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**AN EXAMINATION OF EMOTIONAL AND BEHAVIOURAL ELEMENTS OF THE
ESCALATING INTERPERSONAL CONFLICT PROCESS**

by

Edward M. Vokes

B. A. York University, 1984

A Thesis

**Submitted to the Faculty of Graduate Studies
through the Department of Psychology
in Partial Fulfillment of the
Requirements for the Degree
of Master of Arts at the
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1987**

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An eye for an eye soon makes the whole world blind.

M. K. Gandhi .

DEDICATION

To my mother and father who have endured so much,
To my sister with whom I've shared so much,
To my wife with whom I find peace.

ABSTRACT

The goal of this study was to identify emotional and behavioural elements of escalating interpersonal conflict and examine how they interact during periods of escalation and de-escalation. Fifteen male and female subjects took part in a preliminary study to develop an efficient method for naive subjects to identify these elements of the conflict process. Thirty-nine male and female subjects participated in the primary study which used the method derived from the results of the preliminary study. These subjects viewed each of three filmed episodes of simulated marital conflict five times. Over the course of these viewings subjects recorded their perceptions of: points of conflict escalation and de-escalation; the emotional states actors experienced; the behaviours which they associated with the emotions; and the changing intensity of the conflict. A content analysis of subject responses was conducted using fifteen emotional and five behavioural categories. Comparisons among categories indicated that subjects associated the perception of anger with conflict escalation. They appeared to rely on subtle cues of anger to recognize the onset of escalation, then focused on more overt anger cues to determine the conflict intensity. Emotions other than anger reported during escalation (distress-anguish and fear) appeared to be related to the particular content of the conflict and may have contributed to the arousal of anger. De-escalation was associated with the decline of signs of anger and the

occurrence of behaviours associated with other emotional states. An apparent interaction between surprise and guilt may function to inhibit anger and, therefore, contribute to the de-escalation of a conflict interaction. De-escalations which occurred at the end of poorly resolved conflicts were characterized by emotional states (distress-anguish) which may lead to the arousal of anger. On the basis of these findings it was concluded that there appears to be the potential to regulate conflict interactions through efforts to influence the emotional states of conflict participants. A foundation for the development of emotion based conflict regulation strategies is presented.

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CHAPTER I

INTRODUCTION

The present thesis represents the first stage of a comprehensive research project which seeks to develop techniques for the control and regulation of interpersonal conflict interactions. It is the basic premise of this research that conflict escalations often produce outcomes dysfunctional to the existing relationship between conflicting parties. The goal of the overall project will be to develop a training program which will provide individuals with practical methods of recognizing and avoiding conflict escalations.

In this first stage, the goal is to analyze dysfunctional instances of escalating conflict to identify the emotional states and associated behaviours of conflicting parties which consistently suggest to observers that a conflict situation is getting worse or improving. The second stage will involve the identification and development of strategies and techniques for managing the emotional states and behaviours associated with dysfunctional escalating conflict. Here the emphasis will be on first party intervention to avert dysfunctional conflict interactions. The final stage will involve the development and evaluation of a flexible training program based on the earlier developed strategies.

Interpersonal Conflict

Allison and Rick have been married for three tranquil years. Allison usually looks after paying the family bills and keeps track of finances. As she is sorting through the receipts from what is turning out to be a particularly expensive month, she comes across a sales slip from an exclusive men's clothing shop for more than six hundred dollars. She is aware of the fact that Rick had purchased a new suit and accessories, but had no idea how much it had cost.

She angrily confronts Rick with the slip and asks how he could ever have imagined that they could afford such an extravagant purchase. He responds by saying that he does not buy a new suit very often and that those he does purchase have to convey the right image of success. Besides, he argues, since when does he have to clear everything he does with her? She retorts that he does not have to clear everything, but when it comes to major purchases he might have enough common sense and courtesy to find out if they can afford it. He responds by stating that he bought the suit at the beginning of the month, and questions how he was supposed to know it would turn out to be a costly month? He continues by stating that every time he does something that is out of the ordinary, she gets on his back about it. Allison turns and, as she leaves the room, exclaims that at least one of the participants in their marriage has to behave responsibly, plan ahead, and be considerate of the other person - and that is obviously not him!

The preceding anecdote illustrates the type of conflict which is the focus of this thesis. This research examines the problem of escalating conflict within the context of close personal relationships. This specific type of dyadic relationship was selected for three reasons. First, it was thought important to limit analysis to a single type of interpersonal relationship to avoid the difficulties associated with comparing interactions involving different role relations. Second, escalating conflict interactions frequently happen in such relationships. And third, they are common experiences and, therefore, can be meaningfully analyzed by a sample of subjects.

A Systems Approach to Interpersonal Conflict

The basic perspective which guides this research is general systems theory. Systems theory is a relatively new approach to scientific investigation which offers the researcher a unique theoretical framework for dealing with complex phenomena. Traditional scientific approaches often require the reduction of a phenomena to its basic elements before it may be subjected to analysis. Systems theory offers an alternative approach which enables one to examine a total phenomenon within its environmental context (Weinberg, 1975). Thus, in terms of the present research, systems theory offers the opportunity to examine interpersonal conflict escalation without having to artificially limit intervening variables or remove conflict from the real world setting within which it occurs.

The social dyad as a system. In the simplest sense, a system can be defined as a set of components (which are themselves often systems) which interact within a defined boundary (Berrien, 1976). Implied within this basic definition is the notion that a system has both a structure and a resulting function (Berrien, 1968). In the present context, the members of a social dyad can be regarded as the major components of the system, and together, define its boundary. This provides the basic conceptual structure of the dyad as a system. The many possible forms of interpersonal interaction (the interaction between the system components) represent the function of the system (e.g. conversation, play, and conflict).

A social dyad is not, however, an isolated system functioning independently of its surroundings. Instead, it functions within, and interacts with, a suprasystem consisting of the surrounding physical and social environment (e.g. those persons and conditions most immediate to the dyad which influence and are influenced by the functioning of the dyad). When a system functions in this manner, that is, when there is the exchange of energy and/or information with the environment, then it is classified as an "open" system (Ferguson & Ferguson, 1980).

The notion of a dyad as an open system is important for two reasons. First, it implies that anything which happens between the individuals in a given dyad is likely to have an impact which extends beyond the boundaries of the dyad. Second, it suggests that occurrences beyond the dyad have an impact on the interactions between the individuals. In essence, a systems conceptualization prevents one from viewing a complex phenomena, such as interpersonal conflict, as an isolated and externally uninfluenced process.

According to Frost and Wilmot (1978), most scholars fail to agree on the definition of conflict. This is due primarily to the fact that each of the researchers studying conflict has adopted a unique theoretical approach which has shaped their perception of conflict. Common to all conflict definitions, however, is the explicit or implicit recognition that conflict must be regarded as a multidimensional construct. Systems theory, by its very nature, is particularly suited to accommodating the multidimensional

character of conflict interactions. The following section focuses on the development of an operational definition of conflict which is consistent with the principles of systems theory. In addition, the important elaborative concepts of 'functional' and 'dysfunctional' conflict, and 'conflict escalation' will be examined and defined.

Definition of Terms

Developing a Systems Definition of Conflict

There are many definitions of interpersonal conflict, each shaped by the assumptions of the author's underlying theoretical approach. However, very few are based on the assumptions of systems theory. For this reason, it is necessary to develop an operational definition based upon systems theory principles to guide the present research.

There are two essential criteria stemming from systems theory principles which will be considered in the development of an operational definition. First, the definition will reflect the notion that interpersonal conflict is an interaction process consisting of a series of developmental stages; and second, it will acknowledge that the conflict process is dependent upon the dyad members' subjective cognitive interpretations of events, rather than any absolute criteria. These points are examined in the following sections.

A process view of conflict. Escalating conflict is only one of many possible forms of interaction within a dyadic system. The

function of the system can be regarded as a set of patterned relationships known as the "process" (Scherer, Abeles & Fischer, 1975). The goal of a systems analysis is to break down the system into its components, component relations, intervening variables, and ordered process stages.

The role of cognitive interpretation. Systems theory emphasizes the importance of avoiding the fallacy of absolute thinking and promotes an understanding of the world in relative terms. The experience of reality is regarded as a construction by the observer of his or her subjective interpretations and not based directly on an objective reality (Weinberg, 1975).

This view of reality is reflected in several current theories of interpersonal conflict. For example, Robbins' (1983) view regarding the identification of conflict interactions is consistent with the systems perspective on subjective perceptions. He states:

...conflict must be perceived by the parties to it. Whether conflict exists or not is a perception issue. If no one is aware of a conflict, it is generally agreed that no conflict exists. Of course, conflicts perceived may not be real, while many situations that otherwise could be described as conflictive are not because the group members involved do not perceive the conflict. For a conflict to exist, therefore, it must be perceived. (p. 336)

Once an individual determines that a given interaction is a conflict, cognitive interpretation plays a major role in the conflict process. What is important is not objective reality but the participant's subjective perceptions of reality which influence the beliefs that they hold, the decisions that they

make, and the behaviour that they demonstrate in a conflict interaction (Mortensen, 1974; Nye, 1973). For example, the actual behaviours which occur in an interaction need not be overtly threatening to be considered conflictive by the participants. Indeed, to any outside observer, they may appear entirely harmless. However, when one party interprets the behaviour of the other party as threatening, the subsequent interaction will proceed as if a threatening event had actually taken place.

Therefore, cognitive interpretations of a situation play a tremendous role in defining where and when a conflict occurs. The definition of conflict then, must incorporate the role of subjective interpretations.

Toward an Operational Definition of Interpersonal Conflict

In the previous section, the need for a cognitive process definition of interpersonal conflict was established. This section identifies the elements which should be included in such a definition. The definition of Frost and Wilmot (1978) proceeds from a communications perspective; however, it is particularly relevant to this research because it synthesizes several earlier definitions and incorporates the notions of subjective perception and process. Frost and Wilmot state,

...conflict is an expressed struggle between at least two interdependent parties, who perceive incompatible goals, scarce rewards, and interference from the other party in achieving their goals. They are in a position of opposition in conjunction with cooperation. (p. 9)

This definition can be broken down into three elements which Frost and Wilmot regard as the essential elements of all interpersonal conflicts. These are: "an expressed struggle", "interdependence and independence", and "perceived incompatible goals". The following sections discuss each of these elements and introduce emotion as a critical aspect of interpersonal conflict.

An expressed struggle. In order for one to say that a conflict is occurring, the expression of struggle among the participants must occur (Coser, 1956; Frost & Wilmot, 1978; Mortensen, 1974; Nye, 1973; Weber, 1913/1947). In any interpersonal interaction the nature of the communication identifies the type of interaction which is taking place. In interpersonal conflict, the expression of struggle represents the communication which signals a conflict to an observer. However, as implied previously, an observer's report of conflict behaviour does not necessarily indicate that a conflict will take place. What is necessary is agreement by interacting parties that the apparent struggle represents conflicting behaviours. When this is the case, the first element of interpersonal conflict is present.

Some theorists insist that signs of manifest fighting be present before an interaction can be regarded as a conflict. Others however, such as Robbins (1974, 1983), insist that this is only one possible manifestation of conflict. He argues that interpersonal conflicts often occur with much subtlety. Both parties could agree that the behaviour was indicative of a conflict while an outside observer would regard it as perfectly

benign. For instance, a husband and/or wife might bring home extra work from the office to avoid perpetuating a disagreement started during breakfast. Here, the interpersonal struggle is manifest through apparently nonconflictive behaviours.

Conversely, if interactants regularly demonstrate behaviours commonly associated with conflict but do not consider these to be conflictive then they cannot be regarded as such. A corollary to this rule is that interacting parties may agree that particular amiable-type behaviours are indeed combative. Thus, the expression of struggle may be idiosyncratic to a given dyad. Nevertheless, it is important to note that within a given society there is a general consensus as to the actions which constitute conflicting and nonconflicting behaviour.

Frost and Wilmot (1978) state that most of these expressed struggles have a "triggering event" which serves to clearly indicate to all present that a conflict is occurring. Additionally, conflicts are often based on issues which are larger and more long lasting than the trigger event. The essential premise established here is that all interpersonal conflicts involve an expressed struggle, regardless of whether the expression is verbal or non-verbal, subtle or overt, common or unique.

The previous discussion suggests that it is extremely difficult to arrive at reliable and measurable indicators of conflicts which can be used while they are in progress. This is due to the fact that during the interaction, the only available

information are visible behaviours. This is true for the outside observer as well as the participants. Although each participant does have the advantage of prior knowledge of the other's motive or intent, in the end however, he or she must rely on visible cues to verify or disprove operating beliefs. Under these circumstances an observer must utilize information from a variety of sources in order to make a reliable assessment about the existence of a conflict.

Interdependence and independence. Almost every theorist reviewed has implicitly or explicitly indicated that interdependence is a necessary element of social conflict (Coser, 1956; Deutsch, 1973; Frost & Wilmot, 1978; Nye, 1973; Robbins, 1974, 1983; Scherer, et al., 1975; Vliert, 1984; Weber, 1913/1947). Conflict can only exist between individuals who are somehow linked to one another. This section explores the concept of interdependence and introduces the associated concepts of cooperation, competition and interference.

As discussed previously, a social dyad can be regarded as an interdependent open system. In a general sense, interdependence implies that the components of the system (dyad members) are in some way linked to one another so that either member's behaviour has an impact on the other. It follows, then, that in an interdependent relationship neither party is able to make a decision which is totally independent or separate from the other. This results in a very complex decision-making process, with the engaged parties interacting not in a linear, cause-effect manner,

but through a series of interdependent decisions (Frost & Wilmot, 1978).

Interdependence is not strictly an objective quality of a relationship but also involves subjective interpretations. Each member of a dyad relies on personal feelings, beliefs, goals, interpretations of present circumstances, and the relationship history, to assess their level of dependence on the other member or on a common resource pool. The perception of relative independence among the interacting participants allows each party to make decisions without regard for the choices of the other. The perception of interdependence, however, leads to a decision-making process like that discussed earlier (Frost & Wilmot, 1978). Thus, perception plays a significant role in determining just how interdependent the participants consider themselves, and this in turn, has an impact on the shape and development of the conflict process.

Interdependence is generally divided into two types. Each type describes a general relationship configuration based upon the link between participant goals which bring both parties into association. Morton Deutsch (1973) distinguished between "promotive" and "contrient" interdependence, while Scherer et al. (1975) prefer the terms "positive" and "negative" interdependence. When dyad members are dependent upon one another, they are said to be in a relationship of promotive or positive interdependence. In this situation the members are linked by mutual dependence, and thus, cooperation is required for each to achieve his or her

respective goals. Conversely, when two individuals are dependent on the same set of limited resources they are said to be in a state of contrient or negative interdependence. In this case, if one member achieves his or her goal, the other necessarily cannot. Therefore, both parties must compete with one another to maximize their gains and minimize losses.

According to Deutsch, and Scherer et al., these states of interdependence serve to define cooperation and competition. That is, they associate the occurrence of promotive interdependence with cooperation, and the occurrence of contrient interdependence with competition. There are two positions regarding the relationship of conflict to cooperation and competition. One position is that conflict develops only out of competitive relationships (e.g. Nye, 1973; Scherer et al., 1975; Weber, 1913/1947). The other is that either form of interdependence may lead to conflict (Deutsch, 1973; Frost and Wilmot, 1978). It will be argued in this thesis that this latter position provides a more comprehensive view of the conditions from which conflict may develop.

The fact that competition often results in conflict is a well established principle in the conflict literature. This relationship was demonstrated repeatedly by the Sherifs', beginning with their "Robbers Cave" experiment in the early 1950's (Sherif, 1966; Sherif, Harvey, White, Hood, and Sherif, 1961). A major focus of these studies has been the incompatibility of goals between opponents which cannot be eliminated through cooperative

efforts. When a situation exists whereby resources are limited due to natural, social, or institutional factors, the only options available to participants are to compete or give up their respective goals.

However, competition does not always lead to conflict. Many factors including relative power, perceptions of justice, and the history of the relationship may be involved in determining whether a competitive interaction will develop into a conflict interaction. However, a major factor determining whether a particular competitive interaction will turn into conflict is the emotional state of the participants as the interaction progresses. It is suggested that competitive interactions remain competitive as long as the participants experience positive emotions. However, a competitive interaction develops into a conflict interaction with the emergence of intense negative emotions. The role that negative emotions play in conflict will be discussed in later sections of this thesis.

In a cooperative relationship members have the option of either cooperating to produce mutual benefits, or not cooperating to prevent the other from achieving their goal. In this sense, cooperation is different from competition in that the interaction may turn into a conflict if one member chooses to withhold a resource desired by the other. For instance, an employee is dependent upon an employer for wages while the employer is dependent upon the employee for labour. When they cooperate, they exchange labour for money. However, if one party believes that

the relationship no longer represents a fair exchange, they may choose to stop cooperating until the terms of the exchange are modified to their liking.

A common feature of both forms of interdependence is the potential for interference or "blocking behaviour". That is, actions which prevent, or attempt to prevent the attainment of the other's goal (Frost & Wilmot, 1978; Robbins, 1983; Vliert, 1984). In a competitive conflict, participants engage in behaviours intended to block their opponent's attainment of the mutually desired goal. For example, if two fishermen are competing for a limited number of fish, one may sabotage the other's boat and nets. In conflict which stems from not cooperating, withholding of resources can be regarded as blocking behaviour. The employee who goes on strike effectively blocks the goal attainment of the employer who, in turn, withholds the employee's wages.

When parties perceive that their counterpart is in a position to interfere with their attainment of goals or has attempted to do so, they recognize that their access to required or desired resources is threatened. This, in turn, can result in pre-emptive or retaliatory blocking behaviour which initiates or fuels the conflict process (Frost & Wilmot, 1978; Robbins, 1983; Thomas, 1976; Thomas & Pondy, 1977). Underlying this interference interaction, is the important issue of the perception of intent. Thomas and Pondy (1977) argue that the initial perception of intent to frustrate represents the transition from competitive or cooperative interaction to conflict interaction, while subsequent

perceptions of intent represent critical points in the conflict process. They state,

...attributions of intent are asserted to mediate strongly between the frustrating behaviour of the other and the party's own response....[They] may also initiate a conflict episode when the attributed intent forecasts frustrating behaviour by the other party. Likewise, during a conflict episode, the behaviour of the other may suggest intentions which imply further frustration. (p. 1092)

Furthermore, they suggest that if a participant perceives the frustrating behaviour of the other as unintentional, then there is less likelihood that an escalation in blocking behaviour will develop. However, if one party interprets the other's behaviour as an intentional effort to frustrate, it does not matter what the other's intent actually may have been, retaliation is more probable. Thus, the perception of intent to block goal attainment is as important as blocking behaviour itself. In addition, the perception of intent plays a significant role in the moderation of emotion in a conflict situation. This topic will be discussed in the section on emotion.

In summary, the notion of interdependence is critical to the understanding of the dynamics of conflict. The distinction that Deutsch makes between promotive and contrient interdependence is particularly important in unifying the relationships among the concepts of conflict, cooperation and competition. In addition, interdependence leads to the opportunity for interference, and interference can be regarded as the demarcation point which often

signals the transition from a competitive or cooperative interaction to a conflict interaction.

Perceived incompatible goals. If interdependence represents the relationship structure that is required for conflict, the perception of incompatible goals can be considered the initial impetus for interpersonal conflict. In order for conflict to occur, each participant must perceive that his or her own goals are incompatible with those of his or her counterpart. This incompatibility may be real or imagined (Coser, 1956; Deutsch, 1973; Frost & Wilmot, 1978; Robbins, 1983; Simmel, 1908/1955; Thomas, 1976). One of the first contemporary social theorists to suggest that incompatibility lies at the root of conflict was Georg Simmel. He argued that all conflict is based on incompatibility, and that the conflict process results from a desire to achieve compatibility.

Conflict is thus designed to resolve divergent dualisms; it is a way of achieving some kind of unity, even if it be through the annihilation of one of the conflicting parties....Conflict itself resolves the tension between contrasts. (Simmel, 1908/1955, p. 13)

The role of emotion. The discussion thus far has focused on the cognitive and behavioural aspects of interpersonal conflict but not the emotional aspect. While conflict theorists acknowledge that emotion is associated with conflict they often regard it as an unreliable indicator of conflict, and therefore, do not deal with it. For example, Frost and Wilmot (1978) state:

...the distinctions between emotionally involving and nonemotionally involving conflicts are not very useful. They further the idea that one must be angry

and showing that anger if a "real" conflict is going on. Emotion does usually accompany conflicts, but often the emotion is sadness, bitterness, the desire to win, or sarcasm, as well as anger. (p. 8)

Others, however, contend that emotion is too important to disregard (Mortensen, 1974; Thomas & Pondy, 1977). These conflict theorists find support for their position from interpersonal relationship theorists such as Hinde (1981), who states:

The behavioural and affective/cognitive aspects of interpersonal relationships are almost inextricably intertwined....It is thus necessary for studies of interpersonal relationships to be concerned not only with their behavioural but also with their affective/cognitive aspects. (p. 2)

The issue then, is the role which emotions play. In the following discussion, the role of emotion as the motivational force mediating the conflict process will be developed.

Thomas and Pondy (1977) regard human beings as thinking creatures, whose thoughts (and therefore, behaviours) are often influenced by emotions; and whose emotions are often dependent upon cognitive interpretations of sensory inputs, and are therefore, partially influenced by thinking. Support for this position comes from a number of theorists (Izard 1975, 1977; Jones, 1985; Tomkins 1984; Zajonc, 1984; Zajonc & Markus, 1984). It is Izard's and Tomkins' additional contention that within this hypothesized interplay of emotion, cognition, and behaviour, emotion represents the primary motivational system for the human being.

Thus, with respect to conflict, the attribution of intent to frustrate will have a significant impact upon a party's emotional

reaction to an event. The emotional response, in turn, influences the behaviour that one party will demonstrate toward the other (Thomas & Pondy, 1977). For example, the perception of intent to interfere frequently leads to the experience of hostility (an emotional blend of anger, and to a lesser extent contempt and disgust, resulting in the desire to inflict harm on another [Chaplin, 1975; Izard, 1977]). The simultaneous feelings of hostility serve to motivate retaliatory behaviour. Thus, if the frustrated individual perceives that the other party had no intent to interfere with goal attainment, then it is unlikely that hostility and subsequent retaliation will develop.

Once a conflict has been initiated, reciprocal retaliatory behaviour is generally regarded as the basic interaction pattern which maintains or escalates a conflict exchange (Mortensen, 1974; Teger, 1970; Thomas, 1979; Thomas & Pondy, 1977; Vliert, 1984). However, as Frost and Wilmot earlier indicated, anger is not necessarily the only emotion which can be present in a conflict interaction. Other emotions such as anxiety, sadness, fear, surprise, bitterness, and disgust, may also be present in a conflict exchange. There is no indication however, that positive emotional states are commonly associated with interpersonal conflict.

Because of the primary role which emotions seem to play in interpersonal conflict, the final definition should include emotion as a major component. The formation of a process

definition which includes this and all previously discussed elements of conflict will be developed in the following section.

Interpersonal conflict defined. In the preceding sections, it was determined that an operational definition of conflict needs to regard this phenomena as an interpersonal process which is governed by the participant's subjective perceptions of reality. Furthermore, it was argued that there are four major elements of conflict; an expressed struggle, interdependence, perceived incompatible goals, and negative emotions. Each of these must be integrated into the final definition. These criteria lead, then, to the following definition. Interpersonal conflict is an interaction process involving two or more interdependent parties. It is characterized by an expressed struggle which is initiated and maintained by negative emotions stemming from the mutual perception of incompatible goals, and interference in achieving these goals.

Functional Versus Dysfunctional Conflict

Traditionally, social conflict has been approached as a problem requiring resolution. More recently, however, theorists have recognized that conflict is not necessarily a negative or undesirable phenomena and have argued against a "problem" orientation to the subject (Bach & Wyden, 1969; Coser, 1956; Deutsch, 1973, 1980; Frost & Wilmot, 1978; Robbins, 1974). An alternative view is that conflict is a natural and necessary form of social interaction, having the potential to be functional or

dysfunctional. This section operationally defines functional and dysfunctional conflict.

