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Shame, Guilt, and the Belief in the Legitimacy of Aggression in Aggressive Adolescent Girls

by

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A Dissertation Submitted in Partial Fulfillment of the
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DOCTOR OF PHILOSOPHY

In the Department of Educational Psychology and Leadership

We accept this dissertation as conforming
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Abstract

The issues explored in this study concern the role of shame, guilt, and the beliefs supporting aggression and the implications of these factors for individual adjustment. Issues surrounding the definition of emotions in general and the theories explaining emotions were also explored. The theories of shame and guilt, the development of shame, the connections between shame and anger, shame and the development of psychopathology, shame and the development of aggression were discussed as well. Characteristics of aggressive and non-aggressive adolescent girls were determined.

The sample consisted of adolescent girls ranging in ages from thirteen to eighteen years. Four groups were randomly selected from four different pools of adolescent girls: aggressive in care, aggressive public, non-aggressive in care, and non-aggressive public. The participants were further classified into high, moderate, and low aggressive adolescent girls. The study consisted of participants answering self-report measures on aggression, self-conscious emotions, shame, self-esteem, and beliefs supporting aggression.

Clear characteristic differences were revealed using analysis of variance and post hoc least significant difference tests between high, moderate, and low aggressive adolescent girls. Correlations and multiple regression analysis also confirmed these characteristics. Aggressive adolescent girls were characterised by reporting physical aggression, verbal aggression, anger, hostility, low self-esteem, shame, guilt, the belief that aggression increases self-esteem, the belief that aggression improves negative self-image, and the belief in the legitimacy of aggression. Low aggressive adolescent girls were characterised by reporting pride in self, state pride, and positive self-esteem.

Pearson product-moment correlations indicated that each aspect of aggression was significantly related to shame and to low self-esteem (both Cook and Rosenberg measures). Significant positive correlations were found between the beliefs supporting aggression and all the

aspects of aggression. Positive correlations were disclosed between state guilt, physical aggression, verbal aggression, anger, and hostility. Significant positive correlations were found between state pride and positive self-esteem measures (Cook and Rosenberg). Correlations between shame and Cook's low self-esteem, and shame and Rosenberg's low self-esteem showed that these variables were positively related. Verbal abuse was moderately correlated with physical aggression, anger, and hostility.

Guilt proneness and state guilt were not related. Surprisingly, neither physical, sexual, nor verbal abuse were related to shame proneness or state shame.

Physical aggression was predicted primarily by one variable: the belief in the legitimacy of aggression in conjunction with one other variable such as state shame, low self-esteem, or state guilt. This pattern was also true for anger. Verbal aggression was predicted by the legitimacy of aggression and one other variable, state shame. The legitimacy of aggression was also a primary variable in the prediction of hostility.

An exploratory principal factor analysis produced five factors. The first factor describes the characteristics of shamed adolescent girls. The second factor describes the characteristics of the aggressive adolescent girl. The third factor could be interpreted as the characteristics of the non-aggressive adolescent girl, which include self-conscious affect as described by Tangney (1995). Factor four describes the beliefs in the justification of aggression that would benefit the aggressor, while factor five describes the justification of aggression that dehumanises the victim.

Discussion and implications focus on the characteristics of high and low aggressive adolescents and interpretations of the meaning of these characteristics are offered. In addition, limitations of the research design are discussed and suggestions for future research are proposed.

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Shame, Guilt, and the Belief in the Legitimacy of Aggression in Aggressive Adolescent Girls

CHAPTER 1

Introduction

"The terror of crime is thus a major national problem [in Canada] – quite apart from crime itself." Elliott Leyton (1996, p. ix).

An increasing number of headlines are reporting to a shocked Canadian public the grizzly details of deadly beatings of young adolescent girls by their cohorts, other young adolescent girls. The disturbing aspect of this phenomenon is that it goes against the general understanding that although females may fight amongst themselves, they do not kill each other. Killing was thought to be a male tendency. The immediate response is to question what is happening to these adolescent females. Why are adolescent girls so angry? Why have they become so violent? In other words, what is motivating these adolescent females to be angry and aggressive?

Within the last thirty years, the expanding interest in emotion has brought increasing attention to the examination of the relation of shame and guilt, to anger, hostility and aggression. In particular, clinical observation, psychological theory, and empirical evidence suggest a positive connection between shame, anger, and aggression (Tangney, Wagner, Fletcher and Gramzow, 1992a). The empirical evidence of this connection was obtained from samples of both male and female college and university students who usually do not display the type of violence and hostility described in newspapers.

Aggressive adolescent girls in Canada tend to be the minority of aggressors. In 1997, 16,613 male youths compared to 5,639 female youths were charged with violent crimes in Canada (Statistics Canada, CANSIM, Matrix 2200, 1999). Male youth are almost three times more likely

than female youth to be charged with a violent crime. From 1993 to 1997, the number of female youth charged with violent crime increased almost 11%. For males for the same period, the number of males charged with violent crimes increased only by about 1% by comparison. The trend for male adult and youth violent crime is that it is generally decreasing, but for female adult and youth violent crime, the trend is for it to be slightly increasing (Statistics Canada, CANSIM, Matrix 2200, 1999).

The participants of interest for my study are those adolescent females who were described by teachers, childcare workers, social workers, and parents as exceedingly hostile and aggressive, those adolescent females who are the most difficult to manage and treat. The aim of this study is to find if aggressive adolescent girls report shame and to find other characteristics that differentiate them from girls who tend not to report aggressive tendencies. Studying aggressive adolescent females may provide a greater understanding of their psychological characteristics, which eventually could lead to more effective psychotherapy for these adolescents. Hence, the purpose of this study is to describe the psychological characteristics of aggressive adolescent girls in order to understand what motivates them towards anger, hostility and coercive action (aggression). The undertaking of this exploratory research is done also with the view to expand the empirical evidence of the linkage between shame, guilt, anger, hostility and aggression (coercive action).

CHAPTER 2

Literature Review

The present chapter reviews the literature regarding the theories of emotion and how the emotions of shame, guilt and anger are involved in the formation of psychopathology and aggression in particular. The issue that will be explored concerns the traditional clinical interest in the role of shame and guilt in psychological symptoms, including anger and hostility, and the implications of self-conscious emotions for individual adjustment. First, issues surrounding the definition of emotions and the theories explaining emotions will be discussed. A discussion of the theories of shame and guilt, and the development of shame will follow. Subsequently, the connections between shame, anger, the development of psychopathology, and finally, shame and the development of aggression (coercive action) will be explored.

During this century until the 1960's, the focus of psychology was behaviour and thought, whereas emotion and more broadly, affect, were regarded as nonessential phenomena. If emotions and affect were considered at all, they were considered exclusively in the context of psychopathology and usually within the realm of psychoanalysis. The self-conscious emotions, such as shame, guilt, pride, and embarrassment were particularly ignored despite the popular theories of Freud and Erikson which proposed that shame and guilt were central to development and psychopathology (Tangney & Fisher, 1995). Within the behaviourist and cognitive paradigms, emotion was essentially omitted. The study of emotion, then, is long overdue. Many fundamental questions about emotions need exploration and as yet few definitive answers to these questions have been supplied.

During the last twenty years, a concentration of new theory and research began to centre on affect. Researchers such as Lewis (1971), Ekman, Levenson, and Friesen (1983), and Tomkins (1984) studied affect in earnest. The insignificance of emotion in psychology ended with the contributions of behaviourist and biological researchers such as Tomkins (1962) and Ekman (1984) who provided convincing evidence on the facial, vocal, and neurological

foundations of emotion (Fischer & Tangney, 1995). The empirical evidence based on behaviour and neurology became so extensive and convincing that it could no longer be rejected (Tomkins & Izard, 1965; Scherer & Ekman, 1984; Frijda, 1986). Evidence suggested that emotions perform basic and adaptive functions in human performance (Fischer &Tangney, 1995).

In the 1960's and 1970's, the analysis of internal states and processes was legitimised by the cognitive focus of social science. Most of the theories of emotion retain cognition as an important element. The cognitive appraisal of the significance of situations and experiences is assumed by current theories to be an elemental part of emotions (Lazarus, 1991).

Definition of Emotion, Affect and Feelings

Uniformly accepted definitions of affect, emotion and feelings have yet to be determined. Theorists each have their own definitions for affect, feeling and emotion, usually explained throughout the text of their articles, and are subsequently summarised in Table 1. Theorists have not used the same definitions nor have theorists clarified that they explained the same phenomenon. Definitions are important points of reference to describe emotional phenomena in general (nomothetic generalisations) in order to understand the specific emotions (ideographic understandings) such as anger, shame and guilt. Table 1 will delineate some of the options given for the definitions of the concepts of affect, emotion and feelings according to researchers writing in this field at various times. Included in the table will be definitions generally referred to in various dictionaries as well as definitions used by different theorists. Often, the terms emotion, affect and feeling are used interchangeably.

The terms used in the research on emotion are inconsistent and not adequately defined as indicated from the samples of the definition of emotion and affect in Table 1. Sometimes emotion was defined as a state which affects behaviour (James, 1981; Drever, 1952; Random House Dictionary, 1969; Lewis & Rosenblum, 1978; Tomkins, 1984; Frijda, 1986) and sometimes more directly as a response (Strongman, 1978). When emotion was defined as a state, it was sometimes considered cognitive and sometimes physiological. When defined as a response, emotion was

sometimes regarded as physiological and sometimes behavioural. This confusion may have stemmed from the definition proposed by William James in 1890.

Table 1

History of the Definitions of Emotions, Affect and Feelings

Date	Author	Affect	Emotions	Themes
1890/1981	William James The Principles of Psychology (p. 1065)		Emotions are bodily changes that follow the perception of an exciting fact and the conscious feeling of those bodily changes.	• Feeling states • Unique state of consciousness • Special subjective state
1952	J. Drever The Penguin Dictionary of Psychology (p.10, 82)	Any kind of feeling or emotion attached to ideas or idea complexes.	Differently described and explained by different psychologists. All agree that it is a complex state of the organism involving widespread bodily changes and a state of excitement or perturbation marked by strong feeling and definite behaviour.	• Biological, behavioural and cognitive • Special subjective state
1969	Random House Dictionary of the English Language (p. 24, 467)	Feeling or emotion.	An affective state of consciousness in which joy, sorrow, fear, hate or the like is experienced, as distinguished from cognitive and volitional states of consciousness.	• Special subjective state • Unique state of consciousness

(Table continues)

Table 1(continued)

Date	Author	Affect	Emotions	Themes
1978	M. Lewis & Rosenblum (p. 4)	A consistent, temporarily delimited, multiphasic response pattern that involves four essential elements: (a) the production of a specific constellation of internal physiological and/or cognitive changes in the organism; (b) some concomitant of these changes in overt, surface expression in the individual; (c) the individual's perception of this pattern of changes; and (d) the individual's personal experience of interpretation of perceived change.		• Special subjective state • Cognitive, behavioural and biological combination
1984	C. E. Izard (p. 4)		The integration of the experience of conscious feeling of emotion, the process that occurs in the brain and nervous system and the observable pattern of expression of emotion.	• Unique state of consciousness • Biological, behavioural and cognitive combination

(Table continues)

Table 1 (Continued)

Date	Author	Affect	Emotions	Themes
1984	Tomkins (p.165)	The primary innate biological motivating mechanism, more urgent than drive, deprivation and pleasure, and more urgent even than physical pain. The affect system provides the primary blueprints for cognition, decision and action.		• Biological, behavioural and cognitive combination • Special subjective state
1984	Campos & Barrett (p. 229)		Emotions are not subject to ostensive definition because emotions are manifested in many alternative ways. They can be identified on the basis of the following criteria: (a) emotions are crucial regulators of social and interpersonal behaviour, primarily through their multiple expressive channels; (b) like cognition, emotions regulate the flow of information and the section of response processes or outputs of the organism. The basic emotions regulate behaviour through a noncodified, prewired innate communication process.	• Relational view of emotion • Biological, behavioural and cognitive combination

(Table continues)

Table 1 (Continued)

Date	Author	Affect	Emotions	Themes
1986	N. H. Frijda (p.4-5)		Non-instrumental behaviours and non-instrumental features of behaviour, physiological changes, and evaluative, subject-related experiences, as evoked by external or mental events, and primarily by the significance of such events. Emotions are biological phenomena and are related to cognitive phenomena particularly norms, values, reflective awareness and intentional activity.	• Unique subjective state • Biological, behavioural and cognitive combination
1989	Campos, Campos & Barrett (p. 395)		Processes of establishing, maintaining, or disrupting the individual's significant relations between the person and the internal or external environment. For cognition to produce emotion, the cognition must be about significant events.	• Relational view of emotion
1990	Psychoanalytic Terms and Concepts. B. E. Moore & B. D. Fine (p. 9-10)	Complex psycho-physiological states that include a subjective experience as well as cognitive and physiological components.	Outwardly observable manifestations of feelings. (p. 9)	• Special subjective state • Feeling state

(Table continues)

Table 1 (Continued)

Date	Author	Affect	Emotions	Themes
1990	Fischer, Shaver & Carnochan (p. 85)		Complex functional wholes including appraisals or appreciations patterned physiological processes, action tendencies, subjective feelings, expressions, and instrumental behaviours.	• Unique state of consciousness • Biological, behavioural and cognitive combination
1991	C. E. Izard (p. 14; 54-55)	A general non-specific term that includes the fundamental emotions, patterns of emotions, drives and their interactions. The affect domain also embraces states or processes in which one of the affects (emotions, drives) is linked with or interacting with perception or cognition.	A feeling that motivates, organises and guides perception, thought, and action (p.14). A complex phenomenon having neural, motor-expressive, and experiential components. The individual process whereby these components interact to produce the emotion has resulted from evolutionary biological processes (p.54-55).	• Unique state of consciousness • Biological, behavioural and cognitive combination
1993	Ohman and Birbaumer (p. 9)		Emotional phenomena are evoked by stimuli (external or internal) that are processed as significant to the person. They involve behavioural responses (particularly non-instrumental aspects of such responses), physiological activity, and subjective experiences which are reflected in verbal reports focused on affective (i.e. positive-negative) evaluations of the stimuli.	• Unique state of consciousness • Biological, behavioural and cognitive combination

William James (1890/1981) influenced the study of emotion by explaining emotion as the conscious experience (perception) of a bodily change, that is, by describing emotion as physical response experienced as a unique state of consciousness. This is an example of the inconsistencies evident within as well as between theorists who study emotion where emotion is defined as both a state and a response in the same sentence. From 1890 until the early 1980's, theories of emotion concentrated on accounting for this unique state of consciousness. The central issue for theories of emotion in this period was to determine if this unique state was a feeling state, a special type of cognitive process or a combination of both (Izard, Kagan, & Zajonc, 1984). Most current theories assume that emotions are based on the cognitive appraisal of the significance of the situation or experience and that emotions are comprised of three major components: neurophysiological-biochemical, behaviour-expressive and subjective-experiential (Fischer & Tangney, 1995; Izard, Kagan, & Zajonc, 1984).

The efforts of some recent researchers and theorists focus on uncovering the social foundation of emotion (Campos & Barrett, 1984; Campos, Campos & Barrett, 1989). This relational view of emotion suggests that all emotions are fundamentally social and this is especially true of the self-conscious emotions, shame, guilt, pride and embarrassment, which are founded in social relationships. Since shame and guilt are the focus of this study, the definition that fits for the concepts discussed here includes the relational view of emotion. This relational view also incorporates the neurophysiological-biochemical, behaviour-expressive and subjective-experiential components of emotion.

Hence, according to the cumulative efforts of decades of deliberation, emotions are based on physical expressions and actions, cognitive appraisals, and social interactions. Recent research and theory have focussed on combining these various components into a common framework (Tangney & Fischer, 1995). This framework includes three primary assumptions. The fundamental assumption of this framework is that emotions are essentially adaptive, promoting successful human functioning rather than interfering with it. This assumption convinced some

researchers to call this framework a "functional approach" to emotion (Fischer & Tangney, 1995). The second assumption is that the process of emotional reaction consists of the appraisal of the meaning of events whereby particular appraisals lead to particular emotions and appraisals continue as people monitor and regulate their emotions. Third, each emotion can be described by a distinctive social script, which is a patterned sequence of events and reactions to those events, including characteristic cognitions, affective experiences, motivations, and subsequent behaviours.

Theories of Emotion

Aspects of the theories of shame and guilt, which will be discussed in later sections, have precursors in the cognitively based theories of emotion. It may be helpful then, to trace the development of the cognitively based theories of emotion. As mentioned earlier, current theories assume that emotions are based in a process of the cognitive appraisal of the meaning of situations and experiences (Fischer & Tangney, 1995). This broad class of "appraisal" theories assumes that cognitions cause physiological and behavioural change (Strongman, 1978). Researchers, who have studied the cognitive aspects of emotion, have taken other approaches into account in addition to suggesting that the concept of appraisal is essential to the generation of emotion. Schachter studied the internal and external cues that allow the identification and labelling of emotional states (Strongman, 1978). There are other theories and approaches to emotions such as a cognitive-affective approach (Singer, 1973,1974), a motivational approach to emotion (Tomkins, 1962; Izard, 1971) and differential emotions theory (Izard, 1991). Table 2 will outline these various approaches to emotion leading to the next section of this chapter where the most current advancement in emotion theory, the functionalist approach, will be discussed.

Both functional and cognitive approaches are represented in the current theories of emotion (Ekman, 1984; Scherer, 1984; Frijda, 1986; Barrett & Campos, 1987; Fisher, Shaver & Carnochan, 1990; Tangney & Fisher, 1995). The functionalist perspective regards emotions as organised, meaningful and usually adaptive action systems, which have a mostly positive and

adaptive effect, leading people toward behaviours that meet important needs and motivating development toward effective action. According to this view, emotions are complex functional entities, which include appraisals (or appreciations), patterned physiological processes, action tendencies (dispositions to act), subjective feelings, and instrumental behaviours (Fisher, Shaver, Carnochan, 1990). According to Barrett and Campos (1987), emotions can be gathered into groups or families that share a group resemblance but do not share a universal set of features.

Table 2

Theories of Emotion

Date	Theorist	Theme	Theory
1968, 1991	Lazarus	Emotion as Appraisal	• Emotions are organised psychophysiological reactions to knowledge or beliefs about the significance for personal well being of the ongoing relationship with the environment. • The quality and intensity of the emotional reaction depend on subjective evaluations (cognitive appraisals) about the progress made in terms of the individuals' short- and long-term goals. • Emotions are organised cognitive-motivational-relational configurations whose status changes with changes in the person-environment relationship as this is perceived, appraised, and defined by a unique and specifiable relational meaning. • This meaning is expressed in a core relational theme for each individual emotion, which summarises the personal harms and benefits residing in each person-environment relationship.
1970	Arnold	Emotion as Appraisal	• Emotion results from a sequence of events described by the concepts of perception and appraisal. • To apprehend something is to know what it is as an object, independent of any effect on the perceiver. • Appraisal is characterized as direct, immediate, and intuitive, not the result of reflection or deliberation. • Emotion is the non-rational attraction or repulsion that follows the appraisal of something as good or bad for the perceiver.
1970, 1972	Schachter	Internal & External Cues in Emotion	• Emotion results from physiological arousal and a cognitive appraisal or evaluation of the situation that elicited the arousal. • The evaluation enables the individual to label the arousal sensations as the appropriate emotion depending on the cognitions available in the situation.

(Table continues)

Table 2 (Continued)

Date	Theorist	Theme	Theory
1962, 1963	Tomkins	Motivational	• Emotion is equated with affect where the affective system is primary, the drive system is secondary and the two systems give drive its urgency. • Affects are mainly reflected in facial responses where the organised facial patterns are innately determined and triggered. • Tomkins suggests that affect is the inherent motivational system and the affect system with its learned and unlearned aspects is the main provider of the blueprints for cognition, decision and action. • Tomkins lists the primary affects as interest/excitement, enjoyment/joy, surprise/startle, distress/anguish, disgust /contempt, anger/rage, shame/humiliation, and fear/terror.
1973, 1974	Singer	Cognitive-Affective	• The intimate relation between affect and cognition is implanted in the infant's early efforts at accommodation to its novel and ever-changing environment. • Singer assumes that environmental novelty activates the interest affect, which in tern sustains efforts at exploration and accommodation. • Mastery or accommodation reduces excitement and activates joy, whereas a complex mass of unassimilable material may produce startle, sadness, or fear. • Thus, affective and cognitive processes are intertwined from the very beginning of life.
1991	Izard	Motivational	• The Differential Emotions Theory delineates the characteristics and functions of each distinct emotion separately and the interrelations among emotions. • Emotions are considered as experiential/motivational processes that influence cognition and action and are the personality processes that give meaning and significance to human existence. • The theory is based on five essential assumptions: • (1) ten fundamental emotions constitute the principal motivational system for humans; • (2) each fundamental emotion has organising and motivational functions and unique experiential properties: • (3) fundamental emotions such as joy, sadness, anger and shame lead to different inner experiences and have different effects on cognition and action: • (4) emotion processes interact with and exert influence on homeostatic, drive, perceptual, cognitive, and motor processes: • (5) drive, perceptual, cognitive, and motor processes influence emotions.

From the cognitive theory perspective, emotions conform to a model of categories. All members of a particular category can be related to that prototype but few members have all the characteristics of that prototype (Fisher, Shaver, & Carnochan, 1990). That is, each emotion has a distinctive overall function and organisation. The functional and cognitive perspectives of emotion join together to specify how emotions organise behaviour and how they relate to cognitive processing.

The complexities of the many emotions encompass at least three elements. First, the process that generates emotions includes the appraisal of events as either advancing or impeding a person's goals or concerns in some particular way which then elicit functionally organised dispositions to act or action tendencies (Barrett & Campos, 1987; Scherer, 1984; Frijda, 1986; Ortony, Clore, & Collins, 1988). Secondly, these emotion families are defined by a script of behavioural and social events for the most typical case of the emotion (a prototypical action script) (Fisher, Shaver, & Carnochan, 1990). Thirdly, emotions can be categorised according to a three-layer hierarchy of superordinate (positive or negative), basic, and subordinate (situationally specific and differentiated) emotion families (Shaver, Schwartz, Kirson, & O'Connor, 1987).

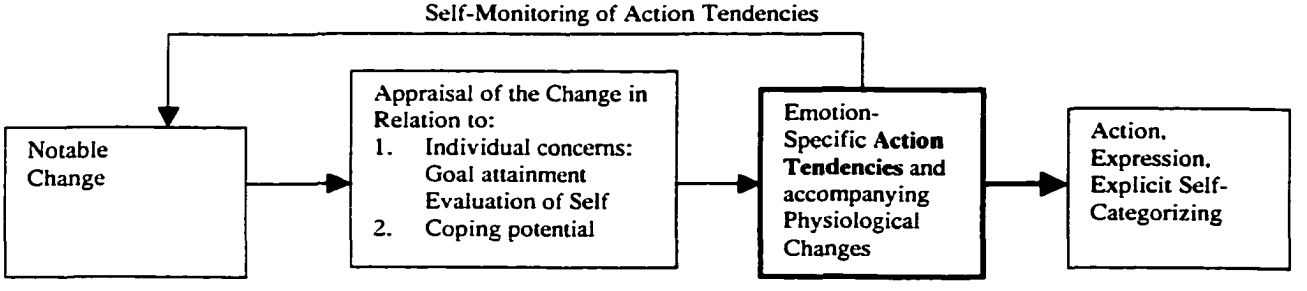
Appraisal of Events

When a person detects a "notable" change, the process of emotion begins. A "notable" change according to Scherer (1984) means a different or unexpected phenomenon that acts to signal the continued processing of the input for personal significance. Continued processing entails assessing the event with regard to the individual's coping potential, current goals, wishes and implicit goals (the person's concerns). If the "notable change" is appraised to promote or facilitate goal fulfilment, positive emotions arise. If the "notable change" is appraised to interfere with goal fulfilment, negative emotions occur. For each emotion experienced after the appraisals are made, a distinct pattern of actions and physiological changes are elicited (action tendencies) (Fisher, Shaver, Carnochan, 1990).

In conjunction to the above emotion process, a self-monitoring process occurs where people try to control their emotions. This is an additional loop through the appraisal process where self-control occurs through the self-monitoring of action tendencies. In this case, the basic appraisal process is repeated and the action tendencies themselves become the appraised events (Fisher, Shaver, Carnochan, 1990) (see Fig. 1). Through self-monitoring of action tendencies, people experience emotions about emotions.

Figure 1

Functional Model of the Emotion Process



(Fisher, Shaver, Carnochan, 1990)

Prototypical Social Scripts for Emotions

The functional analysis of emotions not only stresses their functionality, it also identifies emotions as highly organising. In this analysis, the organisation of emotions is through "prototypical social scripts" which are the patterned succession of events and reactions that compose the prototype, or "best instance" of an emotion, including its antecedents and constituents (Fischer & Tangney, 1995). Shaver et al. (1987) studied stories that people tell about emotions and analysed them into prototypic scripts divided into antecedents, responses, and self-control procedures. An example of a prototypical social script for the emotion of shame is provided in Table 3. The antecedents of shame usually involve some flaw or dishonourable action. Shame produces the responses of hiding, escaping, and feeling worthless. In negative emotions such as shame, self-control procedures tend to prevail. For shame, self-control procedures include trying to change the flaw or dishonourable action, denying it, or disguising it.

The script presented in Table 3 is a proposed prototype, a description of the best instance of shame. It does not describe the range of variation in the meaning of shame. Much human categorisation operates in terms of prototypes, with people agreeing on the category or name of the prototype but ordinarily disagreeing on classifying cases that have only some of the prototype's characteristics. People agree on the essence of the category but not its limits or boundaries.

Table 3

Proposed Prototypical Script for Adult Shame

	Script
Antecedents:	*Flaw or dishonourable or deplorable action, statement, or characteristic of a person* • A person acts in a dishonourable way, says something deplorable, or evidences a characteristic that is disgraceful or flawed. • Someone (other than self) witnesses this action, statement, or characteristic and judges the person (self or other) negatively.
Responses:	*Hiding, escaping, sense of shrinking, feeling worthless* • The person tries to hide or escape from observation or judgement; he or she feels small, exposed, worthless, and powerless. • The person lowers his or her head, covers the face or eyes, or turns away from other people. Sometimes he or she strikes out at the person observing the flaw. • The person is preoccupied with the negative action, statement, or characteristic, as well as with the negative evaluation of the self more generally.
Self-control procedures:	*Undoing and redefinition* • The person may try to change the negative action, statement, or characteristic; disguise it; deny its existence; or blame someone or something else for it.

(Fischer & Tangney, 1995, p. 12)

Emotion Hierarchy

Fisher, Shaver and Carnochan (1990) organised emotion categories by combining the ideas of two opposing perspectives. One perspective emphasised a limited set of discrete emotions (called basic emotions) that are considered to have a common biological basis, such as anger, fear, sadness, joy, and love (Izard, 1977; Sroufe, 1979). The other perspective stressed the socially constructed emotions such as, loneliness and resentment (Fischer et al., 1990). Fischer et al. (1990) proposed a hierarchy of emotions where emotion categories are organised into emotion families (see Figure 2 on page 16). The hierarchy contains three different levels. The superordinate level is at the top, which consists of a broad division into positive and negative appraisals of events in relation to a person's concerns. Below the superordinate level is the basic level which contains the basic emotion categories that are shared most generally across cultures, including anger, sadness, fear, joy, and love. These basic emotion categories define a family of categories that constitute the subordinate level. These subordinate categories are complex, socially contrived emotions such as resentment, loneliness and adoration (Fischer, Shaver, & Carnochan, 1990). Fischer et al. (1990) cited research using a hierarchy where similar hierarchies were obtained in different cultures. The similarities were consistent for the superordinate and the basic emotion categories. Differences arose in the hierarchies for different cultures at the subordinate level.

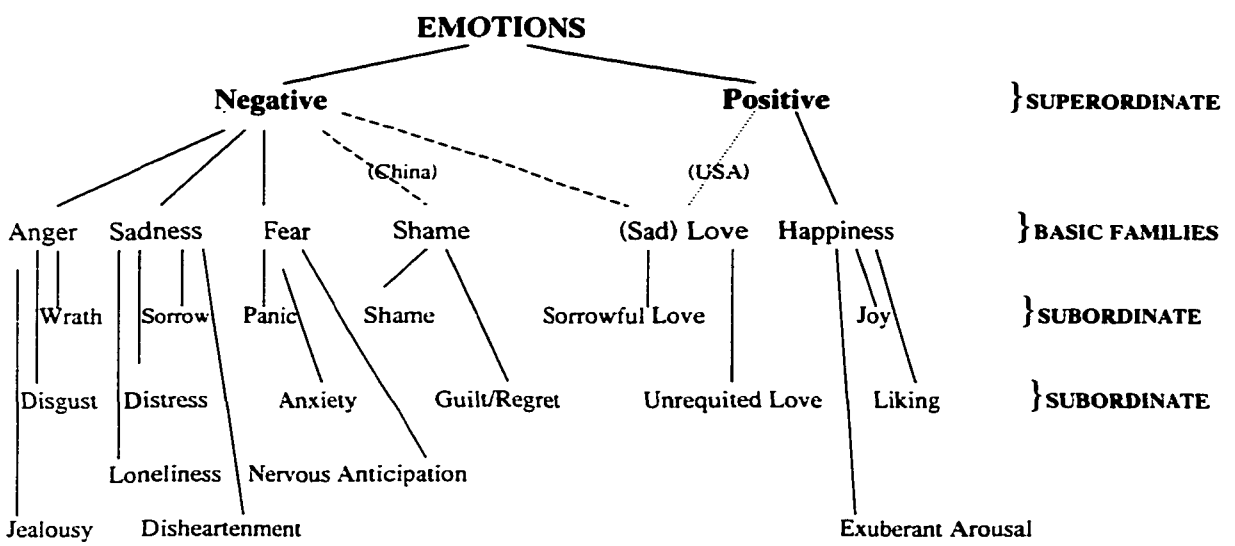
Figure 2 illustrates a hierarchical organisation of emotions by emotion family resemblance. At the highest degree of generality, the emotion families are related in terms of superordinate categories that are the broad range of positive and negative appraisals. Under these two general broad categories, clusters of emotion families or basic emotions are listed as the families of anger, sadness, fear, shame, love and happiness. These emotions are considered basic since these emotion categories are most commonly used in everyday language as a common reference point. Researchers have labelled them "basic" since there is evidence that they are extremely common, both across cultures and among people within a culture. A research tradition

existed in studies where basic emotions were treated as if they referred only to emotions tied to specific individual facial expressions. Within this tradition were arguments about the number of basic emotions and facial expressions of emotions (Ekman, 1984; Ekman & Davidson, 1994; Izard, 1977; Izard & Malatesta; 1987).

Perhaps the argument about the number and the components of basic emotions involves the confusion of different levels of emotions where some of the elements of subordinate emotions were considered as basic emotions. Each particular basic emotion contains a few, to more than a dozen, subordinate categories (subfamilies) of highly specific, differentiated emotion words. These subordinate categories generally show wide variation across cultures.

Figure 2

A Dimensional Hierarchy of Basic Emotion Families



(Fisher & Tangney, 1995)

The hierarchy in Figure 2 is based on an emotional categorisation in a Chinese sample studied by Phillip Shaver and his colleagues (Shaver, Schwartz, Kirson, & O'Connor, 1987; Shaver , Wu, & Schwarz, 1992). They asked people in the People's Republic of China, the United States and Italy to group emotion words in their respective languages according to similarities and

differences. The categorisations for each country were analysed by hierarchical cluster analysis. The resulting emotion clusters revealed a number of similar emotion families as well as important differences. Five basic families, anger, sadness, fear, love, and happiness, were similar across the cultures. In China, a sixth family, shame, was added to the basic list. In addition, love changed its evaluation across countries, falling on the positive side in the United States and Italy and on the negative side in China, which is why it is called (Sad) Love (in Figure 2). Hence, four of the families were globally similar in the three cultures (anger, sadness, fear and happiness); one exhibited a major shift (love), and one occurred as a basic family in one culture (shame) but not in the others. In these studies, the names for the emotion families were selected statistically as the most representative of the choices made within the family. The names for fear, anger, sadness, and happiness were similar across these languages, accounting for the differences in translation.

Shame in the Emotion Hierarchy

A significant consideration was that shame (including guilt, embarrassment, and related emotions) was an emotion family that was missing for the United States and Italy. For these Western nations, shame formed a subfamily under sadness rather than constituting its own basic family. For China, shame formed its own emotion family, with two constituent subordinate categories of guilt/regret and shame each of which contains multiple emotion words. Relative to the Chinese, the English language has an impoverished set of shame words. Many of the differentiated Chinese words for shame were translated into English simply as the one word, "shame", which is why in Figure 2, shame is used in translation for both basic and subordinate emotion categories.

In addition to the superordinate categories of negative and positive in Figure 2, two other important superordinate dimensions have been found (Fischer & Tangney, 1995). These two additional dimensions, an activity or active-passive dimension and a relatedness or engaged-disengaged dimension, are similar across cultures, although they also show significant differences. Kitayama, Markus, & Matsumoto (1995) maintain that cultures differ strongly on the

engagement-disengagement dimension. They argue that the dominance and kind of self-conscious emotions, such as shame, differ considerably with changes along this dimension. Engagement is more significant in Eastern, shame-oriented cultures, whereas disengagement is more significant in Western, independence-oriented cultures.

The sociologist, T. J. Scheff (1995) suggested that shame has a narrow and negative definition in English speaking society as compared to other societies, which have more positive connotations to shame and a greater variety of descriptors and words for shame. In contrast, since shame is a crisis emotion in English, involving extreme emotional pain and social disgrace, it is an emotion to be avoided or otherwise ignored. Scheff (1995) argued that although shame in Modern English speaking societies has increased, it has been denied to the point that it has gone underground. Although generally unrecognised as the main tool used in social control, shame is an omnipresent dynamic in child rearing, education, interpersonal relations, psychotherapy, ethnic group relations, national culture and politics, and international relations (Kaufman, 1989). Essentially, the transference of shame is a powerful mechanism used to control people on a micro and a macrocosmic level. Scheff (1995) argues that there is more shame now in our modern society than existed previously in history and that we are much less aware of it.

Shame is becoming increasingly recognised as not only one of the major emotions as characterized by Tomkins (1963) and Lewis (1971) but as 'the master' emotion in both modern and traditional societies (Scheff, 1995). Shame is pervasive in human development since it influences identity, as well as the relationship with the self and with others (Kaufman, 1989). Shame has a significant influence on cognitive processes and it affects the beliefs and values adopted by individuals during their developmental process. Shame is important in the disturbances of functioning of the self, such as low self-esteem, poor self-concept or body image, self-doubt and insecurity, and impaired self-confidence (Kaufman, 1989). The source of feelings of inferiority is shame.

In summary, the approach taken on shame in this study is that it is a functional emotion with socially defined features differentiating it from other emotions by social scripts. Shame is a self-conscious emotion with its nature, meaning, and function embedded in cultural contexts.

Differences between Shame and Guilt

An essential issue that must be addressed within the discussion of the emotions of shame and guilt is the distinction between them. The distinction has implications for psychopathology and individual psychotherapy (Lewis, 1971; Nathanson, 1987a; Tangney, Wagner, & Gramzow, 1992), as well as marital and family dynamics and therapy (Bradshaw, 1988; Harper & Hoopes, 1990).

Since there is a lack of clarity in the English language for the self-conscious emotions in general and shame and guilt in particular, psychologists and laypeople alike tend to blur the distinction between shame and guilt. Also, theorists have not made an unambiguous differentiation between shame and guilt. The term "guilt" in clinical, social and developmental literatures is used to refer to the phenomenological aspects of both shame and guilt (Tangney, 1995).

Regardless of this language and theoretical difficulty, theories that differentiate shame from guilt agree that shame involves a sense that the entire self is bad; guilt involves a focus on particular misdeeds (Barrett & Campos, 1987; Lewis, 1971; Nathanson, 1987a; Tangney, 1990). These theorists also agree that shame usually entails hiding the face or head and/or averting the gaze, where guilt involves attempting to make amends. These theorists differ on the definitions of shame and guilt, on how these emotions develop, whether these emotions are biologically based, whether they are universal emotions, how guilt and shame are related to each other, and what kinds of socialization would lead to proneness to shame or to guilt.

According to Barrett (1995), Helen Block Lewis (1971, 1987) prepared the most extensive view of the distinction between shame and guilt. The following table (Table 4) outlines the ways in which shame and guilt differ according to Lewis.

The major difference between shame and guilt according to H. B. Lewis (1971) is that in shame the emphasis is on the self as a person and in guilt the emphasis is on behaviour. In shame there is a shift in focus from behaviour to the self. Feelings of shame involve a painful scrutiny of the self. An observing self views and disparages the focal self as unworthy and reprehensible. Whereas guilt often motivates reparative action, shame is likely to motivate either avoidance or a tendency to become aggressive at others involved in the shame-eliciting event (Tangney, 1995a).

Table 4

Differences between Shame and Guilt

Differences between Emotions	
Shame	Guilt
1. Concerns moral transgressions *or defeats.*	1. Only concerns moral transgressions.
2. Focus on the *self's deficiencies*	2. Focus on the *negative event* for which one is responsible.
3. Involves a passive or helpless self.	3. Involves an active self.

Tangney (1995b) expanded upon the distinctions made by H. B. Lewis and identifies the dimensions on which shame and guilt differ and on those, which they share. The following table (Table 5) summarises the similarities between shame and guilt identified by Tangney.

Table 5

Similarities between Shame and Guilt

Similarities:
1. Are moral emotions
2. Are self-conscious self-referential emotions
3. Are associated with negative affect
4. Involve internal attributions
5. Are typically experienced in interpersonal contexts
6. Similar negative events elicit these emotions (often involving moral failures or transgressions)

Shame and guilt are negatively self-relevant emotions that usually originate in response to some personal failure or transgression. The types of events that elicit shame and guilt are remarkably similar. According to Tangney (1995b), shame and guilt eliciting situations such as lying, stealing, cheating, disobeying parents and failing to help another, were cited by some people as connected with feelings of shame and the same situations were cited by other people as connected to guilt feelings. Hence, situations that are generally regarded as moral transgressions are equally likely to evoke shame and guilt. Tangney (1995b) suggested that non-moral failures and limitations such as socially inappropriate dress or behaviour elicit shame but not guilt.

