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ABSTRACT

This study investigated the effectiveness of an educational intervention designed to assist university staff in dealing with aggressive incidents. Participants in the study included 18 Admissions Office staff of a large Canadian research oriented university who had noted an increase in the number of aggressive incidents by rejected applicants. An ecological approach was utilized in designing the intervention, selecting a series of key features which comprised the content of the two-day workshop and based on which change was measured. Results of the study indicated that the intervention increased participants' sense of efficacy, their ability to identify a greater number of options to deal with aggressive incidents, and their sensitivity to the causes of aggression. The intervention also reduced participants' stress levels and created more efficient communication during violent incidents. (Contains 58 references.) (Author/JPB)

Running head: EDUCATIONAL INTERVENTION FOR AGGRESSION

Educational Intervention for University Employees Confronted With Aggressive Incidents

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Educational Intervention for University Employees

Confronted with Aggressive Incidents

Abstract

Concern about violence in society extends to university campuses. This study investigates the effectiveness of an educational intervention designed to assist university staff to deal with aggressive incidents. Participants in the study included 18 Admissions Office staff of a large Canadian research oriented university. An ecological approach was utilized in designing the intervention , selecting a series of key features which comprised the content of the workshop and based on which change was measured. Results of the study indicate increased sense of efficacy, increased number of options to deal with the aggressive incidents, increased sensitivity to the causes of aggression, reduced level of stress, and more efficient communication during these incidents.

Concerns about escalating violence and aggression exist throughout our society. University campuses are not exempt from these concerns. In many universities, when incidents of violence occur, the staff and faculty are ill prepared to respond effectively and as a result, the well being and safety of personnel are at risk. Understanding violence and providing appropriate and effective educational interventions seem not only timely but necessary. The effectiveness of interventions can be enhanced when both the design and the evaluation are based on the needs of the stakeholders (Guba & Lincoln, 1981; Popham, 1993) since the learning needs of each audience are unique to the context, prior experience, and the availability of support and resources (Senge, 1994). The present study is predicated on the assumption that an ecological approach to the design and evaluation of an educational intervention, the needs of an audience could be met and the learning would be transferred and sustained in the long term.

Purpose

The purpose of this study was to examine the long-term effects of an educational intervention designed to assist university staff confronted with aggressive incidents. An ecological approach guided both the design and the evaluation of the intervention which began with a front-end analysis and continued through to the final reports. Participants included twenty Admissions office staff of a large Canadian research oriented university. This context was selected due to existing concerns for the safety and well being of the staff of this office. Concerns translated into not only the safety risk due to an escalating trend in aggressive incidents but increased stress during and after work, reduced confidence in self, and perceived lack of options and control.

In conceptualizing the intervention several questions were addressed. These were: a) What are the learning needs of this group with regard to aggressive incidents in this specific context?, b) What approach should be utilized in the intervention to address these needs?, c) How can effectiveness of the intervention be determined?

Rationale

To design and evaluate any intervention for violence prevention, it is necessary to consider at least three factors. The first is the theoretical framework. There are numerous theories of aggression, violence, and conflict. Regardless of whether aggression is seen as a function of inner human characteristics (Freud, 1961; Lombroso, 1911; Sheldon, 1949), externally motivated drives (Berkowitz, 1962, 1989; Dollard, 1939; Zillman, 1979), social learning (Bandura, 1973; Lewin, 1935), or an interaction with the environment (Altman, 1992; Goldstein, 1994) , situations of aggression are always complex. These theories and subsequent programs approach the concepts of violence, conflict and aggression from different perspectives with different goals and objectives including environmental redesign and social ecological modification (Goldstein, 1994), teaching of problem solving and conflict resolution skills (Bodine, Crawford, & Schrumpf, 1994; Johnson & Johnson, 1989, 1995; Katz & Lawyer, 1994), anger control (Moon & Eisler, 1983; Novaco, 1975), moral reasoning (Kohlberg, 1976), and assault response training (CPI, 1987; PMAB, 1991; Smith, 1983). Each of these perspectives will dictate a different type of orientation and approach. Thus, it is important to specify the framework prior to designing the intervention. The second factor to be considered is the economic reality and staffing conditions surrounding the situation which might impose restrictions on the delivery of the intervention. Under most

circumstances interventions must be provided within time restrictions and limited funding which can create major challenges to researchers, educators, and evaluators (Adelman, 1994; Altschuld & Engle, 1994; Brinkerhoff, 1987; Buckley, 1990; Sleezer, 1994; Worthen & Sanders, 1991). The question of what can be reasonably accomplished within these restrictions is a real factor in planning interventions which aim to have long term impact. The third factor is the set of variables to be considered in order to establish program effectiveness. Evaluations often amount to attendance records, smile sheets, and unsystematic or structured outcome measures (Lam, 1989; Webster, 1993; Wilson-Brewer, 1991). Indeed, it has been reported that there is no evidence that current programs produce long-term changes in violent behavior or that they have caused a decrease in the occurrence of aggressive incidents (Webster, 1993).