In assessing the functionality of a conflict, theorists have tended to focus on interaction outcomes. The drawback to this approach is that outcome prediction is not possible. Accordingly, Deutsch (1973, 1980) proposed that functional conflict processes lead to functional outcomes, while dysfunctional processes lead to dysfunctional outcomes. This position suggests that once functional and dysfunctional conflict outcomes are defined, the processes which lead to these distinct outcomes can be identified. The following section examines process and outcome as distinct aspects of interpersonal interactions.

Process versus outcome. According to interpersonal theorists, personal relationships are established and maintained through a series of interactions between the participants (Burgess, 1981; Hinde, 1981). Each of these interactions, regardless of length, can be described in terms of its process and the outcome. Process refers to the series of interdependent cognitions, emotions and behaviours which define the nature and content of the interaction and determine its eventual outcome. The outcome is the culmination of the process which, in turn, influences the process and outcome of subsequent interactions.

With respect to conflict, an interaction might be shaped by the participant's perceptions of the intent to frustrate, intense feelings of anger and hurt, and an interaction pattern of yelling, threats, and even violent behaviours. The outcome of this

interaction could range from a successful resolution of the incompatibility between participants to a complete breakdown of the relationship. With this important distinction, it is now possible to introduce the notion of functionality to the present discussion.

Functionality of conflict outcomes. Deutsch (1973) and Frost and Wilmot (1978) have argued that functionality of a conflict interaction is determined by the participants' level of satisfaction with the outcome. In operational terms, a functional outcome would be one in which the participants have not been physically and/or psychologically injured during the interaction, and experience positive emotions toward the other at the end of the interaction.

Other theorists, however, have suggested that the long-term impact of the interaction on the relationship is an equally important aspect of functionality. From this perspective, for the conflict to be considered functional the relationship between the participants must have been strengthened or at least undamaged by the interaction (Bach & Wyden, 1969; Feldman, 1982; Fisher & Ury, 1981). On an operational level, this implies that there must be some visible indication of a mutual understanding that there will be a future interaction on the same positive level (e.g. a hand shake and verbal commitment to meet again). If the relationship between parties is in some way damaged, then the likelihood of dysfunctional conflict processes and outcomes in future interactions increases proportionately.

Thus, for the purposes of the present thesis, the functionality of interpersonal conflict can be regarded as a measure of the participants' satisfaction with the outcome, and the degree to which the interaction has a positive effect on the relationship between the interacting parties.

Functionality of the conflict process. Deutsch stated that functional conflict processes lead to functional outcomes while dysfunctional processes lead to dysfunctional outcomes. The goal, then, has been to identify the characteristics of the conflict process which distinguish a functional outcome from a dysfunctional one.

With respect to functional conflict processes, Baxter (1982) has indicated that when dyad members are able to view their conflict as a substantive rather than personal challenge they are generally able to maintain positive emotions and avoid a dysfunctional outcome. Other variations on this approach include self-encapsulation strategies where one or both participants adopt a set of ideological restraints which they refuse to exceed during the conflict process, and thereby inhibit intense negative emotions and threatening behaviours (Wehr, 1979); and, problem solving approaches where conflicts are viewed as mutual problems requiring a cooperative partnership to reach a solution (Fisher & Ury, 1981). In essence, these patterns rely on maintaining a particular cognitive viewpoint which encourages positive emotions and protects the ego from having to defend itself.

Several varieties of dysfunctional conflict processes have also been identified according to their characteristic interaction patterns. For example, Bach and Wyden (1969) discuss dysfunctional conflict patterns which produce feelings of frustration and hostility yet hinder the escalation of the conflict. This has the effect of preventing the parties from addressing the deeper issues over which the conflict is actually occurring.

In "passive-aggressive" conflict interactions for instance, the conflict is camouflaged by apparently innocent instances of noncooperation by one or both parties. For example, a husband who resents his wife's requests for help around the house might repeatedly "forget" to do the chores he has promised or find other more pressing tasks unrelated to house work. This type of conflict tends to build resentment and hostility between the participants and decreases their level of mutual trust, because the real issues over which the conflict occurs are never openly addressed. In such a situation, it is very unlikely that there will be mutual satisfaction with the outcome or that the relationship will be undamaged.

A related interaction pattern involves "hit-and-run" tactics, whereby one party instigates a conflict only to follow it with disinterest in continuing the exchange (Bach & Wyden, 1969). A wife might launch a verbal attack on her husband's appearance and manners, however, when he enters the argument she decides that she is no longer interested and refuses to discuss it further. Again,

such an interaction pattern is likely to produce feelings of hostility and perpetuate the conflict interaction without addressing the original issues. Thus, the outcome will prove highly dissatisfying to one or both of the participants and will very likely damage their relationship.

Of particular concern to many theorists and clinical practitioners is the conflict pattern known as the "escalatory spiral" (Deutsch, 1973; Feldman, 1982; Frost & Wilmot, 1978; Scherer, et al., 1975; Thomas, 1979; Wehr, 1979). This form of conflict interaction has received attention in the literature for two reasons. First, it is a common form of conflict interaction in this culture, and second, it is generally recognized as among the most dysfunctional of conflict patterns. The following section discusses the literature on the escalatory spiral.

Conflict Escalation and the Escalatory Spiral

Escalation is a key concept involved in both functional and dysfunctional forms of interpersonal conflict. For example, in terms of the passive-aggressive and hit-and-run conflict patterns discussed previously, some degree of escalation is required before the parties will deal with the real issues underlying their conflict (Bach & Wyden, 1969; Frost & Wilmot, 1978). With the escalatory spiral, however, escalation occurs to the point that it becomes a dysfunctional conflict process. This type of conflict pattern is characterized by continuous and reciprocal intensification during the interaction. As Wehr (1979) states,

the escalatory spiral is "a dynamic of conflict that has each party responding to a hostile act from the other with an even more hostile one" (p. 205). To reach a more thorough understanding of how this dysfunctional pattern develops and is perpetuated, theorists have attempted to identify the characteristic features of the general escalation process.

Most contend that the exact course of a given escalating conflict cannot be predicted; however, they also argue that it contains some predictable elements and dynamics (Deutsch, 1973, 1980; Frost & Wilmot, 1978; Thomas, 1979; Wehr, 1979). These are: a shift from cooperative to competitive strategies and tactics; an increase in the number, nature, and size of the issues under dispute; an increase in hostility and decrease in trust; an increase in perceptual and cognitive distortions; and communication distortions and breakdowns. Each of these elements will be discussed in more detail below.

Strategy shifts. As conflict intensifies, participants use fewer cooperative strategies of persuasion such as conciliation, minimization of differences, enhancement of positive feelings and promotion of mutual understanding, and more competitive strategies, which include tactics associated with threat, deception, and coercion (Deutsch, 1973, 1980; Thomas, 1979). According to Deutsch (1973), this shift to more competitive processes

...stimulates the view that the solution of the conflict can only be imposed by one side or the other by means of superior force, deception, or cleverness.

The enhancement of one's own power and the complementary minimization of the other's power become objectives. The attempt by each of the conflicting parties to create or maintain a power difference favorable to his own side tends to expand the scope of the conflict from a focus on the immediate issue in dispute to a conflict over the power to impose one's preference upon the other. (p. 353)

Spread of competition. The developing competitive relationship often spreads to other issues which, under nonconflict conditions, would be easily resolved. As the issues proliferate in number and size and their nature becomes more hostile, the parties will adopt more extreme positions. The competitive element may be so overwhelming that each party's objective shifts from his or her own goal attainment to defeating or blocking the other at all costs. This phenomena known as "goal substitution" or "displacement" (Robbins, 1979; Thomas, 1979), is a primary means of spreading competition.

Hostility and distrust. Hostility and distrust are particularly important aspects of the escalatory spiral because all other characteristics of this process contribute to, or result from, these two emotions. As Thomas (1979) states:

Each of the remaining bases of Party's power tends to disappear with increasing hostility. Information power becomes ineffective as Other becomes suspicious of Party and ceases to listen to him. Expert power becomes ineffective with Other's mistrust and lack of respect. Party has no referent power, or has negative referent power when Other ceases to identify with him. Party's legitimate power becomes ineffective when Other sees him acting arbitrarily. Even reward power may become ineffective when Other views gifts from Party as tainted or as bribes. (p. 279)

According to Deutsch (1973), it is far more difficult to rebuild the trust necessary for the re-establishment of this power base than it is to lose it. Thus, the parties resort to coercive power, which leads to still greater levels of mutual hostility and decreased trust (Thomas, 1979).

Perceptual and cognitive distortions. A major factor in the escalation process is perceptual and cognitive distortion. Deutsch (1973) states that the intensification process often results in stress and tension which exceeds optimal levels. It is his claim that this overactivation may lead to several perceptual and cognitive impairments. These include: an impairment of the parties ability to perceive alternative solutions; a reduced ability to think in terms of the long range consequences of the perceived alternatives; tendencies toward polarized thought patterns which simplify percepts into black and white categories; stereotyped response patterns; and increased defensiveness.

In effect, excessive tension reduces the intellectual resources available for discovering new ways of coping with a problem or new ideas for resolving a conflict. Intensification of conflict is likely to result as simplistic thinking and the polarization of thought push the participants to view their alternatives as being limited to victory or defeat. (Deutsch, 1973, p. 355)

Thomas (1979) provides a further explanation for the occurrence of perceptual and cognitive distortion in conflict interactions. He argues that because dyad members are for the most part unaware of the other's motives, yet have access to the reasoning behind their own behaviour, their behaviour seems

reasonable, while the other's appears arbitrary and unjustified. To this Deutsch (1973) adds that most people are considerably more motivated to maintain a positive perception of themselves than they are of others, and consequently, see their behaviour as more legitimate and benevolent than their opponent's. Furthermore, both parties are selective in their perception and interpretation of the other's behaviour (Thomas, 1979). If both are mistrustful of the other, then it is very probable that they will be actively looking for behaviours which could be interpreted as threatening, competitive, and hostile. Consequently, they are likely to find them. In addition, as they look for indications of malice from the other, they are likely to miss any gestures of goodwill and cooperation that the other may send.

Of further concern is the fact that cognitive distortion of this nature frequently promotes behaviour which extends beyond normative limits. Deutsch (1973) explains that the competitive process develops in the participants a suspicious and hostile attitude which results in a heightened sensitivity to differences and threats and a much reduced awareness of similarities and gestures of cooperation.

This, in turn, makes the usually accepted norms of conduct and morality that govern one's behaviour toward others who are similar to oneself less applicable. Hence, it permits behaviour toward the other that would be considered outrageous if directed toward someone like oneself. Since neither side is likely to grant moral superiority to the other, the conflict is likely to escalate as one side or the other engages in behaviour that is morally outrageous to the other. (p. 353)

Cognitive distortions of this type are extremely effective at producing aggressive and even violent behaviour. The military, for example, has developed psychological manipulations which take advantage of this natural tendency (Dyer, 1985). It is much easier to have one person behave aggressively toward another if he or she can be convinced that the other is highly dissimilar.

Another common result of cognitive distortion is the self-fulfilling prophecy. As indicated earlier, interpersonal interactions are complex patterns whereby the behaviour of one person is both a response and a stimulus to the other's. Thus, if a person expects the other to behave competitively, he or she may initiate competitive behaviour. When the other responds competitively, this confirms the first party's belief that the other was intending to behave in such a manner. Thomas (1979) states;

The upshot of this is that Party's orientation toward the other and his trust or distrust toward Other have some tendency to be reinforced by generating the predicted behaviour in Other - regardless of the other's original orientation. (p. 278)

Related to this is the process of "entrapment" (Brockner & Rubin, 1985). Essentially, entrapment is an intrapsychic process which involves continued commitment to justify previous behaviour. One of the basic principles of human behaviour is the need to remain consistent with previous actions. Likewise, in conflict situations, to justify the original conflict behaviour continued commitment to escalation is required (Deutsch, 1973). Even when continued escalation appears unlikely to produce the desired

goals, participants are entrapped into an escalation process in order to justify their previous behaviour.

The development of an entrapment situation usually indicates that the original reasons for engaging in conflict have given way to more emotional factors. Furthermore, there is often the psychological need to "save face" and demonstrate determination and strength. As Brockner and Rubin (1985) state, "the entrapped decision maker's motives shift over time, from the rational to the rationalizing" (p. 4).

It appears, then, that distortions of perception and cognition play a significant role in the conflict escalation process. They work to develop and reinforce hostility and mistrust, and they promote behaviour which tends to intensify the conflict. Once engaged in conflict the participants find themselves unable to break out of this vicious circle.

Communication distortion and breakdown. A prevalent characteristic of dysfunctional conflict interactions is communication distortion and breakdown. As a conflict escalates, it is typical for one or both of the conflicting parties to distort or misperceive the other's messages. Often, they cease to attend to the other's message altogether and concentrate on transmitting their own message (Deutsch, 1973; Thomas, 1979). The tendency towards poor communication in escalating conflicts is both produced by, and contributes to, the escalation process. Thomas (1979) states,

...trust is diminished as either party uses communications to manipulate or coerce the other or as either party becomes suspicious that the other is doing so. With diminished trust, Other's communications cease to be believed or even listened to, and Party concentrates on getting his own message across. (p. 278)

As communication breaks down altogether, the possibility of cooperative functional interactions becomes even more remote. A communication breakdown enables the interactants to maintain and even enhance their distorted views of each other. Since these distortions allow no new contradictory input the hostility is free to grow. The intensification of hostility has been referred to as "autistic hostility" for it develops in the absence of communication (Thomas, 1979). In addition, the ability of both parties to notice and respond to the other's cooperative gestures is greatly impaired, and this furthers the escalation process (Deutsch, 1973).

Dysfunctional Escalating Conflicts

Resulting Problems

As previously indicated, interpersonal conflicts are an inevitable part of human interaction which may also produce desirable and beneficial results. However, in most cases they do not. The following section examines the typical dysfunctional outcomes that escalating conflicts produce.

There are several problems with a dysfunctional escalating conflict. The most important is that it eventually leads to relationship breakdown and termination. The outcome of the

conflict tends to expand the boundaries of the conflict, rather than reduce it. Moreover, it often fails to address the real concerns of the participants and hinders their ability to explore alternative conflict resolution strategies. Finally, it frequently promotes irrational and extreme forms of behaviour which leave residual effects that may re-ignite the conflict with little provocation.

Dysfunctional outcomes. Dysfunctional conflict escalations generally fail to solve the original problem between participants. Instead, as indicated previously, they serve to expand the number of issues under contention and, therefore, increase the magnitude of the conflict. As the competition spreads, the interactants stray away from, and lose sight of, the original issues. Furthermore, the goal may shift so that winning becomes more important than the original issues over which the conflict was initiated. When this occurs the real concerns are lost and the conflict is fought over false issues, leaving the original problem unresolved at the end of the interaction (Deutsch, 1973; Frost & Wilmot, 1978; Robbins, 1979; Thomas, 1979). Under such circumstances, a mutually satisfactory outcome to a conflict is unlikely.

In addition, the participants are unable to look for and to utilize other options for conflict resolution. Once a conflict begins to escalate it often becomes self-perpetuating (Teger, 1970; Vliert, 1984). Typically, the conflicting parties choose to escalate a conflict even when superior options might be available.

In effect, they become trapped by the dynamics of the interaction which encourage the growth of hostility and mistrust. They are therefore, compelled to continue contributing to the intensification of the exchange without serious consideration of the long range consequences of their behaviour (Frost & Wilmot, 1978). Thus, an escalatory spiral tends to produce dysfunctional outcomes because, once initiated, there is little chance to break out of the cycle.

Any interpersonal interaction will have an influence of some kind on the relationship within which it occurs (Burgess, 1981; Hinde, 1981). In other words, the relationship may be enhanced, weakened or merely reinforced through the interaction of the dyad members. It follows then that the resolution of a conflict will produce residual effects which may be either functional or dysfunctional to the relationship (Baron, 1984; Nye, 1973; Vuchinich, 1985). For example, conflicts which culminate in compromise may create or enhance feelings of solidarity or partnership between participants, while those which end in an unresolved standoff may produce feelings of frustration and animosity.

Dysfunctional "psychological residues" (Vuchinich, 1985) are the result of processes such as the extreme behaviours that the participants often engage in during escalation, the shift to coercive tactics, cognitive distortions, and the breakdown of communications. In addition, the decrease in trust and increase in hostility which underlie all other processes are particularly

important determinants of dysfunctional residues. The long term problem associated with dysfunctional psychological residues lies in their tendency to promote future conflict interactions which further deteriorate the relationship.

Relationship breakdown and termination. If one of the conflicting parties reaches a point in the interaction whereby he or she perceives that his or her basic concerns are incompatible with the other's, then the relationship is in danger of breaking down. The occurrence of such a perception signals a critical point in the interaction process since it becomes apparent to one or both of the participants that the relationship cannot continue. Should this occur, the perceiving party will probably initiate a strategy to drive the other party away (Thomas, 1979).

In his discussion of dysfunctional marital conflict, Feldman (1982) describes the typical outcomes of the escalatory spiral. Usually, such spirals do not reach a crisis point and lead to uneasy and short lived reconciliations followed by renewed outbreaks of escalating conflict. If a crisis point is reached, the parties may make the decision to drastically alter their relationship and separate or divorce. In the worst case, however, the spiral reaches a level of destructiveness which leads to physical injury or death of one or both parties. This last point demonstrates the severity of behaviour that characterizes the most extreme instances of escalating conflict. Recent findings on criminal violence support the notion that retaliatory escalation

plays a significant role in interactions leading to death (Felson & Steadman, 1983).

Other research suggests a more subtle, though equally dangerous link between dysfunctional interpersonal conflict and death. Jenkins and Zyzanski (1980) have produced findings which suggest that sustained interpersonal conflict is related to coronary heart disease. They suggest that interpersonal relationships with a sustained pattern of dysfunctional conflict should be targeted for therapy to reduce the member's chances of developing serious heart ailments.

It should be acknowledged that not every incidence of an escalatory spiral concludes with a dysfunctional outcome. If, for example, in the midst of the escalation one or both of the participants realize that continued escalation will be damaging to the relationship, then they may take steps to de-escalate the interaction process. Should this occur it is conceivable that the conflict interaction may result in an outcome which is both satisfying to the participants and preserves or strengthens their relationship. However, as has been demonstrated, the dysfunctional dynamics of this interaction process tend to discourage such shifts to functional interactions and produce dysfunctional over functional outcomes.

Statement of the Problem

Given that escalating conflict is a relatively common form of interpersonal conflict in this society and that escalatory spirals

are among the most potentially destructive forms of interpersonal conflict, there is a very real need for research targeted at the development of applied solutions to this problem.

To this end, it is necessary to improve the understanding of the basic mechanisms of the conflict escalation process. That is, while the global properties of the escalatory spiral have been identified (e.g. Deutsch, 1973; Thomas, 1976, 1979), less attention has been devoted to an examination of the specific emotional and associated behavioural elements of this type of conflict. Only after these aspects of the escalatory spiral are thoroughly understood can work be done to develop effective strategies for its regulation and control.

The question addressed here is: What emotional states and associated behavioural cues do observers consistently interpret as indications of the escalation, or de-escalation of a conflict interaction? It is hoped that the data obtained in answer to this question will serve as a guide to the development of interaction strategies which can reduce the escalatory emotional states and behaviours and increase those emotions and behaviours associated with functional conflict patterns.

CHAPTER II

METHOD

This investigation of escalating interpersonal conflict consisted of a preliminary and a primary study. The goal of the preliminary study was to develop an efficient method of eliciting feedback from subjects as they viewed filmed episodes of interpersonal conflict. The aim of the primary study was to determine the emotional states and behaviours which observers consistently associated with periods of conflict escalation and de-escalation.

Preliminary Study

Subjects

The subjects for the preliminary study (N = 15) were officers and their spouses from a military reserve unit. All subjects were high school graduates, one had completed community college, and four had university undergraduate degrees. The mean age for males (n = 7) was 27 with a range of 23 to 40, while for females (n = 8) the mean age was 24 with a range of 18 to 35. The combined mean age was 25.3.

Procedure

The experimental stimuli used in both studies were filmed episodes of escalating interpersonal conflict. The researcher selected twelve commercial films which focused on close interpersonal relationships. From these films, nineteen escalating conflict interactions were identified (according to the

criteria established in chapter 1). Seven episodes met the pre-established criteria of an escalating conflict between a male and female in a close personal relationship. From these, five episodes were selected at random for use in the preliminary study.

Subjects were assembled in a room with a video monitor and audio tape recorder and provided with an experiment response package (see Appendix A). They were informed that written responses would be anonymous, that group discussions would be taped and the contents of these tapes would remain confidential, and that an independent observer would be present during the study.

A briefing based on the conflict escalation model of Scherer et al. (1975) (see Appendix B) was conducted to familiarize subjects with the nature and purpose of the study. During this briefing subjects were instructed to attend to the conflict process rather than the content of the episode, and in particular, to focus on the events which signaled critical interaction points (conflict onset, escalation, de-escalation, and crisis). Upon completion of the briefing subjects were given the opportunity to decline participation in the study. All agreed to participate. The subjects were then shown a series of five conflict episodes. For each episode, the presentation format and subject tasks were varied to test a range of data gathering techniques. The particular procedures used for each episode are outlined in the following sections.

Episode 1. The purpose of the initial viewing for this, and all subsequent episodes, was to familiarize subjects with the conflict interaction. Prior to the second viewing, subjects were requested to note the points at which they perceived critical events in the interaction. A group discussion was conducted to determine where these events were perceived to occur by the majority of subjects. Finally, subjects were asked to write a brief summary of the process of the conflict episode.

Episode 2. After the familiarization viewing subjects were again requested to record the points at which they perceived critical events in the interaction. For the third viewing, subjects were instructed to identify the cues (verbal and non-verbal) which indicated that a critical event was occurring. During the fourth viewing, each subject was asked to discuss his or her analysis of the episode with the group. Subjects were then instructed to write a summary of the conflict interaction process.

Episode 3. For this episode subjects were provided with a transcript of the conflict exchange (previous response sheets were blank). During the first two viewings of the conflict, subjects were instructed to use the transcript to indicate the specific location of all critical interaction points. During the third viewing, their task was to record the behavioural cues that they had interpreted as indications of a critical event. Subjects were requested to provide a written summary of the interaction process, and as part of this summary, to informally graph the changing

intensity of the conflict using the numbered statements of the transcript as anchor points.

Episode 4. This film clip was administered in an identical manner to that of the third, however, an additional viewing was included. In this, the fourth viewing, subjects watched the interaction without the accompanying sound. Having identified the critical points in the interaction and the main behavioural cues associated with these points, the 'no-sound' viewing was intended to provide an opportunity to attend more specifically to non-verbal cues.

Episode 5. The administration of the fifth film clip was conducted in an identical manner to that of the fourth, however, subjects were not provided with a transcript of the conflict. Here, blank response sheets were used to record observations. Upon completion of the final conflict episode a group discussion was conducted. The purpose of this discussion was to determine which of the data gathering techniques enabled subjects to provide the maximum amount of relevant information.

Primary Study

Subjects

The subjects for the primary study were members of a third year undergraduate psychology course at the University of Windsor (N = 39). The mean age of the male subjects (n = 16) was 24.5 years with a range of 19 to 43. The mean age for female subjects

(n = 23) was 24 with a range of 20 to 60. The combined mean age was 24.2.

Procedure

Forty-eight students were present for the introduction to the study. Subject response packages (see Appendix C) and handouts (see Appendix D) summarizing the purpose and procedure of the study were distributed. During the introductory briefing (see Appendix E) the students were informed that they were under no obligation to participate, that they were free to withdraw their participation at anytime, and that anonymity was assured. A total of 39 agreed to participate. A series of three filmed conflict episodes were administered using a presentation format derived from the results of the preliminary study. This format consisted of five viewings with specific tasks assigned to each. Details of this procedure are presented in the following sections.

Viewing 1: Subject familiarization. Subjects were instructed to observe the conflict interaction.

Viewing 2: Identification of critical interaction points. Subjects were provided with a transcript of the interaction and asked to indicate the points at which they considered the conflict to begin, escalate, de-escalate, and reach a crisis.

