is generally defined as a strong affectionate bond with a specific person. These bonds first develop between child and parent and later between adult and adult (14). Bowlby (14) stated that any situation that appeared to endanger the bond will elicit actions designed to preserve it; the more precarious the situation, the more intense and varied are the behaviors to protect it. Kienlen (15) extended this idea to include stalkers and the variety of behaviors exhibited by them in the pursuit of their victim. Meloy (6) also supported this idea when he defined stalking as a pathology of attachment, implying that the core issue is "a poor style of" attachment by the stalker. Kienlen, Birmingham, Solberg, O'Regan, and Meloy (16) found that most stalkers reported disruptions in childhood caretaking relationships. While

attempts made to operationalize attachment have led to different numbers and types, it has generally been found that there are at least two stable categories: secure and insecure (17).

Purpose

The purpose of this study was to empirically develop a typology of male stalkers based on the female victims' perceptions of the stalkers' behavior (13) and motivation measured along two dimensions; love/hostility and control/freedom (8,11,12). Additionally, secure or insecure attachment style (8,6) was measured along with the type of prior relationship from strangers to married) as suggested by Harmon et al. (8), Holmes et al. (12), Wright et al. (11), and Zona et al. (9). Victims perception were utilized despite the possibility that the victim's relationship with the perpetrator may have influenced the amount of information retained. The victim of a more intimate relationship may possess more knowledge of the perpetrator than the victim of a friend or unfamiliar perpetrator. Unfortunately, there was not an adequate sample of identified stalkers available, but there were ample victims.

It was hypothesized that stalkers would tend to have higher scores on the control, hostility and jealousy scales compared to participants in the Control Group. It was also predicted that stalkers would tend to have an insecure style of attachment compared to controls. Finally, it was predicted that the majority of stalking incidents would occur after the breakup of a previously intimate relationship.

Method

Procedure

Participants were tested in a group setting and were given the booklet that contained the Coleman scale (13) and the questionnaire developed for this study. All participants were given the instruments in the same order and received the same instructions. The participants responded to the items based on a previous relationship where they experienced stalking behavior. If the participant did not report experiencing any stalking behavior then the survey was completed based on the participant's most recent relationship and they formed the control group.

All participants responded to the question: Have you had anyone intentionally and repeatedly follow, and/or harass, and/or threaten you? Later they were also asked: West Virginia law defines a stalker as someone who "knowingly and repeatedly follows, harasses, and or threatens someone." Were you being stalked? If they responded yes to either question they were considered to have been stalked and were placed in the Victim Group. If they responded no to both questions they were placed in the Control Group. A total of 396 females were screened to identify 108 participants (approximately 28%) who have been previously stalked. Prevalence rates were similar to the rates found by Fremouw et al. (3).

Materials

Participants were given a booklet of questionnaires to complete. This booklet contained a revised version of the stalking behavior checklist first developed by Coleman (13). Responses were then factor analyzed to yield four factors. A second questionnaire developed for this study addressed demographic information, motive, attachment style, and the type of relationship. Motive was operationalized along two dimensions (love/hostile and control/freedom) in an attempt to separate those stalkers who are trying to win the victims back (amorous) or those acting revenge. Participants

rated three items on each of five concepts (love, hostility, control, jealousy, and freedom) on a 7 point likert scale. Item content was based on motives hypothesized in previous literature (8,12,11). Participants responded to each motive (love, hostility, etc.) at three different times (first meeting, most happy, and during harassment) to provide a more detailed description of each motive. The responses were then factor-analyzed to yield four factors.

Attachment was operationalized by using the attachment survey developed by Feeney and Noller (18) to classify people as either secure or insecure in their attachment style. This scale differentiates insecure into avoidant and ambivalent types. Participants responded to 15 true/false items, five items for each attachment style (secure, avoidant, and ambivalent) that produced three scores. For this study, the attachment style with the highest score was recorded. If the highest scoring scale was either the avoidant or ambivalent scale, the result was considered to be insecure and the score accepted. If the highest insecure scale was equal to the secure scale, the item was scored as insecure.