Borrowing from H. B. Lewis, Tangney (1995b) suggested that the essential difference between shame and guilt focuses on the role of the self in these experiences. In shame, the self is the focus of evaluation. In guilt, the focus of evaluation is behaviour. The other dimensions on which shame and guilt differ evolve from this fundamental difference in the focus on the role of the self. The dimensions that were identified by Tangney (1995b) are outlined in Table 6 below.

Table 6

Dimensions on which Shame and Guilt Differ

Dimensions on which Shame and Guilt Differ		
Dimension	Shame	Guilt
Focus of evaluation	Global self	Specific behaviour
Degree of distress	Generally more painful than guilt	Generally less painful than shame
Phenomenological experience	Shrinking, felling small, felling worthless, powerless	Tension, remorse, regret
Operation of self	Self "split" into observing and observed "selves"	Unified self intact
Impact on self	Self impaired by global devaluation	Self unimpaired by global devaluation
Concern with regard to others	Concern with others' revaluation of self	Concern with one's effect on others
Counterfactual processes	Mentally undoing some aspect of the self	Mentally undoing some aspect of behaviour
Motivational features	Desire to hide or escape, or desire to strike back	Desire to confess, apologise, or repair

Our primary concern in a prototypical shame experience is with our self as a person. Shame involves a painful scrutiny of the self, a feeling that "I am unworthy, incompetent, or bad". People who are in the midst of a shame experience feel inadequate, diminished, worthless, powerless and exposed. The person may not necessarily have an actual observing audience aware of one's imperfections, rather the person often has imagery about how one's defective self would appear to others. Since with shame the focus is on the self, shame experiences have a tendency to elicit counterfactual thinking involving the self such as "If only I weren't such-and-such kind of person" (Tangney, 1995b). Also, as discussed in greater detail in this chapter, shame is liable to motivate either avoidance or a tendency to strike out defensively at others involved in the shame-evoking situation. In summary, Tangney (1995b) uses an elaboration of H. B. Lewis' analysis of the differences between shame and guilt and provides dimensions on which shame and guilt are similar. H. B. Lewis (1971) did not elaborate on how shame and guilt developed.

Psychoanalytically minded theorists such as Freud (1961), Piers and Singer (1971), Schore (1991), and Nathanson (1987b; 1992) along with cognitive theorists such as Jerome Kagan (1984) and Michael Lewis (1992) developed theories concerning the development of shame and guilt. These theories will be outlined in the following section.

Theories of Shame and Guilt

Most of the following theories described in the following Table 7 fall into one of two types of theories: the psychoanalytic or the cognitive-prerequisite theories (Barrett, 1995). Later, the functionalist theory, which is significant for this study, will be described.

Table 7

Theories of Shame and Guilt

Psychoanalytic Theories		
Theorist	Theory	
	Guilt	Shame
Freud (1930)	• Freud wrote extensively about guilt and much less about shame. • Guilt and shame were discussed in relation to conscious and unconscious conflict, and the suppression of Id impulses. • Guilt was regarded as the result of superego (conscious) conflict with id impulses and with the recognition of those impulses by the ego. • Instead of involving real-world behaviour, "true guilt" was viewed as involving intrapsychic conflict and linked closely with conflict over aggressive impulses. • It was believed that guilt could not be possible until the formation of the superego, in accord with the resolution of the Oedipus complex, at about 5 years of age. • Before the development of the superego, guilt-like reactions involve fear of loss of love (social anxiety), which was equated with the fear of punishment. • Guilt from actual aggression (rather than from intrapsychic conflict) was labelled remorse.	• Shame was thought of as a control on sexual impulses, especially exhibitionism and voyeurism. • Shame and disgust develop between the ages of 6 to 11 years of age and help to suppress the tendency of phallic/Oedipal children to exhibit themselves and to look at others' bodies. • Erikson (1963) believed that shame was social anxiety stemming from fear of loss of love, and believed that shame proceeded guilt developmentally and viewed shame as less mature than guilt.
Piers & Singer (1971)	• Guilt is a superego function involving intrapsychic conflicts. • Involves rule violations enforced by the superego - *transgressions*. • Can arise before early childhood years.	• Shame is a superego function involving intrapsychic conflicts. • Arises when the individual fails to live up to the expectations of the ego ideal – *shortcomings*. • Depends on external sanctions and authority figures. • Can arise before early childhood • Originates from many different standards (not only from sexuality).

(Table continues)

Table 7 (Continued)

Theorist	Guilt	Shame
Nathanson (1987b)	• Guilt involves intrapsychic conflict. • Involves punishment of wrongdoing.	• Shame involves intrapsychic conflict. • Shame concerns a certain quality of the self. • "Primitive" shame is experienced as young as 2½ months old. • Children are highly connected with people from birth and early shame originates from early interpersonal situations. • When the infant interacts with another person, but does not get the expected/desired response, shame is aroused and with it comes the awareness that someone beyond the self is interacting with the baby. • As the child progresses through different developmental changes, different situations evoke shame.
Schore(1991)	• Guilt emerges with verbalisation. • Involves superego affects. • Primary focus is on shame.	• Shame has a preverbal nature. • Involves superego affects. • Shame precedes guilt developmentally. • Shame functions as an inhibitor of excessive joy and/or interest/excitement. • Ten to eighteen month old infants experience unrestrained enthusiasm, interest and elation while exploring the world. • This excitement would become too much for the infant, except for the regulating mechanism of shame. • The infant, after exploration, returns to the mother who is usually attune to her baby's need for reconnection, but on some occasions she mismatches her baby, thus initiating the emergence of shame.

(Table Continues)

Table 7(Continued)

Cognitive Prerequisite Theories		
Theorist	Guilt	Shame
Buss (1980)	• Guilt is defined by certain cognitions.	• Shame is defined by particular cognitions. • Shame not possible until the cognitive self has developed at 5 years of age. • Shrinking and cringing behaviours are observed in toddlers after being caught in a forbidden act actually express "pseudoshame" fear of punishment.
Jerome Kagan (1984)	• Cognitive abilities are required to experience guilt. • Guilt is experienced when a person notices a choice of actions the person could have used instead of the action that was chosen. • Guilt is not experienced before the age of four.	• Cognitive abilities are required to experience shame. • Shame occurs when the person has no choice and other people know of the transgression. • Shame normally precedes guilt, since children know they have standards of behaviour shared by others before they understand that they have responsibility for and control over related action.
Michael Lewis (1991)	• Guilt is distinguished from other emotions by cognitions. • Guilt involves a self-focus on specific features or actions of the self.	• Shame is distinguished from other emotions by cognitions. • Shame involves a self- focus on the whole self. • Determined through research that three-year-olds more frequently show shame relevant responses when they fail at a developmentally easy task.

In summary, the psychoanalytic theories of shame and guilt suppose that these emotions are the result of unconscious intrapsychic conflicts. The cognitive-prerequisite approaches require certain cognitive understandings for the development of shame and guilt. The functionalist approach differs considerably from the two approaches mentioned previously. The functionalist approach proposes that shame and guilt are social emotions, which serve important functions for the individual and society (Barrett, 1995). Shame functions to emphasise social standards and to maintain social hierarchies. Guilt functions to emphasise standards and to assist in the development of self-knowledge. Other characteristics of shame and guilt will be reviewed in the next section on the functionalist approach to shame and guilt.

A Functionalist Theory of Shame and Guilt

As noted previously with regard to emotions in general, in the functionalist approach, appraisals constitute an important cognitive process. Analogous to appraisals, Barrett & Campos (1987) suggest that "appreciations" are a special piece of the emotion process. An appreciation secures the personal significance of the environment for the self. It brings the person into an organism-environment relationship with implications for the person's adaptive functioning. This relationship may become significant for various reasons. For example, the relationship may be life threatening or it may affect the pursuit of some goal such as a friendship or warmth in a cold environment. Appreciations may operate in a wide range of levels of sophistication, from biological adaptive terms to one's beliefs about appropriate behaviour.

In contrast to the other shame and guilt theories mentioned earlier, Barrett (1995) proposed that emotions are multifaceted phenomena that are best characterized by the concept of emotion families (Fischer et al., 1990). As stated earlier, emotion families are usually associated with specific patterns of characteristics such as, (1) appreciations, (2) goals or end states with which these appreciations are concerned, (3) action tendencies, (4) vocal patterns, (5) physiological patterns, (6) facial movement patterns, and (7) adaptive functions. However, members of emotion families may not be associated with one or more of the characteristics, and a particular family member may contain additional responses that are not associated with other family members (the smile of embarrassment, an emotion Barrett, 1995, regards as a member of the shame family). Also, some families may not have all the characteristics, for example, shame does not have any specific facial muscle movements associated with it.

Barrett (1995) classifies shame and guilt as social emotions since these emotions are significant for the management of both the individual's transactions with the environment and the individual's development of the self. The following table (Table 8) outlines the seven basic principles of the functionalist model of shame and guilt proposed by Barrett (1995).

Table 8

Basic Principles of the Functionalist Approach to Shame and Guilt

The Functionalist Approach		
Number	Principle	Description
1	Shame and guilt are social emotions	Shame and guilt are: • Socially constructed • Connected with real or imagined social interaction • Given significance by social communication and/or relevance to desired ends • Associated with appreciations (appraisals) regarding others as well as the self
2	Shame and guilt serve important functions	• The shame and guilt emotion families are defined by the intrapersonal (internal regulatory), interpersonal (social regulatory) and behaviour-regulatory functions they serve for the individual. • Shame serves to distance the experiencing individual from important others who can evaluate or are evaluating the individual. • Shame makes it painful to do "wrong" in the moral and/or achievement standards sense, emphasising the importance of meeting standards. • Shame helps the individual to acquire knowledge of the self as an object by accenting how the individual appears to others (or to the Internalized other). • Guilt functions to motivate reparative action. • Guilt often drives the individual to inform others about the misdeed, and thus show others that he or she understands the standards and wishes to follow them. • The guilty person understands that she is able/unable to produce harm and/or repair harm, thus learning about his or her capabilities and/or deficiencies.
3	Shame and guilt are associated with particular appreciations regarding self and other.	• Each emotion has an "appreciation regarding self" and an " appreciation regarding other". • Shame involves an appreciation that one is bad, that someone thinks one is bad, and that everyone is looking at one, but no one need be present. • Guilt involves appreciations that one has done something contrary to one's standards, and that someone has been injured by some wrongful act.

(Table Continues)

Table 8 (Continued)

Number	Principle	Description
4	Shame and guilt are each associated with particular action tendencies.	• The action tendencies associated with shame and guilt are sensible and functional given the different appreciations associated with these emotions. • Shame is associated with social withdrawal. • Guilt is associated with action toward reparation for an indiscretion. • If, as in shame, one focuses on the self as a bad person who is evaluated as such by others, then the only recourse is to die, disappear, or at least withdraw from evaluating other. • If, as in guilt, the problem is that one has harmed another through ones actions, one can easily remedy the situation by confessing and/or repairing the wrong. • The differences in action tendencies and their associated functions distinguish shame from guilt.
5	Shame and guilt aid in the development of a sense of self.	• Shame and guilt experiences contribute in significant ways to the child's development of a sense of self. • These experiences emphasise the importance and consequences of a child's behaviour, including successes and failures. • These emotions emphasise the kinds of behaviours the child can or cannot and does or does not do. • Such experiences stress how others regard the child and his or her behaviour, which also helps the child learn how to evaluate him or herself.
6	Cognitive understandings do not determine the emergence of shame and guilt.	• General cognitive abilities such as object permanence or self-recognition are not deemed necessary for the emergence of shame or guilt, since full accurate understanding is not necessary for the appreciation process. • However, these broad cognitive understandings do contribute to the nature of shame and guilt experiences, in addition to the conditions under which these emotions occur.
7	Socialization is crucial to the development of shame and guilt.	Socialization: • Experiences make a significant contribution in the development of shame and guilt. • Causes the child to care about the opinions of others, making the child want to follow social standards. • Teaches the child about rules and standards for behaviour, and endows particular standards with significance. All of these are pivotal to the development of shame and guilt.

In summary, the seven principles outlined in Table 8 form the foundation of the functionalist approach to shame and guilt development. Shame and guilt are social emotions and, when they occur at the appropriate levels, serve important functions for the individual and society. Shame emphasises social standards and the maintenance of social hierarchies. Furthermore, shame draws attention to the self as object, providing knowledge about the self. Shame is connected with gaze aversion and social withdrawal, and these shame behaviours diminish the arousal experienced in shame-relevant situations. According to the functionalist perspective proposed by Barrett (1995), the appearance of shame and guilt are not determined by cognitive understandings. Often only low level sensing is involved in emotion elicitation (Barrett, 1995), however, events must be significant to the individual in order for emotion to be generated. Socialization is critical for the development of shame and guilt, particularly the early parent-child interactions that endow social standards as goals and then endow those goals with significance.

Metaphors

One of the difficulties in discussing the concept of shame is the use of different descriptors that stand for or mean shame. Words used to describe inner states have particular meanings that become attached to distinct shame experiences. The different labels for the many manifestations of shame have hindered the recognition of the identical nature of the underlying core affect present in each of these disturbing states, that is, shame. There is a multitude of ways to disguise the shame experience. Variations of shame occur in a variety of interpersonal contexts where different inner states have been identified, given different labels, and erroneously thought of as distinct. Discouragement, self-consciousness, embarrassment, dishonour, disgrace, humiliation, chagrin, mortification, shyness, shame and guilt are states that are experienced as distinct but do not reflect fundamental differences in affect. These inner states are experienced as quite different because of the combination of their perceived causes and consequences, yet the core affect of shame is the same (Kaufman, 1989). For example, discouragement is shame about temporary defeat; embarrassment is shame before any type of audience; self-consciousness is the

self-scrutinizing the self, i.e. the self exposed in shame; shyness is shame in the presence of a stranger; shame is the loss of dignity, a sense of failure; guilt is shame about moral transgression (Kaufman, 1989). Each of these inner states belongs to an experience with a common characteristic, the negative evaluation of the self in its relation to another, with at least the imagination of how we look in other's eyes (Retzinger, 1991). This characteristic is an indication of shame's pervasiveness.

Diverse descriptors of the feeling of shame are used for distinct states of shame. Descriptions of a mild state of shame include uncertainty, lacking confidence, insufficiency, and low self-esteem. Words for a moderate state of shame include overwhelmed, inadequate, immobilised, incapable, lacking, deficient, and incompetent. Severe descriptors of shame include words like worthless, good for nothing, inferior, useless, and failure (Harper & Hoopes, 1990).

Definition of Shame

There are two types of shame, the destructive form, which I will discuss in this paper, and the healthy form of shame known as having a "sense of shame" which in appropriate proportions is essential to manage social distance. As a construct, shame needs to be understood in its broadest sense as a social process that occurs in interaction within and between people. Shame seems to be the most social of all the emotions and is very important in human relationships (Retzinger, 1991). A major characteristic of shame is that it is an emotion that focuses on the self in its relationship to other persons. Each person is acutely aware of themselves in relation to others and shame is a human device that is used to monitor the self in social situations (Retzinger, 1991). People usually avoid behaviour that causes shame in others or ourselves and try to fix interactions that have become damaged or are threatened (Retzinger, 1991).

Shame involves a person's entire self in a sudden exposure of deficiency in one's own eyes and perceived in the eyes of the other person. Feelings of shame involve a negative examination of the self, a feeling that the person's self is unworthy, incompetent, or bad. The

shamed person often imagines how their defective self would appear to others, that is, the person imagines themselves being observed negatively (Tangney, 1995b).

Shame and the Development of Psychopathology

Early in the conceptualisation of psychological therapy, Freud proposed that guilt was the predominant pathologic emotion with shame as an occasional pathological influence (Harder, 1995). With time many psychoanalytic clinicians recognised shame as critical for the generation of psychopathology. Many clinicians (e.g. H. B. Lewis, 1971; Bradshaw, 1988; Harper & Hoopes, 1990; Kaufman, 1989; Nathanson, 1987a) theorised that excessive shame was the main process in the formation and maintenance of symptoms at all levels of pathology. Shame has been implicated in a wide range of pathologies including depression (H. B. Lewis, 1971), sexual and physical abuse syndromes (Kaufman, 1989), suicide (Harper & Hoopes, 1990), and violence (Harper & Hoopes, 1991; Gilligan, 1996; Katz, 1988) to mention a few. Harder (1995) argued that special attention needs to be given to shame in order to provide therapeutic improvement for shame-prone individuals.

As described earlier in this chapter, the phenomenology of shame and guilt are distinct. The shame experience elicits a tendency in the shamed person to observe the self, evaluate the self, ferociously attack the self, and consequently devalue the self (Lewis, 1987). Shame also makes us want to hide or escape. It is such an intensely painful and disorganising experience that we want it to end quickly. In short, shame is a state of self-devaluation. In the phenomenology of shame, the self is concerned with the other's evaluation of the self, but it is actually the self's own vicarious experience of the other's scorn that is occurring (Lewis, 1987). For a person experiencing guilt, their main concern is the effect their behaviour had on others. They may feel regret, remorse or tension and may want to take reparative action as a consequence of their original behaviour.

For H. B. Lewis (1971, 1987) the difference in the phenomenology between shame and guilt was important for her theory on the role of shame in symptom formation. According to

Tangney (1995b), Lewis presented an integrated conceptualisation of the differential roles of shame and guilt in psychopathology. Various other theories have identified shame and/or guilt as potentially important factors in the formation of psychological symptoms. However, Lewis (1971, 1987) was most consistent in maintaining a clear distinction between shame and guilt. Most theoretical perspectives, with the exception of Lewis (1971,1987) have not clarified the distinction between shame and guilt and have been inconsistent regarding the relative importance of shame and guilt as essential factors in symptom formation (Tangney, 1995b).

Tangney, Wagner, and Gramzow (1992a) provided empirical evidence to suggest that shame rather than guilt contributed to various types of psychopathological symptoms including somatasization, obsessive-compulsive, psychoticism, paranoid ideation, hostility-anger, interpersonal sensitivity, anxiety, and depression. They argued that since shame had a negative self-focus then shame-proneness would be associated with low self-esteem. Since shame also involves the imagery of real or imagined disapproval of other (Lewis, 1971), then shame would also be associated with self-consciousness (particularly public self-consciousness), fear of negative evaluation, and social anxiety. Finally, shame-prone individuals who engage in global negative self-evaluations in reaction to negative events would be particularly likely to use the defence of splitting. Splitting involves a gross isolation or separation of good and bad images of the self and others (Tangney, 1995b). The shame experience could be thought of as tapping into the "all-bad" feature of the self. Tangney et al. (1992a) found that shame-proneness, as assessed by the scenario-based measures, was, in fact, consistently negatively correlated with measures of self-esteem and stability of the self. Also, they found that shame-proneness was positively correlated with self-consciousness, fear of negative evaluation, social anxiety, and the use of the defence of splitting.

Subsequently, Tangney et al. (1992a) found that as opposed to shame, guilt has adaptive qualities. Guilt is likely to foster interpersonal empathy by bringing the person to focus on the consequences for others of negative, harmful behaviour. Hence, Tangney et al. (1992a) concluded

that a tendency to experience guilt uncomplicated by shame was unrelated to psychological maladjustment. They proposed that guilt becomes maladaptive particularly when it becomes fused with shame, that is, when guilt over the effect of some behaviour becomes magnified and generalised to the self. Shame sets in motion a sequence of pathogenic affect and cognitions leading from tension and remorse over a particular behaviour to more global feelings of self-contempt and disgust. The shame component of this sequence poses an irresolvable dilemma. The negative effects of behaviour can be repaired, amended or softened by an apology. In contrast, it is more difficult to transform or amend the person's self if it is defective to the core. Shame and shame-fused guilt offer no chance for redemption. Tangney et al. (1992a) suggest that guilt superimposed with shame tends to result in the ceaseless rumination and self-castigation that is so often described by clinicians. Tangney et al. (1992a) also found that many people are prone to experience both shame and guilt in response to negative events and guilt fused with shame seems to be exceedingly maladaptive. The empirical study conducted by Tangney et al. (1992a) confirmed the suggestion made by Lewis (1971, 1987) that proneness to the painful feeling of shame is associated with a wide variety of psychological symptoms.

Lewis (1971, 1987) and Tomkins (1962,1963, 1984, and 1987) are essentially two theorists from whom other theorists derive their work on shame and psychopathology. The following is a brief description of the drive-based theory Tomkins uses to explain shame. Expanding on Darwin's (1872/1979) observation that emotions show on the face of infants before they appear in a child's consciousness, Tompkins demonstrated that the affect system is primarily displayed on the face. He proposed that until the development of speech as symbolic communication, facial affect display is the major means of information transfer between infant and caregiver and it remains a significant form of nonverbal communication throughout adult life (Nathanson, 1987a).

According to Tomkins (1987), a specific affect that has an important link to shame is what he calls *interest*. Tomkins defines individual affects as part of a dipole. The least intensely

experienced form of the affect is given first, and the most intense form comes second, as in the affect pair *interest-excitement*. Tomkins argues that shame is an auxiliary to the affects of interest-excitement and enjoyment-joy. He assumes that the instigator of shame affect is any experience that requires rapid decrease in the affects of interest-excitement and enjoyment-joy in situations where the individual wishes to maintain the pre-existing affect state (Nathanson, 1987a). Failure is a powerful instigator of shame since inefficacy is a potent liberator of shame. The inability to carry out a plan that one has generated will activate inadequacy and shame. Whenever the individual is required to end enjoyment-joy in a situation in which the individual wants to maintain the enjoyment, shame affect may be instigated to stop enjoyment-joy in an analogous way to the action of shame as an interest-excitement reducer. This mutual enjoyment is a major force in socialization, but if an individual realises that their partner is no longer enjoying what had been shared, the individual may turn away in shame. In adulthood, mature shame evolves from countless life experiences, different for each developing child, summating eventually to form the particular kind of shame experience characteristic for each adult.

Although Tomkins did not conduct experimental research to verify his assertions, the affect theory developed by Tompkins elicited much research into the facial expression of emotion (e.g. Ekman & Davidson, 1994) and further theories of shame by Kaufman (1989, 1992, 1996) and Nathanson (1987b, 1992). The research and consequent theory conducted by H. Lewis (1971, 1987) has subsequently generated not only elaboration on her observations but also further experimental research into the intricacies of shame.

Lewis (1971) provides a theory, method and a substantial amount of evidence for understanding the role of shame in the formation of psychopathology. Unacknowledged shame is the central concept of her theory (Scheff, 1987). Her work suggests that this concept performs an essential role in both the causation of mental illness and its cure. In her clinical study of shame and guilt, Lewis (1971) provides the basis for the continued development of a theory and method. In her study, hundreds of verbatim excerpts from clinical sessions were used to depict several

basic points: the multiform guises of shame, the affinity between shame and anger, the sources of evoked shame, and the various types of symptoms that occur when shame is not acknowledged or dispelled (Scheff, 1987). The main endeavour of her study is devoted to the interpretation of clinical transcripts, which are dense with emotion and meaning.

Lewis (1971) uses clinical excerpts to illustrate a fundamental hypothesis: If shame is aroused and not dissipated, then the level of symptomatic behaviour will be increased or maintained (Scheff, 1987). In Lewis' (1971) clinical text she demonstrates how instances of unacknowledged shame can be located, line-by-line, in a verbatim text, and how these instances seem to increase or maintain the level of symptomatic behaviour. In the clinical sessions she examined, unacknowledged shame was substantially widespread, yet at the same time invisible to both the therapist and the client. Her findings suggest that most shame is invisible since it takes on one of two forms: either it is "bypassed" or it is manifested in a form that is "overt and differentiated." A brief explanation of each is provided in Table 9.

Table 9

Types of Shame

Types of Shame	
Bypassed	Overt, undifferentiated
• Involves excessive thought or speech, but very little feeling. • Manifested as a brief moment of painful feeling, but little thought, followed by a lengthy episode of obsessive thought and speech. • For example, a scene where one thinks one has been insulted or criticised unfairly. At the moment of insult or when recollecting the incident, a brief jab of painful feeling will be experienced immediately followed by a compulsive replaying of the scene in one's imagination. Often one envisions how one might have responded to the insult in a way that would have been more satisfying than one's actual response. • This may continue for at least several hours or longer.	• Involves considerable painful feeling but little thought. • One experiences painful confusion and unwanted physical manifestations, such as blushing and/or rapid heart beat. • At the same time, one is at a loss for words and also at a loss for thoughts. • One's behaviour and thought seem disorganised or disoriented. • One states that they are feeling peculiar, shy, bashful, awkward, funny, bothered, miserable. • These episodes of painful feeling may be of long duration.

Retzinger (1991) noted a distinction between feeling ashamed which is undifferentiated or overt shame, and a shame state which is bypassed or covert shame. The familiar type is overt shame where feelings of discomfort and bodily arousal such as blushing, sweating, rapid heartbeat are prominent. Covert shame cannot be detected through bodily arousal since bodily arousal is bypassed by the thought processes and the ideation of the self in relation to other people (Retzinger, 1991). The concept of covert shame is invisible, but it has a vitally important effect on relationships. The content of covert shame thought processes and ideation (cognitive mediators) will be discussed below.

The Characteristics of Shame-prone Individuals

Harper & Hoopes (1990) describe covert shame in terms of the shame-proneness of individuals. These people, according to Harper & Hoopes (1990), Kaufman (1989), and Lewis (1971), had cumulative experiences throughout life, which confirmed that the basic core of their

self is defective. Such experiences involve a consistently shaming environment of emotional, physical, and/or sexual abuse which convinces them that they are flawed as people (Kaufman, 1989). These chronic, recurring shame experiences lead people to expect others to victimise them and they consequently acquire shame-prone identities. Since shame-prone people expect others to victimise them, they interpret all of their experience through a perceptual filter that recognises only experiences that are shaming, where they even recreate experiences in relationships that shame them, thereby reaffirming their shame-prone identities (Harper & Hoopes, 1990). The emotional disposition of the shame-prone person is that they will be exposed unexpectedly and repeatedly.

Covert shame in shame-prone individuals remains largely unacknowledged and is primarily detected in the content of their conscious thought, the focus of which is the self and includes a diversity of thoughts about the inadequacy of the self. The thoughts of a shame-prone person may be characterized as self-conscious thoughts where their thoughts are usually divided between imaging self-identity, that is, determining whether the self has been discredited, and imaging the other person, that is, determining whether the other person is discrediting them. Shame-prone individuals tend to be suspicious of everything asked of them. They tend to try to second-guess what you are thinking, and they interpret every incident as validation of how worthless they are, how bad they are, how unlovable they are, how incapable they are of loving and giving to others.

Harper & Hoopes (1990) characterise shame-prone individuals as having difficulty integrating feeling with thinking (some emotions are bypassed by self-conscious thoughts) and consequently, they are not aware of many of their emotions. Yet, paradoxically, many shame-prone individuals behave as a consequence of emotional experience rather than as a consequence of cognition and, consequently, one specific emotion, for example, anger or fear, pervades every aspect of their experience (Harper and Hoopes, 1990). For example, the shame-prone individual may be angry at everything and everybody.

The reaction in a shame experience is to feel out of control, helpless, and to want to hide (Retzinger, 1991). In other words, shame motivates avoidance, the shamed person wants to escape the pain of the situation, or, shame can motivate defensive anger. The extreme pain of shame sometimes leads to retaliatory anger directed toward the real or imagined disapproving 'other' since the shamed person feels humiliated.

The Relationship between Shame and Anger

Tangney (1995b) cites the results of a developmental study of shame and anger that indicated that across all ages, shame-proneness was substantially correlated with anger arousal. The outcomes suggested that shame-prone individuals who are more prone to anger were less constructive with their anger than compared with their less shame prone peers. Shame prone individuals were more likely to use maladaptive and unconstructive responses to anger including malevolent or malicious intentions such as direct, indirect, and displaced aggression, as well as self-directed hostility. In other words, shame-proneness was associated with increasing the likelihood of employing direct verbal and symbolic aggression, indirect aggression, all forms of displaced aggression, self-directed aggression, and ruminative, unexpressed anger. Therefore, there appears to be a unique connection between shame and anger.

Lewis (1971) found that when shame is evoked and not dispelled, a sequence of emotions in rapid succession is triggered. The principal sequence is shame in any of its various forms, followed by anger, which is followed by guilt. The most common sequence appears to be unacknowledged shame, followed by anger. Shame-rage is defined as anger with self and/or with another, that one is experiencing shame, or being ashamed that one is angry (Scheff, 1987). One is in a state of "humiliated fury, in which the rage is bound by shame where the rage cannot be discharged. Scheff (1987) refers to repeating sequences of emotion as "spirals". This concept implies that emotion sequences such as shame-rage may accumulate with such intensity and duration that they are experienced as overwhelming and/or unending. Scheff (1987) suggests that people can have emotional reactions to emotional reactions, which may become a closed loop

such as panic, where a person becomes afraid because one is afraid or because others are so afraid. These intrapersonal spirals can lead to chronic symptoms, and interpersonal spirals can lead to extreme types of collective behaviour like panic (Scheff, 1987).

The essential point of Lewis' research on shame is that if shame goes unacknowledged, it disrupts one's behaviour. Everyone in our society finds it exceedingly difficult to acknowledge his or her own shame (Scheff, 1987). Most of us have felt shame so continuously and for so long that we cease to notice it. If a person experiences the inner turmoil of shame and rage, it interferes with the ability to deal with the world. If a person's shame is of the overt, differentiated type, the shame rage signs occur as part of a pattern of painful fluster that disorganises communicative behaviour, which may produce plentiful pauses, inability to speak, or comprehend and such. Hence, unacknowledged shame has two direct effects: It produces errors in the organisation of behaviour, and it spawns anger. If one feels shame in the company of another person, it is very difficult not to feel that the shame is coming form the other, and that one is being scorned, even if the other is not angry (Scheff, 1987). One way of reacting to scorn, whether real or imaginary, is to feel shame and another way is to feel anger. Often people who feel that they are being scorned will feel both shame and anger, but alternately. Scheff (1987) has conceptualised the alternation between shame and anger as a shame-rage spiral.

Shame plays a significant role in anger and hostility. Covert or unacknowledged shame acts as both an inhibitor and a generator of anger (Retzinger, 1991). Shame renders the person unable to express anger toward the other, while concurrently initiating further anger, which may eventually appear later as demeaning or hostile criticism, blame, insult, withdrawal, or other forms of aggression. Hence, as mentioned earlier, shame is likely to motivate either avoidance or a tendency to retaliate defensively at others involved in the shame-eliciting situation. This retaliatory hostility and anger may serve another defensive function by redirecting the anger outside the self thereby facilitating the retrieval of a sense of power, influence and control (Tangney, 1995b). Tangney (1995b) reported on studies that revealed a positive correlation

between shame-proneness and the tendency to externalise blame. She suggested that externalisation could possibly represent a defensive attempt to shame the shamer and re-empower the self by placing blame outside the self. Consequently, shame may result in, or occur together with, anger and the tendency to project blame outward.

Interestingly, the shamer and the shamed have shared motives. The individual who habitually shames others could possibly be using shame as a weapon to avert personal shame (Kaufman, 1989; Retzinger, 1991; Tangney, 1995b). Hence, a transfer of shame from one person to another occurs in shaming situations. The act of shaming a person can be a powerful method of social control and a form of anger, hostility and aggression. Shaming behaviours towards the person shamed are normally described from the point of view of the shamer and not from the point of view of the person being shamed. The designation of whom is the shamer and who is the shamed is arbitrary.

As discussed earlier, shame and anger often appear together. A shame-based person has a tendency to motivate defences against feeling shame such as a desire to hide or a tendency to deny shame by using the following behaviour: repression, negation of other, anger and violence (Retzinger, 1991). In other words, anger is a common defence against shame. Recognising the code words for anger and shame is important since, as mentioned earlier, Western society has been desensitised to the many variants of shame.

The number of code words for anger is far less than those for shame. Code words for verbal expressions identifying anger involve phrases or words ranging from mild anger, such as being annoyed to extreme forms like being enraged. They include direct indications such as, aggravated, angry, bothered, cross, fuming, furious, incensed, indignant, irate, irritable, mad, pissed, and teed-off, or hostility which refers to overt and covert expressions of shame combined with anger directed toward self, others, animals and objects (Retzinger, 1991). Examples of hostility include abandoning, blaming, causing suffering, criticizing, cruelty, cursing, bullying,

insulting, deprecating, destroying, dislike, fighting, harming, hating, injuring, killing, mutilation, threatening, and violence.

Social emotions are innate self-governing systems that help regulate the distances between people and maintain the survival of relationships (Retzinger, 1991). Anger has two functions. It prepares the person to fight and, concurrently, serves as a communicative function to warn others so that readjustments can be made to the relationship on both sides (Retzinger, 1991). Shame communicates threat or damage to a relationship and also guards the boundaries of privacy and intimacy. It is a message about the degree of closeness or distance in relation to the other in terms of the comfort or well being of the self (Retzinger, 1991). Shame tends to motivate behaviours that are likely to distance relationships either through avoidance or defensive retaliatory anger and hostility (Tangney, 1995b).

Cognitive Mediation of Aggression

Since shame is covert and unacknowledged in angry, hostile and aggressive behaviour, shame is not generally explicitly recognised as an emotional factor in research exploring the cognitive aspects of aggression. Yet, as mentioned earlier, shame is a vital precursor in aggressive acts since it occurs in conjunction with anger.

As cited in Tedeschi & Felson (1994), Leonard Berkowitz, in his theory of aggression, Berkowitz stated that the individual's cognitive appraisals of events control aggressive reactions to aversive stimuli, rather than the stimuli per se. Hence, the aversiveness attributed to a stimulus is the product of the individual's processing of the information through cognitive filters (Tedeschi & Felson, 1994). In other words, the determination of aversiveness is through the interpretative filters of the individual.

Tangney (1995b) introduced a comparable notion while discussing the relationship between anger and shame. Tangney (1995b) noted that shame-prone individuals tended to attribute malicious and malevolent intentions to the person with whom the shame-prone individual was angry, regardless of the other person's actual motives. Slaby & Guerra (1988)

reiterate this concept in their study of the cognitive mediators of aggression. They found that the male aggressive adolescent offenders in their study perceived the other person as a hostile adversary. They found that aggressive adolescent males attributed malicious motives to a fictitious peer in a hypothetical story. This study and others (Dodge & Frame, 1982; Nasby, Hayden & DePaulo, 1980) on cognitive mediation found evidence, which concurred with Tangney's (1995b) research on shame and anger. Slaby & Guerra (1988) speculated that the hostile bias represented either a deficit in information processing or reflected an impaired set of beliefs that affected the interpretation of the evidence and the processing of information. This is as far as these researchers examined the antecedent cognitions that motivate aggression. They had no further explanation for this hostile attributional bias. Yet, there is evidence to suggest that a profitable line of inquiry would be to consider the possibility that shame could be the motivator behind aggression.

The focus of Slaby & Guerra's (1988) article was to examine the cognitions the adolescents used to justify, legitimise and rationalise the use of aggression. Slaby and Guerra (1988) obtained results that are also consistent with Tangney's (1995b) observations about anger and shame that deal with the defensive functions of anger. Slaby & Guerra (1988) found that aggressive adolescents are concerned about their self-image and their self-esteem. Aggressive adolescents believe that aggression will help them avoid a negative self-image and improve their self-esteem. As mentioned earlier, self-image and self-esteem are concepts that are commonly disturbed by shame (Kaufman, 1989). Tangney (1995b) noted that shame motivates anger to defend or retaliate against the possibility of being shamed again. This retaliatory anger facilitates the retrieval of a sense of power, influence and control. Hence, the aggressive person maintains their self-esteem and self-image through the retaliation of perceived hostility from another person. Further study would need to occur to definitely associate the aggressive adolescents' concern for their self-image and self-esteem with shame. This study by Slaby & Guerra (1988) provides a strong indication that further research would be beneficial to determine whether aggressive

individuals are shame-prone and are using anger as a defensive action. Since antisocial-aggressive adolescents were more likely than high- and low-aggressive adolescents to believe that aggression increases self-esteem, this discrepancy may indicate a difference in magnitude of shame between antisocial aggressive adolescents, and high- and low-aggressive adolescents.

As stated earlier in this chapter, Tangney (1995b) disclosed studies that revealed a positive correlation between shame-proneness and the tendency to externalise blame. Tangney (1995b) suggested that externalisation could possibly represent a defensive attempt to shame the perceived shamer (the victim) and re-empower the self by placing blame outside the self. Slaby & Guerra (1988) demonstrated that all aggressive groups in their study believed that the victims deserved aggression. The indication by aggressive adolescents that victims deserve aggression is a form of externalisation and the projection of blame outward toward the victim. More research needs to occur to confirm that aggressive adolescents are in fact shame-prone and are externalising and blaming the victim. Slaby & Guerra (1988) also revealed that antisocial aggressive adolescents were the least likely of all aggressive adolescents to believe that victims deserve aggression. This may be an indication that antisocial aggressive adolescents were abused in some manner and they have experienced the arbitrary and uncontrollable nature of victimisation (Slaby & Guerra, 1988). If antisocial aggressive adolescents were abused, this would also be a further indication that they likely would be shame-prone and this aspect would need to be investigated further.

Another aspect that is related to the externalisation of blame that Tangney (1995b) and Retzinger (1991) mention is that some characteristics of shame-prone individuals are to avoid or deny shameful aspects of the situation. Slaby & Guerra (1988) found that high-aggressive and antisocial aggressive adolescents believe that victims of aggression do not suffer. To believe that victims suffer would be to admit responsibility for a shameful act, a transgression against another person. If these aggressive adolescents were shame-prone individuals, admitting to shame would be extremely emotionally painful and disgraceful, and hence, an admission to be avoided.

Therefore, the aggressive adolescents negated the victim's experience of suffering. More research is needed to determine whether aggressive individuals believe that admitting to a shameful act is emotionally painful and disgraceful. As an aside, some evidence of this already exists where perpetrators of sexual abuse often deny they sexually abused their victims, even when the evidence is clear. Research is needed to indicate whether this denial is because of the pain of shame or some other factors.