Review of the Literature

The intervention presented in this study is based on two sets of theories. The first set consists of theories which explicate aggressive human behavior, its causes (Eron, 1994; Goldstein, 1994a, 1994b; Heusmann, 1994) and approaches to address it (Bodine, 1994; Goldstein, 1994; Johnson, 1995; Katz, 1993, 1994; Smith, 1983; Thomas, 1976). The second set consists of design and evaluation models, both framed within the context of naturalistic responsive evaluation (Guba & Lincoln, 1981; Popham, 1993; Stake, 1967).

Aggressive Human Behavior

One of the major problems in studying aggression and prevention programs is the difficulty in defining the term aggression (Baron, 1994; Berkowitz, 1981). This term is used to refer to a large variety of actions. One view contends that aggression is simply any behavior that harms or injures others

(Buss, 1961). Several researchers assert that in order to be aggressive, actions must involve the intention as well as the actual delivery of harm (Berkowitz, 1981; Feshbach, 1970). Zillmann (1979) limits aggression to attempts to produce bodily or physical injury to others. In addition, there are other questions to consider. For instance, is aggression a behavior, an emotion, a motive, or an attitude? Is it a negative condition? Buss (1961) outlines eight categories of aggression, ranging from stabbing and punching to failure to speak up in another person's defence when he or she is unfairly criticized (Baron, 1994). Definitions also consider the relationship of the act to others. In this regard Baron (1994) notes that defining aggression is also dependant on the recipient or victim's motivation to avoid such harm.

Understanding aggression can be further expanded by considering both intra-individual qualities and the relevant characteristics of the individual's environment (Goldstein, 1994). According to this ecological view, aggression is a person-environment fit. Interpersonal contact and environmental influences must be examined in order to fully understand aggression and conflict. Moving toward a person-environment interactionism places both the understanding of and the intervention for aggression in a more optimistic perspective. As has been stated elsewhere, the opportunity for growth and problem solving coexists with potential destruction (Bodine, 1994; Goldstein, 1994; Johnson, 1993, 1995; Katz, 1994). Aggression from this perspective is the product of unresolved conflict and lost opportunity.

Our society grapples with alarming incidents that plague the family, schools, streets, and the workplace. International to interpersonal, conflict and aggression are very much part of daily life. Reports in the press, reactions to violent crimes in our communities, and violence awareness groups

have served to heighten sensitivity to violence, this most prevalent and destructive behavior confronting North Americans. This study comes at a time when the rate of violent crimes, especially violent offenses, are in a three-year decline in Canada. The public perception however, which some say is directly linked to media coverage, is that crime is rising and that, today, public safety faces an inevitable threat (Goldstein, 1994, Wilson-Brewer, 1991). Recent articles and professionals also warn that there is a potential of increase in violence in the next decade due to the booming 14-17 age group. In the view of North Eastern University criminologist, James Alan Fox (1996), this is the calm before the storm. There are currently thirty nine million children under ten in the U.S., more than any time since the 1950'S. Studies suggest teenagers are at great risk as a crimeprone group (Stallings, 1995; Time, January, 1996) and there is need for multiple approaches from many perspectives to address this problem.

Safety concerns in the workplace reflect this general view and addressing potential threats to safety have become important responsibilities of institutional management, particularly in light of recent incidents such as the 1989 slaying of fourteen women at the Universite' de Montreal (The Gazette, Montreal, Dec. 7, 1995) and the more recent rampage in Scotland (Time, March 26, 1996). Through institutional legislation, policy development, staffing, and security, and Occupational Health and Safety guidelines, attempts are being made to assure the safety and security of workers. Specific measures taken include worksite analysis, steps for preventative control of violence, management of victimized employees, and training and education of all staff (Sandrick, 1995). Schools and educational institutions are among those experiencing both the need and pressure to prepare for violent

incidents.

As can be expected, in such a climate, there is an abundance of intervention programs. Violence prevention, conflict resolution, and mediation programs are being developed and delivered for various ages, groups, and purposes (Johnson, 1995; Lam, 1989; Wilson-Brewer, 1991). Interventions may be designed to educate or treat individuals at primary, secondary, or tertiary levels of prevention. Some interventions emphasize the learning of prosocial behaviors (Goldstein, 1994: Glasser, 1984, 1986), negotiation and resolution skills (Bodine, 1994; Johnson, 1993, 1995; Katz, 1993, 1994; Kreidler, 1984, 1990; McBeth, 1995; Schrumpf, 1991, 1993), and effective communication (Covey, 1989; Carkhuff, 1977; Fisher, 1983). Others emphasize the safety issues and the learning needs of individuals who must deal with aggression as an unwelcome aspect of their job or life in society (Crisis Prevention Institute, 1987; Prevention & Self-protection Course, 1994; Professional Assault Response Training, 1983; Prevention & Management of Aggressive Behavior, 1991). Several interventions address the need to respond to the stress and well being of those confronted with aggression (Mitchell & Everly, 1993; Sandrick, 1995).

