CROWD REACTIONS TO SUBLETHAL WEAPONS: UNIVERSAL TRIGGERS FOR CROWD VIOLENCE

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Since the end of the cold war, military forces have increasingly been required to manage crowds of people, some of which may quickly turn violent. Frequently, crowd researchers identify "flashpoint" variables: environmental or social triggers that cause a crowd to become hostile. The goal of this research was to identify potential flashpoints, to assist the simulation and training communities in crowd representation. Researchers exhaustively reviewed crowd literature, surveyed subject matter experts in crowd control, and analyzed anecdotal crowd events. Survey results indicated that crowd weapons, alcohol and drugs, crowd commitment, and crowd desperation may be flashpoints for violence. However, none of these variables strongly varied with culture. Anecdotal results revealed additional flashpoint variables, such as aggression and the use of auditory stimuli by control force members, instigators within the crowd, and general masculine culture. These findings agree in part with results from existing literature, and have implications for peacekeeper training.

INTRODUCTION

Beginning with the end of the cold war, peacekeepers have been increasingly responsible for managing crowds of people. In addition, sublethal options have been added to the modern soldier's arsenal (Department of Army, 1992). These changes have challenged peacekeeping forces to develop new strategies for maintaining peace as well as new training programs to facilitate these strategies (Greenwald, 2002).

Crowd researchers have worked to update theories of collective behavior and to contribute to training programs for peacekeeping forces (Klein & Steele-Johnson, 2002; Miller, 1993). One attempt to develop a three-stage theoretical model of crowd behavior was developed by Kenny and his colleagues in 2001 (Kenny, Farrer, Heal, Ijames, McPhail, Odenthal, et al., 2001).

The first stage, assembly, consists of the process and motivation behind an initial collection of people. Crowds may assemble for a planned event or people my collect without warning. The assembly stage contains variables that determine the motivation behind collective activity (Kenny et al., 2001).

Once the crowd has assembled it enters the gathering stage, where crowd members engage in collective behaviors. These behaviors can range from peaceful actions such as singing or cheering to violent behaviors (Kenny et al., 2001).

Eventually the crowd will discontinue its collective behaviors and disperse. Dispersal is the final stage of a crowd's evolution and may be either forced or routine (Kenny et al., 2001).

Kenny's model provides peacekeeping forces with a starting point to understand crowd behavior. However, the theory does not comprehensively

specify the variables that trigger violent crowd behavior. Several researchers have adopted the notion of flashpoints to explain crowd violence (Waddington, Jones, & Critcher, 1987). A "flashpoint" is the point at which a previously docile crowd suddenly becomes violent in response to a trigger or stimulus.

Some psychologists point to demographic variables as the major causes of violent collective behavior. Russell (1998) found that young, single men tended to be crowd participants most prone to violent behavior. Others suggest that low socioeconomic status could contribute to crowd violence (Stott & Reicher, 1998). Stott et al. suggested that working class individuals may be more inclined to demonstrate violent behavior, and that high concentrations of such individuals within a crowd could lead to flashpoint violence.

Other researchers have proposed that cultural variables act as flashpoints. Miller (1993) identifies racial tension as a frequent trigger for violent crowd behavior. In addition, Pyszczynski et al. (in press) has found that if members of a crowd share similar ethnic customs and norms they may be hostile to out group members. Other studies examining collectivist cultures show that people in these cultures may be more prone to collective violence and confrontation towards their opponents (Derlega et al., 2002; Singells, 2000).

A third body of research suggests a link between environmental variables and crowd violence. For example, Stott and Reicher (1998) believe that in some cases the presence of a perceived environmental threat, such as a police force, may cause a crowd to display hostile behavior toward that threat. Crowds may also become more aggressive in the presence of an aggressive or violent activity such as violent sporting event (Miller, 1993). Feinberg and Johnson (1988) note that an ambiguity or chaos often causes crowds to be more accepting of violent behavior.

Several researchers believe that violent crowd behavior results from complex interactions between individual and group goals (McPhail, 1991). These researchers explain that each crowd member is cognitively capable of setting the terms of his or her cooperation with the group's goals. Therefore, crowd behavior is determined by the extent to which a consensus is reached between the rational calculation of the individual members and those of the group (McPhail, 1991). Violence may occur when individual agitators successfully influence other members and direct the goals of the crowd toward violence (Feinberg and Johnson, 1988). The extent to which agitators influence crowd members depends on several variables. For example, members of small crowds are more likely to be influenced as well as members who are not suspicious of the agitators. Johnson and Feinberg (1977) found that diversity of opinions and suggestibility of individual members also increased the likelihood that they would model instigator violent behavior. Another variable that may cause individuals to accept violent group goals is perceived anonymity. When individuals believe they have lost their anonymity within a crowd they tend to become more prone to violence (Rehm, Steinleiter & Lilli, 1987; Watson, 1973).

Crowd research has uncovered many potential factors that can cause crowds to reach a flashpoint. Important questions remain regarding which flashpoint variables are the most

common, potent, and consistent across crowd types and situations. The research reported here is an initial step to answer these questions.

METHOD

Our approach was multiphasic. We first conducted an exhaustive literature review to identify documented and theorized flashpoints. We next surveyed and interviewed 15 world renowned military and police peacekeepers to obtain applied data about observed flashpoints. Third, we compared our findings to Kenny et al's (2001) model of crowd behavior to classify flashpoints according to the stages of this model.