Slaby and Guerra (1988) contemplated different possibilities where beliefs could direct either the information that needed to be processed or the aggressive action. They also speculated that the use of aggression in certain situations may be determined by the habitual patterns of cognitive mediation that are essential to aggression but they were unable to determine what specific factors governed the use of aggression by aggressive adolescents. The missing piece of the puzzle may be that beliefs associated with shame are the motivators of aggression. Defences against feeling shame may be the habitual patterns of cognitive mediation that are essential for the use of aggression. The four beliefs employed to justify the use of aggression are observed in the article by Slaby & Guerra (1988) and these beliefs parallel the characteristics of shame-prone individuals described by Tangney (1995b) and Retzinger (1991) that are described and compared in Table 10.

Table 10

Comparison of Beliefs about Aggression

Comparison of Beliefs about Aggression by Various Researchers	
Slaby & Guerra (1988)	Tangney (1995b) and Retzinger (1991)
• The hostile attributional bias of aggressive adolescents, victims deserve aggression	• The attribution of malevolent and malicious intentions to others
• Aggression helps to avoid negative self-image	• The use of retaliatory anger to avoid the shameful aspects of the situation in order to preserve a sense of power, influence and control (self-esteem and self-image)
• Aggression increases self-esteem	• The use of retaliatory anger to deny (negate) the experience of the other person and the shame-prone person's role in the situation
• Victims do not suffer and they deserve the aggression	• The use of retaliatory anger to defend against shame by blaming the victim

Coercive Actions and Aggression

As indicated earlier, shame seems to play a prominent role in anger and hostility. It is unusual to find prolonged anger without the presence of shame and vice versa (Tangney, 1995b). Katz (1988) has made explicit the prominence of shame and the role shame plays in both conflict and physical violence by analysing the role of humiliation underlying murder.

Social interactionist theory of coercive action combines the best ideas and concepts from the traditional theories of aggression and combines them into a model of coercive action. Coercive action is defined as an action taken with the intention of imposing harm on another person or forcing compliance. The language of coercive actions is used in this social interactionist theory instead of the language of the traditional theories of violence and aggression since it links the literature of aggression to other literatures, such as the literature on conflict, social justice, social control, and other forms of social influence. Social interactionist theory uses the language of coercive actions since this language focuses on the social goals of people who use coercion to gain their interpersonal objectives (Tedeschi & Felson, 1994). Also, coercion involves an attempt to gain compliance or to administer harm, while the traditional concept of aggression only refers

to acts intended to do harm. Coercive actions refer not only to criminal violence but also to the judge's sentencing of criminals to prison, and not only to physical abuse of children but also to deprivations or admonishments of parents who punish the misbehaviour of their children. Social interactionist theory intends to explain all kinds of coercion, whether justified on not, no matter what type of harm is attempted, threatened or accomplished (Tedeschi & Felson, 1994).

This model assumes that aggression or coercive action is a form of social influence and is instrumental as a means leading to various ends (Tedeschi & Felson, 1994). The purpose of these coercive actions is to change the target person in some way. The intention is to compel behaviour, deter behaviour, to inflict discomfort, to lower status, to change dispositions, et cetera. The social interactionist theory adopted a decision making model to explain why actors choose to perform coercive actions. The actor in this model is viewed as typically examining alternative means of achieving three major social goals: (a) to control the behaviour of others, (b) to restore justice, and (c) to assert and protect identities (Tedeschi & Felson, 1994).

In social interactionist theory, coercive action is defined as action taken with the intent of imposing harm on another person or forcing compliance. Threats, bodily force, and punishments are the three types of coercive actions. A threat is a communication of intent to do harm. Bodily force is the use of physical contact to compel or constrain behaviours of another person. Punishment is an act that is intended to do harm.

In this scheme, intent is defined in the context of decision-making by the actor and refers to the expected value connected with a chosen act. An intentional act is executed with the anticipation that it will produce the expected proximate outcome of value to the actor (Tedeschi & Felson, 1994). The proximate outcome, or goal, is valued because it is expected to produce some valued terminal outcome, the motive. The goal of a contingent threat is compliance. The contingent threat is issued when the actor places a demand and warns that punishments will result from non-compliance. Compliance is valued because is brings money, safety, sexual gratification or something else of value.

In the case of punishment, harm is the expected outcome but harm has no intrinsic value, but harming another person is instrumental in acquiring other values, such as deterrence, justice, and desired social identities. Tedeschi & Felson (1994) proposed three distinct forms of harm. Physical punishments involve directing physical stimuli to exact bodily discomfort or biological damage to a target person. Deprivations are attempts to restrict opportunities or take away values possessed or expected by the target person. Finally, social harm involves damage to the social identity of target persons and lowering of their power or status.

Tedeschi & Felson (1994) argued that no matter how impulsive the coercive action appears, it involves a series of decisions. The first decision to be made is whether or not to use coercion or some other action, and if coercion is chosen what kind and magnitude, and then how to perform the action. Other factors that are considered in the decision include the value of the outcome, expectations about success in achieving that outcome, expectations about incurring costs, and the negative value of the costs. Decisions are always involved in coercive action, although there may be variation in the amount of thought given to decisions about whether to use coercion or not.

Individuals assign value to both outcomes (terminal values) and means for accomplishing those outcomes (procedural values). When conflicts over terminal values exist with other people, coercion is more likely, particularly when there is scarcity and the rules of distribution are unclear. The decision making of the individual when considering coercive action also includes the values attributed to both the means and the ends (Tedeschi & Felson, 1994).

Coercive actions are executed to acquire valued outcomes. Some of the valued outcomes may be achieved by the compliant behaviour of target people or by directly harming the target person. Doing harm may serve to gain future compliance, but harm is also used to remedy injustices and to improve and protect social identities. The coercive actions used to gain compliance, redressing justice, and protecting identities are somewhat different, although any given incident may involve all of these processes (Tedeschi & Felson, 1994). In the following

table (Table 11), the valued terminal outcome (motives) and the processes of coercive action for each motive or combination of motives is outlined according to social interactionist theory. Also in this table, the parallel and similar ideas expressed by Tangney (1995b), Slaby and Guerra (1988), and Harper and Hoopes (1990) are compared with the motives and processes of coercive action as outlined by Tedeschi and Felson (1994). The motives and processes of coercive action described by Tedeschi and Felson (1994) will be used as a framework for comparison between the theories by Tangney, Slaby and Guerra, Harper and Hoopes, and Tedeschi and Felson.

Table 11

Comparison of the Attributes of Social Interactionist Theory with Self-conscious Affect Theorists

Motive	Processes of Coercive Action	Tangney	Slaby & Guerra	Harper & Hoopes
Compliance	• More likely to use coercive actions when individuals are pessimistic about the success of noncoercive forms of influence. • Coercive actions are used by weaker parties who expect to be attacked by powerful adversaries and who expect that greater costs would be incurred if coercive actions were not performed. • When there is social conflict and interests diverge, each contender may be tempted to use coercive actions to force the other to act against his or her own interest.	• Shame-prone people tend to attribute malicious and malevolent intentions to the other person.	• Male aggressive adolescent offenders perceived the other person as a hostile adversary.	• Shame-prone people expect to be victimised. • They interpret all of their experiences through a perceptual filter that recognises only shaming experiences

(Table continues)

Table 11 (Continued)

Motive	Processes of Coercive Action	Tangney	Slaby & Guerra	Harper & Hoopes
The Justice Motive and the Expression of Grievances	• The formation of a grievance is based on the attribution of blame. • A person may attribute blame when none is warranted. • Blaming others is a way of deflecting blame from oneself. • The attribution of blame and the perception of injustice cause the individual to experience anger. • Anger affects cognitive and behavioural functioning in ways that increase the likelihood of coercive actions. • Social skills and argumentative skills deteriorate and as a result accusations and insults may result in coercive interactions. • Sometimes the grievant may make a claim for some remediation by the wrongdoer. • The grievant may punish the wrongdoer as a form of retributive justice. • An alleged offender may retaliate further enraging the grievant leading to escalation.	• Positive correlation between shame-proneness and the tendency to externalise blame. • Shame motivates either avoidance or a tendency to retaliate defensively • Retaliatory anger and hostility facilitate the retrieval of a sense of power, and control.	• Victims deserved the aggression • Victims don't suffer.	• A characteristic of shame – proneness is using a blaming social interaction pattern. • By turning on others in contemptuous ways, shame-prone individuals distract others from their hidden shame. • Rageful behaviour (yelling, name-calling, sarcasm, physical threat and violence) is often manifested when there is a threat that a person's shame will be discovered.

(Table continues)

Table 11 (Continued)

Motive	Processes of Coercive Action	Tangney	Slaby & Guerra	Harper & Hoopes
Taking and Giving Offence	• A person who consistently violates distributive, procedural, or interactional rules is likely to be targeted frequently by grievants seeking retributive justice. • People with hostility biases tend to interpret the behaviour of others as hostile even when it is not. • Individuals with low self-esteem tend to be quick to take offence, moreso than individuals with high self-esteem. • Personal insecurity may leave a person susceptible to being sensitive to any slight and to take an attack on their identity very seriously. • People with low self-esteem may be more envious of others if they see their own outcomes or accomplishments as relatively impoverished, and they may attempt to lower the outcomes of others to produce redistributive justice.	• Shame-prone individuals attribute malicious and malevolent intentions to the other person, regardless of the other person's actual motives.	• Male aggressive adolescent offenders perceived the other person as a hostile adversary. • Aggressive adolescents believe that aggression will help them avoid a negative self-image and improve their self-esteem.	• Shame-prone individuals expect to be exploited or harmed by others. • As long as shame-prone individuals stay powerful, they keep others from discovering their hidden shame.

(Table continues)

Table 11 (Continued)

Motive	Processes of Coercive Action	Tangney	Slaby & Guerra	Harper & Hoopes
Social Identities	• In general, people have strong concerns about the images of themselves that they project and social identities play an important part in coercive interactions. • A violation of norms of politeness and insulting behaviour by others casts the individual into a negative identity and motivates the individual to "save face".			• As long as shame-prone individuals stay powerful, they keep others from discovering their hidden shame.
	• By retaliating, the individual can lower the status of the norm violator and can demonstrate his or her own power, courage and competence. • By putting the antagonist down, retaliators can put themselves "one up" and restore their status. • The person losing the verbal battle may turn to physical violence as a face-saving gesture. • In general, the presence of an audience increases identity concerns and the likelihood of retaliation in order to save face.	• Retaliatory anger and hostility facilitate the retrieval of a sense of power and control.	• Aggressive adolescents believe that aggression will help them avoid a negative self-image and improve their self-esteem.	• Rageful behaviour (yelling, name-calling, sarcasm, physical threat and violence) is often manifested when there is a threat that a person's shame will be dis-covered. • A charac-teristic of shame-proneness is using a blaming social interaction pattern.

(Table continues)

Table 11 (Continued)

Motive	Processes of Coercive Action	Tangney	Slaby & Guerra	Harper & Hoopes
Influence and Self-Presentation	• Social influence through self-presentation is an attempt to influence other people with the goal directed at changing the cognitive or emotional states of the target individual. • Intimidation tactics are expected to inspire fear, which then is expected to result in compliance. • Strategic self-presentations such as competence, attractiveness, status, trustworthiness, and credibility, which cultivate long term reputations, increase the effectiveness of threats, promises, and persuasion. • The effect of such strategic identities is the perception of the strategy as an attempt to reduce the target individual's power or status. • This perception is usually enough to motivate the target individual to engage in face-saving actions to restore and even bolster status.		• Aggressive adolescents believe aggression will help them avoid a negative self-image and improve their self-esteem.	• As long as shame-prone individuals stay powerful they keep others from discovering their hidden shame.

(Table continues)

Table 11 (Continued)

Motive	Processes of Coercive Action	Tangney	Slaby & Guerra	Harper & Hoopes
Justice and Self-Presentation	• When unjust actions convey disrespect and lower status, in all probability, the victim will be motivated to save face.			
	• The victim of both an affront and an unjust action will likely be more punitive since the person will attempt to restore status by putting the other person down, restore justice by getting even and save face by winning. • Those motivated by face-saving prefer to perform the punishment themselves and they also prefer that the target individual knows at whose hand they suffer.	• Retaliatory anger and hostility facilitate the retrieval of a sense of power and control.	• Aggressive adolescents believe aggression will help them avoid a negative self-image and improve their self-esteem.	• Rageful behaviour (yelling, name-calling, sarcasm, physical threat and violence) is often manifested when there is a threat that a person's shame will be discovered.
Protective Self-Presentation	• A successful attack on a third party may help the person restore, at least to some extent, an identity as tough or competent. • By changing competitors, the individual shifts to a contest that is winnable.	• Retaliatory anger and hostility facilitate the retrieval of a sense of power and control.	• Aggressive adolescents believe aggression will help them avoid a negative self-image and improve their self-esteem.	• Rageful behaviour (yelling, name-calling, sarcasm, physical threat and violence) is often manifested when there is a threat that a person's shame will be discovered.

(Table continues)

Table 11 (Continued)

Motive	Processes of Coercive Action	Tangney	Slaby & Guerra	Harper & Hoopes
Secondary Gains for Coercive Actions	• When a person is motivated to use coercion to protect identity, beliefs about justice may facilitate a coercive act and justice, then, is an added value or secondary gain. • When a person considers using coercive actions to gain compliance or restore justice, the secondary gain associated with enhanced identity will increase the likelihood that the person will perform the coercive action.			

In summary, social interactionist theory describes various motives for coercive actions. The motives to restore justice and defend identities have different implications for the subsequent course of interaction, despite the possible activation of both in a given situation. If an aggrieved person decides to inflict retribution, then the punishment is made to fit the severity of the transgression and retributive justice is a matter of getting even. Since the goal in a contest over identities is to win, the defence of identities in this circumstance is likely to escalate and involve severe harm. People who are motivated to defend identities prefer to carry out face-saving or face restoring coercive acts themselves.

The theories by Tangney (1995a), Slaby and Guerra (1988) and Harper and Hoopes (1990) propose that the underlying motivation behind rage, hostility, and aggression (coercive action) is to improve a person's sense of power and control, improve their self-esteem, assure a positive self-image and ensure their shame remains hidden from others. These ideas coincide with

Tedeschi and Felson's (1994) explanation for why defending identities and restoring justice are fundamentally necessary to a person using coercive action. The theories of shame and beliefs about aggression add depth to the theory of coercive action.

Tedeschi and Felson (1994) proposed that the processes described by social interactionist theory are universal, applying to men and women, to young and old, to members of all ethnic and religious groups, and to all cultures. They also contend that learning experiences, temperament and other individual-differences factors interact with situation factors to determine the type and magnitude of coercion used. In the above section, the processes involved in the protection of social identities and self-presentation were described. Although, in the description of the processes of protecting social identities, the concept of shame was not explicitly used, the concept of saving face was an important factor in the protection of social identities. Saving face is related to restoring one's dignity after being shamed. This concept and shame will be used more extensively in the next section where a theory of violence will be described to illustrate how shame and violence are related.

Shame and Violence

As mentioned earlier, social interactionist theory means to explain all kinds of coercion, whether justified on not, no matter what type of harm is attempted, threatened or accomplished (Tedeschi & Felson, 1994). Therefore, violence is a type of coercive action. James Gilligan, a forensic psychiatrist, uses his clinical sessions with inmates in a maximum security penitentiary as evidence to explain his theory of violence. Although he may not have considered all possible intervening variables, Gilligan (1996) unequivocally stated that shame is the principal cause of all violence toward other individuals, the self or entire populations. Gilligan (1996) argued that violent men who are incarcerated in maximum security prisons have been shamed and have experienced contempt and disdain many times during their lifetime. He claims that the purpose of violence is to diminish the intensity of shame and replace it with pride, consequently preventing

the individual from being overwhelmed by the feeling of shame. Gilligan found that men who feel ashamed are unlikely to become violent toward others unless several preconditions are met.

During his work with inmates of the penitentiary, Gilligan was able to ascertain the first precondition: a secret carefully guarded by violent men. The secret is that violent men feel deeply and chronically ashamed of matters that are so trivial that their very triviality makes it even more shameful to feel shame about them, and consequently they are ashamed even to reveal what shames them. Paradoxically, it is the very triviality of the precipitants of violence that makes these incidents so overwhelmingly shameful. These men will hide this secret behind a defensive mask of bravado, arrogance, self-satisfaction, studied indifference or "machismo". Many violent men would rather die than to disclose what is distressing them, or even that anything is distressing them. They display a mask of self-assurance behind which is a person who feels vulnerable not just to "loss of face" but to the total loss of honour, prestige, respect, and status. They fear the disintegration of identity, especially their adult, heterosexual identity, their selfhood, personhood, rationality and sanity. Gilligan suggested that the amount of shame that a man needs to feel in order to become homicidal is so intense and so painful that it threatens to overwhelm him and bring about the death of the self, cause him to lose his mind, his soul, his sacred honour. According to the social interactionist theory of coercive action, this is precisely the process that was described to preserve one's social identity whereby insulting behaviour throws the individual into negative identity and motivates the individual to save face (Tedeschi & Felson, 1994).

When these men perceive themselves as having no non-violent means of warding off or diminishing their feelings of shame or low self-esteem, such as by socially rewarded economic or cultural achievement, or high social status, position, and prestige, then the second precondition for violence is met. When no other alternatives appear possible, they will use violence as a "last resort" to deflect shame (Gilligan, 1996).

When a person lacks the feelings or emotional strength that usually inhibit the violent impulses that are stimulated by shame, then the third precondition for engaging in violent

behaviour is met. The person who is deluged by feelings of shame is, by definition, experiencing a psychically life-threatening lack of love and the person in that condition has no love remaining for anyone else (Gilligan, 1996). Consequently, the person has no love and guilt toward others, or fear for the self, the very emotions that would inhibit violent behaviour.

Gilligan (1996) noted that being assaulted, punished or humiliated are conditions that increase the feelings of shame in people and decrease the degree of guilt these people feel. This is the reason why the more harshly children or criminals are punished, the more violent they become, since their feelings of shame increases, which then simultaneously decreases their capacities for feelings of love for others and of guilt toward others.

Essentially, Gilligan (1996) agreed with Lewis (1971, 1987) and Scheff (1987) when he suggested that the essential condition for committing violence is the presence of overwhelming shame. Shame then stimulates rage and violent impulses toward the person in whose eyes the person feels shamed. In this case, when the feelings of shame, rage and violent impulses are present, love and/or guilt, the feelings that would normally inhibit the expression of those feelings and the acting out of those impulses, are absent. Gilligan notes that all people have experienced feelings of shame such as feelings of inferiority, rejection, and embarrassment and yet not everyone becomes violent. Gilligan suggests that the reason that most people do not commit violent acts despite the fact that they are exposed so feelings of shame throughout a person's lifetime is that most people have non-violent ways to protect or restore their wounded self-esteem. Or, in the situations in which they find themselves, violent behaviour would not get them what they needed. And finally, most people have sufficient guilt and empathy toward others that will not allow tem to engage in lethal violence except under unlikely situations.

Most of the time the people who are identifiably violent are not violent all the time and most of the time hurt no one. Their violence occurs in brief, acute crises. Violence only occurs when an incident happens that intensifies their feelings of being humiliated, disrespected, or dishonoured to the extent that it threatens the coherence of the self. Or, violence occurs when they

find themselves in a specific situation from which they feel that they cannot withdraw non-violently except by "losing face" to a catastrophic degree.

The argument and theory of shame and violence put forth by Gilligan (1996) from his experience with violent men in prison seems to fit the motives for Justice and Self-Presentation and Social Identities described by Tedeschi & Felson (1994) that are summarised again in Table 12.

Table 12

Summary of the Motives and Processes for Coercive Actions Similar to Gilligan's Observations of Violent Men

Motives	Processes
Justice and Self-Presentation	• When unjust actions convey disrespect and lower status, in all probability, the victim will be motivated to save face. • The victim of both an affront and an unjust action will likely be more punitive since the person will attempt to restore status by putting the other person down, restore justice by getting even and save face by winning. • Those motivated by face-saving prefer to perform the punishment themselves and they also prefer that the target individual knows at whose hand they suffer.
Social Identities	• In general, people have strong concerns about the images of themselves that they project in a situation and social identities play an important part in coercive interactions. • A violation of norms of politeness and insulting behaviour by others casts the individual into a negative identity and motivates the individual to "save face". • By retaliating, the individual can lower the status of the norm violator and can demonstrate their own power, courage and competence. • By putting the antagonist down, retaliators can put themselves "one up" and restore their status. • The person losing the verbal battle may turn to physical violence as a face-saving gesture. • The social interactionist approach predicts strong audience effects on the use of coercion.

Gilligan (1996) claims that violence is the result of the attempt by people to protect themselves from humiliation who have been so often humiliated that they feel they have no other

recourse to preserve their dignity. Gilligan (1996) states that the inmates at the penitentiary where he works were tremendously shamed and humiliated throughout their lives starting in childhood. This fits the theory of coercive actions that was proposed by Tedeschi & Felson (1994) where coercive actions are motivated by the need to preserve social identity and self-presentation. These main ideas find further support in research in the cognitive mediation of aggression.

In summary, covert shame has gone underground and is not recognised or acknowledged either by individuals in everyday interactions or by most researchers investigating situations involving shame, as in research concerning aggression. The characteristics of shame-prone individuals and the beliefs that mediate the use of aggression by adolescents have remarkable similarities. With further investigation into the specific cognitions and beliefs of shame-prone and aggressive individuals, a comprehensive theory of the cognitive mediators integrating shame and aggression could be constructed.

Measures

There are two broad categories that classify the measures of shame and guilt. The first category assesses emotional states, i.e., feelings of shame and guilt in the moment, and the second assesses emotional traits or dispositions, i.e., shame-proneness and guilt-proneness. The assumption underlying the dispositional measures is that although most people have the potential to experience both emotions during their lifetime, there are individual differences in the degree to which people are prone to experience shame and/or guilt across a variety of situations involving transgressions or failures (Tangney, 1996).

A collection of scales was developed which assess guilt-proneness without considering shame-proneness (Buss & Durkee, 1957; Klass, 1987; Kugler & Jones, 1992; Mosher, 1966; Ottenbacher & Munz, 1973), or vice versa (Cook, 1989). Various different formats are employed by these measures, such as, the selection of a single adjective, ratings of descriptive statements, forced choice alternatives, ratings of likely emotional responses to specific situations, and qualitative analysis of narrative responses to specific situations.

Ottenbacher & Munz (1973) developed the G-Trait scale of the Perceived Guilt Index, which is basically a single-item measure. Participants are asked to select from a list of 11 adjectives that vary in level of guilt the one adjective that best describes how they "normally feel". On the Guilt scale of the Buss-Durkee Hostility-Guilt Inventory (Buss-Durkee, 1957), respondents indicate agreement or disagreement with nine descriptive statements (e.g., "I am concerned about being forgiven for my sins"). The Trait Guilt scale of the Guilt Inventory devised by Kugler and Jones (1992) consists of 20 items (e.g. "Guilt and remorse have been a part of my life for as long as I can recall") rated on a five-point scale. The Mosher Forced-Choice Guilt Inventory (Mosher, 1966) is composed of 79 incomplete sentence stems, each follows by two sentence completions from which the participants must chose, producing three subscales of Hostility-Guilt (29 items), Sex-Guilt (28 items), and Morality-Conscience (22 items). In the Situational Guilt Scale devised by Klass (1987) respondents rate their most probable emotional reactions to 22 specific guilt-inducing situations. Each of these guilt scales was developed for adults.

The Internalized Shame Scale (ISS) developed by Cook (1989) is comprised of 24 items (with six items from the Rosenberg Self-esteem scale as fillers, each rated on a five-point scale). Cook defines internalized shame as an "enduring, chronic shame that has become internalized as part of one's identity and which can be most succinctly characterized as a deep sense of inferiority, inadequacy, or deficiency." Tangney (1996) suggested that the ISS had difficulties with discriminant validity. She proposed that the ISS correlated highly with self-esteem scales since the ISS essentially measured self-esteem rather than shame.

Another approach consists of checklists of shame and guilt-related adjectives, requesting global ratings of how well each adjective describes the participant. Hoblitzelle's (1987) Revised Shame-Guilt Scale (RSGS) is composed of 20 guilt adjectives (e.g., unethical, liable, culpable) and 16 shame adjectives (e.g., mortified, humiliated, embarrassed). Respondents are requested to rate the degree to which each adjective describes them. Harder and colleagues (Harder & Lewis,

1987; Harder, Cutler, & Rockart, 1992) developed the Personal Feelings Questionnaire (PFQ) and the revised PFQ-2. Respondents are furnished with a list of shame and guilt-related affective descriptors (e.g., for guilt, "intense guilt", "regret", "remorse", "worry about hurting or injuring another;" for shame, "embarrassment", "feeling ridiculous", "feeling childish", "feeling disgusting to others") and are requested to rate the frequency with which they experience such feelings. The PFQ is comprised of five shame items and three guilt items. The PFQ-2 is comprised of ten shame items and six guilt items.

These adjective checklists have high face validity, they appear to measure shame and guilt and are easy to administer. However, several problems occur with this approach. Extended adjective checklists, like the RSGS, require very advanced verbal skills. The PFQ measure involves less sophisticated vocabulary but relies on the participant's ability to distinguish between the terms "shame" and "guilt" in an abstract context. Many people use the term "guilt" to refer to both experiences. Thus, perhaps in rating several important PFQ/PFQ-2 guilt items, the participants are reporting a generalised tendency to experience both guilt and shame.

Shame and guilt are often considered as moral emotions that each motivates self-regulatory processes, including hostility and aggression (Ausubel, 1955). These negative emotions are generally assumed to inhibit the expression of socially and morally unacceptable impulses, particularly in the areas of sex and aggression (Tangney, Wagner, Fletcher, & Gramzow, 1992b). Tangney (1996) suggested that only a few empirical studies have been conducted to examine the relation of shame and guilt to anger, hostility, and aggression using the Mosher Forced Choice Guilt Inventory (Mosher, 1966). For the most part, these studies have focused on guilt (Abramson, Mosher, Abramson, & Woychowski, 1977; Ackerman, McMahon, & Fehr, 1984; Fehr, 1979; Mosher, Mortimer, & Grebel, 1968; Schill, 1972; Schill & Schneider, 1970). These investigations have provided evidence of an inverse relationship between guilt, hostility and aggression. Likewise, the Guilt scale derived from the Buss-Durkee Hostility-Guilt Inventory (Buss & Durkee, 1957) appears to be unrelated to indices of overt aggression and

covert hostility. In a study using the Personal Feelings Questionnaire (Harder & Lewis, 1986), both the Guilt and the Shame scales were correlated with the Multiple Affect Adjective Checklist (MAACL) Hostility scale. Therefore, there appears to be an inconsistency in the findings stated in the empirical literature focussing on the relationship between guilt, hostility-aggression.

Also, empirical investigations of the connection between shame and guilt and psychopathology have followed far behind the relevant theory, largely due to the difficulties in the measurement of shame and guilt (Tangney, Barggraf, & Wagner, 1995c). Tangney et al. (1995c), suggest that the reason for the difficulty in measuring guilt and shame and also in finding consistent relationships between shame, guilt, and hostility-aggression is partly because psychologists have failed to distinguish between guilt and shame. Since the Mosher Forced Choice Inventory and the Buss-Durkee Hostility-Guilt Inventory were developed without considering the guilt-shame distinction, these scales assess aspects of both emotions. These scales are not useful in distinguishing between the psychopathological correlates of shame and guilt nor are they helpful in examining the relation of shame and guilt to anger, hostility, and aggression (Tangney, 1996).

There have been few systemic empirical investigations to explore the differential relation of shame and guilt to anger and aggression (Tangney, et al., 1992a). However, psychological theory, clinical observations, and some empirical evidence suggest a positive connection between shame, anger and aggression. In contrast, psychological theory suggests that an inverse relationship exists between guilt, anger, and aggression, although the empirical evidence is somewhat contradictory (Tangney, et al., 1992a).

In an attempt to adjust for this failure of psychologists to distinguish between guilt and shame and also to adjust for the difficulty in measuring these internal affective states directly, Tangney (1990) developed an instrument to assess and differentiate proneness to shame and proneness to guilt. The Self-conscious Affect and Attribution Inventory (SCAAI) is an adult paper and pencil measure of proneness to shame, guilt, externalisation, and pride. It consists of a series

of scenarios that college students are likely to encounter in day-to-day life. Succeeding each scenario, is a scale on each alternative where the participants rate the likelihood of responding in a particular way. The SCAAI contained ten negatively valanced scenarios, three positively valanced scenarios, and a total of 55 associated responses to be rated by respondents.

Responses indicating shame, guilt, externalisation of cause or blame, and detachment/unconcern follow the negatively valanced scenarios. Rather than forcing participants to rate only shame and guilt responses, externalisation of cause or blame and detachment/unconcern were included to provide respondents with a likely range of options. Responses indicating shame, guilt, externalisation and two types of pride, alpha and beta pride, follow the positively valanced scenarios. Alpha pride is the term Tangney (1990) used to label the feelings of pride in the entire self and beta pride is the term used for the feeling of pride originating from evaluation of specific behaviour.

Positively valanced scenarios were included to assess the degree to which an individual is prone to respond with shame or guilt solely in negative situations or in situations regardless of valence. Also, these positive scenarios were included to evaluate the interrelationship of shame, guilt, and pride (Tangney, 1990).

Two methods were used to determine the reliability of the SCAAI, internal consistency and test-retest reliability. The reliability of the four main subscales of the SCAAI, Shame, Guilt, Externalisation, and Detachment as determined by Cronbach's alpha was generally moderate to high (.46 to .82) (Tangney, 1990). Since Cronbach's alpha yields lower bound estimates of reliability when applied to heterogeneous scales, the alpha coefficients are more than satisfactory (Tangney, 1990). For the four main subscales of the SCAAI over a one to five week period, the test-retest reliabilities of .71 to .79 were obtained (Tangney, 1990). Taken together, the results provided strong support for the reliability of the main subscales of the SCAAI.

Tangney (1990) demonstrated that the SCAAI produced two functionally related yet distinct Shame and Guilt subscales. Hoblitzelle (1987) which is an undifferentiated index of

proneness to shame correlated the SCAAI Guilt scale with the Revised Shame-Guilt Scale (RSGS). The RSGS scales showed no correlation to SCAAI Guilt scale, and the SCAAI Guilt scale was more modestly related to the RSGS factors than with SCAAI Shame scale, thus showing that the SCAAI Guilt scale was differentiated from the SCAAI Shame scale. The SCAAI Shame and Guilt subscales were both positively related to the two Mosher Guilt subscales, which Tangney (1990) claimed was an undifferentiated index of both guilt and shame. Thus, the Mosher Guilt subscales were in fact undifferentiated.

Moreover, Tangney (1990) found a strong positive association between the tendency to externalise cause or blame and proneness to shame, but no relationship was observed when considering proneness to guilt. This connection between shame reactions and externalisation of blame is consistent with Lewis' (1971) description of shame-rage or the humiliated fury that often accompanies shame experiences.

Besides providing functionally distinct Shame and Guilt scales, the scenario-based approach demands less advanced verbal skills compared to adjective checklists such as the RSGS (Tangney, 1990). In addition, the scenario-based method does not require respondents to define and differentiate between the terms *shame* and *guilt* in the abstract. Rather, respondents rate phenomenological descriptions of shame and guilt reactions to specific situations, therefore defensive response biases are unlikely to be aroused. Moreover, the SCAAI does not involve time-consuming qualitative analyses of participants' life event descriptions (Tangney, 1990). Consequently, the SCAAI can be used in large sample studies necessary to explore multivariate questions.

Tangney, et al. (1992a, b) suggest that the Test of Self-conscious Affect (TOSCA), an updated version of the SCAAI, be used instead of the SCAAI. They suggest the TOSCA be used since it has several advantages over the original SCAAI. The items in the TOSCA were "subject-generated" rather than "experimenter generated". Since the items are not specifically for college

students, they are appropriate for adults of all ages. The analyses provided by Tangney, Burggraf, & Wagner, 1995c suggest that the TOSCA is more psychometrically sound than the SCAAI.

The TOSCA consists of ten negative and five positive scenarios producing indices of Shame-proneness, Guilt-proneness, Externalisation, Detachment/Unconcern, Alpha Pride and Beta Pride. The new scenarios in the TOSCA were derived from written accounts of personal shame, guilt, and pride experiences provided by a large sample of college students and non-college adults. The new responses were produced from a large pool of affective, cognitive, and behavioural responses provided by a second sample of adults.

The TOSCA-Adol (Test of Self-conscious Affect for Adolescents) is essentially the same structure as the adult TOSCA except that the scenarios and associated responses were taken from, in part, the TOSCA for adults and, in part, from the TOSCA-C for children. Some items were rewritten to make the content more relevant for adolescents. The advantages and limitations of the TOSCA scenario-based measure are outlined in Table 13.

Table 13

Assessment of the Test of Self-conscious Affect (TOSCA)

Advantages and limitations of the TOSCA scenario-based measures	
Advantages	**Limitations**
1. The structure of the scenario-based measures is more conceptually consistent with the current understanding of guilt.	1. Tend to yield lower internal consistency estimates of reliability than adjective checklist measures.
2. Guilt is an emotion, which arises from a negative evaluation of specific behaviours, embedded in local contexts.	2. The estimates of internal consistency are still reasonably high (ranging from .61 to .83, depending on the age), although the alpha coefficient tends to underestimate reliability because of the situation variance introduced by the scenario approach.
3. These measures assess tendencies to experience guilt about specific behaviours, distinct from shame about the self.	3. There are inevitable constraints on the range of shame- and guilt inducing situations represented by these measures.
4. The scenario-based approach is composed of situation-specific phenomenological descriptions of shame and guilt, rather than relying on the participants' ability to distinguish between shame and guilt in the abstract.	4. Items for the TOSCA and TOSCA-C were based on subject generated items as opposed to experimenter generated items.
	5. These measures assess generalised tendencies to experience shame and guilt across a broad range of situations.
5. This approach is less likely to arouse defensive response biases than adjective checklist-type measures.	6. The scenario-based measures may, to some degree, confound shame-proneness and guilt-proneness with moral standards, which would be indirectly involved when evaluating a particular scenario.
6. Scenario-based measures can be adapted easily for use with younger respondents.	7. Scenario-based measures may fail to tap more "maladaptive" forms of guilt.
7. Each of these measures presents participants with a range of age-appropriate situations that are likely to assess the elicitation of shame and guilt.	8. Tangney suggested that guilt becomes maladaptive when it is fused with shame.

Research has been done to develop state measures of shame and guilt in the moment. Two of these measures are mentioned here. The Differential Emotions Scale (DES) developed by Izard (1977) is the most widely used measure of state shame and guilt. Some forms of the DES use single word descriptors of key emotions (e.g., guilt, shyness, sadness, etc.). Other forms rely on clusters of closely related emotion words to describe each key emotion (e.g., for guilt: repent, guilty, blameworthy), each is rated on a five-point scale in reference to the respondent's current

feeling stated. These DES measures share some of the same difficulties as the adjective checklist type measures described above. Although the face validity is very high, these measures rely heavily on the participant's ability to distinguish between the terms *shame* and *guilt*.

The State Shame and Guilt Scale (SSGS) was developed by Marschall, Sanftener & Tangney (1994). It is comprised of brief phenomenological descriptions of shame (five items, e.g., "I feel humiliated, disgraced," "I want to sink into the floor and disappear") and guilt (five items, e.g., I fell remorse, regret," " I cannot stop thinking about something bad I have done") experiences, each rated on a five-point scale. There is some doubt as to the degree to which this measure can distinguish between the shame-about-the-self and guilt-about-behaviour distinction without reference to specific behaviour (Tangney, 1996).

Lewis (1971) used a scheme for coding shame and guilt experiences in narrative accounts and running text borrowed from Gottschalk and Gleser's (1969) coding system. References to adverse criticism, abuse, moral condemnation, and such are scored as guilt markers, and references to ridicule, inadequacy, shame, embarrassment, humiliation and so forth, as shame markers (Tangney, 1996). Tangney (1996) noted that although this approach is appealing because of it wide applicability to many types of data, the disappointing evidence for the reliability and validity of these coding systems have persuaded researchers to abandon these coding attempts to assess shame and guilt.

While the aforementioned researchers used self-report measures to study aspects of aggression in adolescents and college students, in addition, other research approaches are used to study aspects of aggression, such as, video taping interviews of people describing their emotional experiences. Retzinger (1987) used an analysis of both verbal and non-verbal indications of rage and shame in the video taped interviews to study the interrelationship of these phenomena. Retzinger (1987) used video technology to observe and capture fleeting or masked expressions of shame and rage and to identify their association with specific emotions. She proposed that emotional states be charted by observing facial behaviour. When a feeling occurs, specific facial

muscles contract and visual changes appear. Since facial expressions may occur outside conscious awareness, they are usually good indicators of what the person is feeling at any particular instant. Even when a person is trying to mask what is occurring, careful analysis can show the actual emotional states. During the videotaping, each frame is coded according to the time and the frame (e.g., 00:20:04:21, represents the 20th minute, 4th second, and the 21st frame; where 30 frames =1 second). This approach is used to demonstrate the phenomenon of a shame-rage spiral and is essentially a descriptive content analysis of interviews using video recording to collect data.

In conclusion, a range of measures was described for assessing shame and guilt at the dispositional level and at the state or situational level. Also, some conceptual and methodological issues that challenge researchers interested in assessing shame and guilt were discussed in the previous section.

CHAPTER 3

Method

Participants

The participants in this study were adolescent girls ranging in ages from thirteen to eighteen years. Four groups were purposively selected from four different pools of adolescent girls. With permission of the Clinical Director of the Child Protection Division of British Columbia and the University of Victoria Ethics Committee, the aggressive adolescent girls were chosen from children in the care (CIC) of the provincial government in Victoria, British Columbia who are known in the system as assaultive and aggressive teens and from those that are incarcerated by the Attorney General in British Columbia for various illegal activities including assault. The second group was selected from a group of adolescents in-care (CIC) known to be non-aggressive. Also, a third group was chosen from non-aggressive adolescents who attend public school in Victoria. The fourth group was chosen from aggressive adolescent girls known in the public school system (PS) as aggressive but have not been involved with either the Ministry for Children and Families or the Attorney General. The aggressive and non-aggressive adolescents were purposively chosen from caseloads of adolescents who are known by social workers, teachers and professionals as either having an aggressive or non-aggressive relationship style. A sum of 12 girls for each group of aggressive (A) and non-Aggressive (NA) adolescents totalled a sample of 48 adolescents. For each group, 2 participants were selected for each age group. The following table (Table 14) indicates the number of adolescent girls for each age in each group.