Relationship type was operationalized along one dimensions. Participants responded to a question describing the type of relationship (strangers, friends, casually dating, seriously dating, married/living together, and ex-partner/ex-spouse).

Results

A total of 396 females at West Virginia University were surveyed, ranging in age from 17 to 39 ($M = 19.0$, $SD = 2.01$). Approximately 57% of the participants were freshman (22% sophomore, 13% junior, and 8% senior) and a large majority of them were Caucasian (91%). Of the 396 females sampled 108 (28%) reported being stalked (Victim Group). No significant differences were found between the controls and the Victim Group on any of the demographic variables.

One-way analysis of variance tests demonstrated that compared to females in the Victim Group, females in the Control Group reported that their partners were less controlling when they first met, $F(1370) = 13.9$, $p < .001$ and when they were most happy, $F(1366) = 9.11$, $p < .01$ compared to the Victim Group. Females in the Control Group (compared to the Victim Group) also reported that their partners were less hostile when they first met, $F(1302) = 14.9$, $p < .001$ and when they were most happy ($F(1315) = 59.70$, $p < .001$). Finally, controls also reported lower levels of jealousy when they first met, $F(1343) = 8.49$, $p < .001$ and when they were most happy, $F(1339) = 48.77$, $p < .001$ compared to the Victim Group (Table 2).

TABLE 2—Controlling, jealous, and hostile behavior differences.

Variable	Control	Victim	df	F	p
Controlling when first met	$M = 1.6$ $SD = 1.1$	$M = 2.1$ $SD = 1.7$	(1370)	13.9	$p < .001$
Controlling when most happy	$M = 1.9$ $SD = 1.2$	$M = 2.4$ $SD = 1.4$	(1366)	9.11	$p < .01$
Hostile when first met	$M = 1.3$ $SD = 0.8$	$M = 1.8$ $SD = 1.4$	(1302)	14.90	$p < .001$
Hostile when least happy	$M = 2.2$ $SD = 1.7$	$M = 4.0$ $SD = 2.03$	(1315)	59.70	$p < .001$
Jealous when first met	$M = 1.8$ $SD = 1.3$	$M = 2.7$ $SD = 3.8$	(1343)	8.49	$p < .01$
Jealous when most happy	$M = 5.5$ $SD = 1.7$	$M = 5.2$ $SD = 6.6$	(1339)	48.77	$p < .001$

Chi² analysis revealed that females in the Victim Group reported that the attachment style, as measure by the Feeney and Noller (18) scale, of their partner was more likely to be insecure (79%) than secure (21%) compared to 48% secure and 52% insecure in the Control Group, $X^2(1, N = 390) = 23.25, p < .001$, (Table 3).

One way analysis of variance showed that the mean frequency of stalking behaviors, as measured by the Coleman Scale (13), tended to increase as the relationship became more serious, $F(493) = 3.15, p < .05$. Individual t-tests, using the Bonferroni correction, revealed no specific type of relationship (stranger, friend, causally dating, seriously dating, or ex-partner) significantly differed from any other on the amount of harassing behavior. Upon visual inspection, a large difference was noticed in the mean frequency of the behaviors between relationships that were more casual (stranger, friend, and casually dating) compared to more serious relationships such as seriously dating and ex-partners (Table 4). When the data was recoded into a dichotomous variable, Casual Relationship (stranger, friend, and casually dating) and Serious Relationship (serious dating and ex-partner), the results were significant. More harassing behaviors occurred after Serious Relationships ($M = 1.94, SD = 1.09$) compared to Casual Relationships ($M = 1.25, SD = 0.84$), $F(196) = 12.25, p < .001$.