Intervention and Evaluation Design

The effectiveness of violence prevention programs is an important issue as managers and educators attempt to develop strategies to deal with the problem. While there has been a proliferation of programs in recent years, there is much uncertainty about the effectiveness of these efforts (Lam, 1989; Webster, 1993). A survey in 1991 of fifty one violence prevention programs found it impossible to identify which ones were most effective (Wilson-Brewer, 1991). Very few of the programs in that study produced any evidence of effectiveness. Thirty percent of the programs conducted no evaluation or had

no data, 49% utilized some form of feedback sheets or attendance records, leaving 21% reporting use of some outcome measures to establish effectiveness. None of the surveyed programs were found to be evaluated at a level approaching rigorous experimental design (Wilson-Brewer, 1991). In many studies conducted, the quantitative evidence is not as strong as the qualitative data (Lam, 1989) and this, at best, has lacked structure and relied on anecdotal evidence rather than actual data. Carefully constructed research methodologies and data collection procedures, as advocated by Popham (1993), need to be incorporated in evaluation designs before a strong case can be made on the effectiveness of a given intervention program.

Educational interventions must also be responsive to the needs of the stakeholder, that is those persons in and around the program such as staff, sponsors, clients, administrators, and support staff (Adelman, 1994; Cranton, 1994; Guba, 1981; Popham, 1993). This is particularly important in these economically driven times. Scarce resources are allocated with care toward interventions that are proven worthwhile. An intervention that is characterized by a partnership between the stakeholder and the educational researcher is one way to ensure that the needs, the intervention and the outcome are in harmony (Fox, 1994; Mansoor, 1994; Popham, 1993; Senge, 1994).

Following on the need to base the intervention in context is the need for meaningful evaluation. Meaningful translates to the perception and experience of the stakeholder. Naturalistic research aims to understand the persons involved and the influence of the physical, social, and psychological environment on them (Smith & Glass, 1987). Naturalistic evaluation adopts this same concern and is mainly focused on small, face to face groups such as the ones that exist in the workplace. Each context has a uniqueness that must also

be recognized in the evaluation design. Naturalistic responsive evaluation operates with a working design, one that is initially preliminary and tentative. Since the unit of study is always more complex than can be anticipated, this working design provides a flexible framework (Guba, 1981; Popham, 1993; Smith, 1987). This approach seems particularly complementary to interventions designed for aggression.

In summary, an interactionist view of aggression and a naturalistic responsive approach to intervention and evaluation share respect for the context and the stakeholder's experience and needs. Responsiveness to the unique context becomes a priority. An evaluation that is dynamically and intricately linked to the intervention itself has the opportunity to embody this responsiveness.

Design of the Intervention

A two day workshop comprised the basis of this study. Front-end analysis identified the critical needs of the setting where the study was conducted. Data from the analysis and interviews were compiled, triangulated, and categorized. The emerging categories revealed specific concerns about violence and aggression. These were: a decreased sense of control and efficacy, decreased sense of safety, and increased ratings of level of stress. Staff survey results and interviews indicated limited awareness of options open to individuals to deal with incidents of violence. These needs formed what is referred to in this study as the key features (Renzulli, 1975),based on which content for the workshop was selected. The content covered areas of aggression and conflict theory, awareness of self, skill development, prevention, and self management. (see Table 1 for more specific content). Following the model proposed by Saroyan and Amundsen (1994), from these key features or concepts,

learning outcomes were identified. The teaching strategies and learning activities were based in the theory and practice of adult education (Brookfield, 1986; Caffarella, 1994; Cranton, 1989, 1994, Mezirow, 1990). The teaching strategies and learning activities take into account prior experience and learning of participants, concern for practical application to assist in the transfer of skills to the workplace, and an interactive and cooperative forum for learning.

The literature and research led to the realization that there are a wealth of approaches, frameworks, and goals that could be chosen to guide the design of the intervention the selected theoretical perspectives appeared robust enough to address the initial questions (i.e. what are the needs and what approach should be utilized?) The interactionalist perspective of aggression and the responsive approach to evaluation created a complementary fit for this study. Recognizing the need to address the stakeholder issues, within the limitations of the context, took priority. An ecological approach where the research activity was based in the setting was adopted in the design and evaluation of the study. The key features framework (Renzulli, 1983) provided structure for the methodology.

Methodology

Context

The context for this study was a large Canadian research oriented university with a student population of forty thousand. The excellent reputation of this institution attracts some sixteen thousand applications per year. Future competition for employment pressures applicants to seek quality education which is perceived as providing a credible edge over others. Refusal of admission, anxiety about process, and the competition frequently create

situations where applicants react aggressively. The staff who work in the Admissions office of this university had been reporting an increase in the number of the aggressive incidents. Their expression of concern for safety and increased level of stress were supported by the administration, the Human Resources, and security departments.

Participants

The participants of this study were eighteen staff and two administrative supervisors from the Admissions Office of this university. This comprised the entire regular staff of the unit at the time. All, except two, participants attended the two day workshop. Only two staff members missed the second day.

Design

The four phases comprising the study are outlined in Table 2. From the beginning of the front-end analysis through to the final report, an ecological approach was utilized. The stakeholders, meaning all those persons with some stake in the intervention, were involved in the design and evaluation of the intervention. During the first phase interviews with administration, human resources, security, and a staff survey served to assist in focusing the intervention. Recommendations from the literature on conflict resolution programs and violence prevention programs provided further direction for both the intervention and the evaluation (Johnson, 1995; Lam, 1989; Webster, 1993; Wilson-Brewer, 1991).