Permission was sought from the Director of the Child Protection Division to purposively select and ask adolescents in-care if they were willing to participate in a research study about emotions and beliefs about aggression. They were asked to answer a series of questionnaires that took them no more than one hour in total to answer. Informed consent was obtained from them and their parent or guardian for adolescents (Appendix A, B). Also, adolescents were recruited

through professional contacts who know of non-aggressive and aggressive adolescents using a letter of introduction (Appendix J) and informed consent was again obtained from these adolescents and their parent or guardian.

Table 14

Number of Adolescents for each Age and Group

		Aggressive Adolescents (A)		Non-aggressive Adolescents (NA)	
	Age	CIC	PS	CIC	PS
	13	2	2	2	2
	14	2	2	2	2
	15	2	2	2	2
	16	2	2	2	2
	17	2	2	2	2
	18	2	2	2	2
Total Sample	48	12	12	12	12

For the purposes of this study, the questionnaires were coded, the individuals' age was obtained but no names were applied. No individual adolescent was identified in any publication or presentation and the data obtained from the individuals were analysed in association with all other participants in the study. The procedures used in this study were in compliance with the Ethical Standards and Guidelines of the Canadian and American Psychological Associations.

The participants in this study were a specific subset of the total population of adolescents in the Victoria region, i.e. those adolescents in-care of the provincial government with a small representation of adolescents in the public school system. Hence, the interpretation of the results of this study must be approached with caution.

Data Collection and Data Analysis

Once permission was obtained from the Ministry for Children and Families, social workers were approached for permission to ask the adolescents in-care if they were willing and interested to participate in a research study on emotion for the University of Victoria. Consent forms (Appendix A, B) were faxed or brought in person to the social workers.

Colleagues the Ministry for Children and Families were approached about interviewing their daughters for the study. The parents were provided with a consent form and a letter of introduction to provide to their daughters for their information. The daughters of colleagues were asked about approaching their friends to participate in the study. The adolescents who participated in the study selected both aggressive and non-aggressive public adolescents by approaching friends who might be interested in participating. The consent forms for the participants were provided before the questionnaires were answered. Answering six questionnaires took a maximum of one hour.

The questionnaires were then scored and the scores were entered into a spreadsheet under the appropriate age of the participant in the appropriate group (A or NA). These groups were determined in two ways. First, the social worker or professional who knew the participant described the adolescent as either aggressive or non-aggressive according to the operational definition provided, that is, the adolescent girl was reputed to have caused physical harm to another person. Secondly, the score on the physical aggression subtest of the Buss-Perry Aggression Questionnaire verified this categorisation.

Once the all the scores were obtained questions and issues were examined using the following statistical tests: analysis of variance, Pearson product moment for bivariate correlations, standard multiple regression analysis, and factor analysis.

Procedure

This study consisted of participants answering self-report measures on aggression, self-conscious emotions, self-esteem, shame, and beliefs supporting aggression. When constructs such

as these are measured, issues of construct validity are of primary concern (Eichelberger, 1989). The main concern is that the measures appropriately represent and accurately assess the behaviours, dispositions and beliefs that are being studied. The correlation coefficients between the self-reports and some observable result that the self-report purports to measure must be significant in order to support the construct validity of a measure. Threats to the validity and credibility of this research project are created if the construct validity of a measure is suspect. Therefore, the validity and reliability of the measures were outlined and discussed in the next section called "Measures".

Self-report measures are only accurate to the degree that the person accurately reveals their self-perceptions and is willing to express them honestly. Self-report inventories are subject to malingering or faking (Borg & Gall, 1983). Sometimes participants may respond in a random fashion or deliberately lie, fake or distort their answers, particularly if rapport is not established at the outset.

Sometimes participants respond to items to the content of each item in the way the measure is intended or a general "set" called a response set determines their responses. There are three types of response sets: social desirability, or the set to present oneself in a favourable light; acquiescence, or the set to respond "true" no matter what the content of the inventory item may be; and the set to respond deviantly.

According to Anastasi (1976), the respondent's tendency to choose socially desirable responses on a self-report inventory does not necessarily indicate a deliberate deception. She suggested that the social desirability response set is a façade effect or a tendency to "put up a good front". This response set may indicate a lack of insight into one's own characteristics, self-deception or unwillingness to face up to one's limitations. Anastasi (1976) suggested that the strength of the desirability response is related to the individual's general need for self-protection avoidance of criticism, social conformity, and social approval. Alternatively, the individual who

chooses unfavourable items in a self-description may be motivated by a need for attention, sympathy or help in meeting her personal problems.

Despite the high face validity that self-report measures may possess, they are intrinsically crude measures with restricted applicability. The reliability of the results of these measures is dependent on the candour and honesty of the respondents. The motivation of volunteers for a research project to create a favourable or an unfavourable impression may not be too strong, however, complete sincerity cannot be assumed, because of the prevalence of rationalisations, defensive reactions and other façade effects (Anastasi, 1976).

The reliability of the results may depend upon the ability of the researcher to motivate the participant to answer sincerely. Obtaining informed consent may increase the tendency for the participants to answer the questionnaires honestly. A brief explanation of the purpose of the study may motivate the participants to answer truthfully. Providing the participants with a reward at the end of their response to the questionnaires may enhance motivation. Building a relationship with the respondents may help motivate a sincere response. Ensuring confidentiality and anonymity may also encourage honest responses.

Hypotheses

The theories described in Chapter Two suggested that anger and shame-proneness are related, and that shame-proneness is related to externalising blame, detachment-unconcern and to aggression. In order to determine if, in fact, aggression is related to the state of shame-proneness, a exploratory study were undertaken, which involves proposing questions to be answered by participants.

Tangney, Wagner, Fletcher, and Gramzow (1992) found that shame-proneness was positively correlated to anger arousal, suspiciousness, resentment, irritability, a tendency to blame others for negative events and indirect (but not direct) aggression in a sample of university and college students of both genders. Would the positive correlations found by Tangney et al. (1992) hold true for a sample of adolescent females identified by their community and themselves as

directly hostile and aggressive? In order to begin to answer this question, several other questions would need to be answered. First, the adolescents would need to be identified as aggressive according to an objective measure like the Buss-Perry Aggression Questionnaire (1992). How do identified aggressive adolescent females compare to non-aggressive adolescent females on physical aggression, verbal aggression, anger, and hostility sub-scales? Secondly, the existence of shame proneness needs to be determined for the identified aggressive adolescent females. Then, the identified shame-prone aggressive adolescent females would be compared to identified non-aggressive adolescent females on various characteristics of shame-proneness.

Slaby and Guerra (1988) found that aggressive adolescent youth had beliefs that promoted aggression. How do aggressive adolescent females compare with non-aggressive females in terms of beliefs supporting aggression? How do aggressive adolescent females compare with non-aggressive adolescent females in belief measures about the legitimacy of aggression, that aggression increases self-esteem and avoids a negative self-image in the aggressor, that victims deserve aggression and victims don't suffer?

The concepts developed by Slaby and Guerra (1988), Tangney (1995b) and Retzinger (1991) comparing aggressive adolescent beliefs about aggression and those beliefs held by shame-prone individuals are remarkably similar. Slaby and Guerra (1988), Tangney (1995b) and Retzinger remarked that both aggressive youth and shame-prone individuals attributed malicious or hostile intentions to other people, they both blamed the victim, and they both believed that the use of aggression or retaliatory anger increased their self-esteem. Is there a relationship between the characteristics of shame-proneness and beliefs supporting aggression? The questions or issues that were examined in this study are outlined in Table 15.

Table 15

Questions and Issues Examined in the Study

Theme	#	Research Questions
Shame-proneness and aggression	1	Aggressive adolescent girls will have high scores on the physical aggression subscale of the Buss-Perry Aggression Questionnaire.
	2	Aggressive adolescent females will have high scores on measures of verbal aggression, anger, and hostility compared to non-aggressive adolescent girls.
	3	Identified aggressive adolescent girls will be more likely to report shame proneness than the non-aggressive girls using the Test of Self-conscious Affect for Adolescents.
	4	More aggressive adolescent females compared to non-aggressive will be more likely to report externalisation, detachment and guilt proneness using the Test of Self-conscious Affect for Adolescents. Non-aggressive adolescent girls will be more likely to report pride in self and pride in behaviour.
	5	The anger subtrait as measured by the Aggression Questionnaire is related to the characteristics of shame-proneness.
Beliefs supporting aggression	6	Using the Beliefs supporting Aggression Questionnaire aggressive adolescent girls will be more likely to report beliefs supporting aggression than non-aggressive adolescents on all Belief subscales.
Aggression, shame-proneness and beliefs supporting aggression	8	There is a relationship between the characteristics of shame-proneness and beliefs supporting aggression.
Self-esteem	10	Aggressive adolescent females will be more likely to report having a high self-esteem as suggested by their belief system.
State of Shame Scale	11	Aggressive adolescents will be more likely to report state shame compared to the non-aggressive adolescent girls.

Measures

Operational definitions are a crucial aspect of exploratory studies. Operational definitions help define the groups that possess the characteristics to be studied. The procedures used to define the groups will determine the meaning and applicability of the results. The groups and the concepts to be measured are determined through the use of six questionnaires. The questionnaires, the groups and the concepts they measure are outlined in Table 16.

Table 16

Groups and Concepts Measured

#	Questionnaire	Groups	Concepts Measured
1	Aggression Questionnaire	Aggressive versus Non-Aggressive	• Physical Aggression • Verbal Aggression • Anger • Hostility
2	Test of Self-Conscious Affect	Degree of Shame-Proneness	• Shame • Guilt • Externalising • Detachment/Unconcern • Alpha Pride • Beta Pride
3	Beliefs Supporting Aggression Questionnaire	Aggressive versus Non-Aggressive	• Legitimacy of aggression • Increases self-esteem • Avoids a negative image • Victims don't suffer
4	State Shame and Guilt Scale	Degree of Shame Degree of Guilt	• State of Shame • State of Guilt
5	Rosenberg's Self-esteem Scale	Degree of Self-esteem	• Self-esteem
6	Internalized Shame Scale	Degree of Shame	• State of Shame • Self-esteem

Aggression

Aggression is defined as an action with the intent of imposing harm on another person (Buss & Perry, 1992). Aggression is a subset of coercive action since coercive action involves both the actions that intend to do harm or actions that force compliance. Buss and Perry

(1992) define the personality trait of aggression as having four subtraits: physical aggression, verbal aggression, anger, and hostility. Physical and verbal aggression were defined as behaviour that involves hurting or harming others. Buss and Perry (1992) define anger as feelings of irritation, frustration and the inability to control one's temper. Buss and Perry (1992) define hostility as feelings of a suspicious and jealous nature, feelings that people have malicious intentions, and feelings that other people treat them unfairly for the purposes of this questionnaire.

The Buss-Durkee Hostility-Guilt Inventory (Buss & Durkee, 1957) was the most commonly used as a measure of hostility or aggression. Mark Perry recently revised the original Buss-Durkee (1957) inventory under supervision of Arnold Buss (Buss & Perry, 1992). The recent revision of the self-report scale was undertaken in the hopes that the different problems with the Hostility Inventory would be corrected. The difficulties with the Hostility Inventory include inconsistency in the factor analyses, and the determination and assignment of what some of the items measure (Buss & Perry, 1992). The result was the construction of a new self-report instrument, the Aggression Questionnaire.

No evidence for the test-retest reliability of the original inventory was presented when it was designed over forty years ago (Buss & Perry, 1992). Buss & Perry (1992) indicated that the inconsistency in the factor analysis could be attributed to the lack of stability of the scales over time. The original inventory has a true-false format. The true-false format only estimated the correlations that could be obtained from a more quantitative score such as one achieved from a Likert format. Also, respondents prefer to indicate whether an item applies to them more or less rather than simply indicating yes or no (Buss & Perry, 1992). Correspondingly, psychometric practice approves of a Likert format of at least a five-point scale, e.g., from least characteristic to most characteristic (Anastasi, 1976).

Another difficulty with the Buss-Durkee Hostility Scale was that some individual items in the original Hostility inventory could fit more than one category. For example, the item "I sometimes spread gossip about people I don't like" fits both the Indirect Aggression category and

the Verbal Aggression factor, or the item "When I get mad, I say nasty things" fit both the Verbal Aggression factor and the Irritability Scale. This suggests that the items need to be assigned to scales through empirical means rather than by reasonable guesses (Buss & Perry, 1992).

Buss and Perry (1992) used factor analysis to correlate 52 items for a sample of 406 respondents. Out of the list of 52 items, 23 did not meet the specifications for inclusion in the questionnaire. The criterion for inclusion was for the item to load at least .35 on its own factor but less than .35 on any other factor. In a total sample of 1,253 subjects, 612 males and 641 females were included. The sample was divided into three subsamples of approximately 400 respondents each. Initially, four factors were derived from an opening sample of 406 adult college student respondents. Two subsamples were used to replicate the four-factor structure. The four factors that emerged were Physical Aggression, Verbal Aggression, Anger, and Hostility. When the factors were correlated among themselves, Verbal and Physical Aggression were closely related but they correlated only moderately with Hostility. Anger correlated strongly with all three factors. The total sample of 1,253 respondents was applied to evaluate the internal consistency of the four factors using the alpha coefficient. Table 17 outlines the alpha coefficients of the four factors.

Table 17

The Internal Consistency of Four Aspects of Aggression for the Aggression Questionnaire

Factor	Internal Consistency
Physical Aggression	.85
Verbal Aggression	.72
Anger	.83
Hostility	.77
Total	.89

Each item was rated on a five-point Likert scale, from being the least to the most characteristic of the rater. The score for each scale is the total of these ratings. There are two reversed items, where the rating numbers are reversed, 1 becoming 5, and 4 becoming 2. The scales vary in the number of items and, as a consequence, their means cannot be compared directly. Compared to females, males had significantly higher scores on Physical Aggression, Verbal Aggression, and Hostility, but not on Anger. The sex difference was much larger for Physical Aggression than on the other three scales. In order to derive quantitative estimates of the sex differences, the standardised mean difference for each scale was calculated to determine effect size. Table 18 outlines the effect size of the sex differences obtained for the different scales.

Table 18

The Effect Size of Sex Differences for Aspects of Aggression

Scale	Effect Size
Physical Aggression	.89
Verbal Aggression	.44
Anger	.05
Hostility	.19
Total	.57

The sex difference for Physical Aggression was large, that for Verbal Aggression was moderate, and for Hostility was small. There was no significant effect for Anger. The effect size for the combination of effect sizes was medium (Buss & Perry, 1992). The reliability of the questionnaire was tested twice with one sample of 372 subjects with the interval being nine weeks. The test-retest correlations are outlined in Table 19. For scales with a relatively small number of items, Buss and Perry (1992) propose that the coefficients suggest adequate stability over time.

Table 19

Test-Retest Correlations for the Aggression Questionnaire

Scale	Coefficient
Physical Aggression	.80
Verbal Aggression	.76
Anger	.72
Hostility	.72
Total	.80

Since this questionnaire was devised for college students, caution must be used in extrapolating the findings of this questionnaire to populations of less education and socioeconomic status. They also propose that a different sample may affect the norms but not the factor structure. Buss and Perry (1992) question whether these same four factors would emerge with children as respondents. The authors were able to establish strong evidence for the construct validity of the Physical Aggression scale and weaker evidence for the construct validity of the other three scales. Despite these limitations, Buss and Perry (1992) suggest that the questionnaire can be used to distinguish between violent and non-violent men and delinquent and non-delinquent adolescents, or to divide subjects into high- and low-aggression groups. The Aggression Questionnaire is a retrospective self-report measure of the characteristics of aggressive individuals.

The scores on the Aggression Questionnaire range from 51.2 to 85.2 for women. This suggests that the personality trait of aggression was measured on a continuum. Presumably, highly aggressive adolescent girls have a high rating on the Aggressive Questionnaire. Table 20 outlines the means, standard deviations and the ranges that can be expected from responses to the Aggression Questionnaire.

According to Buss and Perry (1992), the Aggression Questionnaire (Appendix C) has modest construct validity as measured by comparing scores on the questionnaire with observations of the participants' aggressive behaviour from knowledgeable informants. Table 21 contains the correlations between the self-reports and peer nominations. The authors claim that all the correlations were significant ranging from strong to modest, with the correlation for the total score being .31. They suggest that there is strong evidence for the construct validity of the Physical Aggression scale and weaker evidence for the construct validity for the other three scales.

Table 20

Means, Standard Deviations, and Ranges for the Aggression Questionnaire

Scale	Mean	Standard Deviation	Range
Physical	17.9	6.6	11.3 - 24.5
Verbal	13.5	3.9	9.6 - 17.4
Anger	16.7	5.8	10.9 - 22.5
Hostility	20.2	6.3	13.9 - 26.5
Total Score	68.2	17.0	51.2 - 85.2

Table 21

Correlations between Self-reports and Peer Nominations

Scale	Score	# of Items
Physical Aggression	.45	9
Verbal Aggression	.20	5
Anger	.29	7
Hostility	.24	8
Total Score	.31	29

Regarding internal consistency estimates of reliability, the Aggression Questionnaire subscales were lower than that of the full scale as noted in Table 22.

Table 22

Alpha Coefficients for the Aggression Questionnaire

Scale	α Coefficient	Number of Items
Physical Aggression	.85	9
Verbal Aggression	.72	5
Anger	.83	7
Hostility	.77	8
Total Score	.89	29

The original hostility questionnaire (Buss & Durkee, 1957) was used to distinguish between violent and non-violent men, and between delinquent and non-delinquent adolescents Buss & Perry, 1992). The hostility questionnaire was used to assess guilt-proneness (Tangney, 1996). It was also used to determine whether shame-proneness and guilt-proneness were differentially related to anger hostility, and aggression (Tangney, Wagner, Fletcher, & Gramzow, 1992b). It was used to distinguish between high- and low-aggression groups in research (Buss & Perry, 1992). The Buss-Durkee Hostility Inventory, the precursor to the Aggression Questionnaire, was one of the most widely used and well-validated measures of hostility. The items from the previous hostility questionnaire and the aggression questionnaire overlap sufficiently. Buss and Perry suggested that since there was sufficient overlap that the aggression questionnaire would prove as useful as the hostility measure.

Test of Self-conscious Affect

For the purposes of the Test of Self-conscious Affect (TOSCA) (Appendix D), Tangney (1990) defined shame-proneness as the tendency to respond to negative situations with shame. Shame is defined as an affective state stemming from internal, global, uncontrollable, and stable attributions arising from the self's negative evaluation of the self (an evaluation that may or may not have been instigated by real social exposure). The object of concern in shame is the entire self. A negative situation is experienced as a reflection of a "bad self". The entire self is painfully scrutinised and negatively evaluated. There is a sense of shrinking, of being worthless and powerless with shame. Tangney suggests that the object of concern in guilt is some specific action or failure to act. Behaviour is evaluated somewhat apart from the self where there is remorse or regret over the "bad thing" that was done with a resulting sense of tension that motivates reparative action.

Tangney (1990) suggested that the internal consistency estimates for the scenario-based measure for adolescents (TOSCA-A) are high for the shame and guilt scales (.77 and .81 respectively) although the alphas are modest relative to adjective checklist measures. The internal consistency is considered high since the alpha coefficient tends to underestimate reliability in scenario-based measures because each item includes a unique variance associated with it's own scenario in addition to the common variance of the psychological construct of interest.

The reliability for the TOSCA-A is outlined in Table 23.

Table 23

Reliabilities (Cronbach's Alpha) for the TOSCA-A

Scale	Reliability	# of Items
Shame	.77	15
Guilt	.81	15
Externalisation	.76	15
Detachment	.56	10
A-Pride	.51	5
B-Pride	.43	5

The measure consists of scenarios that were derived from narrative accounts of shame, guilt, and pride experiences of several hundred college students, non-college adults and children. Tangney (1996) claims that the measure assesses generalised tendencies to experience shame and guilt in a broad variety of everyday situations and that the procedure used to develop the measures resulted in more "ecologically valid" measures that are extensively applicable to participants in a given age group.

Beliefs

Slaby and Guerra (1988) developed a beliefs questionnaire consisting of 18 statements representing beliefs supporting aggression. Items measured five beliefs supporting aggression: legitimacy of aggression, aggression increases self-esteem, aggression helps to avoid a negative image, victims deserve aggression, and victims don't suffer. A ten-week test-retest reliability study was done with 66 institutionalised delinquents and the reliability coefficient was found to be high (.86). A "true" response on half of the items and a "false" response for the other half indicated beliefs supporting aggression. Calculating a percentage for each measure indicated support for aggression. The number of items for each measure and the alpha coefficients

indicating the internal consistency of items for each of the five belief categories are indicated in Table 24.

Table 24

The Internal Consistency for the Beliefs Questionnaire

Beliefs	Number of Items	α
Legitimacy of Aggression	6	.67
Aggression increases self-esteem	3	.53
Aggression helps to avoid a negative image	3	.68
Victims deserve aggression	3	.72
Victims don't suffer	3	.37

Slaby and Guerra (1988) used this belief measure to discriminate between high-aggressive and low-aggressive adolescents. The percentages that Slaby and Guerra (1988) obtained for every belief across the three groups of adolescent females (low, high and antisocial aggressive females) are contained in Table 25.

Table 25

Percentage of Aggressive Adolescent Females who hold Particular Beliefs

Beliefs	Low	High	Antisocial
Aggression is legitimate	5	20	40
Aggression helps to avoid negative self-image	0	5	45
Aggression increases self-esteem	0	0	25
Victims do not suffer	0	0	10
Victims deserve the aggression	38	50	35

The measure used by Slaby and Guerra (1988) (Appendix E) was developed specifically for the study conducted in 1986 and had a test-retest reliability that was high (Kendall's τ =. 86).

The internal consistency for each of the five beliefs supporting aggression was measured. The alpha coefficients are listed in Table 26 for each belief supporting aggression.

Table 26

Alpha Coefficients Indicating Internal Consistency for Beliefs Questionnaire

Beliefs	Alpha Coefficient	Number of items
Legitimacy of aggression	.67	6
Aggression increases self-esteem	.53	3
Aggression helps to avoid a negative self-image	.68	3
Victims deserve aggression	.72	3
Victims don't suffer	.37	3

Internalized Shame Scale

For the purposes of measuring the state of shame, Cook (1988) defined shame as a score of fifty or higher on the Internalized Shame Scale (Appendix F) as being indicative of painful levels of internalized shame where the person has feelings of inferiority, worthlessness, inadequacy and a sense of being diminished.

The Internalized Shame Scale (ISS) developed by Cook (1989) is comprised of 24 items (with six items from the Rosenberg Self-esteem scale as fillers, each rated on a five-point scale). Cook defines internalized shame as an "enduring, chronic shame that has become internalized as part of one's identity and which can be most succinctly characterized as a deep sense of inferiority, inadequacy, or deficiency." The reliability was tested with clinical and non-clinical populations. Table 27 outlines the reliability coefficients for the shame and the self-esteem items.

Table 27

Alpha Coefficients Indicating Internal Consistency for the Internalized Shame Scale

Scale	α Coefficients		Number of Items
	Clinical	Non-Clinical	
Shame	.70	.63	24
Self-esteem	.67	.73	6

According to Tangney (1996), this state measure of shame seems to measure self-esteem more than shame since the ISS correlates more with measures of self-esteem than it does with measures of shame. A measure of self-esteem is included in this study and scores on the ISS were compared to scores on the Rosenberg (1965) Self-esteem Scale (Appendix G).

Self-esteem

Rosenberg (1965) developed a measure for self-esteem that defines self-esteem as a positive or negative attitude toward an object, the self, in this case. In this scale, high self-esteem connotes that the person feels that she is "good enough", i.e., simply a person who has worth, who respects herself for what she is, respecting all that she is noting both strengths and weaknesses. The person with high self-esteem does not necessarily consider herself superior to others. The individuals with high self-esteem not only accept themselves for who they are, without regret, but they also want to grow, to improve and overcome their limitations.

A person with low self-esteem, according to Rosenberg (1965), does not accept what he observes of himself. The picture this person observes is disagreeable and he wishes it to be different. Low self-esteem implies self-rejection, self-dissatisfaction, and self-contempt.

Rosenberg (1965) argued that the Self-esteem Scale was internally consistent and appeared to have face validity since he compared it with Guttman's Scale of Self-esteem and Leary's scale descriptions as gloomy and disappointed. In addition, he compared scores of low self-esteem to scores of depression, discouragement, and unhappiness and found that they were

related. He proposed that people with low self-esteem would display symptoms of anxiety, be less popular in their social group and gain less respect from their peers. Rosenberg found that his expectations were met, therefore concluded that his measure actually measured self-esteem, had reliability and validity. Rosenberg stated that the reliability of the Self-esteem Scale is .93 and the internal consistency of the items in the scale is .73.

State Shame and Guilt Scale

Marshall, Sanftner, and Tangney (1994) developed a State Shame and Guilt Scale (SSGS) (Appendix H), which is a 15-item measure that assesses self-report state of shame, guilt and pride on a 5-point scale. Each scale consists of five items composed of brief phenomenological descriptions of shame, guilt and pride without specifically referring to a specific behaviour. The following table (Table 28) describes the inter-item reliability of the three scales in the SSGS.

Table 28

Inter-Item Reliability of the State Shame and Guilt Scale

Scale	N	Inter-Item Reliability	Mean	Standard Deviation
Shame	140	.89	7.21	3.31
Guilt	140	.82	7.79	3.33
Pride	140	.87	16.44	4.43

In conclusion, since the aggression questionnaire was used for several decades to distinguish between aggressive and non-aggressive individuals, it has the most information available to researchers. The concepts of shame, guilt, and self-esteem are at various stages of development and as a consequence the developers of the scales measuring these concepts have varying amounts of information about their scales.

CHAPTER 4

Results

The aim of the present study was to explore some characteristics of adolescent girls who were aggressive, i.e. who hurt and harmed other girls or peers. How do aggressive and non-aggressive adolescent girls compare on measures of aggression? Do aggressive adolescent girls feel shame and is the emotion of shame related to various aspects of aggression? How do aggressive adolescent girls compare with non-aggressive girls on other aspects related to shame, such as self-esteem, pride and guilt? How do aggressive adolescent girls compare with other adolescent girls on beliefs about aggression? How are the aspects of shame, guilt, pride, self-esteem, and the beliefs about aggression related to aggression? Can any of these feelings and beliefs predict aggression? The present exploratory study considered the unique circumstances of adolescents in the care of the government and those who were members of the public. Those adolescent girls who were described by peers and adults as aggressive and those who were not considered aggressive participated in this study.

Preliminary Analysis

A preliminary analysis was conducted on twenty-two measures using various SPSS programs to determine the accuracy of the data and the fit between their distribution and the assumptions of multivariate analysis. To reduce moderate skewness and kurtosis, guilt proneness, detached/unconcern, pride in self, pride in behaviour, and positive self-esteem from the Internalized Shame Scale were transformed using square root functions for negatively skewed variables. Beliefs that aggression improves self-esteem, legitimacy of aggression, victims deserve aggression, aggression improves negative self image, victims don't suffer, the low self-esteem/shame from the Internalized Shame Scale, Rosenberg's low self-esteem, state shame and state guilt were transformed using square root functions for positively skewed variables. The variables approximated a normal distribution more closely but remained somewhat skewed even after transformation.

Despite this transformation of the original data, the untransformed data were used for analysis and interpretation. One of the functions of a exploratory study is an exploration of the variables in their original state. The data were not much improved after transformation and were difficult to interpret. Moreover, it is not surprising that the transformed data still remained skewed since the sample purposely included highly aggressive adolescents, which would naturally skew the data. Consequently, the transformation was abandoned.

The adolescent girls, aged from thirteen to eighteen years old, were divided according to Group Status (In-care or Not In-care) and Aggression (Not Aggressive or Aggressive). The means, standard deviations and variances of the four groups were calculated on six measures (Aggression, Test of Self-conscious Affect, Beliefs, Internalized Shame, Self-esteem, and State Shame). For each of the 22 variables, a 2 X 2 analysis of variance (ANOVA) was conducted, with Group Status (In-care or Not In-care) and Aggression (Not Aggressive or Aggressive) as the main factors. All statistical procedures were computed using the Statistical Packages for the Social Sciences, SPSS Graduate Package, Base 8.0 for Windows (SPSS, 1998).

Demographic Description

Parental education and mental illness

The difference between adolescent girls in-care of the Ministry for Children and Families and adolescent girls not in-care was examined for each of the 22 variables. No significant effects for those variables were found between the adolescent girls in-care and those not in-care.

The variables where the difference between in-care and not in-care was significant were for the education of mother and father, parental mental illness and for sexual abuse, physical abuse, and verbal abuse experiences of the adolescent girls. The ANOVAs for parent's education and parental mental illness will be described in this section on education and mental illness. The ANOVAs for abuse with the effect of In-care and Public (not in-care) groups will be discussed in the following section on abuse.

During the preliminary interview the adolescent girls were asked questions about the education of either their biological or their stepparents and whether their parents were diagnosed with a mental illness. The scoring for education consisted of the score of the actual grade up to grade twelve, a score of thirteen if the parent attended college, a score of fourteen if the parent attended university, and a score of one if the adolescent did not know. The scoring for parental mental illness consisted of the scores of zero if the parents were not reported mentally ill by the adolescent, one if one parent was reported mentally ill, and two if both parents were reported as mentally ill. The ANOVAs in Table 29 for the difference between adolescents in-care of the government and those not in-care showed significant main effects for mother's education, father's education and parental mental illness. The magnitude of the effect (omega squared) was calculated and reported for these variables. Group membership accounted for 15.49 % of the variability in mother's education scores, 20.56% of the variability in father's education scores and 13.16% of the variability in parental mental illness scores.

Table 29

Analysis of Variance for the Difference between Public and In-care Adolescents in Parental Education and Mental Illness Scores

Subscales		Sum of Squares	df	Mean Square	F	P	
Mother's Education	Between Groups	136.688	1	136.688	9.805	.003	*
	Within Groups	641.292	46	13.941			
	Total	777.979	47				
Father's Education	Between Groups	252.083	1	252.083	13.424	.001	***
	Within Groups	863.833	46	18.779			
	Total	1115.917	47				
Parental Mental Illness	Between Groups	2.083	1	2.083	8.273	.006	*
	Within Groups	11.583	46	.252			
	Total	13.667	47				

*p<.05, ***p<.005

Table 30

Group Statistics for the Difference between Public and In-care Adolescents in Parental Education and Mental Illness Scores

Scale	Groups	N	Mean	Std. Deviation
Mother's Education	In-care	24	8.79	5.03
	Public	24	12.16	1.60
Father's Education	In-care	24	7.16	5.52
	Public	24	11.75	2.64
Parental Mental Illness	In-care	24	.62	.57
	Public	24	.20	.41

The descriptive statistics for parental education and mental illness (Table 30) reported by adolescent girls showed that the in-care adolescents reported that their mothers' had less education than the mothers' education reported by the public adolescent girls, they reported that their fathers had less education than the fathers' education reported by the public adolescent girls, and the in-care adolescent girls reported more of their parents with mental illness than the reports of public adolescent girls. The in-care adolescent girls also reported that their mothers had more education than their fathers since the mean for in-care mothers' education was grade 8.79 and for their fathers was grade 7.17. Hence, the in-care adolescent girls reported that their parents had less education than the education of the parents reported by the public adolescent girls and the in-care parents also were more often reported to be mentally ill.

Abuse

Data were collected on the frequency of reported physical, sexual and verbal abuse in the sample of 48 adolescent girls. At the time this data were collected, the girls were cautioned about not providing abuse information unless the abuse had already been reported to the Ministry since unreported abuse would need to be reported by the researcher to the Ministry. Hence, all the abuse

reported in the study was previously reported to the proper authorities. The abuse was arbitrarily rated in terms of the types of abuse the adolescent girls reported. A rating of 0 was given if the adolescent reported no physical or sexual abuse. A rating of 1 indicated that the adolescent reported sexual abuse, a rating of 2 indicated reported physical abuse and a rating of 3 indicated both physical and sexual abuse were reported. The number of adolescent girls reporting sexual and physical abuse and the percentage of the total number of girls reporting abuse is displayed in Table 31. The percentage of adolescent girls reporting abuse in the various groups is shown in Table 32.

Table 31

Frequency and Percentage of Adolescent Girls in the Sample Reporting Abuse

	Type of Abuse				
	None	Sexual	Physical	Sexual and Physical	Total
Number	17	6	9	16	48
Percentage	35.4	12.5	18.8	33.3	100

The majority of this sample of adolescent girls reported sexual, physical or both sexual and physical abuse. Adding the percentages of adolescents that reported sexual, physical and both sexual and physical abuse resulted in 64.6% of the adolescent girls reporting some form of abuse regardless of the group category (Table 31). When the girls who reported abuse were allotted into groups and categories of abuse, 91.6 % of the non-aggressive adolescent girls in-care reported physical, sexual or both sexual and physical abuse. Of the aggressive in-care group of girls, 83.3% reported abuse. The percentage of public non-aggressive adolescent girls who reported abuse was substantially less at 24.3 % and 58.3% of the public aggressive adolescent girls reported abuse. This result suggested that more adolescent girls in-care reported abuse (84.5%) than the public adolescent girls (41.6%), an expected result since children usually come into the care of the government because they have been abused in some way.

Table 32

Percentage of Adolescent Girls per Group Reporting Abuse

	Groups				
	Non-aggressive in-care	Aggressive in-care	Public Non-aggressive	Public Aggressive	Total
Type of Abuse	%	%	%	%	%
None	8.3	16.7	75.0	41.6	35.4
Sexual	25.0	8.3	8.3	8.3	12.5
Physical	25.0	8.3	16.0	25.0	18.8
Sexual and Physical	41.6	66.7	00.0	25.0	33.3
Total percentage of girls reporting abuse	91.6	83.3	24.3	58.3	100.0

The differences between groups in the percentage of adolescents reporting abuse were confirmed using analysis of variance (ANOVA) as shown in Table 33 and Table 34. ANOVAs showed a significant main effect for the differences between In-care and Public groups (Table 33) and also for all groups (in-care and aggression) (Table 32) in the number of adolescents reporting abuse.

Table 33

Analysis of Variance for the Difference in In-Care and Not in Care Groups Reporting Abuse

	Sum of Squares	df	Mean Square	F	p
Between Groups	18.750	1	18.750	14.557	.000***
Within Groups	59.250	46	1.288		
Total	78.000	47			

***p<.005

Table 34

Analysis of Variance for the Difference in All Groups Reporting Abuse

	Sum of Squares	df	Mean Square	F	p
Between Groups	24.167	3	8.056	6.584	.001***
Within Groups	53.833	44	1.223		
Total	78.000	47			

***p<.005

Table 35

Multiple Comparisons of All Groups Reporting Abuse

(I) Group	(J) Group	Mean Difference (I-J)		p
In-care Non-Aggressive	Public Non-aggressive	1.5833	*	.001
	In-care Aggressive	-.2500		.583
	Public Aggressive	.6667		.147
Public Non-aggressive	In-care Aggressive	-1.8333	*	.000
	Public Aggressive	-.9167	*	.048
In-care Aggressive	Public Aggressive	.9167	*	.048
		Standard error	.452	

* The mean difference is significant at the .05 level.

The magnitude of effect for group membership was calculated for the difference between In-care and Public groups. Group membership accounted for 22.03% of the variability in the percentage of reported abuse.

The magnitude of effect for group membership was calculated for the difference between all four groups. Group membership accounted for 25.87% of the variability in the percentage of reported abuse. Post hoc comparisons were conducted using the Fisher's least significant difference test (LSD) for the different groups reporting abuse. Significant differences using this procedure reflect at least a .05 level of significance. The results of the post hoc analysis reported

in Table 35 confirm that the difference in the number of adolescent girls reporting abuse between the non-aggressive adolescent girls in-care and the public non-aggressive adolescent girls is significant. There were significantly less public non-aggressive girls who reported abuse than the non-aggressive girls in-care. Significantly fewer public non-aggressive girls reported abuse than any other group of non-aggressive or aggressive girls. Significantly more aggressive girls in-care reported abuse than the either aggressive or non-aggressive public adolescent girls. The number of public aggressive adolescent girls who reported abuse was significantly different from both public non-aggressive girls and aggressive girls in-care. Significantly more public aggressive girls reported abuse than public non-aggressive girls and significantly fewer public aggressive adolescent girls reported abuse than aggressive adolescent girls in-care.

The reported number of meaningful people in the adolescent girls' life who consistently verbally abused them during their childhood was used as a rough indication of the amount of verbal abuse experienced by this sample of adolescent girls. The ratings ranged from 0 to 4. The last rating (4) included a report of 4 or more significant others who verbally abused the adolescent girl. The number of 0-1 significant others reported to have verbally abused the girl were considered as a low degree of verbal abuse, ratings of 2 significant others were considered a moderate degree of verbal abuse, ratings of 3-4 significant others were considered a high degree of verbal abuse (Table 36).

Many aggressive adolescent girls in-care (50%) experienced verbal abuse from 3 or more significant others. Then 25% of the public aggressive girls experienced verbal abuse from 3 or more significant others. Of the total number of adolescent girls in the sample, 20.9% experienced verbal abuse from 3 or more significant others. In contrast, 92% of the non-aggressive adolescents in-care had two or fewer significant others verbally abuse them and 100% of the public non-aggressive adolescent girls had two or fewer significant others verbally abuse them. Of the total number of adolescent girls in the sample, 78.7% experienced verbal abuse from 2 or less

significant others. Many of the adolescent girls in this sample (64.2%) experienced verbal abuse from two or more significant others in their childhood.

Table 36

Percentage of Adolescents Reporting Various Degrees of Verbal Abuse

Degree of Verbal Abuse	Groups: Non-aggressive In-care	Aggressive In-care	Public Non-aggressive	Public Aggressive	Percentage Reporting a Degree of Verbal Abuse
	%	%	%	%	%
Low 0	0.0	0.0	33.3	8.3	10.4
Low 1	16.6	8.3	41.7	33.3	25.0
Moderate 2	75.0	41.7	25.0	33.3	43.3
High 3	8.3	33.3	0.0	25.0	16.7
High 4	0.0	16.7	0.0	0.0	4.2
Total High (3+4)	8.3	50.0	0.0	25.0	20.9

The differences between groups in the number of adolescent girls experiencing verbal abuse from varying numbers of significant others revealed in Table 36 were found to be significant once an analysis of variance was applied to the data. ANOVAs shown in Table 37 and Table 38 revealed significant effects for the differences between groups. ANOVAs showed a significant main effect for the differences between In-care and Public groups (Table 37) and also for all groups (in-care and aggression) (Table 38) in the percentage of adolescents reporting verbal abuse.