Victim Group

Of the 396 participants, 108 reported experiencing stalking behaviors. The victims ranged in age from 17 to 39 ($M = 19.3, SD = 2.53$). Approximately 57% of the participants were freshman (18% sophomore, 18% junior, and 8% senior) and a large majority of them were Caucasian (92%). The length of the relationship ranged from 0 (Stranger) to 48 months ($M = 15.2, SD = 28.1$). The victim initiated the breakup in 70% of the relationships. The final outcome of most of the relationships (27%) was that the couple sees each

other but does not speak (22% never saw each other again, 19% became acquaintances, 9% became friends, 3% went to jail, 3% stayed together, 16% "other").

First, the stalking behavior checklist (13) was factor analyzed by participant, using Principle Component Analysis in SPSS ($N = 108$). A factor solution was identified based on eigenvalues, the scree test, and interpretability of the solution (19). Four factors with eigenvalues greater than 1 were retained. Using a Varimax rotation, these four factors accounted for 51% of the variance (see Table 5 for factor loadings). Factor 1 (Harassment) was composed of nine items, accounted for 17% of the variance, and reflected a general pattern of harassing behaviors. Items included leaving messages on the machine, sending letters, or coming to the victim's

TABLE 5—Factor loadings of the stalking behavior checklist from the victim group.

Item	Subscale			
	Harassment	Physically Threatening	Illegal Behaviors	New Partner
Came to your home	.737			
Left messages on machine	.727			
Sent gifts	.726			
Sent letters	.622			
Calls to your home	.585			
Sent photos	.556			
Calls at work	.539			
Came to work/school	.472			
Threats to cause self harm	.430			
Threats to cause you harm		.822		
Physically harmed you		.821		
Attempted to harm you		.816		
Followed you		.564		
Watched you		.541		
Makes hang up calls		.421		
Physically harmed himself		.414		
Stole/read your mail		.351		
Attempted to break into home			.903	
Broke into your home			.794	
Broke into your car			.717	
Attempted to break into car			.586	
Violated restraining order			.369	
Damaged property of new partner				.809
Harmed new partner				.781
Made threats to new partner				.673

TABLE 3—Attachment style.

Attachment Style	Victims	Controls
Secure	$N = 23$ 21%	$N = 137$ 48%
Insecure	$N = 84$ 79%	$N = 146$ 52%

NOTE: $\chi^2(1, N = 390) = 23.25, p < .001$.

TABLE 4—Amount of harassing behaviors on the Coleman scale by type of relationship.

Type of Relationship	Mean Frequency of Behaviors* (Range = 0–7)
Stranger	$M = 0.96$ $SD = 0.65$
Friend/Acquaintance	$M = 1.28$ $SD = 0.87$
Casually Dating	$M = 1.28$ $SD = 0.87$
Seriously Dating	$M = 1.89$ $SD = 1.13$
Ex-partner	$M = 2.00$ $SD = 1.06$

* Likert scale values were as follows: 0 = never; 3 = twice a week; 7 = once a day. Controlling, Jealous, and Hostile Behavior Differences.

home. Factor 2 (Physically Threatening) was composed of eight items, accounted for 15% of the variance, and reflected more physically threatening behaviors. Items included physical threats, physically harming the victim, attempting to harm the victim, and behaviors such as stealing the mail. Factor 3 (Illegal Behaviors) was composed of five items, accounted for 11% of the variance, and reflected prominently illegal behaviors. Items included breaking into the home, breaking into the car, attempting to break into the house, attempting to break into the car, and violating a restraining order. Factor 4 (New Partner) was composed of three items, accounted for 9% of the variance, and reflected a pattern of hostility toward a new partner. Items included threatening a new partner, harming a new partner, and damaging the property of the new partner.