During the second phase a data gathering matrix was developed to assist in instrument development (Table 3). Questionnaires, interviews, observations, and incident journals were all structured to gather data relating to the key

features. During this second phase the two day workshop was developed. Content was based on the synthesis of information from the front-end analysis. Care was taken to design the workshop to be responsive to the needs identified by the stakeholders while including the critical areas identified by experts in the field of violence prevention (Goldstein, 1994; Johnson, 1993, 1995; Smith, 1983). Critical concepts and content are outlined in Table 1.

The third phase involved data gathering, workshop delivery, and workplace support followed by the analysis of the data. The final phase involved the construction of the reports. The entire process covered a span of one year.

Data Sources

An initial needs assessment survey and interviews, during the front-end analysis, served to focus the intervention. Based on this data set, the measurement instruments and workshop were developed.

In all, five sources provided data for this study: a) the questionnaire, which was administered three times, pre, immediately post, and six months after the intervention, b) an evaluation done immediately following the workshop, c) an incident log, maintained by office staff, d) interviews of the staff six months post workshop, and e) records of the on-going observations and support at the job site, maintained by the researcher. The researcher also had an opportunity to monitor the site via video recordings of campus security and used this only to corroborate references made to aggressive incidents by workshop participants.

Analysis

The questionnaires items were rated utilizing a Likert-type scale. Paired t-tests and analysis of variance were carried out to determine difference to the key features between the three time-frames. Sixteen questionnaires provided the primary data for analysis with equal numbering of respondents pre and post intervention.

Interviews were coded according to the key features as well. Three coders scored the data for interrater reliability. This same procedure was utilized for the observations and log journal data. All data with less than 85% of concurrence were discarded.

Results

The results of the evaluation done immediately following the workshop were extremely positive. Of particular interest to this study was the participants' responses to the usefulness and appropriateness of the content. The mean rating for perceived practical use of content was 4.62 on a 5 point scale where 5 is the highest rating. The mean rating for educational intervention being sensitive to their needs was 4.94 on the same scale.

The key features which emerged from the synthesis of the front-end data collection and based on which the content of the workshop was generated also guided the coding of the data collection and the variables for the analysis. Results presented in this section are organized around the key features of awareness of self, identification of cause, self efficacy, use of skills, and level of stress. For each feature, both quantitative and qualitative results are presented.

The results of the ANOVAs suggest a significant change in all features. (see Table 4). An overall comparison of the results indicated consistent improvement in the variables targeted by the design of the intervention.

Table 4

Anova: Changes in key features over time

Key Feature	F-ratio	Pre-Post	Pre-Postpost	Post-Postpost
Awareness of Self	50.491 *	*	*	
Identification of cause	20.915 *	*	*	
Level of efficacy	61.809 *	*	*	
Use of skills	26.408 *	**	**	
Rating of stress	9.809 ***	***	***	****

*p<0.001 **p<0.01 ***p<0.05 ****p<0.10

Awareness of Self

Qualitative results on this concept revealed that even though participants utilized many positive skills, they were employing them in reactive and random fashion with no awareness of why or what they were doing. "I really am flying by the seat of my pants"! "I just bear with it, and hope it is over soon". Interviews with supervisors supported this finding. One particularly representative comment indicated that a staff member "did not seem aware of how offensive the reaction was to the applicant and to those of us around".

Quantitative results as measured by the Awareness of Self ratings provided data on seven factors including awareness of speech content, tone of voice, and volume of speech as well as non verbal communication including gestures, posture, and eye contact. A final factor included ratings of awareness of emotions and feelings. The results of the comparisons pre and post intervention are represented in the Figure 1. the ANOVA F ratio of 50.491 was significant> $.999F_{7,11}=13.0$ (prob< 0.000).

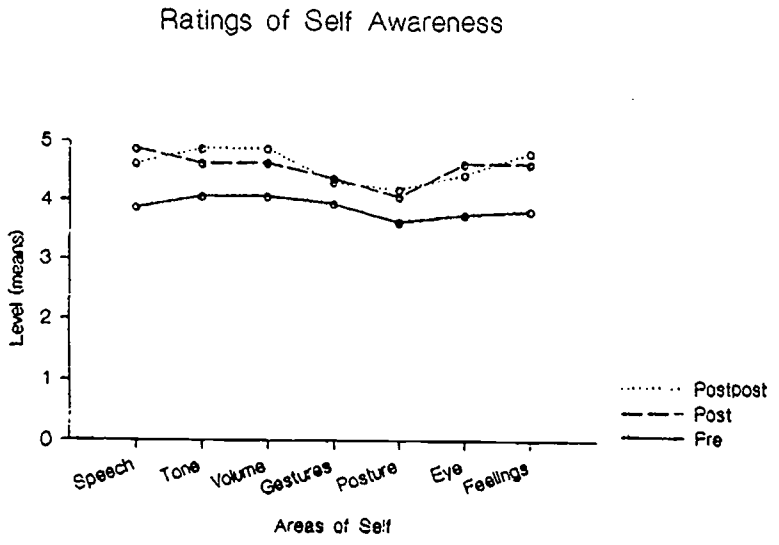

Figure 1 Mean levels of awareness pre and post intervention.