Table 37

Analysis of Variance for the Difference in In-Care and Not in Care Groups Reporting Verbal Abuse

	Sum of Squares	df	Mean Square	F	p
Between Groups	10.083	1	10.083	12.944	.001***
Within Groups	35.833	46	.779		
Total	45.917	47			

***p<.005

The magnitude of effect for group membership was calculated for the difference between In-care and Public groups. Group membership accounted for 19.93% of the variability in the percentage of reported verbal abuse.

Table 38

Analysis of Variance for the Difference in All Groups Reporting Various Degrees of Verbal Abuse

	Sum of Squares	df	Mean Square	F	p
Between Groups	16.917	3	5.639	8.556	.000***
Within Groups	29.00	44	.659		
Total	45.917	47			

***p<.005

The magnitude of effect for all groups (in-care and aggression) was calculated for group membership and was found to account for 32.08% of the variability in the percentage of adolescent girls reporting varying degrees of verbal abuse. Post hoc comparisons were conducted using the least significant difference test (LSD) for the different groups reporting varying degrees of verbal abuse.

Table 39

Multiple Comparisons of Groups Reporting Various Degrees of Verbal Abuse

(I) Group	(J) Group	Mean Difference (I-J)	p
In-care Non-Aggressive	Public Non-aggressive	1.0000 *	.004
	In-care Aggressive	-.6667	.050
	Public Aggressive	.1667	.618
Public Non-aggressive	In-care Aggressive	-1.6667 *	.000
	Public Aggressive	-.8333 *	.016
In-care Aggressive	Public Aggressive	.8333 *	.016
		Standard error .331	

* The mean difference is significant at the .05 level.

The results of the post hoc analysis (Table 39) confirm that the differences in the percentage of adolescent girls that reported a various number of meaningful others who verbally abused them were significant. Significantly more non-aggressive adolescent girls in-care than public non-aggressive girls reported experiencing a high degree of verbal abuse (2 or more meaningful others verbally abusing them). Significantly more public non-aggressive adolescents than non-aggressive adolescent girls in-care and than either public or in-care aggressive adolescent girls reported experiencing a low degree of verbal abuse (two or fewer meaningful others who verbally abused them). Significantly more aggressive adolescents in-care than both public aggressive and non-aggressive adolescent girls reported experiencing a high degree of verbal abuse (two or more meaningful others who verbally abused them). Significantly fewer public aggressive adolescent girls than aggressive adolescent girls in-care reported experiencing a high degree of verbal abuse (two or more meaningful others who verbally abused them). Significantly fewer public aggressive adolescents than aggressive adolescent girls in-care reported two or more meaningful others who verbally abused them. It appears that more of both

aggressive groups than both of the non-aggressive groups reported experiencing high levels of verbal abuse.

In summary, the majority of this sample reported being abused, physically, sexually and/or verbally. More adolescents in-care than public adolescents were physically, sexually or physically and sexually abused. More of the aggressive adolescent girls than the non-aggressive adolescent girls reported high levels of verbal abuse.

Are there Differences between Groups on Measures of Aggression?

Of preliminary interest was to verify that the adolescents who participated were included in the correct aggressive or non-aggressive groups. The first issue addressed in this section is specifying how the four groups differ on four aspects of aggression: physical aggression, verbal aggression, anger, and hostility. Group status means and standard deviations for all groups and for all aggression subscales are presented in Table 40. For every aggression subscale, the adolescent girls in care had high scores indicating self-reported aggressive tendencies. Judging from the individual group means, those girls who were in care and were deemed aggressive by adults and peers, reported more aggression and had higher aggressive scores than those girls who were considered aggressive and who were not in care.

Table 40

Group Statistics for Aggression Scores for the Four Groups of Adolescent Girls

		Aggression Measures				
		Physical	Anger	Hostility	Verbal	
Groups	N	12	12	12	12	Group Mean
In Care Non-aggressive	**Mean**	**8.75**	**7.66**	**9.16**	**9.00**	**8.64**
	SD	5.25	5.41	6.78	4.65	5.52
Public Non-aggressive	**Mean**	**8.33**	**8.50**	**11.33**	**8.75**	**9.22**
	SD	3.17	3.39	4.59	2.37	3.38
In Care Aggressive	**Mean**	**28.50**	**17.70**	**19.00**	**13.08**	**19.58**
	SD	5.58	6.34	3.61	4.98	5.13
Public Aggressive	**Mean**	**22.50**	**14.25**	**16.50**	**12.33**	**16.39**
	SD	7.56	4.11	6.31	3.22	5.30

A substantial difference in the score means is apparent between the aggressive and the non-aggressive groups judging from the magnitude of the means when making simple comparisons using group statistics. The magnitude of the aggression group means is two to three times greater than the non-aggressive groups. The highest possible obtained score on the physical aggression subscale is 36 (Buss and Perry, 1992). A score between 25 and 36 is considered highly aggressive. A score between 13 and 24 is considered moderately aggressive and a score between one and twelve is considered low aggressive. Ten out of the twelve adolescent girls in the aggressive in care group obtained scores between 25 and 36. Two out of twelve adolescent girls in the aggressive in care group obtained moderate scores. The scores obtained by the aggressive adolescent girls in care suggested that these girls were in fact grouped according to their highly aggressive tendencies and these adolescents were willing to report their physically aggressive tendencies.

Table 41

Frequency of Aggression Scores for the Four Groups of Adolescent Girls

	Frequencies			
Groups	High Aggressive Scores 25-36	Moderately Aggressive Scores 13-24	Low Aggressive Scores 1-12	N
Aggressive in Care	9	3	0	12
Aggressive Public	5	5	2	12
Non-aggressive in Care	0	4	8	12
Non-Aggressive Public	0	1	11	12
Total	14 29%	13 27%	21 44%	48

The public aggressive adolescent girls obtained scores that were slightly less aggressive than the aggressive adolescents in care (Table 41). Only five out of twelve public aggressive girls obtained scores between 25 and 36, five obtained scores between 13 and 24 and two obtained scores between one and twelve. These public aggressive girls were properly grouped in the aggressive category since almost half of the girls obtained high scores, although the majority did not. The aggressive group category had at least some girls that obtained high scores whereas the non-aggressive group category did not have high scoring girls, only moderate and low scorers.

The non-aggressive in care group also proved to be properly categorised since four out of twelve girls obtained moderate aggressive score and the rest (eight) obtained low aggressive scores. Similarly, in the public non-aggressive group, eleven girls obtained low aggressive scores and one obtained a moderately aggressive score, suggesting that these were, in fact, non-aggressive groups.

The group status difference was further confirmed using ANOVA for comparing aggression scores between groups. ANOVA revealed a significant main effect for the aggression

subscales (Physical, Anger, Hostility, and Verbal) (Table 42) suggesting that there is at least one mean that is different from one other mean within each aggression subscale.

Table 42

Analysis of Variance for the Difference in Aggression Subscale Scores

Subscales		Sum of Squares	df	Mean Square	F	p	
Physical	Between Groups	3668.063	3	1222.688	38.790	.00	***
	Within Groups	1386.917	44	31.521			
	Total	5054.979	47				
Anger	Between Groups	829.750	3	276.583	11.287	.00	***
	Within Groups	1078.167	44	24.504			
	Total	1907.917	47				
Hostility	Between Groups	740.667	3	246.889	8.221	.00	***
	Within Groups	1321.333	44	30.030			
	Total	2062.000	47				
Verbal	Between Groups	180.083	3	60.028	3.840	.01	***
	Within Groups	687.833	44	15.633			
	Total	867.917	47				

***p<.005

For each of the aggression subscales, the magnitude of the effect (omega squared) was calculated. Group membership accounted for a large percentage of the variability in scores for the physical aggression, anger and hostility subscales. Group membership accounted for 70.26% of the variability in the physical aggression scores, 39.13% of the variability in the anger scores, and 31.09% in the hostility scores. A moderate amount of variability of 15.07% was accounted for by group membership in the verbal aggression scale.

What are the differences between aggressive groups and non-aggressive groups in the various aspects of aggression measured in this study? Are aggressive adolescents in care and aggressive adolescents in the public more aggressive than non-aggressive adolescent girls? Post

hoc comparisons were conducted using the Fisher's least significant difference test (LSD) for the Physical Aggression, Verbal Aggression, Anger, and Hostility subscales (Tables 43, 44, 45, and 46 respectively); the significant differences found using this procedure reflect at least a .05 level of significance. These results suggest that there are differences between aggressive groups and non-aggressive groups in every aspect measured by the Buss-Perry Aggression self-report questionnaire.

The least significance difference test revealed a significant difference between aggressive and non-aggressive groups for the dependent variables of Physical Aggression and Anger (Tables 43 and 45). The aggressive groups reported that they were more likely to hurt and harm others (physical aggression) and they were more likely to be physiologically aroused and prepared for aggression (anger) than the non-aggressive groups.

Table 43

Multiple Comparisons of Physical Aggression Scores between Groups

(I) Group	(J) Group	Mean Difference (I-J)		p
In Care Non-Aggressive	Public Non-aggressive	.41671		1.000
	In Care Aggressive	-19.7500	*	.000
	Public Aggressive	-13.7500	*	.000
Public Non-aggressive	In Care Aggressive	-20.1667	*	.000
	Public Aggressive	-14.1667	*	.000
In Care Aggressive	Public Aggressive	6.0000		.073
		Standard error	2.292	

*The mean difference is significant at the .05 level.

Table 44

Multiple Comparisons of Verbal Aggression Scores between Groups

(I) Group	(J) Group	Mean Difference (I-J)	p
In Care Non-Aggressive	Public Non-aggressive	.2500	.878
	In Care Aggressive	-4.0833 *	.015
	Public Aggressive	-3.3333 *	.045
Public Non-aggressive	In Care Aggressive	-4.3333 *	010
	Public Aggressive	-3.5833 *	.032
In Care Aggressive	Public Aggressive	.7500	.644
		Standard error 1.61	

*The mean difference is significant at the .05 level.

Table 45

Multiple Comparisons of Anger Scores between Groups

(I) Group	(J) Group	Mean Difference (I-J)	p
In Care Non-Aggressive	Public Non-aggressive	.41671	1.000
	In Care Aggressive	-10.0833 *	.000
	Public Aggressive	-6.5833 *	.013
Public Non-aggressive	In Care Aggressive	-9.2500 *	.000
	Public Aggressive	-5.7500 *	.040
In Care Aggressive	Public Aggressive	3.5000	.542
		Standard error 2.021	

*The mean difference is significant at the .05 level.

A simple comparison of the magnitude of the means for verbal aggression scores for aggressive girls and for non-aggressive girls in the table of group statistics (Table 40) revealed that the group scores for verbal aggression in adolescent girls fall mostly within one standard deviation of each other. As shown in Table 44, a post hoc comparison using least significant

differences for verbal aggression showed significant differences between aggressive and non-aggressive group means suggesting that both aggressive groups were more likely than the non-aggressive groups to report the use of verbal aggression.

Table 46

Multiple Comparisons of Hostility Scores between Groups

(I) Group	(J) Group	Mean Difference (I-J)	p
In Care Non-Aggressive	Public Non-aggressive	-2.1667	.338
	In Care Aggressive	-9.8333 *	.000
	Public Aggressive	-7.3333 *	.002
Public Non-aggressive	In Care Aggressive	-7.6667 *	.001
	Public Aggressive	-5.1667 *	.026
In Care Aggressive	Public Aggressive	2.5000	.270
		Standard error 2.23	

*The mean difference is significant at the .05 level.

Post hoc comparisons using LSD (Table 46) revealed that both aggressive groups were more likely to report feelings of injustice and ill will (hostility) than the non-aggressive groups.

In summary, ANOVA and the post hoc tests verified that the aggressive and non-aggressive groups were properly categorised in the appropriate groups. In every aspect of aggression measured by the Buss-Perry Aggression Questionnaire, the aggressive groups were more likely than the non-aggressive groups to report aggressive qualities or traits.

Self-conscious Affect: How do the Four Groups Differ on Shame Proneness Measures?

ANOVAS (Table 48) for the scenario based measures of proneness to shame, proneness to guilt, externalisation of blame, detached/unconcern, and pride (TOSCA-ADOL) revealed a significant main effect for the proneness to guilt measure. The magnitude of this effect was calculated and the variability in guilt proneness scores attributed to group membership was 12.24%. The least significant difference test showed that the non-aggressive groups were more

likely than aggressive adolescents to report guilt proneness. The post hoc test did not reveal any other significant differences in means (Table 47). In terms of self-conscious emotions measured by the Test of Self-conscious Affect, more non-aggressive adolescent girls than aggressive adolescent girls were likely to report guilt proneness (Table 49). No other self-conscious measures revealed any significant differences in means between aggressive and non-aggressive groups.

Table 47

Analysis of Variance for the Difference in TOSCA Subscale Scores between Groups

Subscales		Sum of Squares	df	Mean Square	F	p	
Shame proneness	Between Groups	264.167	3	88.056	1.238	.307	
	Within Groups	3130.500	44	71.148			
	Total	3394.667	47				
Guilt proneness	Between Groups	1107.500	3	369.167	3.232	.031	*
	Within Groups	5025.167	44	114.208			
	Total	6132.667	47				
Detachment	Between Groups	9.167	3	3.056	.081	.970	
	Within Groups	1650.5000	44	37.511			
	Total	1659.667	47				
Externalisation	Between Groups	553.833	3	184.611	1.930	.139	
	Within Groups	4208.167	44	95.640			
	Total	4762.000	47				
αPride	Between Groups	70.729	3	23.576	1.953	.135	
	Within Groups	531.250	44	12.074			
	Total	601.979	47				
βPride	Between Groups	66.417	3	22.139	1.977	.131	
	Within Groups	492.833	44	11.201			
	Total	559.250	47				

*p<.05

Table 48

Multiple Comparisons of Guilt Proneness Scores between Groups

(I) Group	(J) Group	Mean Difference (I-J)		p
In Care Non-Aggressive	Public Non-aggressive	3.0000		.495
	In Care Aggressive	11.4167	*	.012
	Public Aggressive	10.2500	*	.023
Public Non-aggressive	In Care Aggressive	8.4167		.060
	Public Aggressive	7.2500		.104
In Care Aggressive	Public Aggressive	-1.1667		.790
		Standard error	4.363	

* The mean difference is significant at the .05 level.

Table 49

Group Statistics for Guilt Proneness

Groups	Mean	N	Std. Deviation
In Care Non-aggressive	45.00	12	6.66
Public Non-aggressive	42.00	12	5.54
In Care Aggressive	33.58	12	12.53
Public Aggressive	34.75	12	14.98

More in-care non-aggressive adolescent girls reported guilt proneness than either in-care aggressive or public aggressive adolescent girls.

How do the Four Groups Differ on Beliefs Measures?

ANOVAS for the belief measures (Table 50) revealed a significant difference in between-group means for legitimacy of aggression. The variability attributed to group membership for the legitimacy of aggression scores was 32.06%.

Table 50

Analysis of Variance for the Difference in Belief Measure Scores between Groups

Subscales		Sum of Squares	df	Mean Square	F	Sig.	
Legitimacy	Between Groups	605.063	3	201.688	8.550	.000	***
	Within Groups	1037.917	44	23.589			
	Total	1642.979	47				
Aggression increases Self-esteem	Between Groups	48.063	3	16.021	2.683	.058	
	Within Groups	262.750	44	5.972			
	Total	310.813	47				
Aggression Avoids Negative Image	Between Groups	30.563	3	10.188	1.693	.182	
	Within Groups	264.750	44	6.017			
	Total	295.313	47				
Victims Deserve Aggression	Between Groups	19.750	3	6.583	1.116	.353	
	Within Groups	259.500	44	5.898			
	Total	279.250	47				
Victims Do Not Suffer	Between Groups	1.167	3	.389	.130	.942	
	Within Groups	131.833	44	2.996			
	Total	133.000	47				

***p<.005

Post hoc comparisons were conducted for the subscale of legitimacy of aggression using the least significant difference test. Significant differences for legitimacy of aggression (Table 52) were found between the aggressive groups and both non-aggressive groups. More adolescent girls in the aggressive groups were likely to agree with the belief in the legitimacy of aggression than non-aggressive groups. A simple comparison of the magnitude of the means in the group statistics table (Table 51) for the legitimacy of aggression reveals that the public non-aggressive group has the smallest mean of all the groups. More adolescent girls in the non-aggressive groups tend to disagree with the belief in the legitimacy of aggression.

Table 51

Group Statistics for Legitimacy of Aggression

Groups	Mean	N	Std. Deviation
In Care Non-aggressive	2.33	12	3.86
Public Non-aggressive	2.08	12	2.31
In Care Aggressive	10.33	12	7.71
Public Aggressive	7.83	12	3.80

Table 52

Multiple Comparisons of Group Means for Legitimacy of Aggression Scores

(I) Group	(J) Group	Mean Difference (I-J)		p
In Care Non-aggressive	Public Non-aggressive	.2500		.900
	In Care Aggressive	-8.0000	*	.000
	Public Aggressive	-5.5000	*	.008
Public Non-aggressive	In Care Aggressive	-8.2500	*	.000
	Public Aggressive	-5.7500	*	.006
In Care Aggressive	Public Aggressive	2.5000		.214
		Standard error	1.98	

* The mean difference is significant at the .05 level.

In summary, belief subscale showed differences between aggressive and non-aggressive groups, the legitimacy of aggression. The subscale for the belief in the legitimacy of aggression produced an expected result with most aggressive adolescent girls reporting agreement in this belief.

How do the Four Groups compare on self-esteem, shame, guilt and pride?

Cook's Internalized Shame Scale (ISS)

ANOVAS for the Internalized Shame Scale (ISS) revealed significant between-group differences in means for both of Cook's positive and low self-esteem scales (Table 53). About 11% of the variability in Cook's positive self-esteem scores were accounted for by group membership and 14.30% of the variability in low self-esteem was attributed to group status.

Table 53

Analysis of Variance for the Difference in Internalized Shame Scale Scores between Groups

Subscales		Sum of Squares	df	Mean Square	F	p	
Positive Self-esteem	Between Groups	258.896	3	86.299	2.969	.042	*
	Within Groups	1278.917	44	29.066			
	Total	1537.813	47				
Low Self-esteem	Between Groups	4882.896	3	1627.632	3.669	.019	*
	Within Groups	19518.917	44	443.612			
	Total	24401.813	47				

*p<.05

Post hoc comparisons (LSD) were conducted for each self-esteem subscale. A significant difference was found for Cook's positive self-esteem subscale (Table 55) between non-aggressive adolescent girls in care and aggressive girls. More non-aggressive girls in care than aggressive adolescent girls were likely to report positive self-esteem. The magnitude of the mean of reported positive self-esteem scores for the non-aggressive groups was larger than for the aggressive girls (Table 54).

Table 54

Group Statistics for Cook's Positive Self-esteem

Groups	N	Mean	Std. Deviation
In Care Non-aggressive	12	18.16	3.38
Public Non-aggressive	12	17.58	4.10
In Care Aggressive	12	13.33	6.15
Public Aggressive	12	13.16	7.08

Table 55

Multiple Comparisons of Group Means for Cook's Positive Self-esteem Scores

(I) Group	(J) Group	Mean Difference (I-J)		p
In Care Non-Aggressive	Public Non-aggressive	.5833		.792
	In Care Aggressive	4.8333	*	.033
	Public Aggressive	5.0000	*	.028
Public Non-aggressive	In Care Aggressive	4.2500		.060
	Public Aggressive	4.4167		.051
In Care Aggressive	Public Aggressive	.1667		.940
		Standard error	2.20	

* The mean difference is significant at the .05 level.

Table 57 reports the post hoc comparisons (LSD) for Cook's low self-esteem subscale revealing that more aggressive girls in care than both non-aggressive groups were likely to report low self-esteem. Judging from the group statistics in Table 56 the mean of reported low self-esteem scores for aggressive girls in care was larger in magnitude than the means of any of the other groups, with public aggressive girls having the second largest magnitude. The public aggressive adolescent girls group did not show a significant difference in low self-esteem from both groups of non-aggressive girls despite the high magnitude of the mean. The standard

deviation of the public aggressive girls includes the means of both non-aggressive groups and the in care aggressive groups suggesting that the public aggressive adolescent girls were similar to both aggressive girls in care and to non-aggressive girls. Non-aggressive girls have much lower magnitudes of low self-esteem, yet still report a substantial amount of low self-esteem.

Table 56

Group Statistics for Cook's Low Self-esteem Measure (ISS)

Groups	N	Mean	Std. Deviation
In Care Non-aggressive	12	28.16	20.97
Public Non-aggressive	12	23.83	10.30
In Care Aggressive	12	49.41	20.90
Public Aggressive	12	40.33	28.13

Table 57

Multiple Comparisons of Group Means for Cook's Low Self-esteem Scores

(I) Group	(J) Group	Mean Difference (I-J)		p
In Care Non-Aggressive	Public Non-aggressive	4.3333		.617
	In Care Aggressive	-21.2500	*	.017
	Public Aggressive	-12.1667		.164
Public Non-aggressive	In Care Aggressive	-25.5833	*	.005
	Public Aggressive	-16.5000		.061
In Care Aggressive	Public Aggressive	9.0833		.297
		Standard error	8.59	

*The mean difference is significant at the .05 level.

David Cook, in the Internalized Shame Scale equated low self-esteem to shame and the positive self-esteem scale to Rosenberg's positive self-esteem scale. According to Cook's measure, aggressive girls in care had a higher likelihood of reporting shame. Although non-

aggressive girls had a lower likelihood of reporting shame, they reported shame also, but to a lesser degree.

This result introduces several questions. If both aggressive and non-aggressive adolescent girls report shame but indifferent degrees, then how can shame be the determining factor in aggression? Is there another factor along with shame that determines aggression?

Rosenberg's Self-esteem Measure

ANOVAS for Rosenberg's Self-esteem Scale in Table 58 revealed a significant main effect for group status for the two measures, positive self-esteem and low self-esteem. The magnitude of the variability in positive self-esteem scores attributed to group membership is 20.54%. The magnitude of the variability in low self-esteem scores attributed to group membership is 21.02%.

Table 58

Analysis of Variance for the Difference in Rosenberg's Self-esteem Scores between Groups

Subscales		Sum of Squares	df	Mean Square	F	p	
Positive Self-esteem	Between Groups	790.917	3	263.639	5.135	.004	***
	Within Groups	2259.000	44	51.341			
	Total	3049.917	47				
Low Self-esteem	Between Groups	730.562	3	243.521	5.259	.003	***
	Within Groups	2037.417	44	46.305			
	Total	2767.979	47				

***p<.005

Least significant difference post hoc comparisons were conducted on the positive self-esteem subscale of Rosenberg's self-esteem measure (Table 59). Significant differences for positive self-esteem were revealed between the aggressive adolescent girls and the non-aggressive adolescent girls. More adolescent girls of both aggressive groups compared to non-aggressive adolescent girls were likely to report low levels of positive self-esteem. In other words, the non-aggressive adolescent girls were more likely to report positive self-esteem.

The magnitude of the means for positive self-esteem for non-aggressive adolescent girls shown in the descriptive statistics in Table 60 is greater than the magnitude of positive self-esteem for aggressive adolescent girls. This result is more definitive than the result obtained using Cook's self-esteem measure.

Table 59

Multiple Comparisons of Group Means for Rosenberg's Positive Self-esteem Scores

(I) Group	(J) Group	Mean Difference (I-J)		p
In Care Non-Aggressive	Public Non-aggressive	-1.3333		.651
	In Care Aggressive	8.3333	*	.007
	Public Aggressive	6.1667	*	.041
Public Non-aggressive	In Care Aggressive	9.6667	*	.002
	Public Aggressive	7.5000	*	.014
In Care Aggressive	Public Aggressive	-2.1667		.463
		Standard error	2.92	

* The mean difference is significant at the .05 level.

Table 60

Group Statistics for Rosenberg's Positive Self-esteem Scores

Groups	Mean	N	Std. Deviation
In Care Non-aggressive	20.50	12	4.73
Public Non-aggressive	21.83	12	5.76
In Care Aggressive	12.16	12	7.52
Public Aggressive	14.33	12	9.64

Post hoc comparisons using least significant differences for Rosenberg's low self-esteem measure (Table 61) revealed significant differences between aggressive adolescent and non-aggressive adolescents. More aggressive adolescent girls than non-aggressive adolescent girls

were likely to report low self-esteem as revealed by the group statistics in Table 62. The aggressive group had a significantly higher mean than the non-aggressive group. Rosenberg's Scale has the ability to demonstrate the variability in the data and can obtain a greater magnitude of effect than Cook's self-esteem scale. Rosenberg's self-esteem measure was able to show a smaller random error attributing more of the variability to the differences between the aggressive and non-aggressive groups. This suggests that Rosenberg's self-esteem measure can more reliably distinguish the amount of self-esteem between groups than Cook's self-esteem measure.

Table 61

Multiple Comparisons of Group Means for Rosenberg's Low Self-esteem Scores

(I) Group	(J) Group	Mean Difference (I-J)		p
In Care Non-Aggressive	Public Non-aggressive	1.2500		.655
	In Care Aggressive	-7.6667	*	.008
	Public Aggressive	-6.5000	*	.024
Public Non-aggressive	In Care Aggressive	-8.9167	*	.002
	Public Aggressive	-7.7500	*	.008
In Care Aggressive	Public Aggressive	1.1667		.677
		Standard error	2.78	

* The mean difference is significant at the .05 level.

Table 62

Group Statistics for Rosenberg's Low Self-esteem Scores

Groups	Mean	N	Std. Deviation
In Care Non-aggressive	3.25	12	5.42
Public Non-aggressive	2.00	12	2.08
In Care Aggressive	10.91	12	7.73
Public Aggressive	9.75	12	9.56

In summary, Cook's Internalized Shame scale and Rosenberg's Self-esteem Scale show similar results. Rosenberg's scale showed that more aggressive girls than non-aggressive girls were likely to report low self-esteem. Cook's scale showed that more aggressive girls in care than non-aggressive adolescent girls were likely to report low self-esteem. More in care aggressive adolescent girls than any other group reported low self-esteem on Cook's measure. Rosenberg's self-esteem measure was able to show a smaller random error attributing more of the variability to the differences between the aggressive and non-aggressive groups than Cook's measure. This suggests that Rosenberg's self-esteem measure could more reliably distinguish between groups in their reporting of self-esteem than Cook's self-esteem measure. If low self-esteem and shame are equivalent as Cook suggests, both measures show that aggressive adolescent girls in care report more shame than non-aggressive adolescent girls but all groups report some degree of shame.

State of Shame and Guilt

ANOVAS for the State of Shame and Guilt measure revealed differences between groups for all the measures to the .05 level of significance (Table 63). The magnitude of the variability in pride scores attributable to group membership is 13.78%. The magnitude of the variability in state shame scores accounted for by group membership is 12.94%. Group membership accounted for 16.24% of the variability in state guilt scores.

Further exploration with post hoc comparisons (LSD) revealed a significant difference between aggressive adolescent girls in care and non-aggressive adolescent girls in care on the pride subscale for the State of Shame and Guilt Scale (SSGS) (Table 65). More non-aggressive adolescent girls in care than aggressive adolescent girls were likely to report pride. Group statistics in Table 64 show that greater numbers of non-aggressive adolescent girls in care reported higher means for pride scores than aggressive adolescent girls who have lower means. Since the standard deviation for public aggressive adolescent girls was large enough to include the means of both non-aggressive groups plus the in care aggressive group, essentially no difference was found between the public aggressive group and the other groups.

Table 63

Analysis of Variance for the Difference in State Shame and Guilt Scores between Groups

Subscales		Sum of Squares	df	Mean Square	F	Sig.
State Pride	Between Groups	234.562	3	78.187	3.558	.022 *
	Within Groups	966.917	44	21.975		
	Total	1201.479	47			
State Shame	Between Groups	205.062	3	68.354	3.378	.026 *
	Within Groups	890.250	44	20.233		
	Total	1095.313	47			
State Guilt	Between Groups	253.062	3	84.354	4.102	.012 *
	Within Groups	904.750	44	20.563		
	Total	1157.813	47			

*p<.05

Table 64

Group Statistics for the State Shame and Guilt Scale

		Measures		
		State Pride	State Shame	State Guilt
Groups	N	12	12	12
In Care Non-aggressive	**Mean**	**15.16**	**2.08**	**3.00**
	SD	5.5405	3.2879	3.0748
Public Non-aggressive	**Mean**	**14.33**	**2.33**	**3.41**
	SD	1.3707	2.7080	3.2039
In Care Aggressive	**Mean**	**11.08**	**7.00**	**8.41**
	SD	4.5017	4.3485	5.4013
Public Aggressive	**Mean**	**9.83**	**5.33**	**6.91**
	SD	5.9212	6.6241	5.7755

Post hoc comparisons, using the least significant difference test, revealed significant differences between means for the shame subscale of the State of Shame and Guilt Scale (Table 66). More aggressive adolescent girls in care than non-aggressive adolescents were likely to report state shame. Group descriptive statistics in Table 64 show that aggressive adolescent girls in care had the highest mean for the shame subscale and non-aggressive adolescents in care had the lowest mean. Since the standard deviation for public aggressive adolescent girls was large enough to include the means of both non-aggressive groups plus the in care aggressive group, essentially no difference was found between the public aggressive group and the other groups.

Interestingly, Cook's low self-esteem or shame scale revealed the same result as Tangney's state shame subscale. Both subscales showed that more aggressive adolescent girls in care than any other group were more likely to report shame.

Table 65

Multiple Comparisons of Group Means for the Pride Subscale of the State Shame and Guilt Scale

(I) Group	(J) Group	Mean Difference (I-J)		p
In Care Non-Aggressive	Public Non-aggressive	.8333		.665
	In Care Aggressive	4.0833	*	.038
	Public Aggressive	5.3333	*	.008
Public Non-aggressive	In Care Aggressive	3.2500		.097
	Public Aggressive	4.5000	*	.023
In Care Aggressive	Public Aggressive	1.2500		.517
		Standard error	1.91	

* The mean difference is significant at the .05 level.

Table 66

Multiple Comparisons of Group Means for the Shame Subscale of the State Shame and Guilt Scale

(I) Group	(J) Group	Mean Difference (I-J)		Sig.
In Care Non-Aggressive	Public Non-aggressive	-.2500		.892
	In Care Aggressive	-4.9167	*	.010
	Public Aggressive	-3.2500		.084
Public Non-aggressive	In Care Aggressive	-4.6667	*	.015
	Public Aggressive	-3.0000		.109
In Care Aggressive	Public Aggressive	1.6667		.369
		Standard error	1.84	

* The mean difference is significant at the .05 level.

For the guilt subscale (Table 65), post hoc comparisons (LSD) between groups revealed a significant difference between aggressive adolescent girls in care and non-aggressive. More aggressive adolescents in care than non-aggressive adolescents in care were likely to report state guilt. Aggressive adolescent girls in care have the highest mean for state guilt and non-aggressive adolescent girls in care have the lowest mean. No significant difference was found between the public non-aggressive group and the public aggressive group.

In summary, out of the total of 22 variables measured in this study, 7 showed significant differences between aggressive and non-aggressive groups. These variables include verbal aggression, physical aggression, anger, hostility, legitimacy of aggression, Rosenberg's positive self-esteem. A summary of the significant differences in the 7 variables is outlined in Table 68. This table shows a general tendency for aggressive adolescent girls to report aggression, Rosenberg's low self-esteem and to report a belief supporting aggression. Aggressive adolescent girls in care show a tendency to report low self-esteem, state shame and state guilt. Non-aggressive adolescent girls show a general tendency to report positive self-esteem. Non-

aggressive adolescent girls in care were likely to report Cook's positive self-esteem, state pride and guilt proneness.

Table 67

Multiple Comparisons of Group Means for the Guilt Subscale of the State Shame and Guilt Scale

(I) Group	(J) Group	Mean Difference (I-J)		p
In Care Non-Aggressive	Public Non-aggressive	-.4167		.823
	In Care Aggressive	-5.4167	*	.005
	Public Aggressive	-3.9167	*	.040
Public Non-aggressive	In Care Aggressive	-5.0000	*	.010
	Public Aggressive	-3.5000		.065
In Care Aggressive	Public Aggressive	1.5000		.422
		Standard error	1.85	

* The mean difference is significant at the .05 level.

Interactions

Upon examination of the means between in-care or public and aggressive and non-aggressive adolescent girls, five variables showed interactions between in-care and public and aggressive and non-aggressive adolescent girls: anger, hostility, guilt proneness, state shame and state guilt.

For anger, in-care aggressive girls reported more anger than public aggressive girls and in-care non-aggressive girls reported less anger than public non-aggressive girls. For hostility, in-care aggressive girls reported more hostility than public aggressive girls and in-care non-aggressive girls reported less hostility than public aggressive girls. In-care aggressive girls reported less guilt proneness than public aggressive girls and in-care non-aggressive girls reported more guilt proneness than public non-aggressive girls. For state shame and state guilt, in-care aggressive girls reported more shame and guilt than both in-care and public non-aggressive girls.

Table 68

Summary of Results of the Differences between Aggressive and Non-aggressive Girls

	Aggressive		Non-aggressive	
Variables	In Care	Not in Care	In Care	Not in Care
Verbal Aggression	More Likely	More Likely		
Physical Aggression	More Likely	More Likely		
Anger	More Likely	More Likely		
Hostility	More Likely	More Likely		
Low Self-esteem (Rosenberg's)	More Likely	More Likely		
Legitimacy of Aggression	More Likely	More Likely		
State Guilt	More Likely			
Low Self-esteem (Shame)(Cook's)	More Likely			
State Shame	More Likely			
Positive Self-esteem (Rosenberg's)			More Likely	More Likely
Positive Self-esteem (Cook's)			More Likely	
State Pride			More Likely	
Guilt Proneness			More Likely	

Differences between Aggressive and Non-aggressive Groups on Measures of Aggression

The issue addressed in this section is specifying how the aggressive and non-aggressive groups differ on four aspects of aggression: physical aggression, verbal aggression, anger, and hostility. Group means and standard deviations for the two groups and for all aggression subscales are presented in Table 69. For every aggression subscale, the adolescent girls who were deemed aggressive had high scores indicating self-reported aggressive tendencies. Judging from the individual group means, those girls who were deemed aggressive by adults and peers, reported more aggression and had higher aggressive scores than those girls who were not considered aggressive.

Table 69

Group Statistics for Aggression Scores for Aggressive and Non-Aggressive Adolescent Girls

		Aggression Measures				
		Physical	Anger	Verbal	Hostility	
Groups	N	12	12	12	12	Group Mean
Non-aggressive	**Mean**	**8.54**	**8.0**	**8.87**	**10.25**	**8.93**
	SD	4.25	4.44	3.61	5.7	4.52
Aggressive	**Mean**	**25.50**	**16.0**	**12**	**17.75**	**17.9**
	SD	7.1	5.5	4.2	5.1	5.5

A substantial difference in the score means is apparent between the aggressive and the non-aggressive groups judging from the magnitude of the means when making simple comparisons using group statistics. The magnitude of the aggression group means is one half to three times greater than the non-aggressive groups.

The group status difference was confirmed using ANOVA for comparing aggression scores between groups. ANOVA revealed a significant main effect for the aggression subscales

(Physical, Anger, Hostility, and Verbal) (Table 70) suggesting that there was at least one mean that was different from one other mean within each aggression subscale.

For each of the aggression subscales, the magnitude of the effect (omega squared) was calculated. Group membership accounted for a large percentage of the variability in scores for the physical aggression, anger and hostility subscales. Group membership accounted for 67.17% of the variability in the physical aggression scores, 37.61% of the variability in the anger scores, and 30.82% in the hostility scores. A moderate amount of variability of 18.27% was accounted for by group membership in the verbal aggression scale.

Table 70

Analysis of Variance for the Difference in Aggression Subscale Scores

Subscales		Sum of Squares	df	Mean Square	F	p	
Physical	Between Groups	3451.021	1	3451.021	98.972	.000	***
	Within Groups	1603.958	46	34.869			
	Total	5054.979	47				
Anger	Between Groups	752.083	1	752.083	29.932	.000	***
	Within Groups	1155.833	46	25.127			
	Total	1907.917	47				
Verbal	Between Groups	176.333	1	176.333	11.729	.001	***
	Within Groups	691.583	46	15.0334			
	Total	867.917	47				
Hostility	Between Groups	675.000	1	675.000	22.386	.000	***
	Within Groups	1387.000	46	30.152			
	Total	2062.000	47				

***p<.005

In summary, ANOVAs verified that the aggressive and non-aggressive groups were properly categorised in the appropriate groups. In every aspect of aggression measured by the

Buss-Perry Aggression Questionnaire, the aggressive groups were more likely than the non-aggressive groups to report aggressive qualities or traits.

Self-conscious Affect: How are Aggressive Adolescent Girls Different from Non-aggressive Adolescent Girls on Shame Proneness Measures?

ANOVAS (Table 71) for the scenario based measures of proneness to shame, proneness to guilt, externalisation of blame, detached/unconcern, and pride (TOSCA-ADOL) revealed significant main effects for the proneness to guilt measure, αpride (pride in self), and βpride (pride in behaviour). The magnitudes of these effects were calculated and the variability in guilt proneness scores attributed to group membership was 14.97%, for αpride was 6.89%, and for βpride was 9.58%. In terms of self-conscious emotions measured by the Test of Self-conscious Affect, more non-aggressive adolescent girls than aggressive adolescent girls were likely to report guilt proneness, αpride, and βpride. No other self-conscious measures revealed any significant differences in means between aggressive and non-aggressive groups.