Next, factor analysis (Principle Component Analysis in SPSS, default options) was performed on the 16 items that addressed the motivation of the perpetrator. A factor solution was identified based on eigenvalues, the scree test, and interpretability of the solution (19). Four factors with eigenvalues greater than 1 were selected. Using a Varimax rotation these four factors accounted for 53.5% of the variance (see Table 6 for factor loadings). Factor 1

(Hostile) was composed of five items that accounted for 20% of the variance. The five items were hostile during harassment, controlling while harassing, hostile when least happy, jealously during harassment, and freedom during harassment. These five items reflected a hostile attitude toward the victim. Factor 2 (Love) was composed of four items, accounted for 14% of the variance, and reflected a general love component. Items included in this factor were love at first meeting, love while harassing, love when most happy, and trying to win the person back. Factor 3 (Controlling) was composed of three items, accounted for 10% of the variance, and reflected the controlling nature of the relationship. Factor 3 was composed of controlling when first met, hostile when first met, and controlling when most happy. The last factor, Factor 4 (First Meeting), accounted for 8.5% of the variance, was composed of four items, and reflected how jealous the person was when the couple first met. The four items that composed Factor 4 were, jealous when most happy, freedom when most happy, jealous at first meeting, and freedom when most happy.

The secure/insecure attachment scores were converted to z scores for future cluster analysis. The variable type of relationship was transformed into five dichotomous variables. These five variables were then converted to z scores.

Hierarchical cluster analysis (20) using SPSS (within groups linkage) was then performed on z scores derived from previous factor analysis (four z scores derived from the Coleman (13) scale, four z scores from the motivation scale), from the Feeney and Noller (18) measure of attachment and from the type of relationship (one z score for each type; stranger, friend/acquaintance, casually dating, seriously dating, ex-partner), totalling 14 z scores. The clustering technique began with each participant as a separate cluster. Next, the two most similar clusters were combined. This continued until four clusters remained.

The four clusters in each group were then compared using MANOVAS and Chi² tests. A four cluster solution was retained (see Table 7 for mean z-scores of each variable across clusters) based on visual inspection of the dendrogram and the values of the distance coefficients. The four clusters of cases were then compared on the variables originally proposed to differentiate stalkers (behaviors, motivation, attachment, and type of relationship). Cluster names were based on significant differences and overall characteristics of the cluster. A significant difference was found between the four clusters on relationship (Casual or Serious Relationship), $X^2(3, N = 48) = 85.6, p < .001$. Cluster A (Unintrusive) and B (Low Threat) tended to have more Casual Relationships while Cluster C (Violent Criminal) and D (High Threat) had

TABLE 6—Factor loadings of the four subscales of motivation in the victim group.

Item	Subscale			
	Hostile	Love	Controlling	First Meeting
Hostile while harassing	.833			
Controlling when harassing	.758			
Hostile when least happy	.673			
Jealous when harassing you	.660			
Freedom when harassing	.580			
Love at first time you met		.838		
Love when harassing you		.763		
Love when most happy		.694		
Trying to win you back		.516		
Controlling at first time you met			.796	
Hostile of first contact			.689	
Controlling when most happy			.657	
Jealous when most happy				.718
Freedom when first met				.599
Jealous when first met him				.551
Freedom when most happy				.527

TABLE 7—Mean Z scores used in cluster analysis for the victim group.

Factor	Cluster A	Cluster B	Cluster C	Cluster D	F	X ²	(df)
Motivation							
Hostile	-.3679#	-.2590	.6222§	.2706§	5.80†		(3, 96)
Love	-.2770	-.1807	.3223	.3240	2.95*		(3, 96)
Control	.0365#	-.2393	.2832	-.0130	0.82		(3, 96)
First Meeting	-.3992#	-.0167	-.0054	.5887§	6.13†		(3, 96)
Behavior (Coleman)							
Harassment	-.2788#	-.3514#	.69930§	.1506	5.32*		(3, 96)
Physically Threatening	-.2380#	-.4297#	.6995§	.0970	5.23*		(3, 96)
Illegal Behaviors	-.1505#	-.3032#	.6555§	-.0447	3.59*		(3, 96)
New Partner	-.2763	.2844	.2326	.0333	1.69		(3, 96)
Insecure Attachment	-.1955	.0460#	.0972	.1557		2.24	(3, 97)
Casual Relationship	.8685#	.9255#	-1.069§	-.9269§		85.6†	(3, 97)

* $p < .05$, † $p < .001$. #, § Groups with different superscripts are significantly different.

more Serious Relationships. Chi² analysis on attachment style failed to demonstrate a significant difference between the four clusters, $X^2(3, N = 97) = 2.24, p = ns$.