Viewing 3: Identification of emotions. Subjects were requested to record the various emotions that they perceived the conflict participants to experience during the critical interaction points.

Viewing 4: Identification of verbal and non-verbal cues.

During this viewing, subjects were instructed to attend to the behavioural cues which suggested to them that a critical point in the interaction was occurring.

Viewing 5: No-sound viewing condition. In the final viewing, subjects saw the film clip without sound to help them focus on the non-verbal cues which they used to identify the critical interaction points.

Assessing conflict intensity. At the end of the fifth viewing, subjects were instructed assess the intensity of the conflict interaction as it progressed. The subject response package contained standard grids for this purpose (see Appendix C). Numbers on the horizontal axis corresponded to the numbered phrases in the transcripts. The vertical axis was a scale ranging from zero to ten. Subjects were informed that a rating of zero indicated no conflict, while a rating of 10 represented the most intense conflict. Subjects were required to assess the conflict intensity at each phrase in the interaction, mark these levels on the grid, and join the points to produce a graph of the conflict process.

CHAPTER III

RESULTS

Preliminary Study

Analyses of Data

An analysis of subject response packages, taped group discussions, and observations of the independent observer was conducted to determine which of the tested data gathering techniques enabled the majority of subjects to provide the most detailed analysis of the conflict tapes. This section summarizes these results.

Identification of critical points. During the first group discussion subjects suggested the use of standard symbols to mark the occurrence of critical points in the conflict interaction (e.g. one star to represent the conflict onset, a vertical arrow pointing upwards to symbolize escalation, a similar arrow pointing downward for de-escalation, and two stars to indicate a crisis point). This procedure was adopted for the remaining film clips and proved to be a simple and effective method for subjects to communicate the occurrence of critical points in the interaction.

The subject response package. Subjects generally preferred response sheets with a transcript of the conflict interaction over blank note pages. During the final group discussion all subjects agreed that the provision of transcripts enabled them to spend more time focusing on the conflict and supplying the specific information requested, and less time specifying at which point particular events occurred. The phrases served as reference

points around which information on emotional states and behavioural cues could be arranged. A content analysis of the data supported the subjects' position. When transcripts was supplied, the amount and quality of data provided was superior to that from the blank page response sheets. In addition, interpretation of the data was simplified as information was attached directly to specific points in the interaction.

The no-sound viewing condition. It was indicated in the final group discussion that the no-sound viewing aided subjects attend to non-verbal cues. It was emphasized that such a viewing should occur only after subjects had ample opportunity to familiarize themselves with the entire interaction sequence.

Subject summaries. After each viewing series, the subjects were requested to summarize and make general comments on the process of the preceding conflict. An examination of this information indicated that the summaries and comments contained little in the way of valuable target data (affective states and associated behavioural cues). Instead, subjects tended to focused on the issues under dispute, explanations of what they felt had preceded or would result from the interaction, or judgments of which participant was most responsible for the conflict. On the basis of these results it was concluded that subject summaries are an ineffective means of gathering target information.

Assessment of conflict intensity. For the last three film clips, subjects were requested to create informal graphs of the changing intensity of the conflict. An examination of these

graphs indicated that most subjects reported perceiving increases and decreases in conflict intensity at approximately the same points in the interaction. While this information was interesting, it was not possible to combine the individual results into a useful summary. To deal with this problem, standardized grids were made for each episode used in the primary study. These grids enabled subjects to provide assessments of the conflict intensity which could be combined to produce a summary graph for each conflict episode.

Group discussions. A total of three discussions were conducted in this study to obtain two types of information. The first two discussions focused primarily on analyzing the filmed conflict segments themselves, while the last was conducted to obtain feedback concerning the most efficient data gathering techniques. Group discussions were not used in the primary study to ensure that subject responses were based upon individual perceptions of the conflict episodes.

From the results of the preliminary study the method used in the primary study was developed. The following section discusses this method and the results that it produced.

Primary Study

The primary goal of this study was to generate a comprehensive body of textual data pertaining to subject perceptions of conflict escalation and de-escalation. The goal of the analysis was to determine the emotional and behavioural cues

subjects used to identify the occurrence of conflict escalation and de-escalation. The subjects for this study were 39 members of a third year undergraduate psychology course. Of this group, 23 were female with an mean age of 24, while 16 were male with an mean age of 24.5.

An effective means of making valid inferences from textual data is content analysis. This research methodology involves a set of procedures which enable an experimenter to classify text into general categories to detect trends in the data. A primary assumption of content analysis is that a higher relative frequency count in any given category reflects the subject group's greater concern with that category (Weber, 1985). In the present study, subject perceptions of conflict escalation and de-escalation were classified into emotional and behavioural categories, category frequencies were determined, and comparisons of these frequencies were made between the escalation and de-escalation scenarios.

The first step of the content analysis was to select points of conflict escalation and de-escalation from which to draw emotional and behavioural data. Summaries of two different sets of information were used in this identification process. The first, involved creating a "critical point summary" based on the subjects' identification of conflict onset, escalation, de-escalation and crisis points in each of the three conflict episodes. The second involved combining results from the conflict intensity graphs completed by subjects. This produced "mean intensity graphs" for each of the film sequences. The following

sections describe the development of these summaries and their use in the selection of conflict interaction points.

Critical Interaction Points

Subjects were provided with transcripts of each conflict episode and instructed to use the numbered phrases as reference points while supplying the requested data. These phrases served as standard divisions of the conflict episode and were referred to as "interaction points". During the analysis, the data from each subject was combined according to the interaction point with which it had been listed on the response sheet. This procedure made it possible to determine those interaction points at which each subject perceived an escalation or de-escalation, and what features of the interaction they regarded as indications that such an event was occurring.

Prior to the second viewing of each episode subjects were asked to identify the points at which certain "critical events" in the conflict occurred. These critical events were defined as points of conflict onset, escalation, de-escalation, and crisis (Scherer et al., 1975) (see Appendix E). This information was essential for the classification of textual data into escalatory and de-escalatory scenarios. In addition, it was from this information that critical point summaries were developed. For each interaction point in each conflict, counts were made of subjects who indicated that a particular critical event had occurred. On the basis of these frequency counts, the percentage

of the total sample identifying the occurrence of each type of critical event at each interaction point was calculated. The results of this procedure were organized into tables for each conflict tape (see Appendix F).

Conflict Intensity Data

After the final viewing of each tape, subjects were asked to assess the intensity of the conflict at each interaction point in the sequence. By plotting these values on an accompanying grid, they constructed a graph which represented their perception of the changes in conflict intensity over time. This data was combined to produce mean intensity graphs for each of the taped interactions.

The intensity data was combined by calculating the mean and standard deviation for all values from each interaction point in the conflict sequences. This information was then used to plot intensity graphs for male and female subjects separately, and then combined. It was apparent that very little difference existed between the male and female versions of the intensity graphs and, therefore, the combined graphs were used in subsequent stages of the analysis (see Appendix G).

Selection of Interaction Points

This section describes the procedures used to select the points of escalation, de-escalation, and non-conflict from which the emotional and behavioural data was drawn.

Escalation and de-escalation points. The critical point summaries were used to identify interaction points which a greater percentage of subjects had classified to the escalation scenario than to the de-escalation scenario. This produced several segments of escalatory interaction points. The mean intensity graphs were then consulted to determine which of these segments could be classified as escalatory spirals (segments demonstrating reciprocal increases in the level of conflict intensity). Omitted from the segments were points where conflict intensity dropped below the segment's initial intensity level, as this indicated that a major de-escalation had occurred. Also omitted were those points representing a plateau in conflict intensity. Three segments of reciprocally escalating conflict remained; two from tape two (phrases 15 to 23 with 16 to 18 omitted as a plateau, and phrases 30 to 34), and one from tape three (phrases 30 to 46 with 35 and 36 omitted as a plateau).

While there were several points of conflict escalation in tape one, they did not form a segment which could be considered an escalatory spiral. However, it was considered desirable to include data from all three tapes in the analysis. Therefore, the escalation and de-escalation points with the highest level of subject agreement, as determined by the critical point summary, were included in the analysis. Phrase 12 was the highest point for the escalation scenario, with 54% of subjects identifying it as escalatory, and no subjects classifying it as de-escalatory. Phrase 6 was highest for the de-escalation scenario with 59% of

subjects classifying it as de-escalatory and 2% assigning it to the escalation scenario.

An examination of the mean intensity graphs revealed that the three selected escalatory spirals were followed by periods of decreased intensity. The critical point summaries revealed that the points with the highest levels of subject agreement for the de-escalation scenario occurred during these periods. These high agreement points were selected for analysis. From tape two, phrase 26 was identified as a point of de-escalation by 68% of the subjects, while only 5% considered it escalatory. Also from tape two, phrase 36 was classified as de-escalatory by 46% of the subjects, with only 3% considering it an escalation point. From tape three, phrase 47 had 43% of the subjects identify it as a point of de-escalation, with 9% considering it a point of escalation.

Dual scenario points. The critical point summaries indicated that, for a number of selected escalation points, subjects were almost evenly divided on the classification to the escalation and de-escalation scenarios. These were phrases 20 and 22 from tape two, and 33, 39, 42, and 45 from tape three. On the mean intensity graphs these points appeared as slight decreases in the level of conflict intensity which did not terminate the overall escalating trend. These divergent interpretations of the same interaction points raised the question of whether those classifying these points as escalatory reported attending to the same cues as those classifying them as de-escalatory. To address

this issue, the data from subjects who classified these points as escalatory was compiled separately from the data from those who classified them as de-escalatory. Comparisons of these data sets were conducted as part of the data analysis.

Non-conflict points. The mean intensity graphs were used in conjunction with the critical point summaries to identify interaction segments which could be classified as "non-conflictive" (occurring before conflict onset, and without points of escalation or de-escalation). The textual data generated from these segments served as a comparative base line for the data derived from the escalatory and de-escalatory points. The segments selected came from tape three and were composed of phrases 1 to 13, and 17 to 26.

Content Categories and Classification Procedures

The content analysis was conducted using 15 emotional and 4 behavioural, categories. The emotional categories were developed from Izard's (1977) work on emotions and emotional blends, while the behavioural categories were derived from research on the non-verbal communication of emotion (Ekman, 1985; Ekman, Friesen & Ellsworth, 1972; McGuire, 1985).

Emotional data. The categorization of emotional terms was done using a computer. A computer "dictionary" based on Izard's categories was constructed containing 10 primary emotional states and 5 emotional blends. Each emotional category was defined by a general name and contained a list of synonyms, and antecedent and

consequential states and behaviours which Izard has associated with the category (see Appendix H).

During the classification of text to categories, when a word was identified as an emotional state it was typed into the computer and subsequently compared to all terms in the dictionary until it was matched to an appropriate category. When no match was found, standard dictionaries were consulted to identify synonyms of the word which could be matched by the computer. The novel term was then added to the computer dictionary category.

A second content analysis was done to establish subcategories of similar terms. This permitted more in-depth comparisons between the non-conflict, escalatory, and de-escalatory data. For instance, while "hurt", "resignation", and "sorrow" were all coded under the general "Distress-anguish" category; dividing them into subcategories preserved important interpretive information stemming from the unique meaning of these words and their relative frequency within each category (see Appendix I for a list of subcategories and frequencies).

Behavioural data. Researchers studying non-verbal communication have identified four basic modes of emotional communication. These are facial expression, body movement and gestures, voice tone and quality, and relative body position (Ekman, 1985; Ekman, Friesen & Ellsworth, 1972; McGuire, 1985). These modes of communication were used as categories for the classification of behavioural data. In addition, a fifth general

category was added to deal with information supplied by subjects which could not be coded in any other category.

To increase coding consistency, criteria were established which stipulated the conditions under which text was to be classified into each behavioural category (see Appendix J). For example, text was classified under the facial expression category if it made reference to the face or any feature of the face (e.g. eyes or mouth). As with the emotional categories, when the initial coding of behavioural data was complete, a second classification was done within each of the five categories to produce meaningful subcategories for the interpretation stage (see Appendix I).

Scenario response rates. The total number of emotional, behavioural, and general subject responses varied considerably across the three interaction scenarios examined in this study (non-conflict, escalation, and de-escalation). There was a total of 121 responses in the non-conflict scenario, 678 responses in the escalation scenario, and 129 in the de-escalation scenario. Therefore, relative frequencies rather than absolute frequencies of emotional, behavioural and general responses were used in category comparisons across scenarios. Relative frequencies were calculating by dividing each category count by the total number of responses in the scenario. This produced a percentage of the total number of responses each category accounted for within its scenario.

By dividing the total number of emotional, behavioural and general responses in each scenario by the number of analyzed points, a mean response rate per interaction point was determined. In the non-conflict scenario there was a mean of 2.0 emotional responses per analyzed point, 1.6 behavioural responses, and 1.8 general responses. For the escalation scenario there was a mean of 10.7 emotional responses, 9.9 behavioural responses, and 4.6 general responses per point. And for the de-escalation scenario, there was a mean of 4.0 emotional responses, 4.4 behavioural responses, and 4.5 general responses per point. Combining the emotional, behavioural and general responses for each scenario produced a mean of 5.5 responses per point for the non-conflict scenario, 25.1 responses in the escalation scenario, and 12.9 responses in the de-escalation scenario.

Chi square goodness-of-fit tests were conducted on the escalation and de-escalation mean response rates to test the hypothesis that there was no significant difference between the observed figures, and those expected if there were no difference in response rate. The test on the emotional data response rate produced a χ^2 value of 2.189 ($E = 7.35$, $df = 1$, n.s.), while for the behavioural data a χ^2 value of 1.416 ($E = 7.15$, $df = 1$, n.s.) was obtained. For the general data, the χ^2 value was .089 ($E = 4.55$, $df = 1$, n.s.). Finally, the test on the combined mean response rate resulted in a χ^2 value of 3.301 ($E = 19$, $df = 1$, n.s.).

Results of the Emotional Data Classification

This section presents the results obtained from emotional category counts and tests of statistical significance. Chi square goodness-of-fit tests employing Yate's correction for continuity (Elzey, 1985; McCall, 1980) were performed on the escalation and de-escalation data for each emotional category. These tests were restricted to the conflict escalation and de-escalation scenarios as they are the focus of the present study.

Only those emotional categories which accounted for more than 3% of the total responses in at least one scenario were considered for further analysis. Thus, of the ten primary emotional categories six were retained. These included Anger, Distress-Anguish, Fear, Guilt, Joy-Enjoyment and Surprise. Of the five emotional blend categories, only Anxiety and Hostility-Hate were included. The remaining four primary emotions (Interest-Excitement, Disgust-Revulsion, Contempt, and Shame-Shyness) and three blend states (Grief, Depression, and Love) were combined to produce an "Other" category. The results of the emotional category and subcategory counts are summarized in Table 1, and emotional category rankings for each scenario are presented in Table 2.

Anger. There were no instances of anger reported in the non-conflict scenario, however, 69% of the total escalation emotional responses and 10% of the de-escalation responses were classified in this category. Two major subcategories emerged during content analysis. The first, "Anger/Intense Anger"

Table 1

Emotional Category and Subcategory Frequencies and Relative Frequencies for Non-conflict, Escalation, and De-escalation Scenarios

EMOTIONAL CATEGORY Subcategories	NON-CON		ESCAL		DE-ES		X2
	FREQ	%TOT	FREQ	%TOT	FREQ	%TOT	
ANGER	---	---	200	69%	4	10%	42.58*
Anger/Intense Anger	---	---	145	50%	2	5%	
Frustration	---	---	33	11%	2	5%	
Other	---	---	22	8%	---	---	
DISTRESS-ANGUISH	---	---	34	12%	17	42%	15.57*
Hurt	---	---	16	6%	3	7%	
Resignation	---	---	3	1%	5	12%	
Sorrow	---	---	---	---	7	17%	
Other	---	---	15	5%	2	5%	
FEAR	37	82%	24	8%	7	17%	2.56
Apprehensive/Nervous	35	78%	3	1%	1	2%	
Defensive	---	---	11	4%	1	2%	
Fear	---	---	8	3%	4	10%	
Other	2	4%	2	1%	1	2%	
ANXIETY	2	4%	1	0.3%	2	5%	2.58
JOY-ENJOYMENT	2	4%	---	---	1	2%	----
GUILT	---	---	---	---	4	10%	----
HOSTILITY-HATE	---	---	13	4%	---	---	----
SURPRISE	1	2%	3	1%	4	10%	5.81x
OTHER	3	7%	13	4%	1	2%	----
COMBINED CATEGORY COUNT	45	100%	288	100%	40	100%	

Note. FREQ = Number of responses per category/subcategory.
 %TOT = The percentage of the total number of responses within a given interaction scenario.
 X2 = Results of chi square test
 * = Significant at $p < .001$
 x = Significant at $p < .05$

Table 2

Emotional Category Rankings by Relative Frequency for
Non-conflict, Escalation, and De-escalation Scenarios

	NON-CONFLICT		ESCALATION		DE-ESCALATION	
RANK	CATEGORY	% TOT	CATEGORY	% TOT	CATEGORY	% TOT
1	FEAR	82%	ANGER	69%	DISTRESS-ANG.	42%
2	OTHER	7%	DISTRESS-ANG.	12%	FEAR	17%
3	ANXIETY	4%	FEAR	8%	ANGER	10%
	JOY-ENJOYMENT	4%			SURPRISE	10%
					GUILT	10%
4	SURPRISE	2%	HOSTILITY	4%	ANXIETY	5%
			OTHER	4%	OTHER	5%
5	-----	---	SURPRISE	1%	JOY-ENJOYMENT	2%

Note. %TOT = The percentage of the total number of responses within a given interaction scenario.

accounted for 50% of the escalation data and 5% of the de-escalation data. The second, "Frustration", represented 11% of escalation and 5% of the de-escalation data. Results of the chi square test indicate a significant difference between the observed and expected frequencies for this category ($\chi^2 = 39.5$) across the escalation and de-escalation scenarios, with a χ^2 value of 42.582 ($df = 1, p < .001$).

An examination of the distribution of reports of anger indicated that this emotion was reported at every point of escalation examined in this study. Reports of anger in the de-escalation scenario were distributed evenly among interaction points. Further, an examination of the mean intensity graphs and reports of anger during escalation indicated that as the intensity of conflict was perceived to increase, the frequency and intensity of the anger reported also increased. That is, as the conflict was reported to intensify, there were more reports of anger and the reports themselves suggested the presence of more intense anger (e.g. "very angry," "furious," "rage," etc.).

Distress-Anguish. Emotional responses in this category amounted to 12% of the escalation data, and 42% of the de-escalation data. These percentages made distress-anguish the highest ranked emotional category within de-escalation data and the third highest for the escalation scenario. There were no reports of distress-anguish in the non-conflict scenario. Three dominant subcategories emerged within this category: "Hurt", accounted for 6% of the escalation data and 7% of the

de-escalation data; "Resignation", accounted for 1% and 12% of the escalation and de-escalation data respectively; and, "Sorrow" represented 17% of the de-escalation data. Results of the chi square test conducted on the relative frequency of distress-anguish responses in the escalation and de-escalation scenarios produced a X^2 value of 15.574 ($E = 27$, $df = 1$) which is significant at the $p < .001$ level.

An examination of the distribution of reports of distress-anguish among interaction points revealed that in the escalation scenario the majority of reports were confined to one escalation segment in the second conflict episode. In the de-escalation scenario, reports of distress-anguish occurred only at the end of the second and third conflict episodes.

Fear. This category contained 82% of the non-conflict data, 8% of the escalation data, and 17% of the de-escalation data. These figures make this the highest scoring category for the non-conflict scenario, the third highest for escalation, and the second highest for de-escalation. Further analysis produced three major subcategories; "Apprehensive/Nervous", "Defensive", and "Fear". The non-conflict fear category was dominated by Apprehensive/Nervous responses which accounted for 78% of the total, while only 1% of the escalation data and 2% of the de-escalation data were similarly classified. Most of the remaining fear responses for escalation and de-escalation were grouped into the latter two subcategories, with no instances of non-conflict responses. Results of the chi square test performed

between the escalation and de-escalation scenarios indicate that these percentages do not represent a significant difference between observed and expected frequencies ($\chi^2 = 2.56$, $E = 12.5$, $df = 1$, n.s.).

All reports of fear in the escalation scenario and the majority of fear reports in the de-escalation scenario were confined to the third conflict episode. At points of escalation, fear was consistently reported in conjunction with anger. Conversely, at points of de-escalation fear alone was reported.

Anxiety. This category contained 4% of the non-conflict emotional responses, less than 1% of the escalation responses, and 5% of the de-escalation responses. Given that there were so few responses in this category, and that anxiety is an emotional blend, no subcategories were developed. The chi square test conducted on the escalation and de-escalation data produced a χ^2 value of 2.583 ($E = 2.6$, $df = 1$, n.s.).

Hostility-Hate. All responses coded under this category occurred in the escalation scenario and amounted to 4% of the total data. All responses matched the category title making subcategories unnecessary.

Guilt. Responses in this category were limited to the de-escalation scenario. Ten percent of the de-escalation data was coded within this category. All reports of guilt occurred in conjunction with surprise during one de-escalation segment in the second conflict episode.

Surprise. This category accounted for 2% of the non-conflict data, 1% of the escalation data, and 10% of the de-escalation data. Thus, while it contributes relatively little to the first two scenarios, it accounts for the third ranked number of responses for the de-escalation scenario. A chi square test conducted between the escalation and de-escalation relative frequencies produced a X^2 value of 5.818 which is significant at the $p < .05$ level ($E = 5.5$, $df = 1$).

Results of the Behavioural Data Classification

This section presents the results obtained from classifying the behavioural data from the three interaction scenarios into four categories. As with the emotional categories, chi square goodness-of-fit tests were used to detect significant differences between frequencies in the escalation and de-escalation scenarios. Further, subcategories were generated to aid in the comparison of data between scenarios. A complete summary of this data is found in Table 3, while Table 4 ranks the subcategories according to relative frequencies across the three scenarios.

Facial expression. This category accounted for 28% of the non-conflict behavioural data, 12% of the escalation data, and 16% of the de-escalation data. A chi square test performed on the relative frequencies for the escalation and de-escalation scenarios produced a X^2 value of .321 ($E = 14$, $df = 1$, n.s.). Additional classification of this data revealed two prominent subcategories, "Anger in Face" and "Smiling". Subject responses

Table 3

Behaviour Category and Subcategory Frequencies and Relative Frequencies for Non-conflict, Escalation, and De-escalation Scenarios

BEHAVIOURAL CATEGORY Subcategories	NON-CON		ESCAL		DE-ES		X2
	FREQ	%TOT	FREQ	%TOT	FREQ	%TOT	
FACIAL EXPRESSION	10	28%	32	12%	7	16%	0.32
Anger in Face	---	---	21	8%	---	---	
Smiling	7	19%	---	---	---	---	
Other	3	8%	11	4%	7	16%	
GESTURES	10	28%	119	45%	11	25%	5.15x
Gaze Avoidance	1	3%	3	1%	5	11%	
Gaze/Mutual Gaze	5	14%	8	3%	3	7%	
Breaking Objects	---	---	67	25%	---	---	
Threat/Warning Gest.	---	---	21	8%	---	---	
Other	4	11%	20	7%	3	7%	
VOICE	13	36%	93	35%	23	52%	2.94
Anger in Voice	---	---	12	4%	---	---	
Laughter	6	17%	---	---	---	---	
Lowered Tone	---	---	8	3%	8	18%	
Raised Tone	---	---	27	10%	---	---	
Yelling	---	---	27	10%	---	---	
Other	7	19%	19	7%	15	34%	
RELATIVE BODY POSITION	3	8%	22	8%	3	7%	----
Leans Forward	---	---	13	5%	---	---	
Other	3	8%	9	3%	3	7%	
COMBINED CATEGORY COUNT	36	100%	266	100%	44	100%	

Note. FREQ = Number of responses per category/subcategory.
 %TOT = The percentage of the total number of responses within a given interaction scenario.
 X2 = Results of chi square test between escalation and de-escalation scenarios.
 x = Significant at $p < .05$

Table 4

Behavioural Subcategory Rankings by Relative Frequency for
Non-conflict, Escalation, and De-escalation Scenarios

NON-CONFLICT		ESCALATION		DE-ESCALATION		
RANK	SUBCATEGORY	% TOT	SUBCATEGORY	% TOT	SUBCATEGORY	% TOT
1	Smiling	19%	Break Objects	25%	VOICE: Other	32%
	VOICE: Other	19%				
2	Laughter	17%	Raised Tone	10%	Lowered Tone	18%
			Yelling	10%		
3	Gaze	14%	Threat Gest	8%	FACE: Other	16%
			Anger in Face	8%		
4	GEST: Other	11%	GEST: Other	7%	Gaze Avoid	11%
			VOICE: Other	7%		
5	FACE: Other	8%	Leans Forward	5%	Gaze	7%
	BODY: Other	8%			GEST: Other	7%
6	Gaze Avoid	3%	Anger Voice	4%	-----	---
			FACE: Other	4%		
7	-----	---	Gaze	3%	-----	---
			Lowered Tone	3%		
			BODY: Other	3%		
8	-----	---	Gaze Avoid	1%	-----	---

Note. %TOT = The percentage of the total number of responses within a given interaction scenario.

assigned to the Anger in Face subcategory were found exclusively in the escalation scenario. They accounted for a full two thirds of the category data for this scenario, or 8% of the total escalation data. Similar results were found for the Smiling subcategory, though in this case, results were restricted to the non-conflict scenario. Approximately two thirds of the non-conflict Facial Expression data, or 19% was contained in this subcategory.