Table 71

Analysis of Variance for the Difference in TOSCA Subscale Scores between Aggressive and Non-aggressive Groups

Subscales		Sum of Squares	df	Mean Square	F	p	
Shame proneness	Between Groups	33.333	1	33.333	.456	.503	
	Within Groups	3361.333	46	73.072			
	Total	3394.667	47				
Guilt proneness	Between Groups	1045.333	1	1045.333	9.452	.004	***
	Within Groups	5087.333	46	110.594			
	Total	6132.667	47				
Detachment	Between Groups	.333	1	.333	.009	.924	
	Within Groups	1659.333	46	36.072			
	Total	1659.667	47				
Externalisation	Between Groups	147.000	1	147.000	1.465	.232	
	Within Groups	4615.000	46	100.326			
	Total	4762.000	47				
αPride	Between Groups	54.188	1	54.188	4.550	.038	*
	Within Groups	547.792	46	11.909			
	Total	601.979	47				
βPride	Between Groups	65.333	1	65.333	6.085	.017	*
	Within Groups	493.917	46	10.737			
	Total	559.250	47				

*p<.05, ***p<.005

Table 72

Group Statistics for the Test of Self-conscious Affect

Scale	Groups	N	Mean	Std. Deviation
Shame Proneness	Non-aggressive	24	20.00	7.84
	Aggressive	24	21.66	9.20
Guilt Proneness	Non-aggressive	24	43.50	6.18
	Aggressive	24	34.16	13.52
Detachment/Unconcern	Non-aggressive	24	21.50	5.57
	Aggressive	24	21.66	6.41
Externalisation	Non-aggressive	24	19.25	10.26
	Aggressive	24	22.75	9.75
á Pride (Pride in Self)	Non-aggressive	24	13.58	2.76
	Aggressive	24	11.45	4.02
â Pride (Pride in Behaviour)	Non-aggressive	24	11.54	2.51
	Aggressive	24	9.20	3.88

How are Aggressive Adolescents Girls Different from Non-aggressive Adolescent Girls on Belief Measures?

ANOVAS for the belief measures (Table 73) revealed significant differences in between-group means for legitimacy of aggression, the belief that aggression increases self-esteem, and for the belief that aggression avoids a negative self-image. The variability attributed to group membership for the legitimacy of aggression scores was 32.63 %, for the belief that aggression increases self-esteem scores was 12.72%, and for the belief that aggression avoids a negative self-image scores was 7.55%.

Table 73

Analysis of Variance for the Difference in Belief Measure Scores between Groups

Subscales		Sum of Squares	df	Mean Square	F	P
Legitimacy	Between Groups	567.188	1	567.188	24.252	.000***
	Within Groups	1075.792	46	23.387		
	Total	1642.979	47			
Aggression increases Self-esteem	Between Groups	46.021	1	46.021	7.995	.007*
	Within Groups	264.792	46	5.756		
	Total	310.812	47			
Aggression reduces Negative Image	Between Groups	28.521	1	28.521	4.918	.032*
	Within Groups	266.792	46	5.800		
	Total	295.313	47			
Victims Deserve Aggression	Between Groups	16.333	1	16.333	2.858	.098
	Within Groups	262.917	46	5.716		
	Total	279.250	47			
Victims Do Not Suffer	Between Groups	.750	1	.750	.261	.612
	Within Groups	132.250	46	2.875		
	Total	133.000	47			

*p<.05, ***p<.005

A simple comparison of the magnitude of the means in the group statistics table (Table 74) for the legitimacy of aggression, the belief that aggression increases self-esteem, and for the belief that aggression avoids a negative self-image reveals that the non-aggressive group has the smallest means of the two groups. More adolescent girls in the non-aggressive group tend to disagree with the belief in the legitimacy of aggression, with the belief that aggression increases self-esteem, and that aggression avoids a negative self-image.

Table 74

Group Statistics for the Beliefs Measures

Scale	Groups	N	Mean	Std. Deviation
Legitimacy	Non-aggressive	24	2.20	3.12
	Aggressive	24	9.08	6.08
Aggression Improves Self-esteem	Non-aggressive	24	1.08	2.04
	Aggressive	24	3.04	2.71
Aggression Avoids Negative Self-image	Non-aggressive	24	2.41	2.26
	Aggressive	24	3.95	2.54
Victims Deserve Aggression	Non-aggressive	24	2.79	1.69
	Aggressive	24	3.95	2.92
Victims Do Not Suffer	Non-aggressive	24	2.37	1.73
	Aggressive	24	2.12	1.65

In summary, the Belief measure showed differences between aggressive and non-aggressive groups in the belief in the legitimacy of aggression, the belief that aggression increases self-esteem, and that aggression avoids a negative self-image subscales with more aggressive adolescent girls agreeing with these beliefs than the non-aggressive adolescent girls. The subscales for these beliefs produced the expected result that most aggressive adolescent girls reported agreement in these beliefs.

How do aggressive and non-aggressive adolescent girls compare on self-esteem, shame, guilt and pride?

Cook's Internalized Shame Scale (ISS)

ANOVAS for the Internalized Shame Scale (ISS) revealed significant between-group differences in means for both of Cook's positive and low self-esteem scales (Table 75). Group

membership accounted for 14.62% of the variability in Cook's positive self-esteem scores and 15.45% of the variability in low self-esteem was attributed to group status.

Table 75

Analysis of Variance for the Difference in Internalized Shame Scale Scores between Groups

Subscales		Sum of Squares	df	Mean Square	F	p	
Positive Self-esteem	Between Groups	256.688	1	256.688	9.217	.004	***
	Within Groups	1281.125	46	27.851			
	Total	1537.813	47				
Low Self-esteem	Between Groups	4275.188	1	4275.188	9.771	.003	***
	Within Groups	20126.625	46	437.535			
	Total	24401.813	47				

***p<.005

A significant difference was found for Cook's positive self-esteem subscale (Table 75) between non-aggressive adolescent girls and aggressive girls. More non-aggressive girls than aggressive adolescent girls were likely to report positive self-esteem. The magnitude of the mean of reported positive self-esteem scores for the non-aggressive groups was larger than for the aggressive girls (Table 76).

Table 76

Group Statistics for Cook's Self-esteem

Scale	Groups	N	Mean	Std. Deviation
Cook's Positive Self-esteem	Non-aggressive	24	17.87	3.68
	Aggressive	24	13.25	6.48
Cook's Low Self-esteem	Non-aggressive	24	26.00	16.31
	Aggressive	24	44.87	24.67

Table 76 reports the descriptive statistics for Cook's low self-esteem subscale revealing that more aggressive girls than non-aggressive adolescent girls were likely to report low self-

esteem. The mean of reported low self-esteem scores for aggressive girls were larger in magnitude than the mean of the non-aggressive adolescent girls.

David Cook, in the Internalized Shame Scale, equated low self-esteem to shame and the positive self-esteem scale to Rosenberg's positive self-esteem scale. According to Cook's measure, aggressive girls had a higher likelihood of reporting shame. Although non-aggressive girls had a lower likelihood of reporting shame, they reported shame also, but to a lesser degree.

This result introduces several questions. If both aggressive and non-aggressive adolescent girls report shame but in different degrees, then how can shame be the determining factor in aggression? Is there another factor along with shame that determines aggression?

Rosenberg's Self-esteem Measure

ANOVAS for Rosenberg's Self-esteem Scale in Table 77 revealed a significant main effect for group status for the two measures, positive self-esteem and low self-esteem. The magnitude of the variability in positive self-esteem scores attributed to group membership is 22.67%. The magnitude of the variability in low self-esteem scores attributed to group membership is 23.76%.

Table 77

Analysis of Variance for the Difference in Rosenberg's Self-esteem Scores between Groups

Subscales		Sum of Squares	df	Mean Square	F	p	
Positive Self-esteem	Between Groups	752.083	1	752.083	15.056	.000	***
	Within Groups	2297.833	46	49.953			
	Total	3049.917	47				
Low Self-esteem	Between Groups	713.021	1	713.021	15.961	.000	***
	Within Groups	2054.958	46	44.673			
	Total	2767.979	47				

***p<.005

Descriptive statistics confirm the significant differences for positive self-esteem that were revealed between the aggressive adolescent girls and the non-aggressive adolescent girls (Table

76). More aggressive adolescent girls compared to non-aggressive adolescent girls were likely to report low levels of Rosenberg's positive self-esteem. In other words, the non-aggressive adolescent girls were more likely to report positive self-esteem. The magnitude of the means for positive self-esteem for non-aggressive adolescent girls shown in the descriptive statistics in Table 48 is greater than the magnitude of positive self-esteem for aggressive adolescent girls. This result is more definitive than the result obtained using Cook's self-esteem measure.

More aggressive adolescent girls than non-aggressive adolescent girls were likely to report low self-esteem as revealed by the group statistics in Table 78. The aggressive group had a significantly higher mean than the non-aggressive group. Again, this result is more conclusive than the result obtained using Cook's self-esteem measure. Rosenberg's self-esteem measure was able to show a smaller random error attributing more of the variability to the differences between the aggressive and non-aggressive groups. This suggests that Rosenberg's self-esteem measure can more reliably distinguish the likelihood of reporting self-esteem between groups than Cook's self-esteem measure.

Table 78

Group Statistics for Rosenberg's Self-esteem Measure

Scale	Groups	N	Mean	Std. Deviation
Rosenberg's Positive Self-esteem	Non-aggressive	24	21.16	5.20
	Aggressive	24	13.25	8.53
Rosenberg's Low Self-esteem	Non-aggressive	24	2.62	4.07
	Aggressive	24	10.33	8.52

In summary, Cook's Internalized Shame scale and Rosenberg's Self-esteem Scale show similar results. Rosenberg's scale showed that more aggressive girls than non-aggressive girls were likely to report low self-esteem. Cook's scale showed that more aggressive girls than non-aggressive adolescent girls were likely to report low self-esteem. Rosenberg's self-esteem

measure was able to show a smaller random error attributing more of the variability to the differences between the aggressive and non-aggressive groups than Cook's measure. This suggests that Rosenberg's self-esteem measure could more reliably distinguish between groups in their reporting of self-esteem than Cook's self-esteem measure. If low self-esteem and shame are equivalent as Cook suggests, both measures show that aggressive adolescent girls reported more shame than non-aggressive adolescent girls but all groups reported some degree of shame.

State of Shame and Guilt

ANOVAS for the State of Shame and Guilt measure revealed differences between groups for all the measures to the .05 level of significance (Table 79). The magnitude of the variability in pride scores attributable to group membership is 16.33%. The magnitude of the variability in state shame scores accounted for by group membership is 15.09%. Group membership accounted for 18.56% of the variability in state guilt scores.

Table 79

Analysis of Variance for the Difference in State Shame and Guilt Scores between Groups

Subscales		Sum of Squares	df	Mean Square	F	p
State Pride	Between Groups	221.021	1	221.021	10.370	.002***
	Within Groups	980.458	46	21.314		
	Total	1201.479	47			
State Shame	Between Groups	188.021	1	188.021	9.533	.003***
	Within Groups	907.292	46	19.724		
	Total	1095.313	47			
State Guilt	Between Groups	238.521	1	238.521	11.935	.001***
	Within Groups	919.292	46	19.985		
	Total	1157.813	47			

***p<.005

Group statistics in Table 80 show that greater numbers of non-aggressive adolescent girls reported higher means for pride scores than aggressive adolescent girls who had lower means. More non-aggressive adolescent girls than aggressive adolescent girls were likely to report pride.

Group descriptive statistics in Table 80 show that aggressive adolescent girls had the highest mean for the shame subscale and non-aggressive adolescents had the lowest mean. More aggressive adolescent girls than non-aggressive adolescents were likely to report state shame.

Interestingly, Cook's low self-esteem or shame scale revealed the same result as Tangney's state shame subscale. Both subscales showed that more aggressive adolescent girls than non-aggressive adolescent girls were more likely to report shame.

Table 80

Group Statistics for the State Shame and Guilt Scale

Scale	Groups	N	Mean	Std. Deviation
State Pride	Non-aggressive	24	14.75	3.97
	Aggressive	24	10.45	5.18
State Shame	Non-aggressive	24	2.20	2.94
	Aggressive	24	6.16	5.54
State Guilt	Non-aggressive	24	3.20	3.07
	Aggressive	24	7.66	5.52

For the guilt subscale (Table 80), descriptive statistics confirmed the significant difference between aggressive and non-aggressive adolescent girls revealed by the ANOVA in Table 79. More aggressive than non-aggressive adolescents girls were likely to report state guilt. Aggressive adolescent girls have a higher mean for state guilt than non-aggressive adolescent girls.

In summary, out of the total of 22 variables measured in this study, 17 showed significant differences between aggressive and non-aggressive groups. These variables include verbal

aggression, physical aggression, anger, hostility, guilt proneness, pride in self, pride in behaviour, the belief in the legitimacy of aggression, the belief that aggression increases self-esteem, the belief that aggression avoids a negative self-image, Cook's positive self-esteem, Cook's low self-esteem, Rosenberg's positive self-esteem, Rosenberg's low self-esteem, state pride, state shame, and state guilt. A summary of the significant differences in the 17 variables is outlined in Table 81. This table shows a general tendency for aggressive adolescent girls to report physical aggression, verbal aggression, anger, hostility, a belief supporting aggression, a belief that aggression improves self-esteem, a belief that aggression avoids a negative self-image, Cook's low self-esteem, Rosenberg's low self-esteem, state shame, and state guilt. Non-aggressive adolescent girls show a general tendency to report positive self-esteem. Non-aggressive adolescent girls were likely to report pride in self, pride in behaviour, Cook's positive self-esteem, Rosenberg's positive self-esteem, state pride and guilt proneness.

Table 81

Summary of Results of the Differences between Aggressive and Non-aggressive Girls

Variables	Aggressive	Non-aggressive
Verbal Aggression	More Likely	
Physical Aggression	More Likely	
Anger	More Likely	
Hostility	More Likely	
Legitimacy of Aggression	More Likely	
Aggression Improves Self-esteem	More Likely	
Aggression Avoids Negative Self-image	More Likely	
Low Self-esteem (Shame)(Cook's)	More Likely	
Low Self-esteem (Shame)(Rosenberg's)	More Likely	
State Shame	More Likely	
State Guilt	More Likely	
Pride in Self		More Likely
Pride in Behaviour		More Likely
Positive Self-esteem (Rosenberg's)		More Likely
Positive Self-esteem (Cook's)		More Likely
State Pride		More Likely
Guilt Proneness		More Likely

Differences between Low, Moderate, and Highly Aggressive Groups

The previous results were obtained by dividing the groups into a 2 X 2 matrix matching aggressive versus non-aggressive adolescent girls with in-care and public adolescent girls. The following section divides the 48 adolescent girls into 3 groups with different degrees of aggression, low, moderate and high, according to the scores obtained in the physical aggression subscale of the Buss-Perry Aggression Questionnaire. The highly aggressive group consisted of 14 adolescent girls, the moderately aggressive group consisted of 13 girls, and the low aggressive group consisted of 21 girls. The following tables (Tables 82, 83, 84, and 85) provide the group statistics for the subscales representing different aspects of aggression, physical aggression, verbal aggression, anger and hostility.

Table 82

Group Statistics for Physical Aggression in High, Moderate, and Low Aggressive Girls

Aggressive Groups	Mean	N	Std. Deviation
High	30.57	14	3.20
Moderate	18.53	13	3.50
Low	7.28	21	3.13

Table 83

Group Statistics for Verbal Aggression in High, Moderate, and Low Aggressive Girls

Aggressive Groups	Mean	N	Std. Deviation
High	14.35	14	4.14
Moderate	10.76	13	2.61
Low	8.42	21	3.65

Table 84

Group Statistics for Anger in High, Moderate, and Low Aggressive Girls

Aggressive Groups	Mean	N	Std. Deviation
High	18.50	14	5.61
Moderate	12.61	13	3.12
Low	7.38	21	4.10

Table 85

Group Statistics for Hostility in High, Moderate, and Low Aggressive Girls

Aggressive Groups	Mean	N	Std. Deviation
High	19.14	14	5.90
Moderate	14.92	13	5.69
Low	10.00	21	5.01

ANOVAS (Table 86) for the subscale measures of physical aggression, verbal aggression, anger and hostility revealed significant main effects for all the aggression measures. The magnitudes of these effects were calculated and the variability in physical aggression scores attributed to group membership was 89.94%. The variability in verbal aggression scores attributed to group membership was 30.64%, the variability in anger scores was 52.20% and the variability in hostility scores was 31.44%.

Post hoc comparisons using the least significant difference test showed that for physical aggression and anger subscales the groups that had high, moderate, and low scores on aggression were all significantly different from each other.

Table 86

Analysis of Variance for the Difference in Aggression Subscale Scores

Subscales		Sum of Squares	df	Mean Square	F	p	
Physical	Between Groups	4577.573	2	2288.786	215.739	.000	***
	Within Groups	477.407	45	10.609			
	Total	5054.979	47				
Verbal	Between Groups	295.252	2	147.626	11.600	.000	***
	Within Groups	572.665	45	24.504			
	Total	867.917	47				
Anger	Between Groups	1044. 387	2	522.194	27.212	.000	***
	Within Groups	863.529	45	19.190			
	Total	1907.917	47				
Hostility	Between Groups	717.363	2	358.681	12.004	.000	***
	Within Groups	1344.637	45	29.881			
	Total	2062.000	47				

***p<.005 *p<.05

Descriptive statistics showed that for physical aggression, the moderate aggression scorers had a mean score that was almost 2.5 times greater than the mean of the low aggression scorers. For physical aggression, the highly aggressive group had a mean score 4.2 times greater than the low aggressive scorers. Highly and moderately aggressive adolescent girls were more likely than low aggressive adolescent girls to report physical aggression.

Post hoc comparisons using the least significant difference test (Table 88) showed that for the verbal aggression subscale, there was a significant difference between the highly aggressive group and the moderate and low aggressive groups, but no significant difference was found between the moderately aggressive and low aggressive groups. The highly aggressive group mean score was 1.7 times greater than the low aggressive group. The moderately aggressive group mean score was 1.3 times greater than the low aggressive mean score. The highly aggressive group has a mean score that was 1.33 times greater than the moderately aggressive group mean score.

Highly and moderately aggressive adolescent girls were more likely than low aggressive adolescent girls to report verbal aggression.

Moderate aggression scorers had a mean score for the anger subscale that was 1.7 times greater than the low aggressive group. For anger, the highly aggressive group had a mean score 2.5 times greater than the low aggressive group. Highly and moderately aggressive adolescent girls were more likely than low aggressive adolescent girls to report anger.

Table 87

Multiple Comparisons of Aggression Scores between High, Moderate, and Low Aggressive Girls

Dependent Variable	(I) Group	(J) Group	Mean Difference (I-J)	Std. Error	p	
Physical Aggression	high	moderate	12.4176	1.255	.000	*
		low	23.2857	1.124	.000	*
	moderate	high	-12.4176	1.255	.000	*
	low	moderate	-10.8681	1.149	.000	*
Anger	high	moderate	5.8846	1.687	.001	*
		low	11.1190	1.511	.000	*
	moderate	low	5.2344	1.546	.001	*

* The mean difference is significant at the .05 level.

The least significant difference test for post hoc comparisons (Table 88) showed that for the hostility subscale, there was a significant difference between the low aggressive group and the moderately and highly aggressive groups but no difference between the moderately and highly aggressive groups in terms of mean scores. Descriptive statistics showed that the mean for the highly aggressive group was 1.9 times greater than the mean for the low aggressive group. The moderately aggressive group mean was almost 1.5 times greater than the low aggressive group mean. The highly and moderately aggressive adolescent girls were more likely than the low aggressive group to report hostility.

Table 88

Multiple Comparisons of Anger and Hostility Scores between High, Moderate, and Low Aggressive Girls

Dependent Variable	(I) Group	(J) Group	Mean Difference (I-J)	Std. Error	p	
Verbal Aggression	high	moderate	3.5879	1.374	.012	*
		low	5.9286	1.231	.000	*
	low	moderate	-2.3407	1.259	.070	
Hostility	high	moderate	4.2198	2.105	.051	
		low	9.1429	1.886	.000	*
	moderate	low	4.9231	1.929	.014	*

* The mean difference is significant at the .05 level.

Differences between Low, Moderate, and Highly Aggressive Groups on Beliefs

Dividing the adolescent girls into groups depending on their aggression scores revealed more significant differences in between group means for different beliefs. ANOVAS for belief measures (Table 89) showed significant main effects for the belief in the legitimacy of aggression, aggression increases self-esteem, aggression improves negative self-image, and victims deserve aggression. ANOVA did not reveal any significant differences between groups for the belief that victims do not suffer.

The variability attributed to group membership (omega squared) for the belief in the legitimacy of aggression was 34.48%. The variability for the belief that aggression increases self-esteem was 23.82%. The variability attributed to group membership for the belief that aggression avoids negative self-image was 16.22%, and for the belief that victims deserve aggression was 10.16%.

Table 89

Analysis of Variance for the Difference in Beliefs Subscale Scores

Subscales		Sum of Squares	df	Mean Square	F	P	
Legitimacy	Between Groups	624.510	2	312.255	13.797	.000	***
	Within Groups	1018.469	45	22.633			
	Total	1642.979	47				
Aggression Increases Self-esteem	Between Groups	85.247	2	42.623	8.503	.001	***
	Within Groups	225.566	45	5.013			
	Total	310.813	47				
Aggression Avoids Negative Self-image	Between Groups	59.239	2	29.620	5.646	.006	*
	Within Groups	236.073	45	5.246			
	Total	295.313	47				
Victims Deserve Aggression	Between Groups	39.567	2	19.783	3.714	.032	*
	Within Groups	239.683	45	5.326			
	Total	279.250	47				
Victims Do Not Suffer	Between Groups	2.423	2	1.212	.418	.661	
	Within Groups	130.577	45	2.902			
	Total	133.000	47				

***p<.005 *p<.05

Table 90

Multiple Comparisons of Beliefs Scores between High, Moderate, and Low Aggressive Girls

Dependent Variable	(I) Group	(J) Group	Mean Difference (I-J)	Std. Error	p	
Legitimacy	high	moderate	3.8901	1.832	.039	*
		low	8.5238	1.641	.000	*
	moderate	low	4.6337	1.679	.008	*

(Table continues)

Table 90 (Continued)

Multiple Comparisons of Beliefs Scores between High, Moderate and Low Aggressive Adolescent Girls

Dependent Variable	(I) Group	(J) Group	Mean Difference (I-J)	Std. Error	p	
Aggression Increases Self-esteem	high	moderate	.5769	.862	.507	
		low	2.9286	.772	.000	*
	moderate	low	2.3516	.790	.005	*
Aggression avoids Negative Self-image	high	moderate	.5824	.882	.512	
		low	2.4762	.790	.003	*
	moderate	low	1.8938	.808	.024	*
Victims Deserve Aggression	high	moderate	1.1813	.889	.191	
		low	2.1667	.796	.009	*
	moderate	low	.9853	.814	.233	
Victims Do Not Suffer	high	moderate	-.5440	.656	.411	
		low	-7.1429E-02	.588	.904	
	moderate	low	.4725	.601	.436	

* The mean difference is significant at the .05 level.

Table 91

Group Statistics for Legitimacy of Aggression in High, Moderate, and Low Aggressive Girls

Aggressive Groups	N	Mean	Std. Deviation
High	14	10.42	7.49
Moderate	13	6.53	3.79
Low	21	1.90	2.40

Table 92

Group Statistics for Aggression Increases Self-esteem in High, Moderate, and Low Aggressive Girls

Aggressive Groups	N	Mean	Std. Deviation
High	14	3.50	3.10
Moderate	13	2.92	2.59
Low	21	.57	.97

Table 93

Group Statistics for Aggression Improves Negative Self-image in High, Moderate, and Low Aggressive Girls

Aggressive Groups	N	Mean	Std. Deviation
High	14	4.42	2.68
Moderate	13	3.84	2.11
Low	21	1.95	2.10

Table 94

Group Statistics for Victims Deserve Aggression in High, Moderate, and Low Aggressive Girls

Aggressive Groups	N	Mean	Std. Deviation
High	14	4.64	3.41
Moderate	13	3.46	1.50
Low	21	2.47	1.74

Post hoc comparisons were conducted for the belief subscales using the least significant difference test (Table 90). A significant main effect was found for the belief in the legitimacy of aggression. Significant differences were found between high, moderate and low aggressive adolescent girls. Descriptive statistics for the belief in the legitimacy of aggression (Table 91)

revealed that highly aggressive adolescent girls reported a mean score that was almost 5.5 times greater than the low aggressive adolescents. The moderately aggressive adolescent girls reported a mean score that was almost 3.5 times greater than the low aggressive adolescent girls. Highly aggressive adolescent girls were more likely than low aggressive girls to believe in the legitimacy of aggression. Moderately aggressive adolescent girls were also more likely than low aggressive girls to believe in the legitimacy of aggression.

For the belief that aggression increases self-esteem, significant differences were revealed between moderate and low aggressive adolescent girls and high and low adolescent girls (Table 90). No significant difference was found between highly aggressive adolescent girls and moderately aggressive girls. Descriptive statistics or the belief that aggression improves self-esteem (Table 92) disclosed that the mean score for highly aggressive adolescent girls was over 6 times greater than the mean score for low aggressive adolescent girls. Moderately aggressive girls had a mean score over 5 times greater than the low aggressive adolescent girls for the belief that aggression improves self-esteem. Both the moderately and the highly aggressive groups were more likely than the low aggressive group to believe that aggression increases self-esteem.

Again, for the belief that aggression avoids negative self-image significant differences were found between highly aggressive adolescent girls and low aggressive girls and moderately aggressive girls and low aggressive girls (Table 90). No significant difference was found between high and moderately aggressive adolescent girls. For the belief that aggression improves negative self-image, descriptive statistics (Table 93) show that the mean score for highly aggressive adolescent girls was 2.27 times greater than the mean score for the low aggressive adolescent girls. The mean score for the moderately aggressive adolescent girls was almost twice as great as for the low aggressive adolescent girls. Both the moderately and the highly aggressive groups were more likely than the low aggressive group to believe that aggression avoids negative self-image.

For the belief that victims deserve aggression, a significant difference was found only between the mean score of the highly aggressive adolescent girls and the low aggressive girls (Table 90). The descriptive statistics for the belief that victims deserve aggression (Table 94), the mean score for the aggressive adolescent girls was almost twice as great as the mean score for low aggressive girls. The mean score for highly aggressive adolescent girls was 1.55 times greater than for the low aggressive group, but this difference was insignificant. Aggressive adolescent girls were more likely than low aggressive girls to believe victims deserve aggression.

Differences between Low, Moderate, and Highly Aggressive Groups on Self-conscious Affect

Dividing the adolescent groups by degree of reported aggression revealed significant main effects for two measures of self-conscious affect using ANOVA (Table 95). Significant differences were divulged for measures of guilt proneness and pride in self. The magnitudes of these effects were calculated and the variability in guilt proneness attributed to group membership was 13.29% and the variability in pride in self was 12.62%.

Post hoc comparisons were conducted for the self-conscious affect (TOSCA-A) subscales using the least significant difference test (Table 96). Significant differences were found for two subscales, guilt proneness and pride in self. A significant difference was found between highly aggressive adolescent girls and low aggressive adolescent girls for guilt proneness. The mean for reported guilt proneness by low aggressive adolescent girls was 1.35 times greater than the mean for reported guilt proneness for highly aggressive adolescent girls (Table 97). Low aggressive girls were more likely than highly aggressive adolescent girls to report guilt proneness.

Table 95

Analysis of Variance for the Difference in Self-conscious Affect (TOSCA-A) Subscale Scores

Subscales		Sum of Squares	df	Mean Square	F	p	
Shame Proneness	Between Groups	167.826	2	83.913	1.170	.320	
	Within Groups	3226.841	45	71.708			
	Total	3394.667	47				
Guilt Proneness	Between Groups	1055.495	2	527.747	4.678	.014	*
	Within Groups	5077.172	45	112.826			
	Total	6132.667	47				
Detachment/ Unconcern	Between Groups	5.088	2	2.544	.069	.933	
	Within Groups	1654.579	45	36.768			
	Total	1659.667	47				
Externalisation	Between Groups	382.945	2	191.473	1.968	.152	
	Within Groups	4379.055	45	97.312			
	Total	4762.000	47				
á Pride (Pride in Self)	Between Groups	99.671	2	49.836	4.465	.017	*
	Within Groups	502.308	45	11.162			
	Total	601.979	47				
â Pride (Pride in Behaviour)	Between Groups	58.673	2	29.337	2.637	.083	
	Within Groups	500.577	45	11.124			
	Total	559.250	47				

*p<.05

Table 96

Multiple Comparisons of TOSCA-A Scores between High, Moderate, and Low Aggressive Girls

Dependent Variable	(I) Group	(J) Group	Mean Difference (I-J)	Std. Error	P	
Shame Proneness	high	moderate	-1.8077	3.262	.582	
		low	2.6429	2.922	.371	
	moderate	low	4.4505	2.988	.143	
Guilt Proneness	high	moderate	-6.0989	4.091	.143	
		low	-11.1905	3.665	.004	*
	moderate	low	-5.0916	3.749	.181	
Detachment/	high	moderate	.3077	2.336	.896	
Unconcern		low	.7619	2.092	.717	
	moderate	low	.4542	2.140	.833	
Externalisation	high	moderate	1.4505	3.800	.704	
		low	6.2857	3.404	.071	
	moderate	low	4.8352	3.481	.172	
á Pride (Pride in Self)	high	moderate	-2.9451	1.287	.027	*
		low	-3.2857	1.153	.007	*
	moderate	low	-.3407	1.179	.774	
â Pride Pride in Behaviour	high	moderate	-1.5989	1.285	.220	
		low	-2.6429	1.151	.026	*
	moderate	low	-1.0440	1.177	.380	

* The mean difference is significant at the .05 level.

ANOVA revealed significant differences between highly aggressive adolescent girls and both moderate and low aggressive adolescent girls for pride in self. Post hoc comparisons were conducted using the least significant difference test. Descriptive statistics showed that the mean

for reported pride in self was 1.32 times greater for low aggressive adolescent girls than for highly aggressive adolescent girls (Table 98). A significant difference was found between moderate and high aggressive adolescent girls but not between moderate and low aggressive adolescent girls for pride in self. The mean for reported pride in self was found to be 1.29 times greater for moderately aggressive adolescent girls than for highly aggressive adolescent girls (Table 98). Moderately and low aggressive adolescent girls were more likely to report pride in self than highly aggressive adolescent girls.

A significant difference was found between highly aggressive adolescent girls and low aggressive adolescent girls for pride in behaviour. The mean for reported pride in behaviour was found to be 1.30 times greater for low aggressive adolescent girls than for highly aggressive adolescent girls (Table 99). Low aggressive adolescent girls were more likely than highly aggressive adolescent girls to report pride in behaviour. Since the ANOVA (Table 95) for pride in behaviour was not statistically significant, this variable was not included in the results summary.

Table 97

Group Statistics for Guilt Proneness in High, Moderate, and Low Aggressive Girls

Aggressive Groups	N	Mean	Std. Deviation
High	14	32.28	13.05
Moderate	13	38.38	12.62
Low	21	43.47	6.88

Table 98

Group Statistics for Pride in Self in High, Moderate, and Low Aggressive Girls

Aggressive Groups	N	Mean	Std. Deviation
High	14	10.28	3.58
Moderate	13	13.23	3.65
Low	21	13.57	2.95

Table 99

Group Statistics for Pride in Behaviour in High, Moderate, and Low Aggressive Girls

Aggressive Groups	N	Mean	Std. Deviation
High	14	8.78	3.11
Moderate	13	10.38	4.46
Low	21	11.42	2.59

Differences between Low, Moderate, and Highly Aggressive Groups on Self-esteem Measures

Dividing the adolescent girls into groups depending on their aggression scores revealed significant differences in between group means for self-esteem. ANOVAS for self-esteem measures (Table 100) revealed significant main effects for Cook and Rosenberg's positive and low self-esteem measures.

The magnitudes of these effects were calculated and the variability in Cook' positive self-esteem attributed to group membership was 21.13%. The variability in Cook's low self-esteem attributed to group membership was 27.63%. For Rosenberg's positive self-esteem, the variability attributed to group membership was 32.02% and for Rosenberg's low self-esteem the variability was 33.21%.

Table 100

Analysis of Variance for the Difference in Self-esteem Subscale Scores

Subscales		Sum of Squares	df	Mean Square	F	p	
Positive Self-esteem (Cook)	Between Groups	381.719	2	190.860	7.429	.002	***
	Within Groups	1156.093	45	25.691			
	Total	1537.813	47				
Low Self-esteem (Cook)	Between Groups	7593.448	2	3796.724	10.165	.000	***
	Within Groups	16808.364	45	373.519			
	Total	24401.813	47				
Positive Self-esteem (Rosenberg)	Between Groups	1078.329	2	539.164	12.306	.000	***
	Within Groups	1971.588	45	43.813			
	Total	3049.917	47				
Low Self-esteem (Rosenberg)	Between Groups	1010.287	2	505.143	12.933	.000	***
	Within Groups	1757.692	45	39.060			
	Total	2767.979	47				

***p>.005

Post hoc comparisons were conducted for the self-esteem subscales using the least significant difference test (Table 101). Significant differences were found for all the self-esteem measures between the low aggressive group and both the moderately and highly aggressive groups. However, no significant differences were revealed between the moderately aggressive group and the highly aggressive group for the means of all reported self-esteem measures.

Descriptive statistics in Tables 102 and 104 divulged that the means for reported positive self-esteem for low aggressive adolescent girls were greater than those means for moderately and highly aggressive adolescent girls. The mean for Cook's positive self-esteem for low aggressive adolescent girls was about 1.5 times greater than that of the highly aggressive adolescent girls and 1.36 times greater that that of moderately aggressive girls (Table 102). The mean for Rosenberg's positive self-esteem for low aggressive adolescent girls was about 1.8 times greater than that of

the highly aggressive adolescent girls and 1.7 times greater that that of moderately aggressive girls (Table 104). Low aggressive adolescent girls were more likely than moderately and highly aggressive girls to report positive self-esteem (both Cook and Rosenberg measures).

Table 101

Multiple Comparisons of Self-esteem Scores between High, Moderate, and Low Aggressive Girls

Dependent Variable	(I) Group	(J) Group	Mean Difference (I-J)	Std. Error	p	
Positive Self-esteem (Cook)	high	moderate	-1.2692	1.952	.519	
		low	-6.2143	1.749	.001	*
	moderate	low	-4.9451	1.789	.008	*
Low Self-esteem (Cook)	high	moderate	-1.5220	7.444	.839	
		low	24.5952	6.668	.001	*
	moderate	low	26.1172	6.820	.000	*
Positive Self-esteem (Rosenberg)	high	moderate	-.8187	2.549	.750	
		low	-9.9286	2.284	.000	*
	moderate	low	-9.1099	2.336	.000	*
Low Self-esteem (Rosenberg)	high	moderate	.7033	2.407	.772	
		low	9.5714	2.156	.000	*
	moderate	low	8.8681	2.206	.000	*

* The mean difference is significant at the .05 level.

Conversely, descriptive statistics in Table 103 and 105 divulged that the means for reported low self-esteem for highly and moderately aggressive adolescent girls were greater than those means for low aggressive adolescent girls. The mean for Cook' low self-esteem for highly aggressive adolescent girls and for moderately aggressive girls was about 2.2 times greater than that of the low aggressive adolescent girls (Table 103). The mean for Rosenberg's low self-esteem for highly aggressive girls was 8.5 times greater that that of low aggressive girls (Table 105). The

mean for Rosenberg's low self-esteem for moderately aggressive was 7.9 times greater than that of low aggressive girls. Moderately and highly aggressive girls were more likely than low aggressive adolescent girls to report low self-esteem (both Cook and Rosenberg measures).

Table 102

Group Statistics for Cook's Positive Self-esteem in High, Moderate, and Low Aggressive Girls

Aggressive Groups	N	Mean	Std. Deviation
High	14	12.50	6.99
Moderate	13	13.76	4.18
Low	21	18.71	3.93

Table 103

Group Statistics for Cook's Low Self-esteem in High, Moderate, and Low Aggressive Girls

Aggressive Groups	N	Mean	Std. Deviation
High	14	45.78	27.94
Moderate	13	47.30	16.96
Low	21	21.19	12.65

Table 104

Group Statistics for Rosenberg's Positive Self-esteem in High, Moderate, and Low Aggressive Girls

Aggressive Groups	N	Mean	Std. Deviation
High	14	12.64	8.45
Moderate	13	13.46	7.38
Low	21	22.57	4.39

Table 105

Group Statistics for Rosenberg's Low Self-esteem in High, Moderate, and Low Aggressive Girls

Aggressive Groups	N	Mean	Std. Deviation
High	14	10.85	9.00
Moderate	13	10.15	7.28
Low	21	1.28	1.82

Differences between Low, Moderate, and Highly Aggressive Groups on State Measures

Significant differences were divulged for measures of state pride, state shame and state guilt by dividing the adolescent groups by degree of reported aggression and using ANOVA (Table 106). The magnitudes of these effects were calculated and the variability in state pride attributed to group membership was 31.60%, the variability in state shame was 19.66% and the variability in state guilt was 21.40%.

Table 106

Analysis of Variance for the Difference in State Pride, Shame and Guilt Subscale Scores

Subscales		Sum of Squares	df	Mean Square	F	P	
State Pride	Between Groups	419.862	2	209.931	12.086	.000	***
	Within Groups	781.617	45	17.369			
	Total	1201.479	47				
State Shame	Between Groups	256.296	2	128.148	6.873	.002	***
	Within Groups	839.016	45	18.645			
	Total	1095.313	47				
State Guilt	Between Groups	290.334	2	145.167	7.530	.002	***
	Within Groups	867.478	45	19.277			
	Total	1157.813	47				

***p>.005

Post hoc comparisons were conducted for the state pride, shame, and guilt subscales using the least significant difference test (Table 107). Significant differences were found for all the state

measures. For state pride and state guilt, significant differences were found between the low aggressive group and both the moderately and highly aggressive groups. No significant differences were revealed between the moderately aggressive group and the highly aggressive group for the means of all reported self-esteem measures. Significant differences were revealed between highly aggressive adolescent girls and low aggressive adolescent girls for state shame, otherwise no significant differences were found between groups on the state shame subscale.

Table 107

Multiple Comparisons of State Pride, State Shame and State Guilt Scores between High, Moderate, and Low Aggressive Girls

Dependent Variable	(I) Group	(J) Group	Mean Difference (I-J)	Std. Error	p	
State Pride	high	moderate	-.4451	1.605	.783	
		low	-6.1832	1.471	.000	*
	moderate	low	-5.7381	1.438	.000	*
State Shame	high	moderate	-2.8187	1.663	.097	
		low	5.5000	1.490	.001	*
	moderate	low	2.6813	1.524	.085	
State Guilt	high	moderate	-2.4890	1.691	.148	
		low	5.7857	1.515	.000	*
	moderate	low	3.2967	1.549	.039	*

* The mean difference is significant at the .05 level.