All posttest scores were consistently higher than pretest ratings of awareness of self. This measurement of awareness does not indicate any change in use of these areas, only increased awareness. Larger differences between pre and posttest means are noted with awareness of posture, eye contact, and feelings. Table 5 summarizes the comparisons of participant awareness.

Table 5

Comparison of comments on self awareness from interviews

Topic	Pre Comments	Post Comments
Speech, tone	he said I was rude, I didn't think so, but?	I pay attention now to the way I talk especially when I am feeling frustrated.
Posture	I just knew they could tell when I was afraid or annoyed	I try to be open, in the way I hold my arms, stand, lean forward
Eye contact	She said I wasn't listening just because I wasn't looking at her	I find it hard to look at them but I try now so they know I will still listen. I try to use eye contact to help them see I am sincere

Identification of Cause

The need to identify the cause of aggression became apparent from the initial front-end data collection. At the outset participants identify five reasons for applicant's aggression. All were related to refusal of admission and reaction to that action. While participants were aware of other reasons, these reasons did not correspond with the incidents that occurred at the office. During the workshop, within the context of the key feature entitled "causes", twelve factors were examined as potential causes of aggressive incidents. Subsequent to the workshop there was a significant increase in participants awareness of all 12 factors (see Table 4). All factors increased post intervention. The ANOVA results of the this feature F=20.915 were significant > $.999F_{1,11}$ =9.61. (prob<0.000). The difference pre and post intervention is shown in Figure 2.

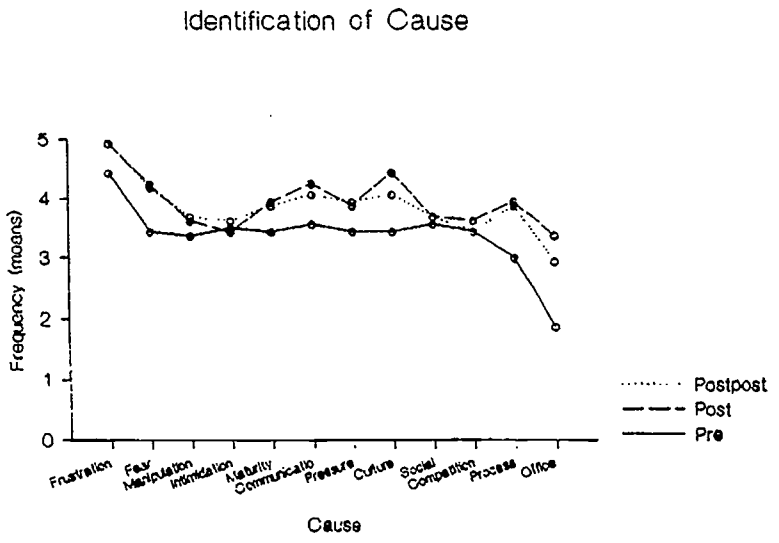

Figure 2. Mean differences in identification of the cause of aggression over time.

Applicant's frustration was identified as the leading cause while intimidation remained low. The latter is expected as aggression is not preplanned on the part of applicants but is most often a reaction. The greatest difference in means pre and post intervention were seen in the area of application process and office procedure as a precipitating cause of incidents. This is important as it points toward areas that the Admissions' Office have more control over and hence can introduce change.

Table 6

A Comparison From Interviews of Sensitivity to Potential Causes of Aggression

Cause	Pre Comments	Post Comments
Fear	(applicants) don't want to hear what we have to say	She was afraid to tell her parents
Frustration Tired	they feel obligated to vent their frustration	he had been to three other offices and walked up the hill several times
Maturity Competition	Not happy with decision it's their problem	he just had not thought of attending anywhere but here
Process Maturity Fear	Just lost it	her first time away from home, a little place, and doesn't know the system
Culture Social Communicate	just won't listen	I wonder if his culture makes it difficult to deal with me (female staff)

Self Efficacy

The term efficacy emerged during the initial needs assessment. Survey results indicated that staff experienced a lack of confidence with their ability to deal with aggression and lack of control of both the situation and themselves. The specifically indicated concern about limited options that they could use in this setting, their inability to predict incidents, and a lack of perceived safety. The safety factor in this feature represents participant feeling of safety during an incident. Questions on seven factors which related to staff sense of efficacy were tested. ANOVA results were significant F=61.809> $.999F_{1,::}$=13.0 (<prob=0.000). The greatest difference in means were for feelings of confidence, ability to cope during the incident, and awareness of available options. The largest gain was realized in an increase in their sense of safety. (see Figure 3).