An examination of mean intensity graphs and the distribution of reports of facial expression among the escalation points indicated that the majority of facial expression reports occurred at the beginning of escalation sequences. As conflicts were perceived to intensify, reports of facial expression began to decline.

Gestures. Behavioural data classified in the Gestures category represented just over one quarter of the total behavioural data for the non-conflict scenario (28%), just under one half for the escalation scenario (45%), and one quarter for the de-escalation scenario (25%). The results of the chi square test for the escalation and de-escalation scenarios indicate that a significant difference exists between the observed and expected frequencies within this category. A χ^2 value of 5.157 ($E = 35$, $df = 1$) was obtained, which is significant at the $p < .05$ level.

A total of four subcategories emerged from the within-category content analysis. These included, "Gaze Avoidance", "Gaze/Mutual Gaze", "Breaking Objects", and

"Threat/Warning Gestures". The Gaze Avoidance subcategory represented 3% of the non-conflict data, 1% of the escalation data, and 11% of the de-escalation data. The Gaze/Mutual Gaze subcategory contained 14% of the non-conflict data, 3% of the escalation data, and 7% of the de-escalation data. The Breaking Objects and Threat/Warning Gestures subcategories were confined to the escalation scenario and accounted for 25% and 8% of the total data respectively.

Reports of gestures increased as the intensity of anger was perceived to increase. During the least intense escalation segment few gestures were reported. However, during the most intense periods of escalation, reports of gestures increased and shifted from gazing behaviours to animated motions of the hands and arms. With respect to the de-escalation scenario, subjects appear to have associated averted gaze with the expression of sorrow. Reports of mutual gazing, however, were distributed evenly among the interaction points and, therefore, were not associated with one particular emotional state.

Voice. The Voice category contained over one third of both the non-conflict and escalation data (36% and 35% respectively), and over half of the de-escalation data (52%). The chi square test conducted on the escalation and de-escalation data produced a χ^2 value of 2.943 ($E = 43.5$, $df = 1$, n.s.).

From the within-category content analysis five subcategories emerged. These include, "Anger in Voice", "Laughter", "Lowered Tone", "Raised Tone", and "Yelling". The Anger in Voice

subcategory only contained data from the escalation scenario and represented 4% of the total responses. The Laughter subcategory was composed of data from the non-conflict scenario and accounted for 17% of the responses. The Lowered Tone subcategory had responses from both escalation and de-escalation scenarios and represented 3% of the escalation, and 18% of the de-escalation totals. The Raised Tone and Yelling subcategories were only composed of escalation data with each containing 10% of the total responses.

An examination of the distribution of vocal cues revealed that as anger intensified voice level was consistently reported to raise over what it had been until, at the most intense levels of conflict, yelling was reported. During de-escalation voices were consistently reported as quieter, lower, or softer, in relation to what they had been in preceding escalation segments.

Relative body position. This category contained the lowest percentages across the three interaction scenarios. Data in the non-conflict and escalation scenario amounted to 8% of the totals, while 7% of the de-escalation data was represented by this category. Only one subcategory emerged from this category. The subcategory "Leans Forward" contained 5% of the total data within the escalation scenario. An examination of the location of reports of this subcategory indicate that it consistently occurred in conjunction with reports of Threat/Warning Gestures and Raised Voice.

Results of the General Data Classification

When data was encountered which did not fit into any of the pre-established emotional or behavioural categories, it was placed into a general category. This section focuses on the categories and subcategories which emerged from a content analysis of the general data. Table 5 provides a summary of these results.

Five basic categories surfaced from this analysis. These included: "Interaction Tactics", which contained responses which indicated that a particular tactic was being employed by one of the actors in an effort to manipulate the course of the interaction sequence; "General Behaviour", made up of responses pertaining to behaviours of a very broad nature; "General Affective State", involving responses which made reference to general psychophysiological states not firmly associated with one emotion; "Motive/Intent", which contained responses involving subject attributions of actor motivations or intents; and, "Other" which held all responses considered too diverse to classify.

Chi square goodness-of-fit tests were conducted on the escalation and de-escalation data for three of the five categories to test the hypothesis that the observed category frequencies did not significantly differ from the expected frequencies. The remaining two categories (General Affective State and Motive/Intent) had relative frequencies which differed only by one and, therefore, could not be tested.

Table 5

General Category and Subcategory Frequencies and Relative Frequencies for Non-conflict, Escalation, and De-escalation Scenarios

GENERAL CATEGORY Subcategories	NON-CON		ESCAL		DE-ES		X2
	FREQ	%TOT	FREQ	%TOT	FREQ	%TOT	
INTERACTION TACTICS	8	20%	33	27%	7	16%	2.326
Cooperation	8	20%	---	---	---	---	
Provocation	---	---	33	27%	---	---	
Conciliation	---	---	---	---	7	16%	
GENERAL BEHAVIOUR	5	12%	28	23%	13	29%	0.481
Cooperative	5	12%	---	---	---	---	
Aggress/Competitive	---	---	25	20%	---	---	
Conciliatory	---	---	3	2%	13	29%	
GENERAL AFFECTIVE STATE	22	55%	24	19%	9	20%	----
Tense/Unsure	18	45%	6	5%	2	4%	
Confident/Determined	---	---	16	13%	---	---	
Calm/Relaxed	4	10%	2	2%	7	16%	
MOTIVE/INTENT	---	---	12	10%	4	9%	----
Retaliate/Terminate	---	---	12	10%	---	---	
Conciliate	---	---	---	---	4	9%	
OTHER	5	12%	27	22%	12	27%	0.327
COMBINED CATEGORY COUNT	40	100%	124	100%	45	100%	

Note. FREQ = Number of responses per category/subcategory.
 %TOT = The percentage of the total number of responses within a given interaction scenario.
 X2 = Results of chi square test between escalation and de-escalation scenarios.

Interaction tactics. This category contained 20% of the non-conflict general response data, 27% of the escalation data, and 16% of the de-escalation data. The results of the chi square test produced a X^2 value of 2.326 ($E = 21.5$, $df = 1$, n.s.).

The content analysis of the data within each of the scenarios resulted in the development of three interaction tactic subcategories: "Cooperation", "Provocation", and "Conciliation". The Cooperation subcategory was characterized by subject responses such as, "encourages communication," "complimenting her," and "talked politely". This subcategory was made up exclusively from the non-conflict data and accounted for the entire 20% of the data. The remaining two subcategories were similarly dominated by responses from only one scenario. Provocation (characterized by subject responses such as, "she's needling him," "sarcasm," and "blaming her") accounted for the entire 27% of the escalation data within the interaction tactics category. Conciliation (e.g. "trying to change subject," "trying to draw his attention to decrease the hostility," "tries to make him feel better") contained all 16% of responses within the de-escalation scenario.

General behaviour. This category was received 12% of the non-conflict responses, 23% of the escalation responses, and 29% of the de-escalation responses. The results of the chi square test on the escalation and de-escalation data indicate there was no significant difference between the observed and expected frequencies within this category ($X^2 = 0.481$, $E = 26$, n.s.). Again, three subcategories emerged from the within-category

content analysis. These subcategories were closely related to those from the Interaction Tactics category and were labelled "Cooperative", "Aggressive/Competitive", and "Conciliatory".

The Cooperative subcategory (made up of responses such as "reassuring, caring," "pleasant, not anticipating conflict," "trying to be nice") contained the entire 12% of the non-conflict data classified in the general behaviour category. The Aggressive/Competitive subcategory (e.g. "aggressive," "demanding," "pushes forward") was dominated by 20% of the escalation data. Finally, the Conciliatory subcategory (e.g. "try to resolve," "conciliatory," "apologetic") contained 29% of the de-escalation data, and 2% of the escalation data.

General affective state. Over half of all the non-conflict responses (55%) were classified to this category, as compared to only a fifth of the escalation (19%) and de-escalation data (20%). Again three major subcategories were identified: "Tense/Unsure", "Confident/Determined", and "Calm/Relaxed".

The Tense/Unsure subcategory (e.g. "tension," "unsure," "hesitant") accounted for 45% of the non-conflict data, 5% of the escalation data, and 4% of the de-escalation data. The Confident/Determined subcategory (e.g. "confident," "determined," "feels sure") only contained responses from the escalation scenario which amounted to 13% of this data. Finally, the Calm/Relaxed subcategory (e.g. "calmness," "relaxing," "at ease") was made up of 10% of the non-conflict data, 2% of the escalation data, and 16% of the de-escalation data.

Motive/Intent. This category contained no responses from the non-conflict scenario, but approximately equal percentages from both the escalation (10%) and de-escalation (9%) scenarios.

The two subcategories for this category refer to subject perceptions of actor motives or intents for the future of the interaction. In the Retaliate/Terminate subcategory subjects responses suggested that it was the actor's intent to either retaliate or terminate the interaction (e.g. "female wants to gain revenge," "trying to make the man angry as well," "did not want further communication"). In the Conciliate subcategory, responses suggested that actor's wanted to re-open communication channels and deal with the conflict issues (e.g. "he wants to clear the air," "feels shame, and wants to explain"). All responses classified under the Escalate/Terminate subcategory came from the escalation scenario (10%), while all Conciliate responses belonged to the de-escalation scenario (9%).

Analysis of Dual Scenario Interaction Points

As previously indicated, most of the escalation and de-escalation points examined in this study were selected on the basis of high levels of subject agreement and low levels of disagreement. However, subjects were almost evenly divided on the assignment of six interaction points to the escalation and de-escalation scenarios (see Appendix F for points and frequencies). This section presents the results of a comparison of the data from these dual scenario points.

The aim of this analysis was to determine whether subjects who classified the same points to different interaction scenarios reported attending to similar or different aspects of the conflict interaction. Two possibilities seemed most likely. Either subjects reported attending to the same emotional and behavioural cues, but interpreted them differently to arrive at their divergent classifications; or subjects made different classifications on the basis of different cues. Because only a small amount of data was generated from these points, tests of statistical significance were not possible. Therefore, direct comparisons of the data classified as escalatory and de-escalatory were conducted within each of the dual scenario points. In addition, the data for all six points was combined to examine the pattern of responses in each interaction scenario. The following sections present the results of these data comparisons.

Comparison of Dual Scenario Emotional Data. For each of the six interaction points the emotional data were compared between the escalation and de-escalation scenarios. When an emotion was identified in the escalation scenario of one point the corresponding de-escalation data was examined for reports of the same emotion. If the same emotion was reported it was considered a "match", and indicated that subjects had detected the same emotional state but attached different significance to its presence. Conversely, when an emotional state was reported in one scenario and a different emotional state was reported in the other, it was concluded that subjects had interpreted the same

information differently. The same procedure was employed for comparisons of the behavioural and general data from these points.

Between the 14 escalation responses and 12 de-escalation responses, only two matches occurred across the six interaction points. That is, on two occasions subjects reported the presence of the same emotional state, but classified the point to opposite scenarios. These findings suggest that subjects who considered these points as escalatory generally differed in their interpretation of emotional cues from those who labelled them as de-escalatory. Table 6 summarizes the category distribution of the escalation and de-escalation responses.

Comparison of Dual Scenario Behavioural Data. Out of the 10 behavioural responses from the escalation scenario and 13 from the de-escalation scenario, only two matches occurred. In most cases, therefore, subjects who classified these points to opposing scenarios appeared to be attending to different aspects of the same events. Table 7 summarizes the category breakdown of the behavioural data obtained from the dual scenario interaction points.

Comparison of Dual Scenario General Data. Of the 10 general responses in the escalation scenario and 13 in the de-escalation scenario, only one match occurred across the six interaction points. Therefore, as with the emotional and behavioural data, it was concluded that subjects in the two scenarios reported attending to different general cues in reaching their decision to classify a point as escalatory or de-escalatory. Table 8 presents

Table 6

Emotional Category and Subcategory Frequencies and Relative Frequencies for Interaction Points Classified Under Both Escalation and De-escalation Scenarios

EMOTIONAL CATEGORY Subcategories	ESCAL		DE-ES	
	FREQ	%TOT	FREQ	%TOT
ANGER	5	36%	1	8%
Anger/Intense Anger	2	14%	1	8%
Frustration	2	14%	---	---
Other	1	7%	---	---
DISTRESS-ANGUISH	4	29%	2	17%
Hurt	2	14%	1	8%
Resignation	1	7%	1	8%
Other	1	7%	---	---
FEAR	3	21%	5	42%
Defensive	2	14%	1	8%
Fear	1	7%	3	25%
Other	---	---	1	8%
ANXIETY (B)	---	---	2	17%
SURPRISE	1	7%	2	17%
OTHER	1	7%	---	---
COMBINED CATEGORY COUNT	14	100%	12	100%

Note. FREQ = Number of responses per category/subcategory.
 %TOT = The percentage of the total number of responses within a given interaction scenario.
 (B) = Emotional blend.

Table 7

Behaviour Category and Subcategory Frequencies and Relative Frequencies for Interaction Points Classified Under Both Escalation and De-escalation Scenarios

BEHAVIOURAL CATEGORY Subcategories	ESCAL		DE-ES	
	FREQ	%TOT	FREQ	%TOT
FACIAL EXPRESSION	2	20%	---	---
Anger in Face	2	20%	---	---
GESTURES	4	40%	3	23%
Gaze Avoidance	---	---	2	15%
Gaze/Mutual Gaze	1	10%	---	---
Other	3	30%	1	8%
VOICE	4	40%	9	69%
Lowered Tone	2	20%	4	31%
Raised Tone	2	20%	2	15%
Other	---	---	3	23%
RELATIVE BODY POSITION	---	---	1	8%
Other	---	---	1	8%
COMBINED CATEGORY COUNT	10	100%	13	100%

Note. FREQ = Number of responses per category/subcategory.
 %TOT = The percentage of the total number of responses within a given interaction scenario.

Table 8

General Category and Subcategory Frequencies and Relative Frequencies for Interaction Points Classified Under Both Escalation and De-escalation Scenarios

GENERAL CATEGORY Subcategories	ESCAL		DE-ES	
	FREQ	%TOT	FREQ	%TOT
INTERACTION TACTICS	1	10%	1	8%
Provocation	1	10%	---	---
Conciliation	---	---	1	8%
GENERAL BEHAVIOUR	---	---	1	8%
Conciliatory	---	---	1	8%
GENERAL AFFECTIVE STATE	4	40%	6	46%
Tense/Unsure	1	10%	2	15%
Confident/Determined	2	20%	---	---
Calm/Relaxed	1	10%	4	31%
OTHER	5	50%	5	38%
COMBINED CATEGORY COUNT	10	100%	13	100%

Note. FREQ = Number of responses per category/subcategory.
 %TOT = The percentage of the total number of responses within a given interaction scenario.

the category distribution of the escalatory and de-escalatory general data responses.

Coding Reliability

To draw valid inferences from the results of a content analysis it is necessary to ensure that the classification procedure is consistent. That is, the same text should be coded the same way, every time, regardless of who is coding it. Thus, ratings of coding reliability are essential in any content analytic study (Holsti, 1969; Weber, 1985).

To obtain a rating of coding stability, the original coder re-coded the data from a series of evenly spaced interaction points from the escalation and de-escalation scenarios. This represented approximately 22 percent of the entire data field and amounted to 176 emotional and behavioural classifications. The re-coded data was then compared to the original data to determine the degree of coding similarity. A total of eight classification errors were recorded. This represents 4.5 percent of the data, or a stability score of 95.5 percent.

A rating of coding reproducibility was completed in a similar manner. A second rater was trained and coded the data from the same interaction points. An examination of this data revealed eleven discrepancies, representing 6.2 percent of the data, or a reproducibility score of 93.7 percent.

None of the discrepancies between the original and two reliability data sets stemmed from disagreements over the category

within which particular text should be coded. All errors resulted when text allocated for category classification was unintentionally overlooked by the coders.

CHAPTER IV

DISCUSSION

The goal of the present research has been to analyze the emotional and behavioural aspects of the conflict escalation and de-escalation process utilizing a systems perspective. To accomplish this, instances of escalation and de-escalation were broken down into emotional and behavioural components. The data generated from this process was content analyzed into 15 emotional and five behavioural categories. To facilitate more precise comparisons between conflict scenarios, the categorized data were further divided into dominant subcategories. The purpose of this chapter is to examine the major categories which resulted from this analysis and to discuss the differences between the escalation and de-escalation scenarios.

Conflict Escalation

Emotion

The goal of this section is to discuss the patterns of emotions subjects reported perceiving in the conflict escalation episodes. These findings will be discussed in the context of the relationship among various emotions. Three primary assumptions from theory and findings in the field of human emotion research underlie the interpretations made here. The first is that emotions function as a primary source of motivation for human behaviour (Izard, 1977; Tomkins, 1984). The second is that primary emotions may interact to amplify, attenuate, or inhibit

the experience of others (Izard, 1975, 1977). The third is that human beings have the natural ability to reliably judge the primary emotional states of others on the basis of observable behaviours (Ekman, 1985; Ekman & Friesen, 1971, 1975; Ekman et al., 1972; Izard, 1977).

Anger. In the introductory chapter it was indicated that conflict theorists regard reciprocally increasing hostility between two interactants as an emergent property of the conflict escalation process which, in turn, motivates further escalation of the interaction (Baron, 1983, 1984; Mortensen, 1974; Teger, 1970; Thomas, 1979; Thomas & Pondy, 1977; Vliert, 1984). The subjects' reports of the emotions perceived during conflict escalation supported this view.

An examination of the subjects' responses clearly indicates that anger, the primary emotion upon which the hostility blend is based (Izard, 1977), was the dominant emotion perceived during all periods of conflict escalation. Anger represented 69% of all emotions reported in this scenario, and with the inclusion of the related hostility-hate data, accounted for 73% of the responses. Furthermore, an examination of the escalation interaction points revealed two important trends in the anger data. First, anger was reported by subjects at every escalatory point analyzed in this study, making it the only emotional state consistently reported during either conflict scenario. Second, the reports of anger increased in both quantity and quality with the increasing intensity of the escalation sequence (as determined by the Mean

Intensity Graphs). That is, as the conflict was reported to intensify, there were more reports of anger and the reports themselves suggested the presence more intense anger (e.g. "very angry," "furious," "rage," etc.). On the basis of these findings, it appears that subjects associated the escalation of the conflict interaction very closely with the perception of intensifying anger.

Distress-anguish and fear. Of the other emotions associated with periods of escalation, 12% were classified as distress-anguish and 8% as fear. Almost all reports of distress-anguish occurred during one escalation episode in conjunction with reports of moderate to intense anger. In this episode, a wife confronted her husband on the subject of his relationship with another woman. The majority of fear reports occurred during an episode in which a husband learned of his wife's desire to gain legal custody of their child. Both husband and wife were perceived as feeling fearful, angry, and frustrated.

An examination of the emotional perceptions revealed that the frequency and intensity of reports of distress-anguish and fear remained fairly constant during these interactions, while reports of anger varied in frequency and intensity with perceived conflict intensity. The variability of anger and the general stability of the other emotions suggests that other emotions may be present during conflict escalation but do not influence the perception of escalation in the same manner as anger. In the present case, it appears that these emotions were related to the specific content

issues over which the conflict occurred, and hence may be referred to as content-specific emotions.

While existing theory and the present findings suggest how anger functions in the conflict process, the role of content-specific emotions is subject to several interpretations, two of which are plausible here. First, content-specific emotions such as distress-anguish and fear may help individuals label or interpret their emotions during conflict. Second, it is possible that the feelings of distress-anguish and fear contribute to the arousal of anger. These interpretations are based on the observation that all initial reports of anger coincided with reports of a content-specific emotion. However, during the most intense conflict periods where the most intense anger was reported, there were few reports of content-specific emotions. Hence, it appears that once an escalatory conflict reached a certain level of intensity, subjects were no longer concerned with the issue but were totally focused on, or overwhelmed by, the perception of anger.

An illustrative episode occurred during the latter stages of a conflict between husband and wife over the husband's affair with another woman. In this episode, the first escalation (characterized by perceptions of distress-anguish and anger) peaked and the interaction then de-escalated. During the de-escalation segment, the husband expressed his desire to discuss his affair with his wife. She, in turn, ignored his efforts to re-open communication which led to what subjects perceived as the

most intense period of escalation in this study. During this subsequent escalation segment, anger was the only emotion reported by subjects. Thus, the interaction began with reports of hurt and anger and escalated until reports of hurt declined and reports of anger increased in both frequency and intensity.

Overall, it is suggested that as long as subjects perceive emotions in addition to anger in an escalating conflict the conflict has not reached a crisis point. As anger intensifies and reaches a point where it is perceived as the dominant emotional state, it appears as if attention is diverted from the content issues and emotions around which the conflict began and becomes focused on the anger itself. Thus, attention is diverted from the specific issues which need to be addressed if the conflict is to be resolved.

In summary, the findings presented in this section have led to several suggestions concerning the manner in which emotions are related to the escalation of conflict. First, it has been suggested that the primary emotion of anger is closely related to the escalation of conflict and its perceived intensity. Second, that other emotions are related to content issues and will actually disappear as the conflict approaches a crisis. Third, that feelings of extreme anger may divert attention from the issues over which the conflict was initiated. These interpretations suggest that the first step towards conflict de-escalation is the reduction of anger. The next then, would be a refocus on the content-specific emotions and related issues.

Behaviour

The emotional data suggested that subjects associated the intensification of anger with the escalation of conflict. The analysis of the behavioural data tend to support this conclusion. Virtually all behaviours reported by subjects during the conflict escalation sequences are those which have been associated with anger (Ekman & Friesen, 1975; Ellsworth, 1975; Izard, 1977). This section examines the trends among the dominant behavioural subcategories which subjects reported as indicators of the intensification of anger.

Facial expression. The highest number of facial expressions were reported at the beginning of the escalation sequences, and the majority of these pertained to anger. As conflicts were reported to intensify, reports of facial expression began to decrease. The data from the most intense conflict segment contained no reports of facial expression, although an examination of the original tape revealed that facial expressions of intense anger, according to criteria established by Ekman and Friesen (1975), were clearly evident during this period.

Gestures. In contrast to facial expression, reports of the perception of gestures increased as the intensity of anger increased. During the least intense escalation segment there were very few gestures reported. At moderate intensity levels, reports of gestures increased, although they were generally limited to gazing behaviours. Gazing and mutual gazing can be considered a specific aspect of facial expression as well as a form of subtle

gesture. Regardless of how this form of behaviour is classified, it is clear that it was most frequently reported prior to overt cues of anger. During the most intense period of escalation, reports of gestures continued to increase and shifted from gazing behaviours to animated motions of hands and arms (often involving indirect violence, e.g. striking table, breaking objects). Examinations of the tapes revealed that gazing behaviour continued during these interactions, though subjects no longer reported this as an indicator of further conflict escalation.