For state pride, the mean reported pride score (Table 108) for the low aggressive adolescent girls was 1.56 times greater than the mean reported pride score for the highly aggressive adolescent girls and 1.63 times greater than the mean pride score for moderately aggressive adolescent girls. Low aggressive adolescent girls were more likely than moderately and highly aggressive girls to report state pride.

The mean reported guilt score (Table 109) for highly aggressive adolescent girls was three times greater than the mean score for low aggressive adolescent girls and the mean score for moderately aggressive adolescent girls was two times greater than the mean score for the low aggressive group. Moderately and highly aggressive girls were more likely than low aggressive adolescent girls to report state guilt.

The mean reported shame score (Table 110) for the highly aggressive group was almost 4 times (3.96) time greater than the mean score for the low aggressive group. The mean reported shame score for moderately aggressive adolescent girls was 2.4 times greater than the mean for low aggressive adolescent girls. Highly and moderately aggressive adolescent girls were more likely than low aggressive adolescent girls to report state shame, but only the difference between highly aggressive adolescent girls and low aggressive girls was statistically significant.

Table 108

Group Statistics for State Pride in High, Moderate, and Low Aggressive Girls

Aggressive Groups	N	Mean	Std. Deviation
High	14	10.21	5.47
Moderate	13	9.76	4.22
Low	21	15.95	2.97

Table 109

Group Statistics for State Shame in High, Moderate, and Low Aggressive Girls

Aggressive Groups	N	Mean	Std. Deviation
High	14	7.35	6.25
Moderate	13	4.53	4.23
Low	21	1.85	2.39

Table 110

Group Statistics for State Guilt in High, Moderate, and Low Aggressive Girls

Aggressive Groups	N	Mean	Std. Deviation
High	14	8.64	6.24
Moderate	13	6.15	3.82
Low	21	2.85	3.03

Differences between Low, Moderate, and Highly Aggressive Groups on Verbal Abuse Measures

Dividing the adolescent girls into groups depending on their aggression scores revealed significant differences in between-group means for their experience of verbal abuse from significant others. ANOVA for the verbal abuse measure (Table 111) revealed a significant main effect for verbal abuse. The magnitude of this effect was calculated and the variability in verbal abuse attributed to group membership was 22.42%.

Table 111

Analysis of Variance for the Difference in Verbal Abuse Scores

Subscales		Sum of Squares	df	Mean Square	F	P	
State Pride	Between Groups	11.970	2	5.985	7.934	.001	***
	Within Groups	33.947	45	.754			
	Total	45.917	47				

*** p<.005

Post hoc comparisons were conducted for verbal abuse using the least significant difference test (Table 110). Significant differences were found between low aggressive adolescent girls and both moderately and highly aggressive adolescent girls but not between moderately and highly aggressive girls. The descriptive statistics in Table 109 showed that the mean score for verbal abuse of highly aggressive adolescent girls was 1.9 times greater than the mean score of low aggressive adolescent girls. The mean score for the verbal abuse of moderately aggressive girls was 1.7 times greater that the mean score of low aggressive adolescent girls. More

moderately and highly aggressive girls experienced verbal abuse than low aggressive adolescent girls.

Table 112

Multiple Comparison of Verbal Abuse Scores between High, Moderate, and Low Aggressive t Girls

Dependent Variable	(I) Group	(J) Group	Mean Difference (I-J)	Std. Error	p
Verbal Abuse	high	moderate	.2802	.335	.407
		low	1.1190	.300	.001*
	moderate	low	.8388	.307	.009*

*p<.05

Table 113

Group Statistics for Verbal Abuse in High, Moderate, and Low Aggressive Girls

Aggressive Groups	N	Mean	Std. Deviation
High	14	2.35	.92
Moderate	13	2.07	.86
Low	21	1.23	.83

In summary, dividing the 48 adolescent girls into three groups representing different degrees of reported physical aggression (high, moderate, and low aggression scores) yielded significant differences between groups in 17 measures. These variables include physical aggression, verbal aggression, anger, hostility, legitimacy of aggression, aggression increases self-esteem, aggression avoids negative self-image, victims deserve aggression, guilt proneness, pride in self, Cook's positive self-esteem, Cook's low self-esteem, Rosenberg's positive self-esteem, Rosenberg's low self-esteem, state pride, state shame and state guilt. In general, the highly aggressive and the moderately aggressive adolescent girls were more likely to report aggressive tendencies, as expected, beliefs supporting aggression, low self-esteem, state guilt and state

shame. Low aggressive adolescent girls were more likely to report guilt proneness, pride in self, state pride and positive self-esteem (Table 114).

Table 114

Summary of the Results of the Differences between High, Moderate, and Low Aggressive Girls

Measure	Degree of Aggression		
	High	Moderate	Low
Physical Aggression	More Likely	More Likely	
Verbal Aggression	More Likely	More Likely	
Anger	More Likely	More Likely	
Hostility	More Likely	More Likely	
Legitimacy of Aggression	More Likely	More Likely	
Aggression Increases Self-esteem	More Likely	More Likely	
Aggression Improves Negative Self-image	More Likely	More Likely	
Victims Deserve Aggression	More Likely		
Cook's Low Self-esteem	More Likely	More Likely	
Rosenberg's Low Self-esteem	More Likely	More Likely	
State guilt	More Likely	More Likely	
State shame		More Likely	
Guilt Proneness			More Likely
Pride in Self		More Likely	More Likely
State Pride			More Likely
Cook's Positive Self-esteem			More Likely
Rosenberg's Positive Self-esteem			More Likely

Correlations among Measures

Of particular interest in this study was the determination of which variables were significantly related to the aggression measures. The theories about shame and aggression suggest that characteristics of shame were related to aggression. One of the purposes of this study was to determine whether this was, in fact, the case as well as determining if other relationships existed between the variables associated with aggression and shame. Once differences between groups on various variables were determined, questions arose about the relationship between these significant variables. As expected, correlations between the various aggression measures and each other were high and positive indicating a strong linear relationship between the aggression subscales. The following Pearson Product Moment Correlation matrices were obtained by dividing the groups in a 2 X 2 matrix matching aggressive versus non-aggressive adolescent girls with in-care and public adolescent girls.

Results using Pearson Product Moment Correlations (Table 115) between measures of various aspects of aggression, measures of low self-esteem, Cook's low self-esteem (C), Rosenberg's low self-esteem (R), and state shame indicated that these measures were positively related to measures of various aspects of aggression. Each aspect of aggression was significantly correlated to shame and Cook's low self-esteem. The variance in physical aggression predicted 26.11% of the variance in Cook's low self-esteem, 30.35% of the variance in Rosenberg's low self-esteem and 24.90% of the variance in state shame. The variance in anger predicted 26.73% of the variance in Cook's low self-esteem, 24.40% of the variance in Rosenberg's low self-esteem, and 26.11% of the variance in state shame. The variance in hostility predicted 44.49% of the variability in Cook's low self-esteem, 43.30% of the variability in Rosenberg's low self-esteem, and 40.96% of the variability in state shame. Measures of low self-esteem and state shame had approximately 25% of their variance in common with physical aggression and anger and approximately 40% of the variance in hostility.

Shame proneness correlated significantly to the 0.01 level of significance with hostility. The correlations with the other aggression subtests were insignificant. The variance in hostility predicted 24.40% of the variability in shame proneness.

The correlations between aggression and both low self-esteem measures and state shame were extremely similar (about .5). Cook's low self-esteem measure was highly positively correlated to state shame. The degree of relationship between these two measures was 60.37% suggesting that the variance in one variable (Cook's low self-esteem) predicted about 60% of the variance in the other (state shame). This result seems to substantiate Cook's claim that low self-esteem and shame were measuring the same phenomenon. Also, the high correlation between low self-esteem and shame may also account for the similarity in correlations between low self-esteem and aggression, and state shame and aggression (about 25%).

State shame and the low self-esteem measures were positively related at the $\alpha = .01$ level of significance to physical aggression, anger, and hostility. The relationship between verbal aggression, state shame, and low self-esteem was not as strong, but still significant at the $\alpha = .05$ level for Cook's low self-esteem and state shame but insignificant for Rosenberg's low self-esteem. The degree of relationship between verbal aggression, Cook's low self-esteem and state shame was at about 9%, a lower degree than the other aspects of aggression. The degree of relationship between hostility and both low self-esteem measures and state shame was about 40%, a substantially higher degree than the other aspects of aggression.

The measures of low self-esteem and shame are highly correlated. The variance of Cook's low self-esteem (C) predicted 67.08% of the variance in Rosenberg's low self-esteem (R) and 60.37% of the variance in state shame. The variance in Rosenberg's low self-esteem predicted 51.84% of the variance in state shame. The variance in shame proneness predicted 35.05% of the variance Cook's low self-esteem, 25.70% of the variance in Rosenberg's low self-esteem, and 27.67% of the variance in state shame. These high positive correlations suggested that these variables may be measuring the different aspects of the same phenomenon.

Table 115

Correlations between Aggression and Shame Measures

	Physical Aggression	Verbal Aggression	Anger	Hostility	Low Self-esteem (C)	Low Self-esteem (R)	State Shame	Shame Prone
Physical Aggression	_	.622**	.777**	.657**	.511**	.550**	.499**	.210
Verbal Aggression		_	.716**	.470**	.301*	.233	.297*	.224
Anger			_	.696**	.517**	.495**	.511**	.280
Hostility				_	.667**	.658**	.640**	.494**
Low Self-esteem (C)					_	.819**	.777**	.592**
Low Self-esteem (R)						_	.720**	.507**
State Shame							_	.526**
Shame Prone								_

** Correlation is significant at the 0.01 level (2-tailed).
* Correlation is significant at the 0.05 level (2-tailed).

Table 116

Correlations between Aggression Measures and Beliefs Measures

	Physical Aggression	Verbal Aggression	Anger	Hostility	Legitimacy	Aggression Increases Self-esteem	Aggression Avoids Negative Self-image
Physical Aggression	_	.622**	.777**	.657**	.682**	.539**	.416**
Verbal Aggression		_	.716**	.470**	.564**	.357*	.290*
Anger			_	.696**	.634**	.526**	.499**
Hostility				_	.386**	.538**	.550**
Legitimacy					_	.578**	.418**
Aggression Increases Self-esteem						_	.658**
Aggression Avoids Negative Self-image							_

** Correlation is significant at the 0.01 level (2-tailed).
* Correlation is significant at the 0.05 level (2-tailed).

The correlation matrix in Table 88 shows a significant positive correlation between the belief in the legitimacy of aggression and all the aspects of aggression. The correlations between the belief in the legitimacy of aggression and physical aggression, verbal aggression and anger are moderately high. Physical aggression and the belief in the legitimacy of aggression have a common variance of 46.5%, verbal aggression and the belief in the legitimacy of aggression have 31.8% of their variance in common, and anger and the legitimacy of aggression have 40.2% of their variance in common. Hostility has the lowest degree of variance in common with the belief in the legitimacy of aggression at 14.9%. The variance in the belief in the legitimacy of aggression predicted a significant portion of the variance in various aspects of aggression.

The belief that aggression increases self-esteem showed significant positive correlations with the different aspects of aggression. Correlations between physical aggression, anger, and hostility were moderately high. Physical aggression and aggression increases self-esteem have a common variance of 29.05%, hostility and the belief that aggression increases self-esteem have 27.67% of their variance in common, and anger and aggression increases self-esteem have 28.94% of their variance in common. Verbal aggression was significantly related to the belief that aggression increases self-esteem to the 0.05 level and had 12.74% of their variance in common.

The belief that aggression avoids a negative self-image showed significant positive correlations with the different aspects of aggression. Correlations between physical aggression, anger, and hostility were moderately high. Physical aggression and aggression avoids a negative self-image have a common variance of 17.31%, hostility and the belief that aggression avoids a negative self-image have 30.25% of their variance in common, and anger and aggression avoids a negative self-image have 24.90% of their variance in common. Verbal aggression was significantly related to the belief that aggression avoids a negative self-image to the 0.05 level and had 8.41% of their variance in common.

Physical aggression was negatively correlated with guilt proneness (Table 89). Physical aggression and guilt proneness had 18.40% of their variance in common suggesting that guilt proneness predicted about 18% of the variance in physical aggression. The only other aspect of aggression negatively correlated to guilt proneness was anger. Anger and guilt proneness had 17.72% of their variance in common. Guilt proneness predicted about 18% of the variance in anger.

Interestingly, Table 117 showed that guilt proneness and state guilt were not related, therefore guilt proneness and state guilt were measuring two different phenomena. This mutual exclusivity was further supported by the correlations that show guilt proneness was negatively correlated to the different aspects of aggression and those that show state guilt were positively correlated to aggression.

Positive correlations were disclosed between state guilt and the aspects of aggression measured in this study. State guilt correlated highly, at the $\alpha = .01$ level of significance, with hostility and indicated that the variability in state guilt predicts 37.45% of the variability in hostility. The variability in state guilt predicted 27.35% of the variability in anger and 26.52% of the variability in physical aggression. The positive correlation between state guilt and verbal aggression was significant to the .05 level. The variability in state guilt predicted 11.63% of the variability in verbal aggression suggesting that the relationship between state guilt and verbal aggression was not as strong as the relationships between the other aspects of aggression.

Table 117

Correlations between Aggression Measures and Guilt Measures

	Physical	Verbal	Anger	Hostile	Guilt Prone	State Guilt
Physical	_	.622**	.777**	.657**	-.429**	.515**
Verbal		_	.716**	.470**	-.263	.341*
Anger			_	.696**	-.421**	.523**
Hostile				_	-.260	.612**
Guilt Prone					_	-.208
State Guilt						_

** Correlation is significant at the 0.01 level (2-tailed).
* Correlation is significant at the 0.05 level (2-tailed).

Table 118

Correlations between Aggression Measures and Measures of Positive Self-esteem and Pride

	Physical	Verbal	Anger	Hostility	Positive Self-esteem (C)	Positive Self-esteem (R)	State Pride
Physical	_	.622**	.777**	.657**	-.440**	-.548**	-.484**
Verbal		_	.716**	.470**	-.191	-.257	-.247
Anger			_	.696**	-.437**	-.474**	-.402**
Hostility				_	-.507**	-.688**	-.512**
Positive Self-esteem (C)					_	.688**	.783**
Positive Self-esteem (R)						_	.670**
State Pride							_

** Correlation is significant at the 0.01 level (2-tailed).

The correlation matrix in Table 118 shows that there was a significant positive correlation at the α= .01 level of significance between state pride and positive self-esteem measures by Cook and Rosenberg. The variance in state pride predicted 61.30% of the variance in Cook's positive self-esteem scale, and 44.89% of the variance in Rosenberg's positive self-esteem scale. Rosenberg's self-esteem scale has 47.33% of its variance in common with Cook's positive self-esteem scale. The high correlations between state pride, Cook and Rosenberg's self-esteem scales indicated that these scales might be measuring the same phenomenon.

In summary, positive self-esteem and state pride were moderately negatively correlated with only three aspects of aggression, physical aggression, anger, and hostility. Verbal aggression was not significantly correlated with positive self-esteem or state pride. Hostility had the highest degree of covariance with the inverse of positive self-esteem and state pride. The variance in hostility predicted 43.33% of the variance in the inverse of Rosenberg's positive self-esteem, 25.71% of the variance in the inverse of Cook's positive self-esteem and 26.21% in state pride

(Table 119). Physical aggression and anger had moderate degrees of covariance with the inverse of positive self-esteem and state pride. The variance in physical aggression predicted 30% of the variance in Rosenberg's positive self-esteem, 23.43% of the variance in state pride and 19.36% in Cook's positive self-esteem scale (Table 91). Similarly, the variance in anger predicted 22.47% of the variance in the inverse of Rosenberg's positive self-esteem, 19.10% of the variance in the inverse of Cook's positive self-esteem, and 16.16% of the variance in state pride (Table 91). These results suggest that the inverse of positive self-esteem and the inverse of state pride related to the different aspects of aggression in a similar manner. These results are similar to the results obtained between aggression, low self-esteem and state shame measures.

Table 119

Percentage of Variability in Common between Measures

Percentage of Variability in Common between Measures

Measure	Physical Aggression	Anger	Hostility	Verbal
Low Self-esteem (Cook)	26.11	26.73	44.49	9.0
State Shame	24.90	26.11	40.96	8.8
State Guilt	26.52	27.35	37.45	11.63
Aggression Increases Self-esteem	29.05	27.67	28.94	12.74
Aggression Avoids Negative Self Image	17.31	24.90	30.25	8.41
Low Self-esteem (Rosenberg)	30.35	24.40	45.30	_
Inverse Positive Self-esteem (Rosenberg)	30.00	22.47	43.33	_
Inverse Positive Self-esteem (Cook)	19.36	19.10	25.71	_
Inverse State Pride	23.43	16.16	26.21	_
Guilt Proneness	18.40	17.72	_	_
Legitimacy of Aggression	46.50	40.20	14.90	31.80

Predicting Aggression

Previous correlation matrices showed the degree of relationship between aggression measures, the belief in the legitimacy of aggression, low self-esteem and shame measures. Of interest was determining if shame and other variables predicted aggression. Significant F values were reported in regression analyses exploring the relationship between aggression measures, the belief in the legitimacy of aggression, low self-esteem and shame measures.

Standard multiple regression analyses were performed between different aspects of aggression as the dependent variables and the belief in the legitimacy of aggression and state shame as independent variables. All the following analyses were performed using SPSS REGRESSION for the evaluation of assumptions. Also, all the following multiple regression analyses tables display the analysis of variance, the unstandardised regression coefficients (B), the standardised regression coefficients (β), the regression coefficient (R^2) and adjusted R^2.

Table 120

Standard Multiple Regression Analysis Using Legitimacy of Aggression and State Shame Variables to Predict Physical Aggression

Model Summary

R	R Square	Adjusted R Square	Std. Error of the Estimate
.775	.601	.583	6.6976

ANOVA

	Sum of Squares	df	Mean Square	F	P
Regression	3036.362	2	1518.181	33.844	.000
Residual	2018.617	45	44.858		
Total	5054.979	47			

Coefficients

	Unstandardised Coefficients B	Std. Error	Standardised Coefficients Beta	t	P
State Shame	1.062	.169	.606	6.293	.000
Legitimacy	.807	.207	.376	3.902	.000

Table 120 shows the standard multiple regression analysis using the belief in the legitimacy of aggression and state shame as independent variables to predict physical aggression. The analysis produced a correlation of .775, between the two variables (R^2 = .601), which is significant, F (2,45) = 33.844, p = .000. The coefficient for state shame is .807, t (45) = 3.902, p = .000 and the coefficient for the belief in the legitimacy of aggression is 1.062, t (45)= 6.293, p = .000. Altogether, 60.1% (58.3% adjusted) of the variability in physical aggression was predicted by knowing the scores on the state shame and legitimacy of aggression variables. Higher scores on the state shame variable and the belief in the legitimacy of aggression variable are associated with higher scores on the physical aggression variable.

Earlier results found a high correlation between Rosenberg's low self-esteem, Cook's low self-esteem, and state shame. It was suggested that measures of low self-esteem and state shame may be different aspects of the same phenomenon. The variance of these measures predicted approximately 25% of the variance of physical aggression. It would seem reasonable then to suggest that Cook's low self-esteem and Rosenberg's low self-esteem could combine with the belief in the legitimacy of aggression to predict physical aggression.

Table 121

Standard Multiple Regression Analysis Using Legitimacy of Aggression and Cook's Low Self-esteem to Predict Physical Aggression

Model Summary

R	R Square	Adjusted R Square	Std. Error of the Estimate
.783	.613	.596	6.5898

ANOVA

	Sum of Squares	df	Mean Square	F	P
Regression	3100.850	2	1550.425	35.703	.000
Residual	1954.129	45	43.425		
Total	5054.979	47			

Coefficients

	Unstandardised Coefficients B	Std. Error	Standardised Coefficients Beta	t	P
Legitimacy	1.062	.166	.606	6.407	.000
Low Self – esteem (Cook)	.178	.043	.392	4.149	.000

A standard multiple regression was performed between physical aggression as the dependent variable and the belief in the legitimacy of aggression and Cook's low self-esteem as the predictor variables. The analysis displayed in Table 121 produced a correlation of .783

between the two variables ($R^2 = .613$), which is significant, F (2,45) = 35.703, p = .000. The coefficient for Cook's low self-esteem is .178, t (45) = 4.149, p = .000 and the coefficient for the belief in the legitimacy of aggression is .985, t (45)= 5.213, p = .000. Altogether, 61.3% (59.6% adjusted) of the variability in physical aggression was predicted by knowing the scores on the Cook's low self-esteem and legitimacy of aggression variables.

Table 122

Standard Multiple Regression Analysis Using Legitimacy of Aggression and Rosenberg's Low Self-esteem to Predict Physical Aggression

Model Summary

	R	R Square	Adjusted R Square	Std. Error of the Estimate
	.821	.674	.660	6.0490

ANOVA

	Sum of Squares	df	Mean Square	F	P
Regression	3408.421	2	1704.211	46.576	.000
Residual	1646.558	45	36.590		
Total	5054.979	47			

Coefficients

	Unstandardised Coefficients B	Std. Error	Standardised Coefficients Beta	t	P
Legitimacy	1.081	.151	.616	7.169	.000
Low Self-esteem (Rosenberg)	.624	.116	.462	5.370	.000

A standard multiple regression was performed between physical aggression as the dependent variable and the belief in the legitimacy of aggression and Rosenberg's low self-esteem as the predictor variables. The analysis displayed in Table 122 produced a correlation of .821, between the two variables ($R^2 = .674$), which is significant, F (2,45) = 46.576, p = .000. The

coefficient for Rosenberg's low self-esteem is .624, t (45) = 5.370, p = .000 and the coefficient for the belief in the legitimacy of aggression is 1.081, t (45) = 7.169, p = .000. Altogether, 67.4% (66.0% adjusted) of the variability in physical aggression was predicted by knowing the scores on the Rosenberg's low self-esteem and legitimacy of aggression variables.

Of the three linear combinations of two predictor variables, the linear combination of Rosenberg's low self-esteem and legitimacy of aggression predictor variables seemed to predict physical aggression the best. Almost 67% of the variability in physical aggression was accounted for by the two variables, Rosenberg's low self-esteem and legitimacy of aggression compared to using shame (60.1 % of the variability). Almost 61% of the variability in physical aggression was accounted for by Cook's low self-esteem (61.3%) and the legitimacy of aggression.

Table 123

Standard Multiple Regression Analysis Using Legitimacy of Aggression and Cook's Positive Self-esteem to Predict Physical Aggression

Model Summary

R	R Square	Adjusted R Square	Std. Error of the Estimate
.741	.549	.528	7.1213

ANOVA

	Sum of Squares	df	Mean Square	F	P
Regression	2772.867	2	1386.433	27.338	.000
Residual	2282.112	45	50.714		
Total	5054.979	47			

Coefficients

	Unstandardised Coefficients B	Std. Error	Standardised Coefficients Beta	t	P
Legitimacy	1.075	.181	.613	5.949	.000
Positive Self –esteem (Cook)	-.537	.187	-.296	-2.876	.006

A standard multiple regression was performed between physical aggression as the dependent variable and the belief in the legitimacy of aggression and the Cook's positive self-esteem as the predictor variables. The analysis displayed in Table 123 produced a correlation of .741 between the two variables (R^2 = .549), which is significant, F (2,45) = 27.338, p = .000. The coefficient for Cook's positive self-esteem is -. 537, t (45) = -2.876, p = .006 and the coefficient for the belief in the legitimacy of aggression is 1.075, t (45)= 5.949, p = .000. Altogether, 54.9% (52.8% adjusted) of the variability in physical aggression was predicted by knowing the scores on Cook's positive self-esteem and legitimacy of aggression variables.

Table 124

Standard Multiple Regression Analysis Using Legitimacy of Aggression and Rosenberg's Positive Self-esteem to Predict Physical Aggression

Model Summary

R	R Square	Adjusted R Square	Std. Error of the Estimate
.795	.633	.616	6.4235

ANOVA

	Sum of Squares	df	Mean Square	F	P
Regression	3198.229	2	1599.115	38.756	.000
Residual	1856.750	45	41.261		
Total	5054.979	47			

Coefficients

	Unstandardised Coefficients B	Std. Error	Standardised Coefficients Beta	t	P
Legitimacy	1.036	.162	.591	6.377	.000
Positive Self-esteem (Rosenberg)	-.539	.119	-.419	-4.525	.000

A standard multiple regression was performed between physical aggression as the dependent variable and the belief in the legitimacy of aggression and Rosenberg's positive self-esteem as the predictor variables. The analysis displayed in Table 124 produced a correlation of .795, between the two variables (R^2 = .633), which is significant, F (2,45) = 38.756, p = .000. The coefficient for Rosenberg's positive self-esteem is -. 539, t (45) = -4.525, p = .000 and the coefficient for the belief in the legitimacy of aggression is 1.036, t (45) = 6.377, p = .000. Altogether, 63.3% (61.6% adjusted) of the variability in physical aggression was predicted by knowing the scores on the Rosenberg's positive self-esteem and legitimacy of aggression variables.

Of the three linear combinations of two predictor variables, the linear combination of Rosenberg's positive self-esteem and legitimacy of aggression predictor variables seemed to predict physical aggression the best. Almost 63.3% of the variability in physical aggression was accounted for by the two variables, Rosenberg's positive self-esteem and legitimacy of aggression compared to using shame (60.1 % of the variability). Almost 55% of the variability in physical aggression was accounted for by Cook's low self-esteem (54.9%) and the legitimacy of aggression.

A standard multiple regression was performed between anger as the dependent variable and the belief in the legitimacy of aggression and state shame as the predictor variables. The analysis displayed in Table 125 produced a correlation of .744, between the two variables (R^2 = .553), which is significant, $F(2,45) = 27.863$, $p = .000$. The coefficient for state shame is .525, $t(45) = 3.911$, $p = .000$ and the coefficient for the belief in the legitimacy of aggression is .595, $t(45) = 5.425$, $p = .000$. Altogether, 55.3% (53.3% adjusted) of the variability in anger was predicted by knowing the scores on the state shame and legitimacy of aggression variables.

Table 125

Standard Multiple Regression Analysis Using Legitimacy of Aggression and State Shame Variables to Predict Anger

Model Summary

R	R Square	Adjusted R Square	Std. Error of the Estimate
.744	.553	.533	4.3522

ANOVA

	Sum of Squares	df	Mean Square	F	P
Regression	1055.540	2	527.770	27.863	.000
Residual	852.377	45	18.942		
Total	1907.917	47			

Coefficients

	Unstandardised Coefficients B	Std. Error	Standardised Coefficients Beta	t	P
State Shame	.595	.110	.552	5.425	.000
Legitimacy	.525	.134	.398	3.911	.000

Table 126

Standard Multiple Regression Analysis Using Legitimacy of Aggression and Rosenberg's Low Self-esteem Variables to Predict Anger

Model Summary

R	R Square	Adjusted R Square	Std. Error of the Estimate
.754	.568	.549	4.2773

ANOVA

	Sum of Squares	df	Mean Square	F	P
Regression	1084.621	2	542.310	29.642	.000
Residual	823.296	45	18.295		
Total	1907.917	47			

Coefficients

	Unstandardised Coefficients B	Std. Error	Standardised Coefficients Beta	t	P
Legitimacy	.619	.107	.574	5.806	.000
Low Self-esteem (Rosenberg)	.343	.082	.413	4.174	.000

Table 127

Standard Multiple Regression Analysis Using Legitimacy of Aggression and Cook's Low Self-esteem Variables to Predict Anger

Model Summary

R	R Square	Adjusted R Square	Std. Error of the Estimate
.750	.562	.543	4.3080

ANOVA

	Sum of Squares	df	Mean Square	F	P
Regression	1072.786	2	536.393	28.903	.000
Residual	835.131	45	18.558		
Total	1907.917	47			

Coefficients

	Unstandardised Coefficients B	Std. Error	Standardised Coefficients Beta	t	P
Legitimacy	.596	.108	.553	5.503	.000
Low Self-esteem (Cook)	.114	.028	.409	4.067	.000

The standard multiple regression analyses performed between anger as the dependent variable and the belief in the legitimacy of aggression and low self-esteem measures as the predictor variables are shown in Tables 126 and 127. The results obtained using low self-esteem as predictor variables are similar to the results obtained using state shame.

The analyses produced correlations that were similar to but less than that of state shame. A correlation of .754, between legitimacy of aggression and Rosenberg's low self-esteem (Table 124) (R^2 = .568) was significant, F (2,45) = 29.642, p = .000. The coefficient for Rosenberg's low self-esteem is .343, t (45) = 4.174, p = .000 and the coefficient for the belief in the legitimacy of

aggression is .619, t (45) = 5.806, p = .000 (Table 98). Similarly, in Table 127, a correlation of .750, between legitimacy of aggression and Cook's low self-esteem (R^2 = .562) was significant, F (2,45) = 28.903, p = .000. The coefficient for Cook's low self-esteem is .114, t (45) = 4.067, p = .000 and the coefficient for the belief in the legitimacy of aggression is .596, t (45) = 5.503, p = .000 (Table 127).

Of the three linear combinations of two predictor variables, the linear combination of Rosenberg's low self-esteem and legitimacy of aggression predictor variables appear to predict anger the best. Altogether, 56.8% (54.9% adjusted) of the variability in anger was predicted by knowing the scores on Rosenberg's low self-esteem and legitimacy of aggression. Knowing the scores on Cook's low self-esteem and legitimacy of aggression variables predicted 56.2% (54.3% adjusted) of the variability in anger. Low self-esteem measures were comparable to state shame and the belief in the legitimacy of aggression in predicting the variability in anger, however, state shame and legitimacy (55.3%) captured less of the variability in anger than the low self-esteem measures (56.8%, Rosenberg, 56.2% Cook) and legitimacy.

The standard multiple regression analyses performed between hostility as the dependent variable and the belief in the legitimacy of aggression, state shame, and low self-esteem measures as the predictor variables are shown in Tables 128, 129 and 130, respectively. As expected, the results obtained using state shame, as a predictor variable, were similar to the results obtained using the low self-esteem measures. However, the self-esteem measures combined with the legitimacy of aggression, as predictor variables, were slightly better at predicting the variability of hostility than the state shame variable combined with the legitimacy of aggression variable.

Table 128

Standard Multiple Regression Analysis Using Legitimacy of Aggression and State Shame Variables to Predict Hostility

Model Summary

R	R Square	Adjusted R Square	Std. Error of the Estimate
.691	.478	.454	4.8928

ANOVA

	Sum of Squares	df	Mean Square	F	P
Regression	984.739	2	492.370	20.568	.000
Residual	1077.261	45	23.939		
Total	2062.000	47			

Coefficients

	Unstandardised Coefficients B	Std. Error	Standardised Coefficients Beta	t	P
State Shame	.298	.123	.266	2.417	.020
Legitimacy	.804	.151	.586	5.322	.008

Table 129

Standard Multiple Regression Analysis Using Legitimacy of Aggression and Rosenberg's Low Self-esteem Variables to Predict Hostility

Model Summary

R	R Square	Adjusted R Square	Std. Error of the Estimate
.721	.520	.499	4.6885

ANOVA

	Sum of Squares	df	Mean Square	F	P
Regression	1072.823	2	536.412	24.403	.000
Residual	989.177	45	21.982		
Total	2062.000	47			

Coefficients

	Unstandardised Coefficients B	Std. Error	Standardised Coefficients Beta	t	P
Legitimacy	.333	.117	.298	2.853	.007
Low Self-esteem (Rosenberg)	.532	.090	.616	5.903	.000

Table 130

Standard Multiple Regression Analysis Using Legitimacy of Aggression and Cook's Low Self-esteem Variables to Predict Hostility

Model Summary

R	R Square	Adjusted R Square	Std. Error of the Estimate
.716	.513	.491	4.7253

ANOVA

	Sum of Squares	df	Mean Square	F	P
Regression	1057.228	2	528.614	23.675	.000
Residual	1004.772	45	22.328		
Total	2062.000	47			

Coefficients

	Unstandardised Coefficients B	Std. Error	Standardised Coefficients Beta	t	P
Legitimacy	.297	.119	.265	2.500	.016
Low Self-esteem (Cook)	.179	.031	.615	5.797	.000

The correlations generated by the analyses for the low self-esteem measures were similar to each other and to shame. Like the correlation coefficients between legitimacy of aggression and state shame as predictors of physical aggression and anger, where low self-esteem along with the legitimacy of aggression predicted a larger share of the variability in the aggression measures, shame predicted a smaller share of variability for hostility. A correlation of .691 between shame and the legitimacy of aggression (R^2 = .478) was significant, F (2, 45) = 20.568, p= .000. A correlation of .721, between legitimacy of aggression and Rosenberg's low self-esteem (R^2 = .520) was significant, F (2,45) = 24.403, p = .000. Similarly, a correlation of .716,

between legitimacy of aggression and Cook's low self-esteem (R^2 = .513) was significant, F (2,45) = 23.675, p = .000 (Tables 128, 129, and 130 respectively).

The coefficient for state shame was .804, t (45) = 5.322, p = .000 and the coefficient for the belief in the legitimacy of aggression was .298, t (45) = 2.417, p = .020 (Table 128). The coefficient for Rosenberg's low self-esteem was .532, t (45) = 5.903, p = .000 and the coefficient for the belief in the legitimacy of aggression was .333, t (45) = 2.853, p = .007 (Table 129). The coefficient for Cook's low self-esteem was .179, t (45) = 5.797, p = .000 and the coefficient for the belief in the legitimacy of aggression was .297, t (45) = 2.500, p = .016 (Table 130).

Considering the three linear combinations of two predictor variables, the linear combination of Rosenberg's low self-esteem and legitimacy of aggression predictor variables seemed to predict the variability in hostility the best. Altogether, 52% (49.9% adjusted) of the variability in hostility was predicted by knowing the scores on Rosenberg's low self-esteem and legitimacy of aggression. Knowing the scores on Cook's low self-esteem and legitimacy of aggression variables predicted 51.3% (49.1% adjusted) of the variability in hostility. State shame and legitimacy of aggression predicted 47.8% (45.4% adjusted) of the variability in hostility. Low self-esteem measures seem to capture more of the variability in hostility (52%, Rosenberg, 51.3% Cook) than state shame (47.8%), but the differences were small and were essentially the same.

The above results showed that the belief in the legitimacy of aggression, state shame and low self-esteem, a variable similar to shame, predicted physical aggression, anger, and hostility. Since aspects of aggression are complex phenomena, other intervening variables besides shame, or along with shame, may predict aspects of aggression.

Standard multiple regression analyses to predict different aspects of aggression using state guilt, state shame, Rosenberg's low self-esteem scale and the belief in the legitimacy of aggression as independent variables will be described below.

Table 131

Standard Multiple Regression Analysis Using State Guilt and the Belief in the Legitimacy of Aggression to Predict Physical Aggression

Model Summary

	R	R Square	Adjusted R Square	Std. Error of the Estimate
	.759	.576	.557	6.9014

ANOVA

	Sum of Squares	df	Mean Square	F	P
Regression	2911.660	2	1455.830	30.566	.000
Residual	2143.319	45	47.629		
Total	5054.979	47			

Coefficients

	Unstandardised Coefficients B	Std. Error	Standardised Coefficients Beta	t	P
State Guilt	.1021	.178	.582	5.740	.000
Legitimacy	.725	.212	.347	3.424	.001

A standard multiple regression analyses was performed between physical aggression as the dependent variable and the belief in the legitimacy of aggression and state guilt as the predictor variables. The analysis, displayed in Table 131, produced a correlation of .759, between the two variables (R^2 = .576), which is significant, F (2,45) = 30.566, p = .000. The coefficient for state guilt is .725, t (45) = 3.424, p = .001 and the coefficient for the belief in the legitimacy of aggression is 1.021, t (45) = 5.740, p = .000. Altogether, 57.6% (55.7% adjusted) of the variability in physical aggression was predicted by knowing the scores on the state guilt and legitimacy of aggression variables. The results obtained using state guilt and legitimacy of aggression, as predictor variables, are similar in degree to the results obtained using state shame.

A standard multiple regression analyses was performed between anger as the dependent variable and the belief in the legitimacy of aggression and state guilt as the predictor variables. The analysis, displayed in Table 132, produced a correlation of .726, between the two variables (R^2 = .527), which is significant, F (2,45) = 25.109, p = .000. The coefficient for state guilt is .476, t (45) = 3.464, p = .001 and the coefficient for the belief in the legitimacy of aggression is .567, t (45) = 4.918, p = .000. Altogether, 52.7% (50.6% adjusted) of the variability in anger was predicted by knowing the scores on the state guilt and legitimacy of aggression variables.

Table 132

Standard Multiple Regression Analysis Using State Guilt and Legitimacy of Aggression to Predict Anger

Model Summary

R	R Square	Adjusted R Square	Std. Error of the Estimate
.726	.527	.506	4.4763

ANOVA

	Sum of Squares	df	Mean Square	F	P
Regression	1006.238	2	503.119	25.109	.000
Residual	901.679	45	20.037		
Total	1907.917	47			

Coefficients

	Unstandardised Coefficients B	Std. Error	Standardised Coefficients Beta	t	P
Legitimacy	.567	.115	.526	4.918	.000
State Guilt	.476	.137	.371	3.464	.001

A standard regression analysis cited previously in Table 128, showed that state shame and the belief in the legitimacy of aggression predicted hostility, the cognitive component of

aggression. Adding the Rosenberg's low self-esteem measure improves the predictive ability of the state shame and legitimacy of aggression variables. Table 133 shows that the standard multiple regression analysis using state guilt, legitimacy of aggression, and Rosenberg's low self-esteem to predict hostility produced a correlation coefficient of .752, between the three variables (R^2 = .566), which is significant, F (3,44) = 19.128, p = .000. The coefficient for state guilt is .363, t (44) = 2.153, p = .037, the coefficient for the legitimacy of aggression is .269, t (44) = 2.318, p = .025, and the coefficient for low self-esteem is .402, t (44) = 3.815, p = .000. Altogether, 56.6% (53.6% adjusted) of the variability in hostility was predicted by knowing the scores on the state guilt, the legitimacy of aggression, and low self-esteem variables. The prediction of hostility using state guilt, legitimacy of aggression, and low esteem is substantially improved by adding the low self-esteem variable.