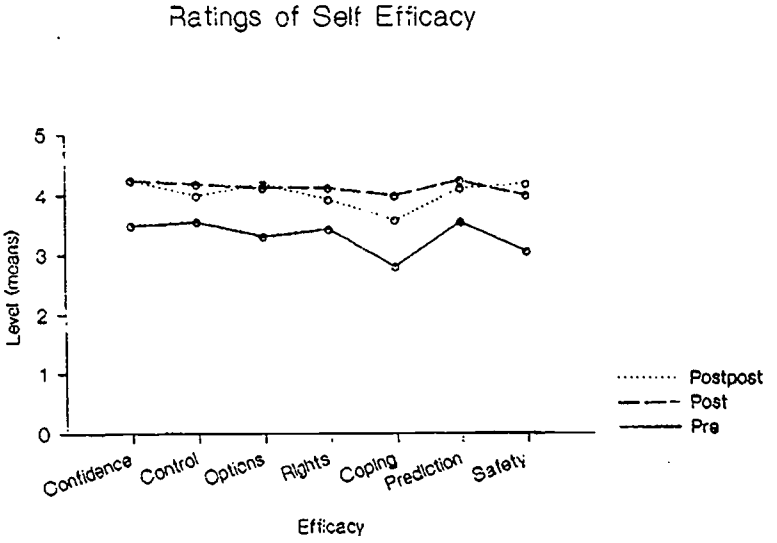

Figure 3. Mean differences of ratings of self efficacy.

Table 7

A Comparison from Interviews of Sense of Self Efficacy

Topic	Pre Comments	Post Comments
Confidence	I worry about media, and ombudsmen should something happen	I have ideas about what to expect I've done it before, and I can help them
Control	(incidents) happen at any moment it is so time consuming and you never know when it will be over.	I know my coworkers are there I can outline politely what I can and cannot do. I'm more patient because I know where I'm going.
Coping	I am concerned about sounding paranoid	We talk after. (supervisors) understand We just need more practice.
Options	we need strong, young, quick security	I left for a few minutes to give him time to cool down
Safety	we are unprotected we need plastic partitions	I think things are in place and I'll be OK

Use of Skills

In the initial survey and during front-end interviews staff could identify interventions and approaches to use with aggressive incidents. The difficulty appeared to be that the approaches appeared to be instinctual. Participants seemed to have no understanding of why some approaches worked or what were appropriate times to use a given approach. When asked how they handled difficult situations staff, tried anything from "a loud booming voice" to distraction and listening. Specific skills that were selected as content of the workshop were use of voice as in tone, volume, use of facial expression as in smiles, irritation, or concern, use of eye contact, use of speech as in words chosen, and use of the team of coworkers. The ANOVA results were significant with F=26.408> $.999F_{1,1}$=18.5 (<prob=0.000). While there was a significant change in all skill areas, the means difference were less for several variables. The facial factor was significantly lower than other factors. The difference between means for the use of the team in dealing with incidents was clarified as staff spoke of the realization that coworkers shared common feelings and difficulties. Providing the forum to share thoughts and experiences allowed staff to recognize the opportunity to support each other. Extending this support back in the office was seen as valuable for all participants. Figure 4 shows the differences in skill use pre, post, and postpost intervention.

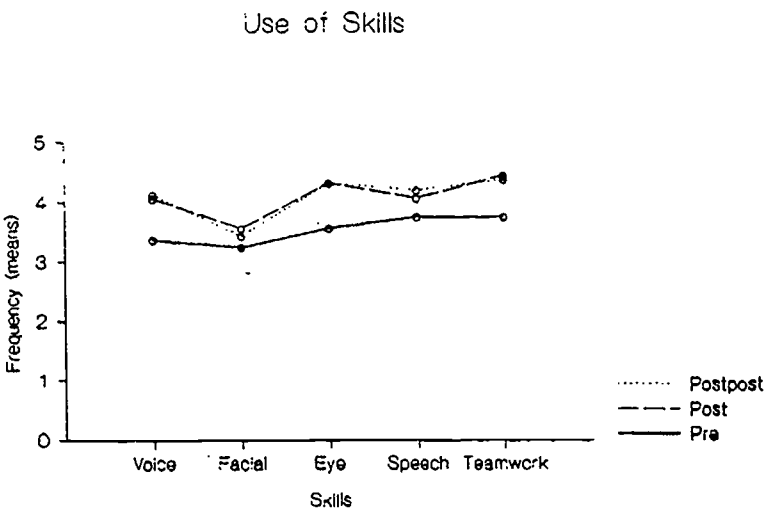

Figure 4 Mean differences of the use of skills utilized by staff.

Comments provided in the interviews and the log entries also shows that moved from confrontational and passive approaches toward sensitive problem solving and empathetic approaches. Participants identified the need to practice debriefing and reflecting on their approaches. After the intervention staff commented on awareness of other alternatives after an incident was over. Supervisors and coworkers made comments to the researcher on the improvement in specific staff. "She handled the situation calmly and clearly, we were impressed at the difference". Another individual spoke with enthusiasm and pride as he described how he interacted in a with a particularly frustrated applicant. "I realized he was beyond reason, so when I went to get some information, I gave him some time to calm down. I watched his reactions for de-escalation so I knew when to talk". The change in approach and the greater confidence is illustrated in Table 8.

increased stress of this group. This is a good example of what Campbell and Stanley (1963) have referred to as history and have identified as a threat to validity. There was reduction of all factors tested as measures of level of stress. (see figure 5 for overall decrease).