One way analysis of variance tests were performed across clusters on the four motivation factors (Love, Hostile, First Meeting, and Jealous) and the four behavior factors (Harassment, Physically Threatening, Illegal Behaviors, and New Partner) previously derived. Results showed significant differences for three motivation factors between clusters (see Table 7 for mean z scores). The three factors were: Hostile (Factor 1), $F(3,96) = 5.8, p < .001$; Love (Factor 2), $F(3,96) = 2.95, p < .05$; and First Meeting (Factor 4), $F(3,96) = 6.10, p < .001$. LSD post-hoc tests using the Bonferroni correction and a cutoff of $p < .05$ (SPSS, Version 9) were utilized to test for significant differences between clusters on the three factors. Clusters A (Unintrusive) and B (Low Threat) tended to be less likely to exhibit hostile behaviors compared to Cluster C (Violent Criminal) and Cluster D (High Threat). On the Love factor, no significant differences were found after the Bonferroni correction. Finally, on the First Meeting factor, Cluster A (Unintrusive) was significantly different than Cluster D (High Threat), indicating that people placed in Cluster D (High Threat) were more likely to be controlling and to restrict their partners' freedom at the time of initial contact.

Results showed significant differences for three of the behavioral factors derived from the Coleman (13) scale. The three factors were: Harassment (Factor 1), $F(3,96) = 5.32, p < .001$; Physically Threatening (Factor 2), $F(3,96) = 5.23, p < .01$; and Illegal Behaviors (Factor 3), $F(3,96) = 3.59, p < .05$. LSD post-hoc tests using the Bonferroni correction and a cutoff of $p < .05$ (SPSS, Version 9) found significant differences between clusters on the three factors. On the second factor, Physically Threatening, significant differences were found between Cluster A (Harmless) and Cluster C (Intense Behavior). Cluster B (Apathetic) significantly differed from Cluster C (Intense Behavior) as well. Cluster C (Intense Behavior) was more likely to exhibit physically threatening behaviors than Cluster A (Harmless) and Cluster B (Apathetic). Finally, the third factor, Illegal Behaviors, differed significantly between Cluster C (Intense Behavior) and Cluster A (Harmless) and Cluster B (Apathetic). Cluster C (Intense Behavior) was most likely to exhibit behaviors that were illegal compared to Clusters A (Harmless) and B (Apathetic).

Discussion

The first hypothesis predicted that stalkers (as rated by the females in the Victim Group) would tend to have higher scores on the control, hostile, and jealousy scales compared to those in the Control Group. Significant differences were found between the Control Group and the Victim Group on all three variables, suggesting that males who stalk females are perceived as more controlling, hostile, and jealous, both at the beginning of the relationship, and when the couple is most happy.

The second hypothesis predicted that individuals who experienced stalking behaviors (Victim Group) would be more likely to have had a partner with an insecure attachment style compared to the Control Group, as measured by the Feeney and Noller (18) scale. There was a significant difference between the Control Group and the Victim Group suggesting that individuals who perpetrate harassing behaviors are more likely to have an insecure attachment style.

The third hypothesis, that stated a majority of harassing behaviors would occur after the termination of an intimate relationship,

was also supported. Strangers, friends, casual daters serious daters, and ex-partners showed increasing amounts of stalking behaviors. When the different types of relationships were regrouped into a Casual Relationship (strangers, friends, and casual daters) and a Serious Relationship (serious daters and ex-partners), a significant difference was found. Victims in the Serious Relationship tended to experience more stalking behaviors compared to victims in the Casual Relationship group.