Our literature review focused on several areas: peaceful crowd processes, flashpoint processes, anecdotal reports of historical crowd events, control force actions, and the role of sublethal weapons for crowd control. Our review was narrowly focused on political or religious demonstrations, because such demonstrations are those most often confronted by military personnel.

To elicit knowledge from applied peacekeepers, we constructed a survey including items based on literature that we had read. Our target sample consisted of 15 experts in the field of crowd management. Because of participants' expertise levels, and because of the exploratory nature of our research, we decided to include a combination of structured and open-ended questionnaire items. Our expectation was that open-ended items would supplement and clarify information obtained from the structured items.

The structured component of our survey required participants to rate the impact of a number of flashpoint variables, and to indicate whether the effects of those variables was universal across cultures, or whether it was specific to a given population. Participants rated variables according to the following convention:

1 = There is no relationship between this variable and crowd violence.
2 = Changes in this variable may lead to crowd violence, but usually only if a crowd is predisposed to violence, or if other causative variables are present.
3 = Changes in this variable occasionally predict crowd violence, but only about half the time.
4 = Changes in this variable are probably related to crowd violence, even without other variables being present or negative crowd predisposition.
5 = Changes in this variable definitely cause crowds to become violent.

After distributing our survey to experts in crowd management, we interviewed a subset of those experts to clarify information we gathered from the surveys. Our last step was to examine reports of anecdotal crowd events. We examined such events within the published literature, on the internet, and within the retuned surveys.

RESULTS

Table 1 lists the results of our literature review. From our analysis of the literature, we have included identified flashpoint variables that would likely influence crowd behavior during the assembly, gathering, and dispersal stage of a crowd timeline (Kenny et al., 2001). Although we attempted to list these variables within each stage by approximate frequency within the literature, considerable work is needed to validate the list.

Table 2 shows main results from our distributed survey. The presence of weapons within the crowd was seen as

the most reliable predictor of crowd violence, followed by the use of alcohol and drugs by crowd members. Interestingly, survey respondents did not consider any of these variables to be strongly dependent upon culture.

To supplement the flashpoint list obtained from the surveys, Table 3 includes the results of our anecdotal report content analysis. Frequently mentioned flashpoints within anecdotal reports are listed within Table 3.

ASSEMBLY STAGE	
Territoriality	
Presence of Agitators	
Presence of Police	
Curiosity	
Political Events	
Time Stress	
Media	
Racial Events	
Religious Events	
Crowd Frustration	
Cohesiveness	
Boredom	
Time of Day	
Crowd Homogeneity	
Crowd Comfort	
GATHERING STAGE	
Presence, Proximity to Like-Minded Individuals	
Weapon Availability	
Presence of Opposition	
Knowledge of Crowd Visibility	
Fatigue	
Conformity	
Ignorance of Other Crowd Members' Motives	
Age	
Physical Aggression	
Presence of Unmarried Personnel	
Presence of Unemployed Personnel	
Commitment to Cause	
DISPERSAL STAGE	
Fatigue	
Control of Media	
Disappointment	
Perception of Self-Efficacy	

Table 1. Three-Stage Categorization of Flashpoints from Literature Review.

FLASHPOINT VARIABLE	RATING AVERAGE
Crowd Weapons	4.57
Alcohol/Drug Use	4.36
Crowd Commitment	4.23
Crowd Desperation	4.21
Societal Acceptance of Violence	4.14
Presence of Instigators	4.14

Table 2. Flashpoint Variables Noted in the Survey.

ANECDOTAL FLASHPOINT VARIABLE
1. Presence and Aggression by Control Force
2. Presence and Actions of Crowd Instigators
3. Masculine Culture
4. Use of Auditory Stimuli
5. Presence and Use of Sublethal Weapons

Table 3. Anecdotal Flashpoint Variables listed by Frequency of Occurrence.

DISCUSSION

The data reported here represent only a portion of our total effort. However, these initial results are compelling. First, it is important to note that many of the survey and anecdotal flashpoints we have identified agree with those suggested in the published literature (e.g., use of alcohol and drugs, weapon availability, aggressive acts by control force members). Moreover, whereas much of the existing literature is drawn from anecdotal reports, we have supplemented it with expert opinion. Second, there are areas of inconsistency between our survey results and data reported anecdotally. For example, survey respondents did not identify the presence of sublethal weapons as a flashpoint variable; however, it was listed in anecdotal reports. Clearly this discrepancy warrants further investigation as peacekeepers consider

increased use of sublethal weapons for crowd control. Another area of discrepancy is the universality of flashpoint influences. Though survey respondents suggested that most variables were not culture dependent, anecdotal and interview results seemed to suggest otherwise. Resolving this issue is important for those who design culture dependent training programs for military peacekeepers. Third, many of the anecdotal flashpoint variables emphasize the interactive nature of the relationship between peacekeepers and crowd members. It is evident that control force actions have a direct and often predictable relationship to subsequent crowd actions. Our results are important for designers of peacekeeper training programs. The demise of the cold war and the emergence of a new war on terrorism have caused crowd violence to be an international threat as well as a domestic one. By uncovering the flashpoints that trigger crowd violence and coordinating these flashpoints into a model of crowd behavior, we hope to provide peacekeepers a training tool to understand the consequences of their actions.

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