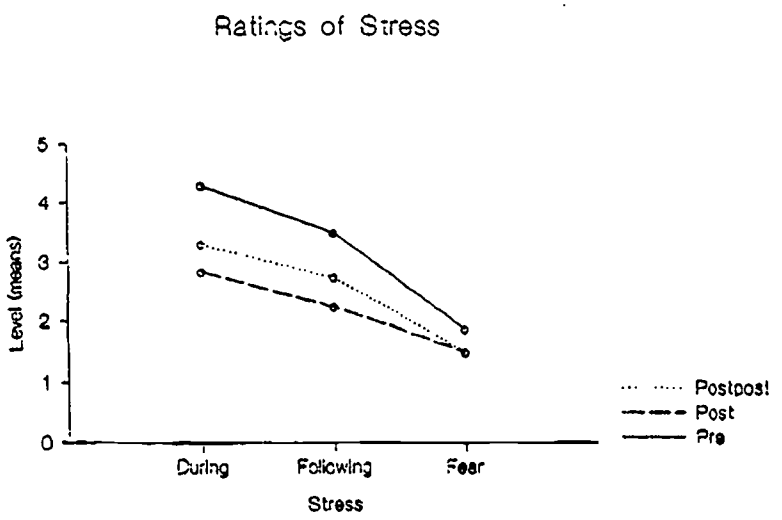

Figure 5 Comparison of means ratings of level of stress.

Statements made by staff in post intervention interviews demonstrated an increase in positive attitudes toward incidents of aggression as well as the use of more satisfying and effective coping strategies in such situations. Table 9 summarizes the comparison of comments made pre and post intervention.

Table 8

A Comparison from interviews and Logs of Skills Used During Incidents

Topic	Pre Comments	Post Comments
Voice	The quieter I got the more he yelled gets excited and hollers as loud	I pay attention to how I talk more than what I say When I make statements now, I am not woozy
Eye	If you glare right back.... I just don't look at them I explain (process) in detail	I looked at her all the time she was talking even though I thought I knew what she would say
Speech	I tell them all the alternatives (log) I agreed with everything (log)	I concentrated on my paper until she quit threatening I say less and listen more I try not to go on and on

Self Rating of Stress

An uncomfortable level of stress was evident in comments made by these staff from the initial contact. There were three specific areas that appeared to concern staff; stress during the incidents as well as level of stress upon leaving work. This factor was tested for change. In addition, participants were asked to rate their level of fear of harm or injury as this seemed to precipitate much of their stress and was in fact one of the primary reasons for conducting the intervention. The ANOVA results for this feature F=9.809 was significant > $.95F_{1,1}=6.94$ (<prob=0.029). The difference in mean scores for this feature were not as large as found with other features. This finding was not surprising as concurrently organizational changes had been initiated within the system. At the fourth month post workshop a major reorganization of the department was announced. Interview and site observations supported the

Table 9

A Comparison from Interviews and Log Entries of Level of Stress

Topic	Pre Comments	Post Comments
During Incidents	Just so much abuse one can take. I feel like crying I can't think I can't breathe I have to get some space	I don't take it personally I focus on what they are feeling I take a deep breath I know how the rest are feeling now
Following Incidents	I think about it at home they threaten to be back You wonder if they will show up after work	I appreciate their concern I walk after work My exercise is important
Level of Fear	they could do anything it happens so often sometimes many times in one day we need a guard at the door	Promoting a sense of unity in the office is essential I don't feel alone I take my time as I realize it will de-escalate and pass

Final Needs Comparison

Staff of the office were asked what other resources or interventions were required to assist them to deal with the aggressive incidents. These questions were asked during the front-end survey and again in the final questionnaire and interview. The comparison of this data served as another measurement of effectiveness of the intervention in meeting the needs of the participants. Table 10 summarizes the comparison of participant comments. A significant change in focus of concerns is illustrated. Prior to the intervention many of the needs are expressed in terms of equipping themselves for countering aggressive reactions, after the intervention, the focus was on things to do to avoid the development of an aggressive incident.

Table 10

A Comparison of Needs Identified By Participants

Front-end Survey Comments	Final Comments
Faster backup	Need to get together to discuss problems and strategies
Guard at the door	Reinforce the skills
Metal protectors	The application process
Strong, young, quick security	Ensuring documents are timely
Self defence skills	Simplify the bureaucracy
Training in dealing with difficult people	More practice sessions with simulated incidents
Ability not to show discomfort	More promotion of the sense of unity in the office
To function as a team	More support with the stress of change in the university
Assertiveness	
Safety & Disaster plans	
Awareness by University administration of the abuse	

Limitations

Several factors jeopardized the validity of this study. History, meaning events which occur between measurements in addition to the workshop were impossible to guard against. Utilizing a responsive design however allowed the researcher to be keenly aware of the events happening in the setting. One particularly critical event was an organizational decision, in the fourth month post workshop, to restructure the admission office and amalgamate it with other departments. This created considerable tension and insecurity in the setting. The effect in this instance would be to lessen effects on key features by the experimental variable. Maturation does not appear to be a threat in this setting. All staff were adults, the youngest being in mid-twenties and the oldest in mid-fifties. Testing effects were limited by the self report nature of the majority of questions. Knowing scores from previous testing would serve no advantage for repeated measures. All questionnaires were confidential. Each one was identified by a code and no names were used.