Voice. Subjects relied heavily on vocal cues to determine when a conflict was escalating. As conflict intensified, voice level was consistently reported to raise over what it had been. This trend often culminated in reports of yelling which were associated with the most intense periods of anger.

Very little research has been conducted on the expression of emotion through the voice. Previous research has only demonstrated that a relationship exists between general types of intonations and broad groups of similar emotions (Bull, 1983). Reports of vocal cues in the present study generally focused on relative changes in loudness. That is, subjects seldom referred to specific "anger" voice qualities but, rather, reported relative increases in the loudness of voice over time. Subjects' heavy reliance on this type of emotional cue suggests that further research in this area would benefit the general understanding of the expression of anger.

Relative body position. This category received the lowest number of responses in the escalation scenario. The major trend which emerged was the association of leaning forward with threatening or warning hand gestures, and a raised voice. Subjects reported this combination of behaviours for periods of moderate to intense anger.

In summary, the behaviours which characterized the beginning of conflict escalations were angry facial expressions, raised voices, and gazing behaviours. As the conflict escalated, reports of these behaviours gave way to reports of threat gestures and closer physical proximity, yelling, and breaking objects. On the basis of this information, it appears that subtle cues (e.g. facial expression, gazing behaviour, raised tone of voice) were important sources of information at the beginning of an escalation period, but became redundant to the perceiver as anger intensified. One interpretation of this trend is that subjects relied on subtle cues to determine the presence of anger, then as more overt cues were expressed, were no longer aware of the subtle cues. Thus, the presence of behaviours which had already appeared and were associated with early increases of anger were not reported during later stages of escalation.

Conflict De-escalation

Emotion

The emotions which subjects associated with conflict de-escalation were more diverse than those reported during

escalation. No single emotion was reported with every point of conflict de-escalation as had been the case during escalation. De-escalation was characterized by reports of distress-anguish (42% of emotion responses), fear/anxiety (22%), and surprise, guilt and anger (10% each). An examination of the distribution of these emotions across the de-escalation points indicated that: distress-anguish subcategory responses were divided between points occurring in two separate tapes; fear/anxiety responses were confined to points of de-escalation within one tape; and all reports of guilt and surprise occurred during the same de-escalation segment. The following sections will discuss the significance of the distribution and patterns of emotions which subjects associated with the de-escalation of conflict.

Distress-anguish. It was suggested in the introduction that escalatory spirals which lead to dysfunctional outcomes leave participants with negative emotional residues which increase the likelihood of future dysfunctional escalations. The clustering and location of reports of distress-anguish (resignation, sorrow, and hurt) obtained here provide an example of this sequence.

Reports of distress-anguish occurred only during periods of de-escalation at the end of two separate conflict episodes. According to the criteria for functional and dysfunctional conflict outcomes established in the introduction, both of these interactions resulted in dysfunctional outcomes; that is, at the end of the interaction the original issues were not resolved to

the satisfaction of the participants, and the relationships were breaking down.

In the first episode, reports of resignation, sorrow and hurt followed the most intense period of escalation recorded in this study. In this episode a husband and wife failed to resolve their conflict over the husband's infidelity and initiated the termination of their relationship. In the second episode only sorrow was reported. Here, a husband and wife failed to reach an agreement concerning the custody of their child, and ended the interaction with the understanding that they would take legal action to settle the dispute. Therefore, given the location of distress-anguish reports, one interpretation is that these emotions represent the initial emotional residue of dysfunctional conflict outcomes.

It was suggested in the escalation section that distress-anguish may not only be compatible with anger, but also function as a foundation for its arousal. If this is the case, it appears that dysfunctional conflict outcomes such as those illustrated here have the necessary elements for the development of future escalatory interactions. That is, the conflict issues remain unresolved, and the emotions of distress-anguish associated with these issues may function to encourage the arousal of anger during future interactions.

According to Izard's (1977) research, there is evidence to suggest that positive emotional states (e.g. joy, relief, etc.) are less likely to occur with anger than states of

distress-anguish. The converse of the above argument is that functional conflict outcomes (both participants satisfied and the relationship strengthened or undamaged) would tend to reduce both anger and the specific content emotions. The resulting positive emotional states would reduce the chance of future escalating conflicts.

Fear and anxiety. In the escalation section, fear was associated with the escalation of conflict. The episode presented was that of a husband and wife who were fighting for custody of their child. Subjects reported that the husband became fearful and angry when he learned of his wife's plans to gain custody while the wife became fearful and anger in response to the husband's intimidation tactics. During this same sequence, however, subjects perceived several minor points of de-escalation. At these points subjects reported the presence of fear and anxiety but not anger, which was reported prior to and after these points. Thus, subjects appeared to have associated the perception of fear and anxiety, in the absence of anger, with the de-escalation of conflict. The implications of these findings will be elaborated on in the following section addressing characteristics common to conflict escalation and de-escalation.

Surprise and guilt. All reports of surprise and guilt occurred together during one period of de-escalation. This segment differed from the other de-escalation segments in that it occurred in the middle of an interaction where the potential remained to redirect the conflict and produce a functional

outcome. Here, a husband and wife were engaged in an escalating conflict (both reported to be angry) when the wife disclosed that she was aware of her husband's relationship with another woman. At this point the husband was reported to experience surprise followed by guilt as he offered to discuss the situation. The fact that surprise and guilt occurred in the same segment suggests that some form of emotional interaction was occurring between these emotional states and the anger which was present immediately before.

Theorists consider surprise to have characteristics unlike any other primary emotion (Ekman & Friesen, 1975; Izard, 1977; Tomkins, 1984). It is always a transient experience which erases present emotions and cognitions and prepares the organism to adapt to a new or rapidly changing situation. In terms of neural activity, surprise is characterized by a sharp increase in stimulation which is produced by a sudden, unanticipated event. It is this drastic increase in stimulation which serves to clear the nervous system of present emotions and cognitions. Once a surprise-inducing situation has undergone cognitive appraisal, this emotion dissipates and is replaced by one appropriate to the new situation.

Within the context of the present example, if the husband felt surprise as the subjects reported, it may have served to reduce his anger and thus initiate a de-escalation. However, because surprise is a transient state, it would need to be replaced by an emotion other than anger if the conflict were to

continue to de-escalate. In this case, surprise was replaced by guilt. Based on the evidence presented in the escalation section of this discussion, if surprise were replaced by anger, the conflict would most likely have been perceived as escalating.

Anger was never reported in conjunction with guilt, and this finding is compatible with Izard's (1977) work on the profiles of primary emotional states. He asked subjects to recall situations during which one of the ten primary emotions dominated their experience. They then rated the presence of the remaining nine emotions. In the imagined anger situation, guilt was ranked as the third most infrequently experienced emotion in conjunction with anger, just above joy and shyness. Similarly, in the guilt situation, anger was rated as the third least frequently experienced emotion. These findings suggest that the presence of one of these emotions is likely to inhibit the experience of the other.

In summary, the first two periods of conflict de-escalation illustrated the results of dysfunctional escalating conflict and, therefore, suggest the primary emotions to be avoided or reduced in order to effectively regulate interpersonal conflict. It is possible that emotional residues of distress-anguish increase the potential for the development of anger. On this basis, it seems reasonable to suggest that strategies which seek to minimize the arousal of distress-anguish and anger would be an effective means of preventing the development of dysfunctional conflicts.

An examination of the emotions reported during the second de-escalation sequence suggests that subjects associated the perception of fear not only with the escalation of conflict but with the de-escalation as well. The implications of this finding are discussed in the following section.

The final segment of conflict de-escalation appears to be the result of an entirely different set of emotional dynamics. The interpretation of these findings suggest that the interaction between the primary emotions of surprise and guilt may be responsible for the reduction of anger, and consequently, the de-escalation of the conflict. Thus, this segment serves as an illustration of what might be accomplished through the effective manipulation of the appropriate incompatible emotions.

It is clear that surprise alone cannot be considered an effective means of anger reduction, for while it is generally incompatible with any emotional state, it is not lasting. Furthermore, it may be followed by any one of the primary emotions or emotional blends and, therefore, has the potential to induce or reduce undesirable emotional states. Thus, it appears that in order for a significant decrease in anger to occur, the surprising event must be such that surprise will be replaced by an emotional state which is incompatible with anger. In the previous example, this was guilt; other primary emotions which generally do not exist with anger are fear, shyness-embarrassment and joy (Izard, 1977).

Taken together, the findings from this section suggest that subjects based their assessment of the de-escalation of conflict on the decline of anger rather than the emergence of one particular de-escalation emotion. That is, while subjects rely on their perception of anger to identify periods of conflict escalation, no single emotion is consistently associated with its de-escalation. Support for this interpretation is provided in the following section on the de-escalation behavioural data.

Behaviour

This section discusses the behavioural cues subjects used to identify periods of de-escalation with reference to the four general behavioural categories. Overall, the data appears to support the assertion that subjects based their initial judgments of de-escalation on the absence of anger rather than on the emergence of another emotion.

Facial expression. References to facial expression were distributed relatively evenly among the major de-escalation points and were not associated with any one particular emotional state. There were equal reports of this cue in both the escalation and de-escalation scenarios, indicating that it was as important during de-escalation as it had been during escalation.

Gestures. The dominant subcategories of gestures reported during periods of de-escalation were averted gaze and mutual gaze. In the majority of cases, subjects associated averted gaze with the expression of sorrow. Reports of mutual gazing were

distributed evenly among the interaction points and, therefore, were not associated with one particular emotional state.

In the escalation scenario, gestures accounted for slightly less than one-half of all behavioural responses, making it the highest reported category. In addition, there were significantly more gestures reported during episodes of escalation than de-escalation. It appears, therefore, that gestures played a more significant role in subject's identification of escalation than de-escalation. During periods of de-escalation, averted gaze was the most frequently reported subcategory. These findings imply that there are fewer overt cues for the recognition of de-escalation than escalation, and that de-escalation may be recognized by the absence of cues associated exclusively with escalation.

Voice. Changes in voice quality accounted for slightly more than half of all behavioural responses in the de-escalation scenario. At all de-escalation points voices were consistently reported as quieter, lower, or softer, in relation to what they had been in the preceding escalation segment (generally raised or yelling). Therefore, it appears that the perception of a decrease in raised voices and yelling were important indicators of the de-escalation of the conflict. This adds further support to the assertion that subjects considered the decline of anger a key indicator of de-escalation.

Relative body position. This category received the lowest number of responses in both the escalation and de-escalation

scenarios. All references to relative body position occurred at one de-escalation point where minimal conflict escalation had occurred and actors resumed non-conflict behaviours to reduce tensions (a wife turned back to her husband and changed her tone of voice in an effort to initiate positive communication). The fact that body position cues were consistently associated here and during escalation with other cues suggests that this type of cue alone is too ambiguous for subjects to use to define a particular emotional state and, hence, is redundant information.

In summary, the most salient indicators of conflict de-escalation seem to be the decline or disappearance of overt cues of anger. That is, subjects identified de-escalation first on the basis of what no longer was present or was diminishing rather than on the basis of emotions which emerged.

These findings further suggest that there was little ambiguity among subjects concerning their association of behaviours with conflict escalation and de-escalation. Behaviours associated with the expression of anger dominated the escalation scenario, while these same behaviours were absent in the de-escalation scenario. The few dominant behavioural subcategories which emerged during de-escalation were opposites of behaviours strongly associated with the expression of anger, although they were not consistently associated with an alternate emotional state.

On the weight of the present evidence, it seems reasonable to suggest that the perception of intensifying anger cues is strongly

associated with the escalation of conflict, while the perception of a decrease in anger intensity is associated with de-escalation. On this basis it is possible that a member of a dyad in conflict who experiences anger, but is able to moderate its expression, is in a better position to direct the interaction away from an escalatory spiral than is one who overtly displays the anger. In addition, this implies that during a conflict escalation, one participant may initiate the de-escalation of conflict by demonstrating behaviour not associated with anger.

This notion of the incompatibility of emotions suggests some important future avenues of research into the development of conflict management strategies. In this regard, one possibility comes from findings which suggest that during conflict subjects tend to adopt a similar conflict interaction strategy to that of their opponent (escalatory or de-escalatory, cooperative or competitive, etc.) (Deutsch, 1973, 1980; Lindskold, Walters & Koutsourais, 1983; Sillars, Parry, Coletti & Rogers, 1982). It is this pattern of reciprocation which underlies the escalatory spiral. In view of the present findings, if one of the conflict interactants can maintain an emotional state which is inhibitory to anger, even in the face of initial anger from the other party, the other may find it increasingly difficult to justify continued anger and may begin to reciprocate the more functional behaviours and emotions of the other.

Emotions Common to Escalation and De-escalation

Fear

The perception of fear was reported to an equal degree in both the escalation and de-escalation scenarios, and was always reported as a response to remarks made by the other party. Thus, the inducement of fear appears as a deliberate conflict strategy. In the escalation scenario, the husband was reported to experience fear and anger when he learned of his wife's intent to gain custody of their child. During the same film clip several de-escalations were recorded. At these points the wife was reported to feel fear in response to her husband's attempts to convince her to abandon her custody efforts. It is important to note that during escalation, fear was coupled with the acceptance of intimidation and the presence of anger, while during de-escalation fear alone was reported.

It appears as if when a conflict participant actively becomes angry, even though intimidated, the interaction is likely to escalate. If, however, a participant passively accepts the intimidation, then fear alone results and the interaction is likely to de-escalate. Thus, it appears that the inducement of fear does not predict whether a conflict will escalate or de-escalate. It is only in conjunction with other data that one may know the outcome.

Distress-Anguish

The distress-anguish subcategory "hurt" was also reported to an equal degree in both escalation and de-escalation scenarios. It was suggested previously that the association of hurt and anger represented an emotional interaction whereby the experience of hurt gave rise to the experience of anger (a wife was reported to be feeling hurt and angry as she confronted her husband with her knowledge of his affair). In contrast, in the de-escalation scenario anger was reported to diminish after two intense periods of escalation leaving reports of only hurt and other distress-anguish emotions (conflicts over a husband's affair and the custody of a child). It was suggested that these reports of hurt represented the emotional residue of dysfunctional conflict outcomes. Furthermore, because of the anger potential that distress-anguish emotions appear to display, such residual emotions leave a dyad in a state of enhanced potential for future escalating conflict over the same issues.

On the basis of these findings, it is possible that, regardless of when hurt is experienced during a conflict interaction, it has the potential to arouse anger. The anger may develop in response to the experience of hurt immediately, or, if hurt is the residue of a dysfunctional outcome, at a later point when the unresolved conflict is re-initiated. This implies that if distress-anguish arises over content issues, these emotions need to be dealt with so as to inhibit the arousal of anger. If participants can avoid arousing anger, then they will probably

have a better opportunity to deal with these emotions as anger appears to distract attention from the original causes of a conflict.

General Data

Although only information concerning the perceived emotional state and associated behaviours of actors was requested from subjects, they frequently reported information which could not be classified into any of the pre-established emotional or behavioural categories. This information was grouped together under four major categories; interaction tactics, general behaviour, general affective states, and motive/intent.

In the escalation scenario, the interaction tactics reported were characterized by acts of provocation, whereby subjects interpreted the actors behaviour as consistently competitive and often, overtly aggressive; actors' general affective states were described as confident and determined, though sometimes tension and uncertainty were reported; and subjects inferred from what they witnessed that it was the actors' intent to retaliate or terminate the conflict interaction.

Conversely, in the de-escalation scenario the interaction tactics were interpreted as acts of conciliation, whereby actors made an effort to reduce tensions and re-open communication; actors' general behaviour was regarded as conciliatory in that behaviours were aimed at reaching a co-operative solution and avoiding further escalation; actors' general affective states were

generally described as calm or relaxed, with several indications of tension; and finally, subjects inferred that it was the actors' desire to strive for a conciliation of the conflict.

Dual Scenario Interaction Points

As previously indicated, for several interaction points subjects were evenly divided on the issue of whether they represented an escalation or de-escalation of the conflict. The analysis of these dual scenario interaction points was conducted to determine whether subjects who classified a particular interaction point as escalatory reported attending to the same emotional and behavioural cues as those who classified it as de-escalatory. Results of the data comparisons indicate that in the majority of cases, subjects who classified these points as escalatory reported different emotional and behavioural cues than those who classified them as de-escalatory.

For each of these points the responses perceived as escalatory were compared to those perceived as de-escalatory. The results of this comparison indicated that approximately 15% of the responses were identical across the escalation and de-escalation scenarios. This represents less than one match between scenario responses per interaction point. Thus, it appears as if subjects focused on particular cues indicative of their own interpretation and missed or disregarded others which might contradict this view.

Conclusions

This study has examined the emotional and associated behavioural aspects of conflict escalation and de-escalation in order to determine how they might interact to shape the conflict interaction process. The nature of this research has required that the interpretation of results draw upon theory and research findings from the conflict and human emotion literature, two areas of enquiry which have not been integrated previously. Conflict theorists have generally down played the role which emotion plays in shaping the conflict process, and emotion theorists are only beginning to examine emotion within the context of interpersonal relations. In this section, the results of this study will be summarized, and the implications discussed.

Summary of Research Findings

Subject perceptions of escalation and de-escalation.

Subjects appeared to base their perception of conflict escalation on the presence anger and behaviours associated with this emotion. Conflict intensity, then, might be equated with subjective judgments of the intensity of anger. Perceptions of anger intensity followed a hierarchy of behavioural indicators beginning with subtle facial cues and progressing to focus on overt acts of violence as conflict intensified.

The data suggest that subjects did not base their initial judgments of de-escalation on the emergence of a particular emotion. Instead, they based this decision on the decline or

sudden absence of behaviours associated with anger. Thus, it appears that the reduction of anger behaviours provides subjects with the first indication that conflict is in the process of de-escalating; other behaviours then, are used to interpret the particular emotions which emerged to take its place.

The role of emotions in interpersonal conflict. A number of suggestions have been generated to explain the function of emotions in escalating interpersonal conflict. Underlying these interpretations of the data is the literature supported finding which identifies anger as the motivation which drives the escalatory spiral process. Additional findings produced from this study indicate that other emotional states may function to arouse, attenuate, or inhibit the experience of anger during conflict interactions.

Results indicate that the emotional states of fear and distress-anguish (hurt) appear to contribute to dysfunctional conflict processes. Attempts to instill fear during conflict do not resolve the disputed issues, they merely suppress one party or may function to motivate further escalatory behaviour. Similarly, behaviours which may be perceived as efforts to intentionally hurt (physically or psychologically) the other party appear to contribute to the arousal of anger, which in turn may escalate the conflict interaction. Additional evidence suggests that emotions of distress-anguish, such as resignation, sorrow, and hurt, may occur as emotional residue at the end of dysfunctional conflict interactions. It appears that these emotions stem from a failure

to resolve the issues under dispute and, therefore, may contribute to the development of future escalatory spirals.

With respect to the de-escalation of conflict, the primary emotional states of surprise and guilt appear to play a role in the reduction or inhibition of anger. Surprise is effective in the temporary reduction of anger; however, the surprising event itself must be calculated to arouse an emotion which is incompatible with anger. The present findings suggest that one emotion which is effective in this regard is guilt. A surprising event which instills guilt may function to de-escalate conflict interactions. The surprise is thought to immediately reduce the anger, while the experience of guilt inhibits its re-arousal. It is suggested that emotions such as joy-enjoyment, shyness-embarrassment, or love may function in a similar manner to guilt, as they may also inhibit the arousal of anger (Izard, 1977).

Thus, the results of the present investigation suggest behaviours and emotions which if avoided or reduced would inhibit the development of an escalatory spiral during a conflict interaction. In the following section, it is proposed that these findings suggest that efforts to manipulate emotional states may be an effective means of regulating interpersonal conflict interactions.

A Proposed Foundation for Emotion Based Regulation Strategies

On the basis of these findings, the following set of assumptions is proposed for the development of conflict regulation strategies which focus on the control of emotions:

1. The most important strategy for conflict regulation is the stimulation of those emotions which inhibit anger and the avoidance of those emotions and behaviours associated with its arousal.
2. When anger is aroused in both participants the reduction of emotions and behaviours which contribute to the reciprocal intensification of anger may be achieved by invoking overt behaviours associated with the de-escalation of conflict.
3. It is possible that anger can be inhibited, reduced, or eliminated through the implementation of interaction strategies which induce emotions incompatible with anger.

Limitations and Recommendations for Future Research

The first limitation is a potential lack of external validity of the stimuli. This research is based on an analysis of simulated conflict episodes and may not be representative of naturally occurring interpersonal interactions. This is actually a long standing problem with research of this nature. Simulations, role plays and re-enactments by trained actors or naive subjects have been used as the primary means of producing experimental stimuli for both conflict and emotion research; however, the validity of these methods is open to question. Yet,

even when interpersonal conflicts have been filmed in natural settings, it has been suggested that subjects' awareness of a camera has a confounding effect on the behaviour exhibited (Ekman, 1985). Future research efforts will need to seriously address this problem of externally valid stimuli.

A second limitation in the present research is the exclusive reliance on observers' reports of emotional states. While there is extensive research to suggest that observers are relatively good at such tasks (Ekman & Friesen, 1971, 1975; Ekman et al., 1972; Izard, 1977), it will be critical to obtain measures of emotions from other sources, including the participants, in order to substantiate, contradict or elaborate on the present findings.

The results are further limited by two important methodological restrictions: the number and the nature of the conflict interactions selected for subject analysis. Only three conflict segments could be analyzed by subjects due to the intensive nature of this task. Had it been practical for subjects to analyze a larger and more diverse set of conflict interactions, the results might well have suggested more directions for emotion-based conflict regulation research. Thus, it is suggested that a similar methodological procedure be employed using conflict interaction sequences classified as successful instances of the de-escalation of dysfunctional conflict interactions. Through research of this type, important insights could be gained into the emotions which function to maintain functional conflict processes.

Because of the exploratory nature of this research it was necessary to allow subjects to respond to the film clips in an unstructured and open-ended fashion. While there are certainly benefits to this approach, there are corresponding drawbacks. Subjects had greater latitude in terms of responses; however, classification of the data obtained was much more subjective. For example, if subjects had been supplied with a check list of the primary emotions and common emotional blends, then the classification procedures would have required less interpretation and hence, decreased some of the potential for experimenter bias. Thus, it is suggested that future research consider the possibilities offered by a structured response format.

Finally, due to the relatively small sample size employed in this study, and unequal number of male and female subjects, statistical comparisons of male and female responses were not conducted. Informal comparisons of the categorized data revealed no obvious differences between responses, however, this is not sufficient evidence to suggest that there were no significant differences between the responses of male and female subjects. Thus, additional research needs to establish whether males and females significantly differ in terms of the behaviours to which they attended and the emotions they perceived.

Overall, it is suggested that a majority of the conflict research has neglected the role which emotions play in shaping the course of interpersonal conflict interactions. It is therefore

recommended that future research efforts place greater emphasis on this important aspect of the interpersonal conflict process.

APPENDIX A
PRELIMINARY STUDY
SUBJECT RESPONSE PACKAGE

FILM CLIP # 1/2/5

SEX: M _____ F _____

NOTES:

SUMMARY:

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TAPE # 3

SEX: M _____ F _____

(1)Male: YOU LOOK REALLY NICE.

(2)Female: WHAT?

(3)Male: YOU LOOK REALLY PRETTY.

(4)Female: SEEM SURPRISED.

(5)Male: OH FORGET IT.

(6)Female: (PAUSE) IS THE DRESS O.K.?

(7)Male: YA.

(8)Female: YA?

(9)Male: IT'S THE ONE YOU WORE LAST YEAR ISN'T IT?

(10)Female: OH, WHY DOES IT STILL HAVE WINE ON IT?

(11)Male: WINE?

(12)Female: THE WINE THAT YOU SPILLED WHEN PETER MARKS WON INSTEAD
OF YOU.

(13)Male: (SIGH) YOU ALWAYS REMEMBER THE WRONG THINGS.