Victim Group

The Coleman Scale was factor-analyzed to produce a 4-factor model that accounted for 51% of the variance. The four factors were titled Harassment, Physically Threatening, Illegal Behaviors, and New Partner. A 4-factor model of the motivation scale was also retained that accounted for 54% of the variance and appeared to explain the data the best. The four factors reflected the general areas of Hostility, Love, Controlling, and Attitudes at First Meeting. Cluster analysis was performed on the z scores from the 4-factor model of motivation, the 4-factor model of harassing behaviors (Coleman scale), attachment, and type of relationship.

Significant differences were found between clusters on three of the four motivation factors (Hostile, Love, and First Meeting), three of the four behavioral factors (Harassment, Physically Threatening, and Illegal Behaviors), and type of relationship (Casual or Serious). No differences were found between clusters on attachment style in this sample. Cluster 1 (Harmless) appeared to reflect a more casual, less jealous pattern of behavior. Cluster 2 (Low Threat) was characterized by low scores (compared to other clusters) on many of the factors. This suggests that this cluster is the least likely to become physically violent or threatening and least likely to engage in illegal behaviors. Cluster 3 (Violent Criminal) appears to be the most likely to engage in physically threatening and illegal behaviors. Cluster 4 (High Threat) is characterized by a more serious type of relationship and in attempting to be more restrictive of their partner when first meeting them. This four-cluster model is the first empirically derived typology based on an assessment of perpetrator behaviors. These clusters need to be replicated in a second, independent sample before being considered stable. The clusters also need to be assessed for predictive ability, specifically for the prediction of violence.

Conclusions

The results from this study suggest that males who perpetrate stalking behaviors against females are perceived as more controlling, hostile, and jealous when the couple first meet and when they are most happy, compared to controls. The results also suggest that more stalking behaviors occur after the breakup of a more serious relationship than a casual relationship, with a trend that the more serious the dating relationship, the larger the number of behaviors that will occur. Finally, the data suggest that the perpetrators are rated as having an insecure style of attachment. This four-group typology is difficult to compare to previous ones, such as the one produced by Zona et al. (9) and Wright et al. (11), due to the different samples being utilized along with the different methodologies. Coleman (13) was the only other typology to utilize empirical methods as opposed to theoretical beliefs. Characteristics found to be important in this study are common to other typologies such as the type of relationship (in this study the difference was between casual and serious relationships) along with the motivation of the perpetrator. These constructs were operationalized and assessed

differently than in previous studies preventing an accurate comparison across samples.

One problem with this study was the reliance on a university sample. College students are not likely to be stalked by the typical stalker who is 35, unemployed, and of above average intelligence. The most common stalking is going to be that of an ex-boyfriend. This limits the generalizability of the results to the general population. In this study, the mean age at the time of the incident was 16 years old. This restricted age range may have been an important factor because older participants would have had more opportunity to experience certain behaviors such as having a restraining order violated. This increased behavior variability is important in the factor analysis. A larger more heterogeneous sample would provide the variability needed in the factor analysis.

One variable that was not included in this study was whether or not the victim and the person exhibiting the harassing behaviors had been sexually intimate. Since the number of harassing behaviors showed a trend of increasing as the relationship became more serious, this suggests that the level of sexual intimacy would be an important factor in future studies.

Another concern is the use of victims perceptions of the stalker and his behaviors. This was done out of convenience due to the finding that people do not readily admit to stalking (3). The use of a victim-only sample does have certain advantages, however. Many of the social demand characteristics have been nullified because the victims do not have to worry about their appearance, especially since the surveys were anonymous.

Attempts to classify stalkers in the future need to include a measure of violence to be used as an outcome measure. This measure could then be applied to the different types of stalkers. Additionally a measure of impact (a PTSD measure) is also needed to assess any lasting psychological effects from the harassment. Finally, the validity of the behaviors need to be verified with a forensic sample of people convicted of stalking. Ultimately, a typology of stalkers could be used to aid in the prediction of violence and in determining the most effective course of action for a victim (ignore, restraining order, etc.). If the types of stalkers responding to restraining orders types were most likely to become violent were predictable, the victim would be better equipped to deal with him. The agencies involved would also be better equipped to allocate the necessary resources (that are often scarce) in helping the victim.

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