All interviews, observations and scoring was done by the researcher which served to guard against changes in instrumentation.

Further threats to validity could have been lessened by including a control group in the design. The uniqueness of this setting created difficulty in finding a comparable group. Doing a split group, dividing the office in half lessened the potential of the intervention to have impact on the total setting.

Conclusions

The learning needs of this group were unique in many ways. Primarily these staff were unprepared for incidents of aggression because it is not an expected job requirement. Moreover, the office as a whole has a service orientation toward applicants. It is very difficult to resolve incidents when the refusal of the application is based on standards that cannot be changed by these front line staff. Applicants are refused primarily because they do not meet the academic standards for acceptance. The motto that "the customer is always right" is difficult to practice when there is no room for movement. Another complicating condition is the nature of a big institutional bureaucracy. In such situations, there are more applications, more regulations, and more procedures. Frustration increases as the complexity increases.

The needs regarding violence prevention are complex in any setting. All parties involved including the applicant, the Admissions Office workers, the institution, have needs that are at times in conflict with one another. True to the theory of conflict, all these needs are complicated by perceptions. Systematic identification of all these perceptions is an essential part of providing a focus for an effective intervention for aggression and its

subsequent evaluation. For these staff, knowledge of aggression and skills for intervention formed only part of the focus. Self awareness, efficacy, and stress management were equally essential features in the intervention.

In this intervention effectiveness was determined by measuring a set of key features which comprised the focus of the workshop. Significant differences were observed in all features. Statistical gains were supported by the practical gains found in the interviews, log journal data, and on site observations.

Any learning which occurs during a workshop must continue beyond the few days of a workshop. Skills are not acquired overnight, issues and problems are dynamic and change. Skills must be transferable and generalizable to new concerns.

An intervention that is designed on the articulated needs of participants is more likely to promote long term effectiveness

The effectiveness of the workshop described in his paper needs to be interpreted with an understanding of several limitations. First, the design did not include a control group. This was partly due to the small number who comprised the entire Admissions Office. Second, concurrent with the day to day business of serving a demanding clientele, staff were confronted with several changes which occurred at the institutional level. For instance, staff were concerned with the changes accompanying the amalgamation of the Admissions and Registrations Offices. Such incidents impacted personnel negatively, causing stressful conditions. Increase in stress levels were reported by participants but dealing with this type of stress had not been an objective of the workshop. These events point to potential threats to validity and thus underscore the limitations of the study.

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Table 1

Key features comprising workshop content

Key Feature	Workshop Content
Awareness of Self	Biological and psychological reactions to aggression Working with people Motivation Control vs caring, issue of personal responsibility Self inventories (reactions to stress, responses to conflict, communication styles) Self control plans
Identification of Cause	Perspectives of aggression, conflict, and violence. Legalities and Rights Communication dynamics Arousal and aggression cycle Aggression and development Sociocultural influences Environmental influences Interactionism
Use of Skills	Conflict resolution skills Communication skills Responses to aggression, verbal and nonverbal Links with the environment Team Work Campus security
Level of Stress	Self Care and Stress management Debriefing and reflection Reflection
Self Efficacy	Cases from work Transfer of skills Monitoring your skills Logging the incidents Going Back to Work

Table 2

Key Features Working Plan

Phase I	Phase II	Phase III	Phase IV
Front-End Analysis	Synthesis of Input Information	Data Collection & Analysis	Evaluation Reports
I. Assessment -staff survey & talley -interviews -site visit -linking with security & Human Resources II. Research -aggression -programs -evaluation III. Document Development -contract -consents & confidentiality	I. Development of Data Gathering Matrix II. Instrument Development & Selection -Validity tests _Reliability -Directions -Pilot & revisions III. Workshop Development -course -materials	I. Administration of instruments -Pre, post, post -Interviews -Incident Logs -Observations visits & video II. Workshop Delivery -evaluation III. Analysis IV. Summarize	I. Interim _Narrative -Statistical -Graphics II. Final
Feb - April/95	April-May/95	May/96- Jan/96	Feb-April/96

Renzulli, J. (1975)

Table 3

Matrix of Key Features and Sources of Data

Features Sources	Awareness of Self	Identify Causes	Efficacy	Use of Skills	Level of Stress
Staff	Question Interview Observe Res Notes	Question Interview Logs Observe Res Notes	Question Interview Logs Observe Res Notes	Question Interview Logs Observe Res Notes	Question Interview Logs Observe Res Notes
Supervisors	Question Interview	Question Interview	Question Interview	Question Interview Res Notes	Interview Question
Human Res	Interview	Interview	Interview	Interview	Interview
Security		Interview		Interview	Interview Video
Documents	Survey	Survey	Survey	Survey	Survey

Table 4

Anova: Changes in key features over time

Key Feature	F-ratio	Pre-Post	Pre-Postpost	Post-Postpost
Awareness of Self	50.491 *	*	*	
Identification of cause	20.915 *	*	*	
Level of efficacy	61.809 *	*	*	
Use of skills	26.408 *	**	**	
Rating of stress	9.809 ***	***	***	****

*p<0.001 **p<0.01 ***p<0.05 ****p<0.10