=====

TAPE # 4

SEX: M _____ F _____

- (1)Female: WHAT'S THE MATTER?
- (2)Male: WHAT'S THE MATTER? I CAN'T FIND MY GLASSES - RATS.
- (3)Female: WHERE DID YOU LEAVE THEM?
- (4)Male: I LEFT THEM RIGHT HERE.
- (5)Female: YOU SURE THERE NOT ON YOUR DESK?
- (6)Male: (SIGH) I'M LOSING EVERYTHING, I CAN'T FIND ANYTHING ANYMORE. I CAN'T EVEN FIND A GODDAMN PENCIL - WHAT DO THE KIDS DO? USE THEM FOR PICK-UP STICKS? WHEN I DO FINALLY RESCUE ONE IT'S CHEWED UP LIKE A PIECE OF LICORICE, ITS GOT A POINT LIKE A GUM DROP. WHAT DO THE KIDS DO WITH MY PENCIL POINTS? STICK THEM IN THERE GODDAMN JUJU BEADS?
- (7)Female: GEORGE, PLEASE STOP.
- (8)Male: STOP WHAT. CAN'T FIND MY GODDAMN GLASSES. WHERE ARE MY GODDAMN GLASSES. HOW CAN I BE EXPECTED TO WORK IF I CAN'T FIND MY GODDAMN GLASSES?
- (9)Female: THEN DON'T WORK GEORGE, JUST DON'T WORK.
- (10)Male: I'M LATE FOR THAT SUNDAY PIECE, I'VE GOT THAT COVER. THEY CLOSE TOMORROW. DON'T WORK, DON'T EARN MONEY. THAT WAY WE CAN ALL STARVE.
- (11)Female: NOBODY IS STARVING GEORGE.
- (12)Male: HUUUU. ORANGE JUICE. NOT EVEN A GODDAMN GLASS OF ORANGE JUICE. I'VE GOT THE ENERGY OF A TWO DOLLAR WHORE IN THE MORNINGS - YOU KNOW WHY? BECAUSE THE KIDS TOOK ALL THE GODDAMN ORANGE JUICE!
- (13)Female: WELL WE RAN OUT AND I MEANT TO GET SOME ON THE WAY BACK LAST NIGHT.
- (14)Male: WHAT - AT TWO IN THE MORNING?
- (15)Female: TWO IN THE MORNING HAS BEEN PERFECTLY FINE FOR YOU LATELY.
- (16)Male: WHAT ARE YOU TALKING ABOUT?
- (17)Female: I'M TALKING ABOUT THE NIGHT BEFORE LAST GEORGE.

(18)Male: I WAS IN TOWN. I WAS WORKING.

(19)Female: YOU WERE WITH YOUR LADY FRIEND.

(20)Male: (PAUSE) MY WHAT?

(21)Female: LADY FRIEND!

(22)Male: (SIGH) LADY FRIEND. WHAT (SIGH) KIND OF A WORD IS THAT?

(23)Female: IT'S LIKE FUCKING - ONLY YOU DON'T TELL ANYONE ABOUT IT! THAT'S WHAT IT IS.

(24)Male: (PAUSE)

(25)Female: SIGH

(26)Male: DO YOU WANT TO TALK ABOUT IT?

(27)Female: (NO RESPONSE)

(28)Male: DON'T YOU THINK WE AUGHTA TALK ABOUT IT?

(29)Female: (NO RESPONSE)

(30)Male: I SAID - DON'T YOU THINK WE AUGHTA TALK ABOUT IT?!

(31)Female: NO GEORGE, I DON'T THINK WE AUGHTA TALK ABOUT IT!

(32)Male: I THINK WE AUGHTA TALK ABOUT IT!

(33)Female: I DON'T WANT TO TALK ABOUT IT!

(34)Male: I WANT TO TALK ABOUT IT!

(35)Female: (PAUSE)

(36)Male: I'M LEAVING.

(37)Female: GOOD.

(38)Male: I'M PACKIN MY BAG.

(39)Female: IT'S ALREADY PACKED.

(40)Male: WHAT?

(41)Female: IT'S ON THE CHAIR UPSTAIRS - I PACKED IT LAST NIGHT.

(42)Male: (PAUSE - EXITS)

APPENDIX B
NATURAL HISTORY MODEL OF CONFLICT

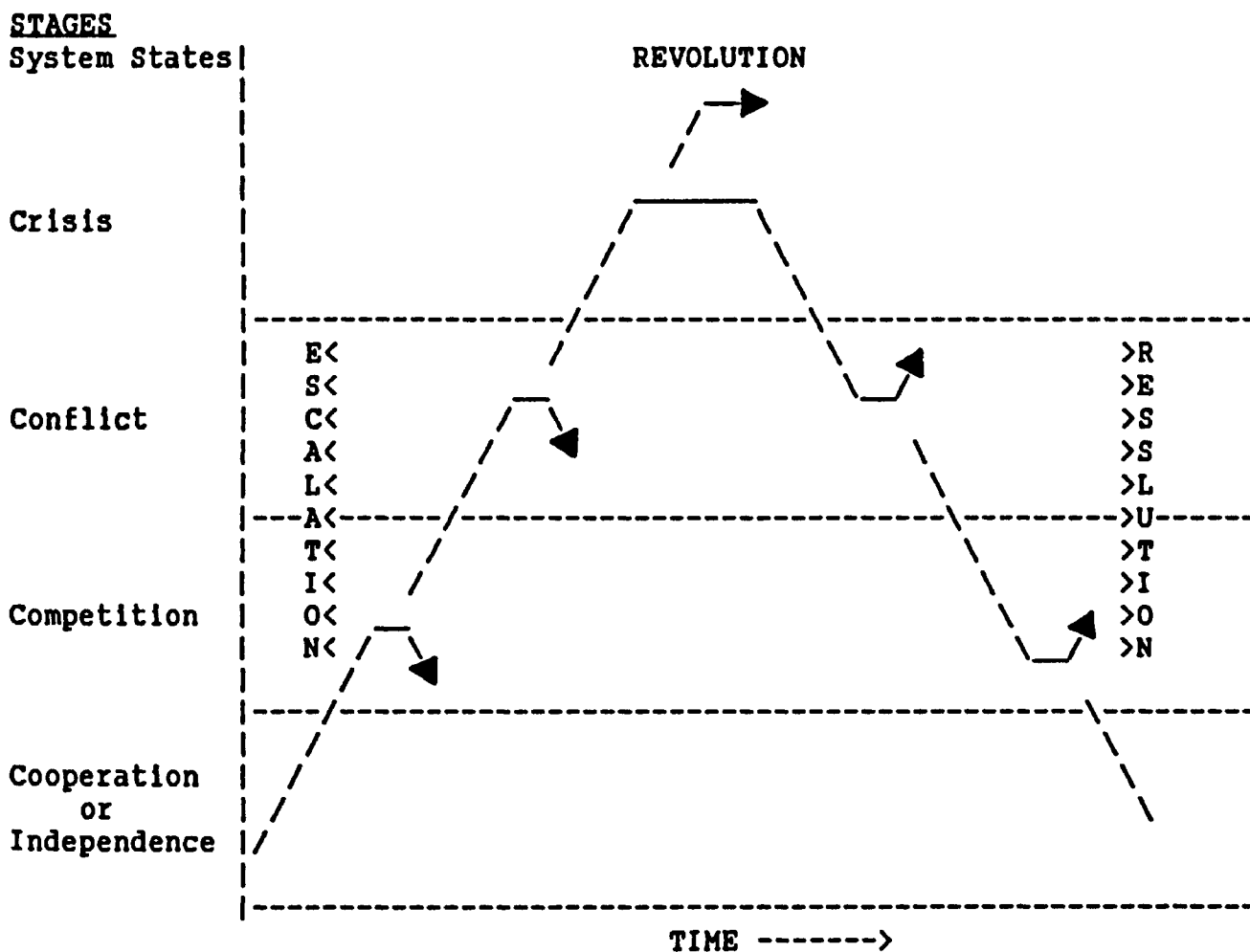


Figure 1. Schematic illustration of a natural history model of conflict.

(Scherer, Abeles & Fischer, 1975, p. 271)

APPENDIX C
PRIMARY STUDY
SUBJECT RESPONSE PACKAGE

INTERPERSONAL CONFLICT STUDY
SUBJECT RESPONSE PACKAGE

PROF. D. WONG-RIEGER

E. M. VOKES

AGE: _____ SEX: M _____ F _____

SUBJECT # _____

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TAPE # 1

(1)Male: YOU LOOK REALLY NICE.

(2)Female: WHAT?

(3)Male: YOU LOOK REALLY PRETTY.

(4)Female: SEEM SURPRISED.

(5)Male: OH FORGET IT.

(6)Female: (PAUSE) IS THE DRESS O.K.?

(7)Male: YA.

(8)Female: YA?

(9)Male: IT'S THE ONE YOU WORE LAST YEAR ISN'T IT?

(10)Female: OH, WHY DOES IT STILL HAVE WINE ON IT?

(11)Male: WINE?

(12)Female: THE WINE THAT YOU SPILLED WHEN PETER MARKS WON INSTEAD
OF YOU.

(13)Male: (SIGH) YOU ALWAYS REMEMBER THE WRONG THINGS.
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TAPE # 2

(1)Female: WHAT'S THE MATTER?

(2)Male: WHAT'S THE MATTER? I CAN'T FIND MY GLASSES - RATS.

(3)Female: WHERE DID YOU LEAVE THEM?

(4)Male: I LEFT THEM RIGHT HERE.

(5)Female: YOU SURE THERE NOT ON YOUR DESK?

(6)Male: (SIGH) I'M LOSING EVERYTHING, I CAN'T FIND ANYTHING ANYMORE. I CAN'T EVEN FIND A GODDAMN PENCIL - WHAT DO THE KIDS DO? USE THEM FOR PICK-UP STICKS? WHEN I DO FINALLY RESCUE ONE IT'S CHEWED UP LIKE A PIECE OF LICORICE, ITS GOT A POINT LIKE A GUM DROP. WHAT DO THE KIDS DO WITH MY PENCIL POINTS? STICK THEM IN THERE GODDAMN JUJU BEADS?

(7)Female: GEORGE, PLEASE STOP.

(8)Male: STOP WHAT. CAN'T FIND MY GODDAMN GLASSES. WHERE ARE MY GODDAMN GLASSES. HOW CAN I BE EXPECTED TO WORK IF I CAN'T FIND MY GODDAMN GLASSES?

(9)Female: THEN DON'T WORK GEORGE, JUST DON'T WORK.

(10)Male: I'M LATE FOR THAT SUNDAY PIECE, I'VE GOT THAT COVER. THEY CLOSE TOMORROW. DON'T WORK, DON'T EARN MONEY. THAT WAY WE CAN ALL STARVE.

(11)Female: NOBODY IS STARVING GEORGE.

(12)Male: HUUUU. ORANGE JUICE. NOT EVEN A GODDAMN GLASS OF ORANGE JUICE. I'VE GOT THE ENERGY OF A TWO DOLLAR WHORE IN THE MORNINGS - YOU KNOW WHY? BECAUSE THE KIDS TOOK ALL THE GODDAMN ORANGE JUICE!

(13)Female: WELL WE RAN OUT AND I MEANT TO GET SOME ON THE WAY BACK LAST NIGHT.

(14)Male: WHAT - AT TWO IN THE MORNING?

(15)Female: TWO IN THE MORNING HAS BEEN PERFECTLY FINE FOR YOU LATELY.

(16)Male: WHAT ARE YOU TALKING ABOUT?

(17)Female: I'M TALKING ABOUT THE NIGHT BEFORE LAST GEORGE.

(18)Male: I WAS IN TOWN. I WAS WORKING.

(19)Female: YOU WERE WITH YOUR LADY FRIEND.

(20)Male: (PAUSE) MY WHAT?

(21)Female: LADY FRIEND!

(22)Male: (SIGH) LADY FRIEND. WHAT (SIGH) KIND OF A WORD IS THAT?

(23)Female: IT'S LIKE FUCKING - ONLY YOU DON'T TELL ANYONE ABOUT IT! THAT'S WHAT IT IS.

(24)Male: (PAUSE)

(25)Female: SIGH

(26)Male: DO YOU WANT TO TALK ABOUT IT?

(27)Female: (NO RESPONSE)

(28)Male: DON'T YOU THINK WE AUGHTA TALK ABOUT IT?

(29)Female: (NO RESPONSE)

(30)Male: I SAID - DON'T YOU THINK WE AUGHTA TALK ABOUT IT?!

(31)Female: NO GEORGE, I DON'T THINK WE AUGHTA TALK ABOUT IT!

(32)Male: I THINK WE AUGHTA TALK ABOUT IT!

(33)Female: I DON'T WANT TO TALK ABOUT IT!

(34)Male: I WANT TO TALK ABOUT IT!

(35)Female: (PAUSE)

(36)Male: I'M LEAVING.

(37)Female: GOOD.

(38)Male: I'M PACKIN MY BAG.

(39)Female: IT'S ALREADY PACKED.

(40)Male: WHAT?

(41)Female: IT'S ON THE CHAIR UPSTAIRS - I PACKED IT LAST NIGHT.

(42)Male: (PAUSE - EXITS)

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TAPE # 3

(1)Female: HOW'S YOUR AH...

(2)Male: WHAT?

(3)Female: HUH?

(4)Male: OH, I'M SORRY - GO AHEAD.

(5)Female: OH I WAS JUST...GOING TO SAY HOW'S YOUR JOB?

(6)Male: FINE, FINE....VICE PRESIDENT OF NOTHING.

(7)Female: (LAUGHS)

(8)Male: NO REALLY, IT'S GOIN GOOD. HI
(WAITRESS: EXCUSE ME WOULD YOU LIKE A DRINK?)
HUUU...WHAT EVER SHE'S HAVING.

(9)Female: WHITE WINE.

(10)Male: WINE.

(11)Female: HOW'S BILLY?

(12)Male: HE'S TERRIFIC...HUU...HE HU, HAD A LITTLE ACCIDENT A
COUPLE OF WEEKS AGO IN A PLAY GROUND AND HE CUT HIMSELF. IT
WAS REALLY SCARY - I RAN HIM ALL THE WAY TO THE HOSPITAL.
HE'S GOING TO HAVE A LITTLE TEENY SCAR, BUT HE'S - HE'LL BE
FINE. I, I'VE BEEN WORRYING THAT IT WAS MAY FAULT...

(13)Female: OH, DON'T DO THAT...YOU CAN'T EVEN SEE IT FROM A
DISTANCE. I, I...(PAUSE)... SOMETIMES I SIT IN THAT COFFEE
SHOP ACROSS THE STREET FROM HIS SCHOOL AND...WATCH HIM. HE
GOT SO BIG! (LAUGHS)

(14)Male: YOU'VE BEEN WATCHING HIM FROM THE COFFEE SHOP?

(15)Female: WELL I'VE BEEN IN NEW YORK FOR ABOUT TWO MONTHS NOW,
SO...

(16)Male: I DIDN'T KNOW THAT...

(17)Female: MMM...ANYWAY (SIGH). THAT'S WHY I WANTED TO TALK TO
YOU TODAY BECAUSE UM...

(18)Male: MMMM...

- (19)Female: LAST TIME YOU SAW ME I WAS IN...(PAUSE) HUU, PRETTY BAD...
- (20)Male: A LITTLE SHAKY? (LAUGHS)
- (21)Female: ...REALLY BAD SHAPE. YA, I WAS (LAUGHS) - I WAS.
- (22)Male: WELL YOU LOOK...YOU LOOK LOVELY...NOW.
- (23)Female: AHFFF...
- (24)Male: WHAT?
- (25)Female: I HAVE A WHOLE SPEECH.
- (26)Male: NO, GO AHEAD (LAUGHS).
- (27)Female: (LAUGHS - SIGHS)...WELL - I DON'T KNOW, ALL MY LIFE I'VE...I'VE FELT LIKE SOMEBODY'S (SIGH) WIFE, OR SOMEBODY'S MOTHER, OR SOMEBODY'S DAUGHTER. EVEN ALL THE TIME WE WERE TOGETHER - I NEVER KNEW WHO I WAS - AND THAT'S WHY I HAD TO GO AWAY. AND IN CALIFORNIA, I THINK I'VE FOUND MYSELF. AND I GOT MY SELF A JOB. I GOT MY SELF A THERAPIST - A REALLY GOOD ONE. AND UH, AND UH I FEEL BETTER...ABOUT MYSELF THEN I EVER HAVE IN MY WHOLE LIFE. AND I'VE LEARNED A GREAT DEAL ABOUT MY SELF.
- (28)Male: SUCH AS? (PAUSE) - NO, I'M, I'M - REALLY, I, I, I'D REALLY LIKE TO KNOW WHAT YOU LEARNED
- (29)Female: (PAUSE) WELL I'VE LEARNED THAT I LOVE...MY LITTLE BOY. AND UH, THAT I'M CAPABLE OF TAKING CARE OF HIM.
- (30)Male: WHAT DO YOU MEAN?
- (31)Female: (PAUSE) I WANT MY SON.
- (32)Male: YOU CAN'T HAVE HIM.
- (33)Female: NOW DON'T GET DEFENSIVE - DON'T, DON'T TRY TO BULLY ME O.K.
- (34)Male: I'M NOT GETTING DEFENSIVE - WHO WALKED OUT OF THE HOUSE 15 MONTHS AGO?
- (35)Female: I DON'T CARE.
- (36)Male: JO...
- (37)Female: I AM STILL HIS MOTHER.

(38)Male: YES. FROM THREE THOUSAND MILES AWAY, AND JUST BECAUSE YOU SEND A FEW POST CARDS...YOU - IT GIVES YOU THE RIGHT TO COME BACK HERE...

(39)Female: BUT I NEVER STOPPED LOVING HIM - I NEVER STOPPED WANTING HIM OR LOVING HIM...

(40)Male: WHAT MAKES YOU SO SURE HE WANTS YOU?

(41)Female: WHAT MAKES YOU SO SURE HE DOESN'T WANT ME?

(42)Male: (SIGH) O.K., LOOK WE'RE GOING TO SIT HERE AND BAT THIS BACK AND FORTH LIKE IT WAS FOR EIGHT YEARS - RIGHT SO IT'S JUST LIKE OLD TIMES...

(43)Female: YOU CAN'T DENY ME ACCESS TO MY BABY...

(44)Male: DON'T TELL ME WHAT I CAN OR CANNOT DO...DON'T TALK TO ME THAT WAY...

(45)Female: I HAVE ANTICIPATED THIS...I'LL TAKE...

(46)Male: O.K. LOOK, I DON'T WANT TO GET INTO THIS - LOOK YOUR GOING TO HAVE TO DO WHAT YOUR GOING TO HAVE TO DO, AND I'M GOING TO HAVE TO DO WHAT I HAVE TO DO...

(47)Female: I'M VERY SORRY ABOUT THIS...

(48)Male: O.K. YOU CAN JUST DO WHAT YOU HAVE TO DO...(BREAKS GLASS - EXITS)

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APPENDIX D
PRIMARY STUDY
SUBJECT INSTRUCTION HANDOUT

INTERPERSONAL CONFLICT STUDY
SUBJECT HANDOUT: INTRODUCTION & INSTRUCTIONS

INTRODUCTION

THE PURPOSE OF THE PRESENT RESEARCH IS TO EXAMINE THE INTERPERSONAL CONFLICT PROCESS. THUS, THE SPECIFIC CONTENT OF THE CONFLICT IS NOT OF CONCERN HERE. RATHER, WE ARE INTERESTED IN THE MEANS BY WHICH THE CONFLICT DEVELOPS, IS MAINTAINED, AND ENDS.

CONTENT: WHAT THE INTERACTION IS ALL ABOUT - THE ISSUES.

PROCESS: HOW THE INTERACTION DEVELOPS AND PROGRESSES OVER TIME - THE METHOD.

INTERPERSONAL CONFLICT: IS A TERM USED TO DESCRIBE A PARTICULAR FORM OF INTERPERSONAL INTERACTION PATTERN. BECAUSE IT IS "INTERPERSONAL," IT NECESSARILY FOLLOWS THAT CONFLICT REQUIRES AT LEAST TWO INDIVIDUALS IN INTERACTION. THEREFORE A CONFLICT DOES NOT EXIST UNTIL BOTH ARE AWARE THAT THEY ARE CONFLICTING.

CONFLICT ESCALATION: ESCALATION USUALLY DENOTES AN INCREASE IN THE LEVEL OF CONFLICT, WHICH OFTEN LEADS TO AN "ESCALATORY SPIRAL". IT IS CHARACTERIZED BY:

- INCREASING THE NUMBER OR THE SIZE OF ISSUES DISPUTED
- INCREASING MUTUAL PUNISHMENT
- INCREASING HOSTILE BEHAVIOUR BETWEEN PARTIES
- INCREASING COMPETITIVENESS
- PURSUING INCREASINGLY EXTREME DEMANDS OR OBJECTIVES
- USING INCREASINGLY COERCIVE TACTICS
- DECREASING TRUST

CONFLICT DE-ESCALATION:

- DEALING WITH THE SPECIFIC ISSUES
- DECREASING MUTUAL PUNISHMENT
- DECREASING HOSTILE BEHAVIOUR BETWEEN PARTIES
- DECREASING COMPETITION
- MORE REASONABLE, COOPERATIVE COMMUNICATION AND INTERACTION
- INCREASED UNDERSTANDING OF THE OTHER'S NEEDS AND GOALS
- USING MORE ACCOMMODATING/COOPERATIVE TACTICS
- INCREASING TRUST

CONFLICT CRISIS: A TURNING POINT IN THE INTERACTION WHERE A "RESOLUTION" OR "REVOLUTION" OCCURS.

RESOLUTION: A POINT IN THE INTERACTION WHERE A RETURN TO COOPERATION OCCURS.

REVOLUTION: A POINT IN THE INTERACTION WHERE THE RELATIONSHIP IS DRASTICALLY ALTERED OR BREAKS DOWN.

INSTRUCTIONS

THIS RESEARCH INVOLVES WATCHING 3 FILM CLIPS AND RESPONDING TO A SERIES OF QUESTIONS. WE WILL BE VIEWING EACH CLIP FIVE TIMES: THE FIRST VIEWING TO FAMILIARIZE YOU WITH THE INTERACTION, AND EACH SUBSEQUENT VIEWING TO LOOK FOR AND IDENTIFY A PARTICULAR FEATURE OF THE CONFLICT PROCESS. FEEL FREE TO ASK QUESTIONS AT ANY TIME.

SHOWING # 1: FAMILIARIZATION

SHOWING # 2: CRITICAL POINTS IN THE INTERACTION

IDENTIFY THE POINT/S AT WHICH YOU FEEL THE CONFLICT

- BEGINS {SHIFT FROM NON-CONFLICT INTERACTION} (*)
- ESCALATES (UP ARROW)
- DE-ESCALATES (DOWN ARROW)
- REACHES A CRISIS POINT (**)

NOTE: CONFLICTS MAY ESCALATE AND DE-ESCALATE REPEATEDLY.

SHOWING # 3: EMOTION

IDENTIFY THE VARIOUS EMOTIONS THAT YOU FEEL THE PARTICIPANTS ARE EXPERIENCING AT EACH OF THE PREVIOUSLY IDENTIFIED POINTS IN THE INTERACTION.

NOTE: IT IS POSSIBLE FOR PEOPLE TO EXPERIENCE MORE THAN ONE EMOTION AT THE SAME TIME - PLEASE IDENTIFY ALL THAT YOU DETECT.

SHOWING # 4: BEHAVIOURAL CUES

IN ORDER TO IDENTIFY THE CRITICAL POINTS IN THIS CONFLICT INTERACTION, YOU ATTENDED TO PARTICULAR BEHAVIOURAL AND VERBAL CUES WHICH SUGGESTED AN ESCALATION, DE-ESCALATION, OR CRISIS WAS OCCURRING. PLEASE WATCH FOR THE VERBAL/BEHAVIOURAL INDICATORS THAT YOU USED TO MAKE YOUR EARLIER DECISIONS AND LIST THESE IN POINT FORM BESIDE EACH SYMBOL.

SHOWING # 5: BEHAVIOURAL CUES - NO SOUND

TO HELP YOU TO FOCUS ON THE BEHAVIOUR OF THE PARTICIPANTS ONLY, WE WILL WATCH THE CLIP WITH OUT THE SOUND. PLEASE WATCH FOR AND LIST THE BEHAVIOURAL INDICATORS WHICH INDICATE TO YOU THAT AN ESCALATION, DE-ESCALATION, OR CRISIS IS OCCURRING.

SCALING THE CONFLICT

1. ON THE NEXT PAGE YOU WILL FIND A GRID PATTERN WITH A SCALE FROM 0 TO 10 ACROSS THE TOP, AND A SCALE FROM 1 TO 13/42/48 ACROSS THE SIDE.
2. TURN THE PAGE SIDEWAYS SO THAT THE SCALE FROM 1 TO 13/42/48 IS NOW ON THE BOTTOM.
3. THE BOTTOM SCALE CORRESPONDS TO THE PHRASE NUMBERS ON THE PREVIOUS TRANSCRIPT PAGE.
4. THE SCALE FROM 0 TO 10 REFERS TO THE PERCEIVED INTENSITY OF THE CONFLICT INTERACTION, WITH 0 REPRESENTING A NON-CONFLICT INTERACTION, AND 10 REPRESENTING THE MOST INTENSE CONFLICT INTERACTION.
5. WHAT WE ARE ABOUT TO DO IS GRAPH THE CONFLICT PROCESS ACCORDING TO YOUR PERCEPTIONS OF THE CRITICAL POINTS AND THEIR INTENSITY.
6. ON THE VERTICAL LINES JUST AFTER THE PHRASE NUMBER, MAKE A MARK TO INDICATE YOUR PERCEPTION OF THE LEVEL OF CONFLICT INTENSITY WHICH WAS PRESENT AT THAT POINT IN THE INTERACTION.
7. WHEN FINISHED, LINK ALL OF THE POINTS TOGETHER TO CREATE A "PICTURE" OF THE CONFLICT PROCESS WHICH OCCURRED IN THIS INTERACTION.

APPENDIX E
PRIMARY STUDY
EXPERIMENTER'S INSTRUCTIONS

INTERPERSONAL CONFLICT STUDY
EXPERIMENTER'S INTRODUCTION AND INSTRUCTIONS

 ON THE BOARD: LIST OF 4 SYMBOLS
 DEMONSTRATION OF GRAPHING

INTRODUCTION

- PLEASE DO NOT FEEL THAT YOU ARE UNDER ANY OBLIGATION TO PARTICIPATE.
- IF YOU CHOOSE TO PARTICIPATE, YOU MAY STOP AT ANY TIME.
- PLEASE LEAVE THE PACKAGE CLOSED AND INTACT WHEN YOU RECEIVE IT.
- THIS RESEARCH IS EXPLORATORY IN NATURE - THEREFORE, IT DOES NOT INVOLVE TESTS OF ANY KIND - NOR ARE THERE ANY "RIGHT" OR "WRONG" ANSWERS.
- RESPONSES ARE ANONYMOUS - ALL THAT IS REQUESTED IS YOUR AGE AND SEX.
- YOUR ROLE AS A SUBJECT IS TO PROVIDE UNBIASED FEEDBACK REGARDING THE FILM CLIPS THAT YOU ARE ABOUT TO VIEW.
- IF YOU WISH TO RECEIVE INFORMATION CONCERNING THE RESULTS OF THIS STUDY, PLEASE FILL IN YOUR NAME AND PERMANENT ADDRESS ON THE SHEET WHICH WILL BE CIRCULATED AT THE END OF THE STUDY.
- ANY QUESTIONS THUS FAR?

=====
MINI-LECTURE

THE PURPOSE OF THE PRESENT RESEARCH IS TO EXAMINE THE INTERPERSONAL CONFLICT PROCESS - THUS, THE SPECIFIC CONTENT OF THE CONFLICT IS NOT OF CONCERN HERE - RATHER, WE ARE INTERESTED IN THE MEANS BY WHICH THE CONFLICT DEVELOPS, IS MAINTAINED, AND ENDS.

CONTENT: WHAT THE INTERACTION IS ALL ABOUT - THE ISSUES.
 PROCESS: HOW THE INTERACTION DEVELOPS OVER TIME - THE METHOD.

INTERPERSONAL CONFLICT: IS A TERM USED TO DESCRIBE A PARTICULAR FORM OF INTERPERSONAL INTERACTION PATTERN - BECAUSE IT IS "INTERPERSONAL," IT NECESSARILY FOLLOWS THAT CONFLICT REQUIRES AT LEAST TWO INDIVIDUALS INTERACTING - THEREFORE A CONFLICT DOES NOT BEGIN UNTIL BOTH ARE AWARE THAT THEY ARE CONFLICTING (E.G. OFTEN A PRECIPITATING EVENT AND RESPONSE TO THAT EVENT).

CONFLICT ESCALATION: ESCALATION USUALLY DENOTES AN INCREASE IN THE LEVEL OF CONFLICT, WHICH OFTEN LEADS TO AN "ESCALATORY SPIRAL":

- INCREASING THE NUMBER OR THE SIZE OF ISSUES DISPUTED,
- INCREASING MUTUAL PUNISHMENT,
- INCREASING HOSTILE BEHAVIOUR BETWEEN PARTIES,
- INCREASING COMPETITIVENESS,
- PURSUING INCREASINGLY EXTREME DEMANDS OR OBJECTIVES,
- USING INCREASINGLY COERCIVE TACTICS,
- DECREASING TRUST.

CONFLICT DE-ESCALATION: USUALLY REFERS TO THE OPPOSITE:

- DEALING WITH THE SPECIFIC ISSUES,
- DECREASING MUTUAL PUNISHMENT,
- DECREASING HOSTILITE BEHAVIOUR BETWEEN PARTIES,
- DECREASING COMPETITION,
- MORE REASONABLE, CO-OPERATIVE DISCUSSION,
- INCREASED UNDERSTANDING OF THE OTHER'S NEEDS AND GOALS,
- USING MORE ACCOMMODATING/CO-OPERATIVE TACTICS,
- INCREASING TRUST.

CONFLICT CRISIS: A TURNING POINT IN THE INTERACTION WHERE A "RESOLUTION" OR "REVOLUTION" OCCURS.

RESOLUTION: A POINT IN THE INTERACTION WHERE A RETURN TO COOPERATION OCCURS

REVOLUTION: A POINT IN THE INTERACTION WHERE THE RELATIONSHIP IS DRASTICALLY ALTERED.

=====

INSTRUCTIONS

- THIS RESEARCH INVOLVES WATCHING 3 FILM CLIPS AND RESPONDING TO A BRIEF SERIES OF QUESTIONS.
- WE WILL BE VIEWING EACH CLIP FIVE TIMES: THE FIRST TIME TO FAMILIARIZE YOU WITH THE INTERACTION - AND EACH SUBSEQUENT TIME, TO LOOK FOR AND IDENTIFY A PARTICULAR FEATURE OF THE CONFLICT PROCESS.
- PLEASE BE AS EXPLICIT AS POSSIBLE AS IT IS MY JOB TO UNDERSTAND WHAT IT IS THAT YOU ARE COMMUNICATING - USE THE SPACE FOR COMMENTS IN PARTICULAR.
- FEEL FREE TO ASK QUESTIONS AT ANY TIME.

SHOWING # 1: FAMILIARIZATION

SHOWING # 2: CRITICAL POINTS IN THE INTERACTION

IDENTIFY THE POINT/S AT WHICH YOU FEEL THE CONFLICT

- BEGINS {INITIAL ESCALATION} (*)
- ESCALATES (UP ARROW)
- DE-ESCALATES (DOWN ARROW)
- REACHES A CRISIS POINT (**)

NOTE: CONFLICT MAY ESCALATE AND DE-ESCALATE REPEATEDLY - INDICATE EACH.

SHOWING # 3: EMOTION

IDENTIFY THE VARIOUS EMOTIONS THAT YOU FEEL THE PARTICIPANTS ARE EXPERIENCING AT EACH OF THE PREVIOUSLY IDENTIFIED POINTS IN THE INTERACTION.

NOTE: IT IS POSSIBLE FOR PEOPLE TO EXPERIENCE MORE THAN ONE EMOTION AT THE SAME TIME - PLEASE IDENTIFY ALL THAT YOU DETECT.

SHOWING # 4: BEHAVIOURAL CUES

IN ORDER TO IDENTIFY THE CRITICAL POINTS, YOU ATTENDED TO PARTICULAR BEHAVIOURAL AND VERBAL CUES WHICH SUGGESTED AN ESCALATION, DE-ESCALATION, OR CRISIS WAS OCCURRING - PLEASE WATCH FOR THE VERBAL/BEHAVIOURAL INDICATORS THAT YOU USED TO MAKE YOUR EARLIER DECISIONS - LIST THESE IN POINT FORM BESIDE EACH SYMBOL

SHOWING # 5: BEHAVIOURAL CUES - NO SOUND

TO HELP YOU FOCUS ON THE BEHAVIOUR OF THE PARTICIPANTS ONLY, WE WILL WATCH THE CLIP WITH OUT THE SOUND. PLEASE WATCH FOR AND LIST THE BEHAVIOURAL INDICATORS THAT SUGGEST THAT AN ESCALATION, DE-ESCALATION, OR CRISIS IS OCCURRING.

SCALING THE CONFLICT

- ON THE NEXT PAGE YOU WILL FIND A GRID PATTERN WITH A SCALE FROM 0 TO 10 ACROSS THE TOP, AND A SCALE FROM 1 TO 13/42/48 ACROSS THE SIDE.
 - TURN THE PAGE SIDE WAYS SO THAT THE SCALE FROM 1 TO 13/42/48 IS NOW ON THE BOTTOM.
 - THE BOTTOM SCALE CORRESPONDS TO THE PHRASE NUMBERS ON THE PREVIOUS TRANSCRIPT PAGE.
 - THE SCALE FROM 0 TO 10 REFERS TO THE PERCEIVED INTENSITY OF THE CONFLICT INTERACTION, WITH 0 REPRESENTING NON-CONFLICT INTERACTION, AND 10 REPRESENTING THE MOST INTENSE CONFLICT INTERACTION.
 - WHAT WE ARE ABOUT TO DO IS GRAPH THE CONFLICT PROCESS ACCORDING TO YOUR PERCEPTIONS OF THE CRITICAL POINTS AND THEIR INTENSITY.
 - ON THE VERTICAL LINES JUST AFTER THE PHRASE NUMBER, MAKE A MARK TO INDICATE YOUR PERCEPTION OF THE LEVEL OF CONFLICT INTENSITY WHICH WAS PRESENT AT THAT POINT IN THE INTERACTION.
 - [DEMONSTRATE]
 - WHEN FINISHED, LINK ALL OF THE POINTS TOGETHER TO GET A "PICTURE" OF THE CONFLICT PROCESS WHICH OCCURRED IN THIS INTERACTION.
-

APPENDIX F
CRITICAL POINT SUMMARIES

Critical Point Summary Notes

- Numbers on the right side of the chart correspond to the transcript phrase numbers.
- Cell values represent the percentage of subjects indicating the occurrence of a particular critical point in the interaction.
- Asterisks mark the interaction points (both escalatory and de-escalatory) selected for content analysis.

=====
 CRITICAL POINT ANALYSIS: PERCENTAGE OF SUBJECTS PER CATEGORY
 TAPE # 1 N = 39
 =====

ON-SET	ESCAL	DE-ES	CRISIS	
2.5		7.6		1
12.8				2
5.1		12.8		3
69.2	23.0			4
5.1	28.2	12.8		5
	2.5	59.0*		6
	5.1	10.2		7
	15.4	5.1		8
	41.0	7.7		9
	48.7	2.5		10
	15.4	7.7	2.5	11
	53.8*		17.9	12
	28.2	28.2	23.1	13
18.9	26.1	15.4	14.5	MEAN PERCENTAGE

=====

CRITICAL POINT ANALYSIS: PERCENTAGE OF SUBJECTS PER CATEGORY

TAPE # 2 N = 37

=====

ON-SET	ESCAL	DE-ES	CRISIS	
2.7	2.7	8.1		1
27.0	13.5			2
	8.1	13.5		3
2.7	16.2	2.7		4
	5.4	16.2		5
8.1	37.8			6
16.2	2.7	32.4		7
5.4	45.9			8
8.1	32.4	13.5		9
	35.1	8.1		10
	5.4	37.8		11
2.7	56.8			12
2.7	16.2	27.0		13
	35.1	2.7		14
16.2	64.9*			15
	13.5	13.5		16
2.7	37.8			17
	10.8	21.6		18
2.7	62.2*		5.4	19
2.7	18.9*	13.5*		20
	54.0*			21
	18.9*	10.8*		22
	73.0*		13.5	23
	5.4	16.2		24
	8.1	8.1		25
	5.4	67.6*		26
	16.2	5.4	2.7	27
	29.7	21.6		28
	18.9	2.7		29
	89.2*			30
	51.3*	2.7	10.8	31

	56.8*			32
	45.9*	2.7		33
	48.6*	2.7	5.4	34
		29.7	10.8	35
	2.7	45.9*	29.7	36
	8.1	24.3	2.7	37
	8.1	16.2		38
		18.9	10.8	39
	16.2	16.2	2.7	40
	2.7	18.9	2.7	41
	2.7	21.6	2.7	42

7.7 26.9 17.4 8.3

MEAN PERCENTAGE

=====

CRITICAL POINT ANALYSIS: PERCENTAGE OF SUBJECTS PER CATEGORY

TAPE # 3 N = 35

=====

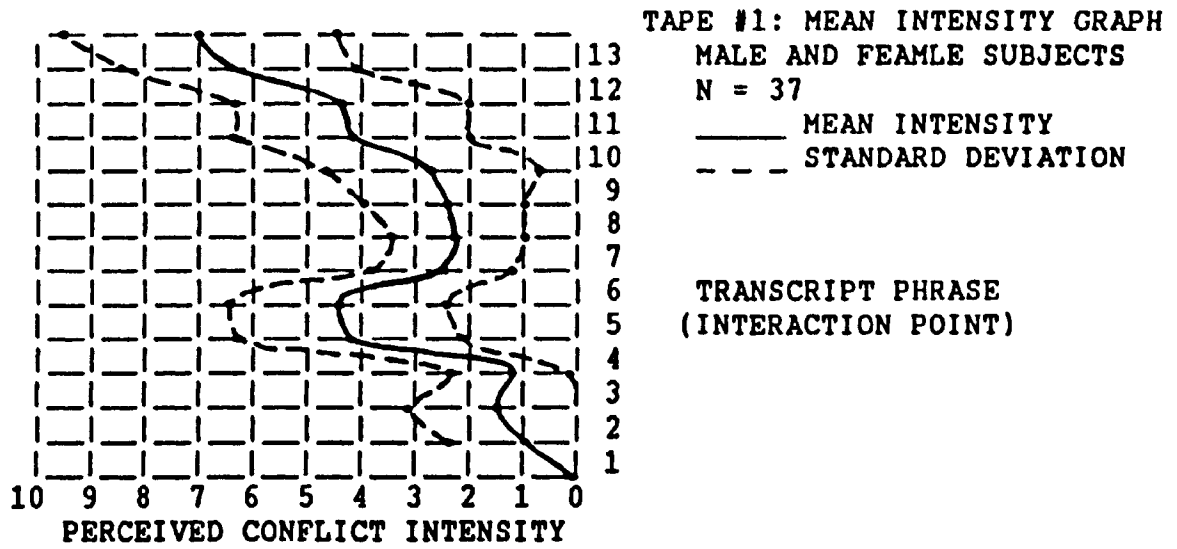
ON-SET	ESCAL	DE-ES	CRISIS	
	2.9	2.9		1
	2.9	2.9		2
	2.9	2.9		3
		8.6		4
		5.7		5
	2.9	2.9		6
		5.7		7
		5.7		8
		5.7		9
		5.7		10
2.9	5.7	5.7		11
	2.9	8.6		12
5.7	5.7	8.6		13
17.1	22.9	2.9		14
	2.9	8.6		15
	5.7	5.7		16
	2.9	5.7		17
	2.9			18
		8.6		19
	2.9	5.7		20
		8.6		21
	2.9	11.4		22
		2.9		23
		2.9		24
		2.9		25
	2.9	8.6		26
5.7	11.4	2.9		27
20.0	14.3	2.9		28
22.9	20.0	2.9		29
2.9	40.0*	5.7		30
28.6	57.1*		5.7	31

5.7	68.6*	2.9		32
	34.3*	31.4*		33
	65.7*	2.9		34
	40.0	2.9		35
	17.1	5.7		36
2.9	34.3*	2.9		37
	62.8*		2.9	38
	25.7*	14.3*		39
	31.4*	2.9		40
	34.3*			41
	25.7*	22.9*		42
	40.0*	2.9		43
	54.3*		20.0	44
	25.7*	22.9*		45
	20.0*	8.6	17.1	46
	8.6	42.9*		47
	37.1	2.9	37.1	48

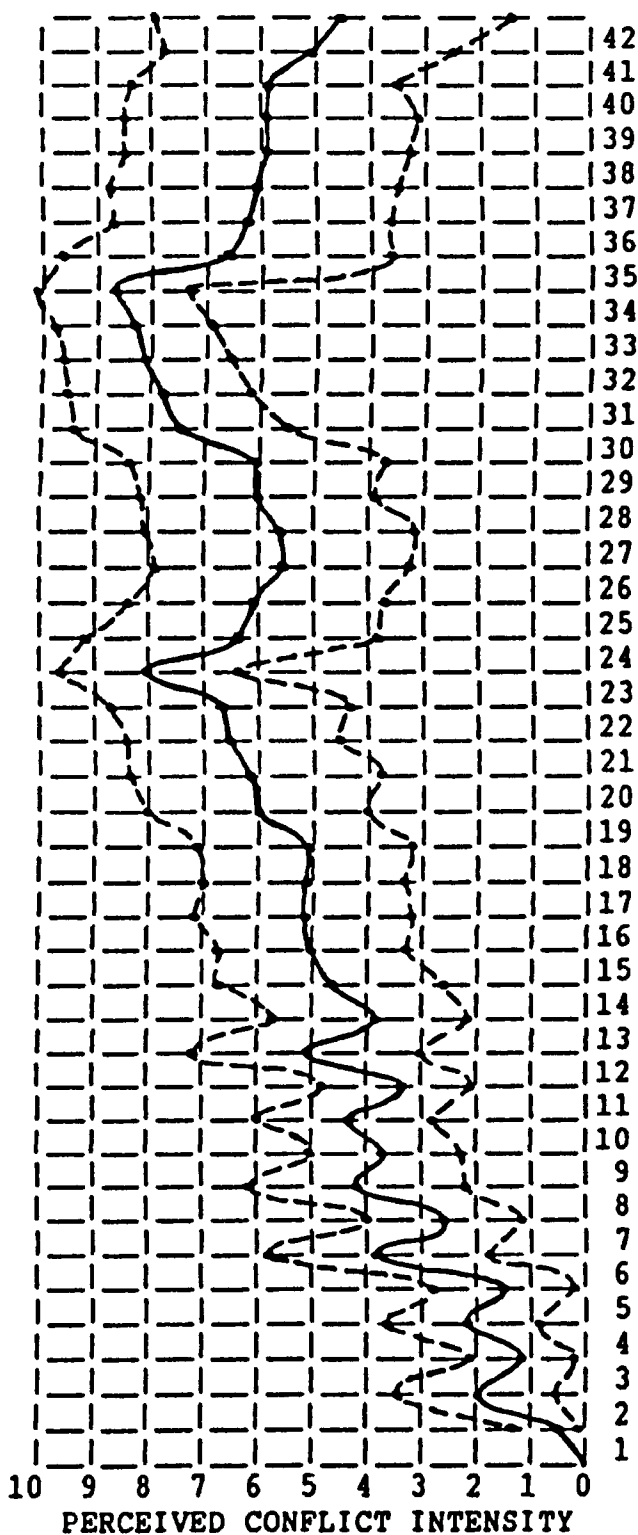
11.1 21.8 7.5 16.0

MEAN PERCENTAGE

APPENDIX G
MEAN INTENSITY GRAPHS

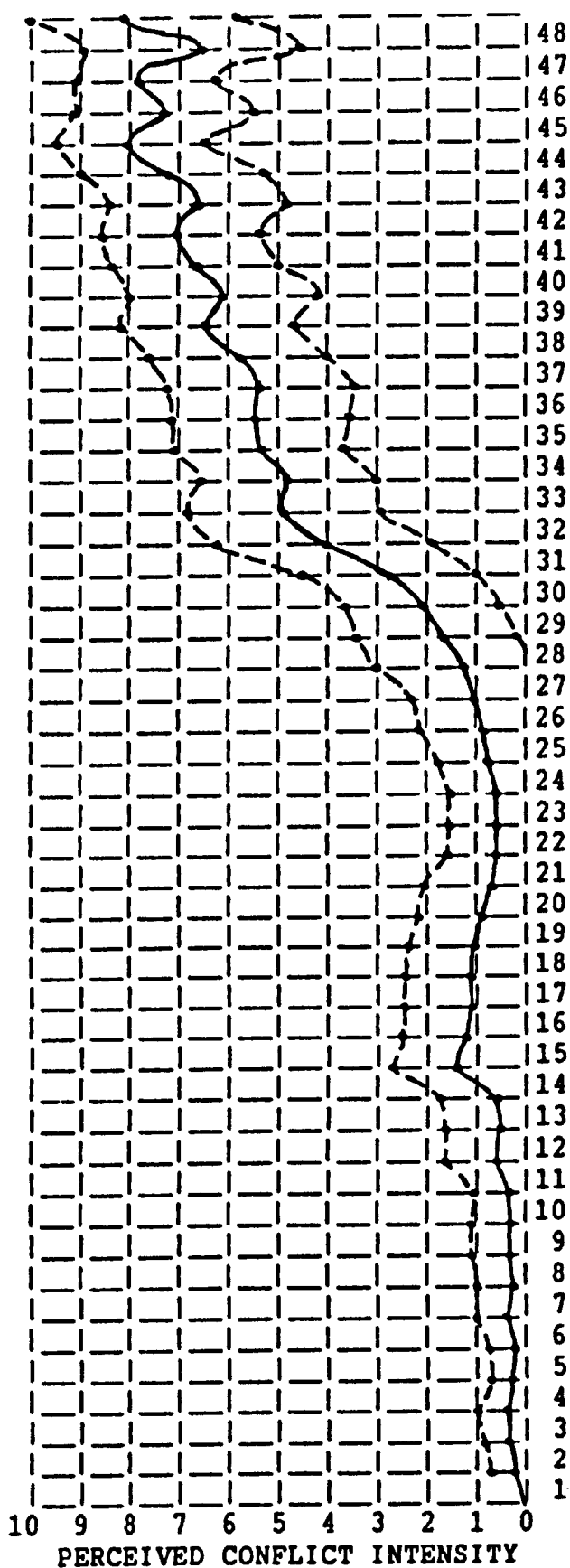


TAPE #2: MEAN INTENSITY GRAPH
 MALE AND FEMALE SUBJECTS
 N = 36
 ——— MEAN INTENSITY
 - - - STANDARD DEVIATION



TRANSCRIPT PHRASE
 (INTERACTION POINT)

**TAPE #3: MEAN INTENSITY GRAPH
MALE AND FEMALE SUBJECTS
N = 35**
 ——— MEAN INTENSITY
 - - - STANDARD DEVIATION



**TRANSCRIPT PHRASE
(INTERACTION POINT)**

APPENDIX H
COMPUTER DICTIONARY OF EMOTIONAL STATES

TEN FUNDAMENTAL EMOTIONS AND FIVE EMOTIONAL BLENDS
 (Adapted from Carroll E. Izard, 1977)

=====

1. INTEREST-EXCITEMENT, attentiveness, curiosity, and fascination caught up or captivated.

Attentive Concentrating Alert	Curiosity Fascination
-------------------------------------	--------------------------

Feelings (antecedents): Personal involvement, concern, feeling that you can gain something, desire to learn, gain knowledge, curiosity, etc. (interest itself), feeling active, energetic, feeling accepted, needed, enjoyment of something.

Actions (antecedents): Something with a specific person, or did something I like, something enjoyable, did something different, creative, original, discovering something, interesting things, something challenging, worked enthusiastically.

Feelings (consequence): Desire to learn, gain knowledge, personal involvement, concern, Interest-excitement itself, alert, active, energetic, self-confident, happy with self, involved in thought, inspired.

Actions (consequence): Learns, gains knowledge, participates, and accomplishes something, did something well, my best, enjoys self, something meaningful, reflects interest.

=====

2. JOY-ENJOYMENT confidence, meaningfulness, and a feeling of being loved. Receptive joy, a state that is extremely difficult to describe, is a feeling of trust and acceptance of the surrounding world.

Delighted Happy Joyful Relief	Self-contentment Elation Serenity
--	---

Feelings (antecedents): Enjoyment, relieved, problemless, relaxed, comfortable, self-confident, successful, accepted and needed, having something to offer.

Actions (antecedents): Doing one's favorite thing, doing well, one's best, helping others, doing something with a particular person, one's duty, being involved in something stimulating.

Feelings (consequence): Enjoyment-joy, feel relieved, relaxed, good, carefree, self-confident, successful, interest-excitement, desire to share joy with others, healthy, active, energetic, about specific person, activity.

Actions (consequence): Favorite things, expresses joy, verbally or physically, shares joy with others, friendly acts, does something to continue joy, becomes carefree and happy, does well, one's best, contemplates joy inwardly.

=====

3. SURPRISE

Surprise	Startle
Amazed	Shock
Astonished	Taken back

Feelings (antecedents): Surprise synonyms: startled, shocked., unexpectedly aware of something, lost, bewildered, confused, physically/mentally stimulated, misled, hurt, used by others, distress synonyms: depressed, sad., shame synonyms: embarrassed, shy.

Actions (antecedents): Something original, creative, unexpected success or failure, something stupid, makes mistake, react to stimulus.

Feelings (consequence): Surprise synonyms, bewildered, confused, fear synonyms, interest synonyms, happy or sad, depending on the context, enjoyment synonyms, shame synonyms.

Actions (consequence): Try to understand cause, regain control of self or situation, express surprise, verbally or physically, depends on situation, whatever is appropriate, anticipate consequences, reaction, something panicky, irrational, express enjoyment.

=====

4. DISTRESS-ANGUISH common cause of distress is real and imagined failure, sad, downhearted, discouraged, lonely, out of touch with people, miserable.

Downhearted	Lonely
Sadness	Miserable
Discouraged	Pensive
Discontented	Beaten
Defeated	Rejection
Give up	Dejection
Resignation	Regret

Feelings (antecedents): Distress, sadness, discouragement, etc., feels lonely, isolated, rejected, physically, mentally upset, feelings of failure, disappointment in self, incompetence, inadequacy.

Actions (antecedents): Something stupid, a mistake, something to hurt others, others impose their will on subject, something morally, legally wrong, passive, does nothing, retreat, withdraw.

Feelings (consequence): Distress, sadness, discouragement, etc., mentally, physically upset, loneliness, rejection, feel need to be alone, anger, feel misled, used, hurt by others, feel like a failure, incompetent, etc.

Actions (consequence): Tries to get over it, expresses sadness, verbally, physically, does something specific, retreats from others, remains passive, does nothing, thinks of all sadness in life, talks to someone, does something impulsive, irrational.

=====
 5. ANGER. Rapidly mobilized energy tenses the muscles and provides a feeling of power, a sense of courage or confidence, and an impulse to strike out.

Enraged/rage	Irritated
Angry	Annoyed
Mad	Vindictive
Betrayal	Cheated
Resent	Frustrated

Feelings (antecedents): frustration, irritation, of being misled, betrayed, used, disappointed, hurt by others, anger-rage synonyms, hatred, dislike, disapproval of others detrimental thoughts, aggressive, revengeful, like attacking others, of failure, disappointed in self, self-blame, inadequacy, sense of injustice in world, distress-anguish synonyms.

Actions (antecedents): Something wrong, stupid, something violent, rash, let off steam, something unappreciated by others, something that you don't want to do, others impose their will, aggression, revenge, something legally or morally wrong or harmful.

Feelings (consequence): Anger synonyms, hot, tense, revengeful, like attacking others, destructive, hatred, dislike disapproval of others, distress synonyms, angry, justified.

Actions (consequence): Tries to regain or maintain control of self or situation, verbal attack or physical action against object of anger, takes action, aggresses against object or situation causing anger, does something impulsive or irrational.

=====

6. DISGUST-REVULSION Disgust combined with anger may motivate destructive behaviour, since anger can motivate "attack" and disgust the desire to "get rid of."

Feeling of distaste	Aversion
Feeling of revulsion	Disgusted
Abhor, abhorrence.	

Feelings (antecedents): "Sick of something", repelled, tired, of failure, disappointment in self, anger toward self, incompetency, of dislike, disapproval of actions of others, disgust synonyms, anger synonyms, contempt synonyms.

Actions (antecedents): Blames self, something wrong, stupid, a mistake, has to do something unpleasant, others impose their will, does something unappreciated by others, does something legally or morally wrong or harmful.

Feelings (consequence): Physical disgust: nausea, fatigue, sick etc., disgust synonyms, anger synonyms, contempt synonyms, like giving up, apathetic, feels misled, betrayed, used, or hurt by others, has failed, blames self, feels bad, lousy terrible.

Actions (consequence): Gets away from situation, finds a solution to problem, verbally or physically hostile, evaluates attitude, tries to do better, covers up feelings, puts up a front, gets mad, acts superior, talks to someone, gets with friend.

=====

7. CONTEMPT often occurs with anger or disgust or with both. These three emotions have been termed the "hostility triad" (Izard, 1972). feel superior (stronger, more intelligent, more civilized) may lead to some degree of contempt. One of the dangers of contempt is that it is a "cold" emotion, one that tends to depersonalize the individual or group held in contempt.

Contemptuous	Bitterness
Scornful	Disdainful

Feelings (antecedents): Of superiority, feels misled, betrayed, used, disappointed, hurt by others, disapproval, disturbed by actions of others, disgust synonyms (revulsion, aversion), shame synonyms (embarrassed, shy), anger synonyms (irritated, annoyed, mad).

Actions (antecedents): Acts superior, condescending, succeed when others thought you could not, do superior work, act sarcastic, hateful, hurt others, something wrong, stupid, mistake, disapprove, dislike actions of others, act selfishly.

Feelings (consequence): Of superiority, confident, good, elevated, anger synonyms, shame synonyms, hatred, dislike, disapproval of others, disgust, envy, jealousy, of others.

Actions (consequence): expresses contempt, either verbally or physically, ignores, avoids object of contempt or situation, tries not to show emotion, or feeling, tries to regain control of self or situation, tries to understand the other point of view.

=====
 8. FEAR, Apprehension, uncertainty, the feeling of a lack of safety and impending disaster accompany strong fear.

Scared	Apprehension
Uneasiness	Defensive
Fearful	Uncertainty
Insecurity	Afraid
Terror	Panic

Feelings (antecedents): Threatened, in danger, in trouble, overpowered, fear synonyms, alone, lost, isolated, rejected, threat to self-esteem, impending failure, feels inadequate.

Actions (antecedents): Something legally or morally wrong, harmful, something dangerous, something that threatens self-esteem, Panicky, irrational things, trying to escape, run away, withdraw, protect self, external force.

Feelings (consequence): Fear synonyms, nervous tension, inadequate, insecure, need to escape, run away, withdraw, protect self, lost, lonely, isolated, rejected, surprise synonyms, in danger, physically threatened, shame synonyms.

Actions (consequence): Run away, withdraw, protect self, face situation, cope, try to act courageously, something panicky, impractical, talk to someone, get with trusted friend, takes action or aggresses against object or situation.

=====
 9. SHAME-SHYNESS increased sensitivity, naked and exposed to the world. Shame motivates the desire to hide, to disappear. feeling of ineptness, incapability, and a feeling of not belonging.

Sheepish	Humility
Embarrassment	Bashful
Ridiculed	Chagrin
Shy	Modesty
Mortification	Self-conscious
Foolish	Inept

Feelings (antecedents): Of disappointment in self, inept, self-conscious (shame synonyms, e.g. embarrassed, shy), has done something to hurt others, of being legally or morally wrong, isolation, rejection, loneliness, lost, Distress synonyms.

Actions (antecedents): Has done something legally or morally wrong, harmful, has done something wrong, stupid, made a mistake, has done something to hurt others, did nothing.

Feelings (consequence): Shyness, embarrassment (other shame synonyms), feels inadequate, disappointed, like a failure, feels bad, terrible, lousy, discouraged, sad, lonely, isolated, rejected, lost, unclean, morally unfit.

Actions (consequence): Repents, atones, makes amends, changes, improves, does not repeat offense, is deliberately alone, retreats from others, rationalize, forget it, escape from feeling, questions, reasons for behaviour, questions what was done and why, punishes self.

=====

10. GUILT feels personally responsible.

Repentant
Guilty
Blameworthy

=====

COMMON EMOTIONAL BLENDS

ANXIETY. Differential emotions theory defines anxiety as a combination or pattern of fundamental emotions including fear and two or more of the emotions of distress, anger, shame/shyness, guilt, and the positive emotion of interest-excitement (Izard, 1972). These six emotions are considered as variable components of a complex pattern.

GRIEF. Differential emotions theory holds that grief is a complex pattern of fundamental emotions and emotion-cognition interactions. The experiential phenomena of grief result from the interaction of distress with other affects and from affect-cognition interactions.

DEPRESSION...differential emotions theory posits distress-anguish, the emotion which predominates in grief, as the key emotion in depression and the one with which other fundamental emotions interact. [This theory] holds that depression is an even more complex pattern than anxiety. More emotions are activated and there are more possibilities for conflicts in the emotion-emotion dynamics. The fundamental emotions involved in depression are distress, anger, disgust, contempt, fear, guilt, and shyness.

Anger, disgust and contempt are expressed both toward the self and others. Since anger, disgust, and contempt may all be related to hostility, these components of depression may be termed inner-directed and outer-directed hostility.

LOVE...Each of these types of love [parental, family, friends, romantic] has unique features. Each is a particular pattern of affects and cognitions. Although the differences among them are considerable, perhaps they have a common thread. Love of any type binds one person to another, and this affective bond has evolutionary-biological, sociocultural, and personal significance.

While fundamental emotions may have both state and trait characteristics, love seems best described as an aspect of a relationship. Love's ingredients include emotions and drives, but it may be best described as an affective-cognitive orientation.

HOSTILITY AND HATE. Hostility has been defined as the experiential/motivational underpinning of aggression. Just as motivation does not always lead to overt behaviour, hostility does not inevitably lead to aggression. The fundamental emotions of anger, disgust, and contempt interact in hostility, and the relative strength of these three emotions (together with cognitive and situational factors) probably determine the likelihood and the nature of aggression. For example, the greater the anger, the "hot" emotion in the hostility triad, the greater the probability of impulsive acts of aggression. Such impulsive "acting out" may be verbal or physical. The prominence of disgust in the hostility triad may prompt a person to hurt another by shunning or avoiding him. Contempt, the "cold" emotion in the hostility triad causes people to hurt others through acts of indifference.

Hate, the more common term in this area, has a close kinship with hostility as defined here. It may be thought of as an affective-cognitive orientation in which the affect consists of some combination of the emotions in the hostility triad.

APPENDIX I
DATA CLASSIFICATION SUMMARY

SUMMARY OF DATA CLASSIFIED UNDER
EMOTIONAL, BEHAVIOURAL, AND GENERAL CATEGORIES

Values listed in "FREQUENCY" cells represent the number of subject responses occurring within that category for the particular form of interpersonal interaction (non-conflict, escalation, de-escalation). The "PERCENT OF TOTAL" cells translate this frequency into a percentage of the total number of subject responses classified as either emotional, behavioural, or general for that particular type of interpersonal interaction.

DATA SUMMARY: EMOTIONAL CATEGORIES AND SUBCATEGORIES

INTEREST-EXCITEMENT							
NON-CONFLICT		ESCALATION		DE-ESCALATION			
FREQUENCY	% OF TOTAL	FREQUENCY	% OF TOTAL	FREQUENCY	% OF TOTAL		
1	2%	1	0.3%	---	---		
JOY-ENJOYMENT							
NON-CONFLICT		ESCALATION		DE-ESCALATION			
FREQUENCY	% OF TOTAL	FREQUENCY	% OF TOTAL	FREQUENCY	% OF TOTAL		
2	4%	---	---	1	2%		
JOY-ENJOYMENT SUBCATEGORY LABEL		NON-CON		ESCAL		DE-ES	
		FREQ	%TOT	FREQ	%TOT	FREQ	%TOT
HAPPY		2	4%	--	--	--	--
RELIEF		--	--	--	--	1	2%
SURPRISE							
NON-CONFLICT		ESCALATION		DE-ESCALATION			
FREQUENCY	% OF TOTAL	FREQUENCY	% OF TOTAL	FREQUENCY	% OF TOTAL		
1	2%	3	1%	4	10%		
SURPRISE SUBCATEGORY LABEL		NON-CON		ESCAL		DE-ES	
		FREQ	%TOT	FREQ	%TOT	FREQ	%TOT
CONFUSION		--	--	--	--	1	2%
SURPRISE		1	2%	3	1%	3	7%
DISTRESS-ANGUISH							
NON-CONFLICT		ESCALATION		DE-ESCALATION			
FREQUENCY	% OF TOTAL	FREQUENCY	% OF TOTAL	FREQUENCY	% OF TOTAL		
---	---	34	12%	17	42%		

DISTRESS-ANGUISH SUBCATEGORY LABEL	NON-CON		ESCAL		DE-ES	
	FREQ	%TOT	FREQ	%TOT	FREQ	%TOT
DISAPPOINTMENT	--	--	1	.3%	--	--
DISCONTENT	--	--	1	.3%	--	--
HURT	--	--	16	6%	3	7%
RESIGNATION	--	--	3	1%	5	12%
REJECTION	--	--	2	.6%	1	2%
REGRET	--	--	1	.3%	--	--
SORROW	--	--	--	--	7	17%
UPSET	--	--	10	3%	1	2%

ANGER

NON-CONFLICT		ESCALATION		DE-ESCALATION	
FREQUENCY	% OF TOTAL	FREQUENCY	% OF TOTAL	FREQUENCY	% OF TOTAL
---	---	200	69%	4	10%

ANGER SUBCATEGORY LABEL	NON-CON		ESCAL		DE-ES	
	FREQ	%TOT	FREQ	%TOT	FREQ	%TOT
ANGER	--	--	115	40%	2	5%
ANNOYANCE	--	--	2	.6%	--	--
BETRAYAL	--	--	3	1%	--	--
FRUSTRATION	--	--	33	11%	2	5%
INTENSE ANGER	--	--	30	10%	--	--
OTHER	--	--	2	.6%	--	--
RESENTMENT	--	--	8	3%	--	--
VENGEFUL	--	--	7	2%	--	--

DISGUST-REVULSION

NON-CONFLICT		ESCALATION		DE-ESCALATION	
FREQUENCY	% OF TOTAL	FREQUENCY	% OF TOTAL	FREQUENCY	% OF TOTAL
---	---	3	1%	---	---

CONTEMPT

NON-CONFLICT		ESCALATION		DE-ESCALATION	
FREQUENCY	% OF TOTAL	FREQUENCY	% OF TOTAL	FREQUENCY	% OF TOTAL
---	---	7	2%	---	---

FEAR

NON-CONFLICT		ESCALATION		DE-ESCALATION	
FREQUENCY	% OF TOTAL	FREQUENCY	% OF TOTAL	FREQUENCY	% OF TOTAL
37	84%	24	8%	7	17%

FEAR SUBCATEGORY LABEL	NON-CON		ESCAL		DE-ES	
	FREQ	%TOT	FREQ	%TOT	FREQ	%TOT
APPREHENSIVE	12	27%	1	.3%	1	2%
DEFENSIVE	--	--	11	4%	1	2%
FEAR	--	--	8	3%	4	10%
INSECURE	1	2%	2	.6%	1	2%
NERVOUS	23	52%	2	.6%	--	--
WORRY	1	2%	--	--	--	--

SHAME-SHYNESS

NON-CONFLICT		ESCALATION		DE-ESCALATION	
FREQUENCY	% OF TOTAL	FREQUENCY	% OF TOTAL	FREQUENCY	% OF TOTAL
---	---	1	0.3%	---	---

GUILT

NON-CONFLICT		ESCALATION		DE-ESCALATION	
FREQUENCY	% OF TOTAL	FREQUENCY	% OF TOTAL	FREQUENCY	% OF TOTAL
---	---	---	---	4	10%

HOSTILITY-HATE

NON-CONFLICT		ESCALATION		DE-ESCALATION	
FREQUENCY	% OF TOTAL	FREQUENCY	% OF TOTAL	FREQUENCY	% OF TOTAL
---	---	13	4%	---	---

ANXIETY

NON-CONFLICT		ESCALATION		DE-ESCALATION	
FREQUENCY	% OF TOTAL	FREQUENCY	% OF TOTAL	FREQUENCY	% OF TOTAL
2	4%	1	0.3%	2	5%

GRIEF: NOT REPORTED

DEPRESSION: NOT REPORTED

LOVE

NON-CONFLICT		ESCALATION		DE-ESCALATION	
FREQUENCY	% OF TOTAL	FREQUENCY	% OF TOTAL	FREQUENCY	% OF TOTAL
1	2%	1	0.3%	---	---

LOVE SUBCATEGORY LABEL	NON-CON		ESCAL		DE-ES	
	FREQ	%TOT	FREQ	%TOT	FREQ	%TOT
LOVE	1	2%	--	--	--	--
LOVE FOR THIRD PERSON	--	--	1	.3%	--	--

DATA SUMMARY: BEHAVIOURAL CUES

FACIAL EXPRESSION

NON-CONFLICT		ESCALATION		DE-ESCALATION	
FREQUENCY	% OF TOTAL	FREQUENCY	% OF TOTAL	FREQUENCY	% OF TOTAL
10	27%	32	12%	7	16%

FACIAL EXPRESSION SUBCATEGORY LABELS	NON-CON		ESCAL		DE-ES	
	FREQ	%TOT	FREQ	%TOT	FREQ	%TOT
ANGRY FACIAL EXPRESSION	--	--	21	8%	--	--
SMILING	7	19%	--	--	--	--
OTHER	3	8%	11	4%	7	16%

GESTURES

NON-CONFLICT		ESCALATION		DE-ESCALATION	
FREQUENCY	% OF TOTAL	FREQUENCY	% OF TOTAL	FREQUENCY	% OF TOTAL
10	27%	119	45%	11	25%

GESTURE SUBCATEGORY LABELS	NON-CON		ESCAL		DE-ES	
	FREQ	%TOT	FREQ	%TOT	FREQ	%TOT
AVOIDING EYE CONTACT	1	3%	3	1%	5	11%
EYE CONTACT	5	13%	8	3%	3	7%
THREAT/WARNING GESTURES	--	--	21	8%	--	--
THROWING/BREAKING OBJECTS	--	--	67	25%	--	--
OTHER	4	11%	20	7%	3	7%

VOICE

NON-CONFLICT		ESCALATION		DE-ESCALATION	
FREQUENCY	% OF TOTAL	FREQUENCY	% OF TOTAL	FREQUENCY	% OF TOTAL
13	35%	93	35%	23	52%

VOICE SUBCATEGORY LABELS	NON-CON		ESCAL		DE-ES	
	FREQ	%TOT	FREQ	%TOT	FREQ	%TOT
LOWERED TONE OF VOICE	--	--	8	3%	8	18%
RAISED TONE OF VOICE	--	--	27	10%	3	7%
YELLING	--	--	27	10%	--	--
ANGER IN VOICE	--	--	12	4%	--	--
LAUGHTER	6	16%	--	--	--	--
OTHER	7	19%	19	7%	12	32%

RELATIVE BODY POSITION

NON-CONFLICT		ESCALATION		DE-ESCALATION	
FREQUENCY	% OF TOTAL	FREQUENCY	% OF TOTAL	FREQUENCY	% OF TOTAL
3	4%	22	8%	3	7%

RELATIVE BODY POSITION SUBCATEGORY LABELS	NON-CON		ESCAL		DE-ES	
	FREQ	%TOT	FREQ	%TOT	FREQ	%TOT
LEANS FORWARD	--	--	13	5%	--	--
OTHER	3	4%	9	3%	3	7%

DATA SUMMARY: GENERAL CATEGORY

GENERAL CATEGORY

NON-CONFLICT		ESCALATION		DE-ESCALATION	
FREQUENCY		FREQUENCY		FREQUENCY	
41		124		45	

GENERAL CATEGORY SUBCATEGORY LABELS	NON-CON		ESCAL		DE-ES	
	FREQ	%TOT	FREQ	%TOT	FREQ	%TOT
TACTICS OF COOPERATION	8	19%	--	--	--	--
TACTICS OF PROVOCATION	--	--	33	27%	--	--
TACTICS OF CONCILIATION	--	--	--	--	7	16%
COOPERATIVE BEHAVIOURS	5	12%	--	--	--	--
AGGRESSIVE/COMPETITIVE BEHAV.	--	--	25	20%	--	--
CONCILIATORY BEHAVIOURS	--	--	3	2%	13	29%
TENSION/UNCERTAIN	18	44%	6	5%	2	4%
CONFIDENT/DETERMINED	--	--	16	13%	--	--
CALM/RELAXED	4	10%	2	2%	7	16%
INTENT: RETAL/END INTERACTION	--	--	12	10%	--	--
INTENT: CONCILIATE INTERACTION	--	--	--	--	4	9%
OTHER	5	12%	27	22%	12	27%

APPENDIX J
CONTENT ANALYSIS CODING RULES

CONTENT ANALYSIS CODING RULES

Essentially the target text is of two types: (1) subject attributions of emotions experienced by the actors, and (2) identification of those observable cues which suggested to subjects that an escalation or de-escalation of the conflict was occurring. Any text which fails to meet either of these general criteria is classified as "GENERAL".

ATTRIBUTIONS OF EMOTION

Three cases:

(1) the word exactly matches one of the 10 primary or 5 blend categories of emotion.

(2) the word is a synonym for one of the 15 categories of emotion. In this instance, the computer dictionary is used to locate the appropriate category.

(3) obvious reference is made to an emotional state through reference to a particular observable cue, e.g. nervous voice, angry face, etc. Here, all of the original text is classified under the appropriate "Behavioural Cues" category and the word referring to the emotion is classified under the appropriate emotional category. Inferences of emotional states are not made without obvious reference to a specific emotion, e.g. one would not assume that anger was present from the phrase "breaking dishes". One would however list "anger" if the original phrase was "demonstrated anger by breaking dishes".

BEHAVIOURAL CUES

A. FACIAL EXPRESSIONS

Text is classified here if reference is made to the face or any particular feature of the face, e.g. eyes, mouth.

B. GESTURES

This is a broad category referring to any movement of the body (waving arms, pointing finger, etc.), any physical interaction with other objects but not persons (breaking dishes, moving glass, etc.), or any general references to physical body state (tense body, relaxed posture, etc.). In addition, "eye contact" and "gazing" was classified under this category, while all other references to eyes were grouped under FACIAL EXPRESSIONS.

C. VOICE

Text is classified here if it refers to sounds made by the actors. The meaning of the words is not of concern; it is the method of communication that is important. For example, "lowered tone", "yelling", and "quiet voice" would all be classified in this category.

D. RELATIVE BODY POSITIONS

This is a very specific category reserved for text which makes reference to bodily movements made by one actor in relation to the other. For example, "leans toward him", "walked away from her", and "stands close to him", all qualify under this category, while "leans on table", would belong in the GESTURES category.

E. GENERAL CATEGORY

This classification is the broadest of all categories. Responses which fit into no other category are classified here. References to cognitive states (denial, thinks, believes, etc.), strategies (trying to make feel guilty, taking control), tactics (direct, forceful, sarcastic), intents and motives (wants to clear the air, is trying calm him down), general psychological states not associated with a particular emotional states (calm, tense, bold, determined), should all be classified in this category.

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