In summary, two core components predicted all the aspects of aggression, shame and the belief in the legitimacy of aggression. The two low self-esteem measures and legitimacy of aggression predict three aspects of aggression, physical aggression, anger and hostility. Cook argued that low self-esteem was equivalent to shame, hence reaffirming that shame and legitimacy of aggression predict aggression. State guilt and the legitimacy of aggression predicted only two out of the four aspects of aggression, physical aggression and anger. Rosenberg's measures of low self-esteem aid in strengthening the predictions of hostility suggesting that hostility may have a special relationship to shame and low self-esteem.

The outcome that revealed that state guilt predicts physical aggression and anger suggested that state guilt might be another variable necessary for the expression of anger and physical aggression. The variables that predict the various aspects of aggression are summarised in Table 134.

Table 133

Standard Multiple Regression Analysis Using State Guilt, the Belief in the Legitimacy of Aggression and Rosenberg's Low Self-esteem Variables to Predict Hostility

Model Summary

R	R Square	Adjusted R Square	Std. Error of the Estimate
.752	.566	.536	4.5099

ANOVA

	Sum of Squares	df	Mean Square	F	P
Regression	1167.093	3	389.031	19.128	.000
Residual	894.907	44	20.339		
Total	2062.000	47			

Coefficients

	Unstandardised Coefficients B	Std. Error	Standardised Coefficients Beta	t	P
State Guilt	.363	.169	.272	2.153	.037
Low Self-esteem (Rosenberg)	.402	.105	.466	3.815	.000
Legitimacy	.269	.116	.241	2.318	.025

Table 134

A Summary of the Variables Predicting Aspects of Aggression

Aggression Dependent Variables	Predictor Independent Variables	Percentage of Variability Predicted
Physical	State Shame and Legitimacy	60.1%
Physical	Cook's Low Self-esteem and Legitimacy	61.3%
Physical	Rosenberg's Low Self-esteem and Legitimacy	67.4%
Physical	Cook's Positive Self-esteem and Legitimacy	54.9%
Physical	Rosenberg's Positive Self-esteem and Legitimacy	63.3%
Physical	State Guilt and Legitimacy	57.6%
Anger	State Shame and Legitimacy	55.3%
Anger	Cook's Low Self-esteem and Legitimacy	56.2%
Anger	Rosenberg's Low Self-esteem and Legitimacy	56.8%
Anger	State Guilt and Legitimacy	52.7%
Hostility	State Shame and Legitimacy	47.8%
Hostility	Cook's Low Self-esteem and Legitimacy	51.3%
Hostility	Rosenberg's Low Self-esteem and Legitimacy	52.0%
Hostility	State Guilt, Rosenberg's Low Self-esteem and Legitimacy	56.6%

In summary, the results of multiple regression analysis showed that all aspects of aggression were predicted by the belief in the legitimacy of aggression. This suggested that the belief in the legitimacy of aggression is an important element in the prediction of aggression.

For hostility, state shame and low self-esteem seemed to make a significant contribution to the prediction of hostility. This is also true when a combination of state guilt and low self-esteem combined with the belief in the legitimacy of aggression were used to predict hostility.

The correlations between the predictors of aggression were high judging from the correlation matrices displayed above (Tables 115 – 118) which suggested an additional question: What variables predict those components involved in predicting aggression?

What Variables Predict those Components Involved in Predicting Aggression?

State Shame

The correlation matrix showing correlations between state shame, low self-esteem, and aggression measures displayed in Table 115 showed that state shame and the low self-esteem measures were correlated with each other. Significant F values were reported in standard regression analyses exploring relationships between Cook's low self-esteem and Rosenberg's low self-esteem measures as dependent variables and state shame, low self-esteem measures and positive self-esteem as independent measures. The following analyses were performed using SPSS REGRESSION for the evaluation of assumptions. Standard multiple regression analyses will be reported in the following tables displaying the analysis of variance, the unstandardised regression coefficients (B) and intercept, the standardised regression coefficients (β), the regression coefficient (R^2) and adjusted R^2.

A standard multiple regression was performed between Cook's low self-esteem/shame as the dependent variable and Rosenberg's low self-esteem and state shame as independent variables. Table 135 displays the standard multiple regression analysis using state shame and Rosenberg's low self-esteem to predict Cook's low self-esteem/shame. The analysis displayed in Table 135 produced a correlation of .862, between the two variables ($R^2 = .743$), which is

significant, F (2,45) = 64.980, p = .000. The coefficient for state shame is 1.836, t (45) = 3.570, p = .001 and the coefficient for Rosenberg's low self-esteem is 1. 599, t (45) = 4.943, p = .000. Altogether, 74.3% (73.1% adjusted) of the variability in Cook's low self-esteem/shame was predicted by knowing the scores on state shame and Rosenberg's low self-esteem.

Table 135

Standard Multiple Regression Analysis Using State Shame and Rosenberg's Low Self-esteem to Predict Cook's Low Self-esteem/Shame

Model Summary

R	R Square	Adjusted R Square	Std. Error of the Estimate
.862	.743	.731	11.8098

ANOVA

	Sum of Squares	df	Mean Square	F	P
Regression	18125.638	2	9062.819	64.980	.000
Residual	6276.174	45	139.471		
Total	24401.812	47			

Coefficients

	Unstandardised Coefficients B	Std. Error	Standardised Coefficients Beta	t	P
State Shame	1.836	.514	.389	3.570	.001
Low Self-esteem (Cook)	1.599	.323	.538	4.943	.000

A standard multiple regression analysis predicting Rosenberg's low self-esteem using Cook's low self-esteem and Cook's positive self-esteem is displayed in Table 136. The analysis produced a correlation of .860, between the two variables (R^2 = .739), which is significant, F (2.45) = 63.811, p = .000. The coefficient for Cook's low self-esteem/shame is .202, t (45) = 6.032, p = .000 and the coefficient for Cook's pride (positive self-esteem) variable is - .460, t

(45)= -3.460, p = .001. Altogether, 73.9% (72.8% adjusted) of the variability in Rosenberg's low self-esteem was predicted by knowing the scores on Cook's low self-esteem/shame and the inverse (or lack) of Cook's positive self-esteem.

Table 136

Standard Multiple Regression Analysis Using Cook's Low Self-esteem/Shame and the Inverse of Cook's Positive Self-esteem to Predict Rosenberg's Low Self-esteem

Model Summary

R	R Square	Adjusted R Square	Std. Error of the Estimate
.860	.739	.728	4.0044

ANOVA

	Sum of Squares	df	Mean Square	F	P
Regression	2046.406	2	1023.203	63.811	.000
Residual	721.573	45	16.035		
Total	2767.979	47			

Coefficients

	Unstandardised Coefficients B	Std. Error	Standardised Coefficients Beta	t	P
Low Self-esteem (C)	.202	.033	.598	6.032	.000
Positive Self-esteem (C)	-.460	.133	-.343	-3.460	.001

Table 137 is a summary of the variables that predict low self-esteem.

Table 137

A Summary of the Variables that Predict Cook and Rosenberg's Low Self-esteem

Low Self-esteem Dependent Variable	Predictor Independent Variable	Percentage of Variability Predicted
Cook's Low Self-esteem	Rosenberg's Low Self-esteem and State Shame	74.3%
Rosenberg's Low Self-esteem	Cook's Low Self-esteem and Cook's Positive Self-esteem	73.9%

How is the Physical, Sexual, and Verbal Abuse of Adolescent Girls Related to Aggression?

Analyses of variance and post hoc comparisons showed differences between groups in physical, sexual, and verbal abuse (Tables 35 and 39). More adolescent girls in-care than public adolescent girls were physically and/or sexually abused. More aggressive adolescent girls than non-aggressive girls reported a high degree of verbal abuse.

Pearson product moment correlations were attempted in order to determine if abuse was related to shame, aspects of aggression, beliefs, self-conscious affect, and guilt. The results of physical and/or sexual abuse of adolescent girls were correlated with measures of aggression and state shame. The correlation matrix failed to reveal a relationship between the physical and/or sexual abuse of adolescent girls and the report of aggressive tendencies in this sample of adolescent girls or the report of state shame. This result suggested that there was no direct relationship between aggressive adolescent girls and the report of their experience of physical and/or sexual abuse. Non-aggressive adolescent girls were as likely as aggressive adolescent girls to report physical and/or sexual abuse. Moreover, no direct relationship was found between reported state shame and the report of their experience of physical and/or sexual abuse.

The results of verbal abuse of the sample of 48 adolescent girls were correlated with measures of aggression and state shame. The correlation matrix revealed that verbal abuse of the adolescent girls was related to different aspects of aggression. There was a significant moderate positive relationship between the verbal abuse of the adolescent girls and physical aggression, anger and hostility. No significant relationship was found between the report of verbal abuse and

the report of state shame. No significant relationship was found between the verbal abuse of adolescent girls and their reported use of verbal abuse against others. Correlations between the verbal abuse of adolescent girls and their reported aggressive tendencies are displayed in Table 138.

Table 138

Correlations between Verbal Abuse of Adolescent Girls and Reported Aggressive Tendencies

Measure Correlated with Verbal Abuse of Adolescent Girls	Correlations with Verbal Abuse of Adolescent Girls	
Physical Aggression	.451	**
Anger	.410	**
Hostility	.354	*

** Correlation is significant at the 0.01 level (2-tailed)
* Correlation is significant at the 0.05 level (2-tailed)

The variance in verbal abuse predicted 20.34% of the variance in physical aggression, 16.81% of the variance in anger and 12.53% of the variance in hostility. Verbal abuse appears to be more highly related to physical aggression in adolescent girls than to anger or hostility. The observation that more aggressive adolescent girls reported a higher level of verbal abuse may account for the positive relationship between physical aggression and verbal abuse.

Further correlations found that physical and/or sexual abuse of adolescents and verbal abuse were correlated with only a few other variables. Verbal abuse was moderately correlated with guilt proneness, α pride, β pride, legitimacy of aggression, and state guilt. Verbal abuse is highly correlated to physical and/or sexual abuse. Physical and/or sexual abuse is correlated to guilt proneness and legitimacy of aggression. These correlations are shown in Table 139.

Table 139

Correlations between Abuse of Adolescent Girls and Guilt, Pride, and Legitimacy of Aggression

	Physical/sexual Abuse	Verbal Abuse
Physical/sexual Abuse	_	.769 **
Verbal Abuse	.769 **	_
Guilt Proneness	-.318 *	-.297 *
α Pride	-.205	-.366 *
β Pride	-.139	-.289 *
Legitimacy of Aggression	.391 **	.370 **
State Guilt	.195	.422 **

** Correlation is significant at the 0.01 level (2-tailed)
* Correlation is significant at the 0.05 level (2-tailed)

Physical/sexual abuse was highly positively correlated with verbal abuse. The variance in physical/sexual abuse predicted 59.14% of the variance in verbal abuse. The inverse of guilt proneness was related to physical/sexual abuse and verbal abuse suggesting that physical/sexual abuse and verbal abuse were related to the lack of guilt proneness or that when the report of physical/sexual or verbal abuse increase, the report of guilt proneness decreases. The variance in guilt proneness predicted 10.11% of the variance in physical/sexual abuse and 8.82% of variability in verbal abuse. The belief in the legitimacy of aggression was related to physical/sexual abuse and verbal abuse. The variance in the belief in the legitimacy of aggression predicted 15.29% of the variance in physical/sexual abuse and 13.69% of the variance in verbal abuse. Finally, the report of verbal abuse was related to the inverse of both α pride and β pride. This result suggested that the report of verbal abuse is related to the lack of α pride and β pride or when the report of verbal abuse increases, the report of α pride (pride in self) and β pride (pride in behaviour) decrease. The variance in verbal abuse predicted 13.39% of the variance in α pride and predicted 8.35% of the variance in β pride.

Verbal abuse was also found to correlated to measures of self-esteem but, the report of verbal abuse was not significantly related to state shame. Table 112 displays the correlations between verbal abuse and Cook's and Rosenberg's measures of self-esteem.

Table 140

Correlations between Verbal Abuse and Measures of Self-esteem

Self-esteem Measures	Verbal Abuse
Positive Self-esteem (Cook)	-.287 *
Low Self-esteem (Cook)	.324 *
Positive Self-esteem (Rosenberg)	-.427 **
Low Self-esteem (Rosenberg)	.350 *

** Correlation is significant at the 0.01 level (2-tailed)
* Correlation is significant at the 0.05 level (2-tailed)

Verbal abuse was related to the inverse of Cook's and Rosenberg's positive self-esteem measures suggesting that verbal abuse was related to the lack of positive self-esteem or when the report of verbal abuse increases, the report of positive self-esteem decreases. The variability of verbal abuse predicted 8.24% of the variability in Cook's positive self-esteem and predicted 18.23% of Rosenberg's positive self-esteem. Moreover, verbal abuse was positively related to low self-esteem. The variance in verbal abuse predicted 10.50% of the variance in Cook's low self-esteem and predicted 18.23% of the variance in Rosenberg's low self-esteem.

The correlations in Table 139 showed that verbal abuse was related to both physical aggression and the belief in the legitimacy of aggression. To determine the possibility that physical aggression could be predicted by verbal abuse was of interest. Hence, a standard multiple regression analysis was performed between physical aggression as the dependent variable and verbal abuse and the legitimacy of aggression as predictor variables. The analysis displayed in Table 141 produced a correlation of .655, between the two variables, verbal abuse and the legitimacy of aggression (R^2 = .428), which is significant, F (2,45) = 63.811, p = .000.

The coefficient for verbal abuse is 2.750, t (45) = 2.161, p = 0.036 and the coefficient for legitimacy of aggression .939, t (45)= 4.210, p = .000. Altogether, 42.8% (40.3% adjusted) of the variability in physical aggression was predicted by knowing the scores on verbal abuse and the legitimacy of aggression.

Table 141

Standard Multiple Regression Analysis Using Verbal Abuse and Legitimacy of Aggression to Predict Physical Aggression

Model Summary

R	R Square	Adjusted R Square	Std. Error of the Estimate
.655	.482	.403	8.0103

ANOVA

	Sum of Squares	df	Mean Square	F	P
Regression	2165.608	2	1082.804	16.864	.000
Residual	2889.371	45	64.208		
Total	5054.979	47			

Coefficients

	Unstandardised Coefficients B	Std. Error	Standardised Coefficients Beta	t	P
Verbal Abuse	2.750	1.273	.262	2.161	.036
Legitimacy	.939	.223	.511.	4.210	.000

Table 142

Standard Multiple Regression Analysis Using Verbal Abuse and State Shame to Predict Cook's Low Self-esteem

Model Summary

R	R Square	Adjusted R Square	Std. Error of the Estimate
.800	.640	.624	13.9666

ANOVA

	Sum of Squares	df	Mean Square	F	P
Regression	15623.903	2	7811.951	40.048	.000
Residual	8777.910	45	195.065		
Total	24401.812	47			

Coefficients

	Unstandardised Coefficients B	Std. Error	Standardised Coefficients Beta	t	P
Verbal Abuse	4.510	2.093	.196	2.155	.037
State Shame	3.506	.428	.743	8.181	.000

Since state shame, low self-esteem and verbal abuse are related, a standard multiple regression analysis was performed between Cook's low self-esteem as the dependent variable and verbal abuse and state shame as the predictor variables. The analysis displayed in Table 142 produced a correlation of .800, between the two variables, verbal abuse and the state shame (R^2 = .640), which is significant, F (2,45) = 40.048, p = .000. The coefficient for verbal abuse is 4.510, t (45) = 2.155, p = .037 and the coefficient for legitimacy of aggression 3.506, t (45) = 8.181, p = .000. Altogether, 64.0% (62.4% adjusted) of the variability in Cook's low self-esteem was predicted by knowing the scores on verbal abuse and state shame.

Rosenberg's low self-esteem is also related to verbal abuse and state shame. A standard multiple regression analysis shown in Table 143 was performed between Rosenberg's low self-esteem as the dependent variable and verbal abuse and state shame as the predictor variables.

Table 143

Standard Multiple Regression Analysis Using Verbal Abuse and State Shame to Predict Rosenberg's Low Self-esteem

Model Summary

R	R Square	Adjusted R Square	Std. Error of the Estimate
.755	.571	.552	5.1386

ANOVA

	Sum of Squares	df	Mean Square	F	P
Regression	1579.727	2	789.864	29.913	.000
Residual	1188.252	45	26.406		
Total	2767.979	47			

Coefficients

	Unstandardised Coefficients B	Std. Error	Standardised Coefficients Beta	t	P
Verbal Abuse	1.803	.770	.232	2.341	.024
State Shame	1.081	.158	.680	6.854	.000

The analysis displayed in Table 143 produced a correlation of .755, between the two variables, verbal abuse and the state shame ($R^2 = .571$), which is significant, $F(2,45) = 29.913$, $p = .000$. The coefficient for verbal abuse is 1.803, $t(45) = 2.341$, $p = .0.024$ and the coefficient for legitimacy of aggression 1.081, $t(45) = 6.854$, $p = .000$. Altogether, 57.1% (55.2% adjusted) of the variability in Rosenberg's low self-esteem was predicted by knowing the scores on verbal abuse and state shame.

In summary, the results to correlation and multiple analyses of physical/sexual and verbal abuse suggested that physical/sexual abuse was not significantly related to aggression. However, verbal abuse was significantly related to three aspects of aggression: physical aggression, anger and hostility. This suggests that there is a positive direct relationship between the verbal abuse of aggressive adolescents by meaningful others in their lives and the reported use of physical aggression, anger and hostility by these adolescent girls. No significant direct relationship was found in this sample between aspects of aggression and physical/sexual abuse of adolescent girls. No significant direct relationship was found in this sample between state shame and physical, sexual, or verbal abuse of adolescent girls.

Physical, sexual and verbal abuse were related to the lack of guilt proneness and directly related to state guilt, which suggests that guilt proneness and state guilt are different phenomena. Physical, sexual and verbal abuse were related to the belief in the legitimacy of aggression. Verbal abuse was directly related to both Cook's and Rosenberg's low self-esteem and related to the lack of both Cook's and Rosenberg's positive self-esteem. This result suggested that verbal abuse of adolescent girls was related to the reduction of self-esteem. Physical/sexual abuse was not significantly related to the reduction of self-esteem in this sample since physical/sexual abuse was experience by many aggressive and non-aggressive girls in the sample.

In summary, physical aggression in adolescent girls was predicted by the verbal abuse of adolescent girls and the belief in the legitimacy of aggression. Cook's low self-esteem was predicted by the verbal abuse and state shame and Rosenberg's low self-esteem was predicted by verbal abuse and state shame.

Factor Analysis

For the following section, the results need to be interpreted with caution since the subject: variable ratio in the following analysis is extremely low and the analysis was exploratory in nature.

The multiple regression analyses indicated that there were variables that were correlated to one another but may be independent of other variables. With this in mind, the original twenty-two variables included in the study were used in factor analysis to explore the possibility that some of the variables would form coherent subsets independent of one another that would combine into factors.

Principal axis factors extraction with varimax rotation was performed on a sample of 48 adolescent girls using SPSS Factor Analysis on the 22 subscales from various measures. These measures included the Aggression Questionnaire, the Test of Self-conscious Affect for adolescents, the Belief questionnaire from Slaby and Guerra, Cook's Internalized Shame Scale, Rosenberg's Self-esteem measure, and the State Shame and Guilt measure. Principal components extraction was used prior to principal factors extraction to estimate the number of factors and the factorability of the correlation matrices.

The factor loading groupings in the principal factor extraction with varimax rotation was essentially similar to the principal components extraction with varimax extraction. In factor analysis, only shared variance between the variables is analysed. Estimates are undertaken to eliminate variance due to error and variance that is unique to each variable. For these reasons factor analysis was chosen instead of principal component analysis despite the similarities in the results.

The goal of using factor analysis was to explore and summarise patterns of correlations among observed variables and possibly describe the correlated groupings. Through the use of factor analysis, a desirable outcome would be to potentially identify shame or low self-esteem as underlying processes. For this reason, orthogonal rotation was initially chosen. Subsequently, an oblique rotation was attempted since it could offer estimates of correlations between factors.

Principal axis factoring and a varimax rotation extracted five factors, which, converged in 7 iterations. As indicated by the squared multiple correlations for variables (SMC) across factors shown in Table 116, all factors were internally consistent and well defined by the

variables: the lowest of the squared multiple correlations was .397 for the belief that victims don't suffer. The variables were also well defined by the factor solution. Communality tended to be high, with a cut of .30 for inclusion of a variable in the interpretation of a factor. All the variables loaded on a factor. All but nine variables (verbal aggression, αpride, the legitimacy of aggression, victims do not suffer, Cook's positive and low self-esteem Rosenberg's positive and low self-esteem and state pride) out of the 22 were complex, 13 variables loaded on either two or three factors (Table 146). Loadings on factors, communalities, and percents of variance and covariance are shown in Table 144. Loadings under .30 (9% of the variance) were omitted. Interpretative labels are suggested for each factor in Table 147.

Table 144

Percentage of Variance and Covariance explained by each of the Rotated Orthogonal Factors

Factors	Rotation Sums of Squared Loadings		
	Total	% of Variance	% of Covariance
1	6.16	27.99	38.99
2	4.05	18.39	25.63
3	2.88	13.09	18.23
4	1.68	7.63	10.63
5	1.03	4.67	6.52
Total	15.80	71.77	100.0

Table 145
Squared Multiple Coefficients of Variables for Principal Factors Extraction

Variables	SMC of each variable with all other variables	SMC for a variable across factors
Physical	.748	.696
Verbal	.702	.591
Anger	.829	.758
Hostility	.686	.679
Shame Proneness	.671	.585
Guilt Proneness	.801	.791
Detachment	.762	.753
Externalisation	.687	.695
α Pride	.745	.637
β Pride	.732	.707
Legitimacy	.801	.686
Aggression Increases Self-esteem	.670	.506
Aggression Reduces Negative Self Image	.656	.562
Victims Deserve Aggression	.498	.429
Victims Do Not Suffer	.388	.384
Positive Self-esteem (Cook)	.744	.590
Low Self-esteem (Cook)	.861	.812
Positive Self-esteem (Rosenberg)	.785	.696
Low Self-esteem (Rosenberg)	.873	.819
State Pride	.817	.702
State Shame	.624	.682
State Guilt	.624	.538

Table 146
Factor Loadings for Principal Factors Extraction and Varimax Rotation of Five Factors

	Factor				
Subscale	1	2	3	4	5
Physical aggression	.450	.702			
Verbal aggression		.769			
Anger	.424	.760			
Hostility	.641	.408		.320	
Shame proneness	.611		.460		
Guilt proneness		-.552	.575		.393
Detachment/Unconcern		.436	.750		
Externalisation		.441	.567	.357	
α Pride			.798		
β Pride	-.320		.778		
Legitimacy of Aggression		.828			
Aggression Increases Self-esteem		.421		.624	
Aggression Reduces Negative Self Image	.369			.653	
Victims Deserve Aggression		.576			-.311
Victims Don't Suffer					-.620
Positive Self-esteem (Cook)	-.768				
Low Self-esteem (Cook)	.901				
Positive Self-esteem (Rosenberg)	-.834				
Low Self-esteem (Rosenberg)	.905				
State Pride	-.838				
State Shame	.763			.318	
State Guilt	.607			.412	

Table 147

Order (by Size of Loadings) in which Variables Contribute to Factors for Principal Factor Extraction and Varimax Rotation

Factor 1: Characteristics of Shamed Person	Factor 2: Characteristics of Aggressive Person	Factor 3: Characteristics of Non-aggressive Person	Factor 4: Belief in the Benefit of Aggression (Self)	Factor 5: Beliefs about the Victim of Aggression (Dehumanisation)
Low Self-esteem (Rosenberg)	Legitimacy of Aggression	Pride in Self	Aggression Avoids Negative Self Image	Victims Don't Suffer
Low Self-esteem/Shame (Cook)	Verbal Aggression	Pride in Behaviour	Aggression Increases Self-esteem	
Inverse of state pride	Anger	Detachment/ Unconcern		
Inverse of Positive Self-esteem (Rosenberg)	Physical Aggression	Guilt Proneness		
Inverse of Positive Self-esteem (Cook)	Victims Deserve Aggression	Externalisation of Blame		
State Shame				
Hostility				
Shame Prone				
State Guilt				

Both principal components analysis and factor analysis summarised the patterns of correlations among the observed variable and reduced the large number of observed variables to the same number of smaller number of factors. The factor loadings changed very little except for the size of some of the factor loadings from the rotated component matrix to the rotated factor matrix. The interpretations possible from both the principal component and factor analysis

matrices were consistent and seem to "make sense". The particular combination of observed variables correlate highly with each factor and the variables tend not to correlate as high with other factors. As seen in Table 145, the factors covary with scores on particular variables hence verifying the factor structure by establishing the construct validity of the factors.

Variables are ordered and grouped by size of loading to facilitate interpretative labels in Table 147. In the principal factor analysis with varimax rotation, the first factor appears to describe the characteristics of the shamed adolescent girl. These characteristics are low self-esteem, the inverse of positive self-esteem and the inverse of pride (again both interpreted as low self-esteem or the lack of positive self-esteem), hostility, shame and state guilt. The second factor describes the characteristics of the aggressive adolescent girl. These components include the belief that aggression is legitimate (a cognitive mediator of aggression), the use of verbal aggression, the cognitive component of anger, physical aggression, the belief that victims deserve the aggression (a belief that justifies aggression and externalises the blame to the victim) and the inverse of guilt proneness (or the lack of guilt proneness). The third factor could be interpreted as the characteristics of the non-aggressive adolescent girl, which include self-conscious affect, as described by Tangney (1995) with pride in self, pride in behaviour, detachment/unconcern, and externalising blame. Factor four describes the beliefs in the justification of aggression that would benefit the aggressor such as that aggression reduces a negative self-image and increases self-esteem. Factor five describes the justification of aggression that dehumanises the victim such as that the victim does not suffer as a consequence of the aggression.

The first factor provides the variables and the order of their loading size. The order of the loading size suggests that low self-esteem is a primary characteristic of shamed adolescent girls. Then, the inverse of positive self-esteem, state shame, hostility, shame proneness, and state guilt follow in order of factor loadings. State guilt has a factor loading that is approximately equal to measures shame proneness. State shame and the inverse of positive self-esteem (Cook) have approximately equal factor loadings of a magnitude of .770 but in the reverse direction.

Rosenberg's low self-esteem and Cook's low self-esteem have approximately equal factor loadings.

The aggression measure, belief measure, self-esteem measures, the state shame, and guilt measures were effective in distinguishing the high, moderate and low aggressive adolescent girls from the low aggressive girls. The Test of Self-Conscious Affect was able to characterize the non-aggressive adolescent girls but did not distinguish them from the aggressive adolescent girls.

CHAPTER 5

Discussion

The present study compared aggressive and non-aggressive adolescent girls on various variables to determine some of the characteristics of aggressive adolescent girls. Specifically, the characteristics of interest for aggressive adolescent girls were shame, self-esteem, and beliefs about aggression. This chapter consists of interpretations of the results of this study.

Summary of Results

Group divisions

The research hypotheses involved the initial establishment of the groups as aggressive or non-aggressive to determine if they differed primarily in measures of beliefs, shame proneness, self-esteem, and shame. The null hypotheses were initially established such that there were no differences between aggressive and non-aggressive groups, and that there were no relationships between aggression, belief, shame, and self-esteem measures. Subsequently, during the process of examining the variables, interesting differences and relationships arose.

The participants in this sample were originally divided into 2 groups of aggressive /non-aggressive adolescent girls and 2 groups of adolescents in-care/public (not in-care). Analyses of variance, correlations, and standard multiple regression analyses were performed. The 48 participants were then divided into 3 groups of high, moderate, and low aggressive adolescent girls depending on the degree of physical aggression reported. The division into 3 groups according to the degree of physical aggression produced unequal groups of 14 highly aggressive adolescent girls, 13 moderately aggressive girls, and 21 low aggressive adolescent girls. Analyses were performed using this unequal division in an attempt to find more significant differences between groups.

Group comparisons

The first questions involved the assignment of the participants into groups, identifying the group with the high aggressive scores, and comparing aggressive and non-aggressive groups on different aspects of aggression. The results of the study demonstrated that the Buss-Perry Aggression Question was able to distinguish between aggressive and non-aggressive adolescent girls. Hence, the aggressive adolescent girls differed from the non-aggressive adolescent girls on the aggression measure. The aggressive adolescent girls tended to have higher scores on the aggression measure and differed from non-aggressive adolescent girls on all aspects or subtests of aggression.

With the division of the participants into two groups, 17 measures distinguished the aggressive adolescent girls from the non-aggressive adolescent girls. More of the aggressive group than the non-aggressive group tended to have the higher aggression scores on different aspects of aggression: physical and verbal aggression, anger and hostility. More aggressive adolescent girls than non-aggressive girls reported state shame and guilt, low self-esteem (Cook and Rosenberg), the belief in the legitimacy of aggression, the belief that aggression improves self-esteem, and the belief that aggression avoids negative self-image. More non-aggressive adolescent girls than aggressive girls reported positive self-esteem (Cook and Rosenberg). More non-aggressive adolescent girls than aggressive adolescent girls reported pride in self, pride in behaviour, state pride, and guilt proneness.

Dividing the participants into three groups according to the degree of reported high, moderate, and low aggression proved successful in providing significant differences among groups on the majority of variables (see Table 86). Significant differences between highly and moderately aggressive adolescent girls and low aggressive girls were found for aggression measures, legitimacy of aggression, aggression increases self-esteem, aggression avoids negative self-image, Cook's low self-esteem, Rosenberg's low self-esteem, and state guilt. More low aggressive adolescent girls than highly and moderately aggressive adolescent girls were likely to

report guilt proneness, pride in self, state pride, Cook's positive self-esteem, and Rosenberg's positive self-esteem.

Regardless of the division of the participants used, differences were found for physical aggression, verbal aggression, anger, and hostility between the aggressive groups and the low aggressive groups. Differences between high and moderate aggressive groups and low aggressive groups were found for the belief in the legitimacy of aggression; aggression improves self-esteem and avoids negative self-image regardless of the division of the participants that was used.

Differences were found for Cook's low self-esteem, Rosenberg's low self-esteem, and state guilt between highly aggressive adolescent girls and low aggressive girls, regardless of the groupings used. No matter what groupings were used, differences were found for Rosenberg's positive self-esteem, Cook's low self-esteem and state pride between the low aggressive adolescent girls and the highly aggressive adolescent girls. The result that more aggressive adolescent girls than low aggressive girls reported believing that aggression improves self-esteem and aggression avoids negative self-image was consistent for the three groups of 48 participants.

The differences between groups on variables such as victims deserve aggression, state shame, and pride in self produced more unexpected results. No moderately aggressive adolescent girls or low aggressive adolescent girls reported agreement with the belief that victims deserve aggression. One might have expected that moderately aggressive adolescent girls would believe that victims deserve aggression. Highly aggressive adolescent girls reported state shame. Both low and moderately aggressive adolescent girls reported pride in self.

As would be expected, comparing the extremes (between high and low aggressive girls) in the degree of aggression produced clearer and more consistent differences between groups. The effect size, that is, the difference (standardised) between groups, was calculated to determine the effect of having unequal sample sizes for high, moderate, and low aggressive adolescent girls. The effect size was then converted to the power of a test, that is, the probability of correctly rejecting

the null hypothesis (no difference between groups) in order to determine which results showed the most stable differences between groups.

The large effect sizes for physical aggression, anger, the belief in the legitimacy of aggression, the belief that aggression increases self-esteem, low self-esteem (Rosenberg), and positive self-esteem (Rosenberg) indicated a high likelihood of correctly identifying the differences between high and low aggressive adolescent girls by dividing the 48 participants into unequal groups (Table 120).

The moderate effect sizes for state shame, state pride and positive self-esteem (Rosenberg) indicated a moderate likelihood (greater than 50%) of correctly identifying the differences between high and low aggressive adolescent girls by dividing the 48 participants into unequal groups (Table 120).

The small effect sizes for verbal aggression, hostility, low self-esteem (Cook), positive self-esteem (Cook), state guilt, aggression avoids negative self-image, victims deserve aggression, guilt proneness, and pride in self indicated a low likelihood (less than 50%) of correctly identifying the differences between high and low aggressive adolescent girls by dividing the 48 participants into unequal groups (Table 120).

The probability was greater than 50% that differences exist between high aggressive and low aggressive adolescent girls in physical aggression, anger, the belief in the legitimacy of aggression, the belief that aggression increases self-esteem, low self-esteem (Rosenberg), state shame, state pride, and Rosenberg's positive self-esteem.

Table 148
The Effect Size for Variables Showing Significant Differences Between Groups for Two Divisions of Participants

		Group Divisions			
		N=48, Equal Groups		N=48, Unequal Groups	
#	Variable	Effect Size	Power	Effect Size	Power
1	Physical Aggression	6.36	.99	7.40	.99
2	Verbal Aggression	1.80	.44	1.60	.36
3	Anger	2.70	.77	2.70	.77
4	Hostility	1.67	.38	1.80	.44
5	Legitimacy of Aggression	3.56	.94	3.50	.94
6	Aggression Increases Self-esteem	_	_	2.99	.85
7	Low Self-esteem (Cook)	2.48	.69	1.94	.49
8	Low Self-esteem (Rosenberg)	4.27	.99	2.26	.99
9	State Shame	1.72	.40	2.30	.63
10	State Guilt	1.56	.33	1.90	.48
11	Positive Self-esteem (Rosenberg)	1.68	.38	2.26	.62
12	State Pride	2.37	.65	2.10	.56
13	Positive Self-esteem (Cook)	1.04	.17	1.58	.34
14	Guilt Proneness	1.52	.32	1.60	.36
15	α Pride	_	_	1.10	.20
16	Aggression Avoids Negative Self-image	_	_	1.17	.21
17	Victims Deserve Aggression	_	_	1.24	.23

Relationships between Variables

The theories about shame and aggression suggest that characteristics of shame were related to aggression. One of the purposes of this study was to determine whether this was, in fact, the case, as well as determining if other relationships existed between the variables associated with aggression and shame. The null hypothesis, then, was that there were no relationships between shame and different aspects of aggression, nor were there any relationships between other variables, shame, and aggression.

Pearson product-moment correlations indicated that each aspect of aggression was significantly positively correlated to shame suggesting a direct relationship between aspects of aggression and shame. This suggests that high aggression scores were paired with high shame scores. Physical aggression and anger have approximately 25% of their variances in common with shame leaving 75% of the variability related to other factors. Hostility had approximately 40% of the variance in common with shame indicating that it has a greater association with shame leaving about 60% of its variance associated with other factors.

Moreover, for each aspect of aggression there was a significant positive relationship to low self-esteem. Again, approximately 25% of the variability in physical aggression and anger was associated with the variability in Cook's low self-esteem and Rosenberg's low self-esteem with about 75% of the variability associated with other factors. Approximately 40% of the variability in hostility was attributable to low self-esteem. The variability in shame and low self-esteem associated with physical aggression, anger, and hostility are remarkably similar. Shame and low self-esteem had similar low correlations or insignificant correlations with verbal aggression.

State shame and the low self-esteem measures were positively related at the $\alpha = .01$ level of significance to physical aggression, anger, and hostility. The two measures of low self-esteem (Cook and Rosenberg) and shame are highly correlated. These high positive correlations suggest

that these variables may be very similar and measure different aspects of the same phenomenon. Also, the high correlation between low self-esteem and shame may also account for the similarity in correlations between low self-esteem and aggression, and state shame and aggression.

Significant positive correlations were found between the belief in the legitimacy of aggression and all the aspects of aggression. The correlations between the belief in the legitimacy of aggression and physical aggression, verbal aggression, and anger are moderately high (about 40%). The belief that victims deserve aggression was positively related to physical aggression, verbal aggression, and to a lesser degree, anger. The belief that aggression increases self-esteem was positively related to physical aggression, anger, hostility, and to a lesser degree, verbal aggression. The variability attributed to the belief that aggression increases self-esteem accounted for about 30% of the variability in physical aggression, anger, and hostility leaving about 70% of the variability attributable to other factors.

Interestingly, Table 89 showed that guilt proneness and state guilt were not related, therefore, guilt proneness and state guilt were measuring two different phenomenons. This mutual exclusivity was further supported by the correlations that show guilt proneness was negatively correlated to the different aspects of aggression and those that show state guilt were positively correlated to aggression. Guilt proneness and state guilt were unrelated, therefore, guilt proneness and state guilt appear to be measuring two different phenomena.

Positive correlations were disclosed between state guilt, physical aggression, verbal aggression, anger, and hostility. The variability in physical aggression and anger associated with the variability in state guilt was about 25%. The variability in hostility attributable to state guilt was about 40%, a result very similar to the variability associated with aspects of aggression, shame, and low self-esteem. The relationship between state guilt and verbal aggression was not as strong as the relationships between the other aspects of aggression. The variability in verbal aggression attributable to state guilt was about 10%.

Significant positive correlations were found at the $\alpha = .01$ level of significance between state pride and positive self-esteem measures by Cook and Rosenberg. The high correlations between state pride, and Cook and Rosenberg's positive self-esteem scales indicated that these scales might be measuring a similar phenomenon. Positive self-esteem and state pride were moderately negatively correlated with three aspects of aggression, physical aggression, anger, and hostility. Verbal aggression was not significantly correlated with either positive self-esteem or state pride. Hostility had the highest degree of covariance with the inverse of positive self-esteem and state pride. The variance in physical aggression and anger attributable to the variance in the inverse of Cook's positive self-esteem was about 20%. The variance in hostility associated with the variance in the inverse of Cook's positive self-esteem was about 25%. The pattern of variability in the aggression measures attributed to the inverse of Cook's positive self-esteem resembles that of the inverse of state pride. The variance in physical aggression and anger attributable to the variance in the inverse of state pride was about 20%. The variance in hostility associated with the variance in the inverse of state pride was about 25%. The variance in physical aggression attributable to the inverse of Rosenberg's positive self-esteem was about 30% and the variance in anger associated with the inverse of Rosenberg's positive self-esteem was about 20%. The variance in hostility associated with the inverse of Rosenberg's positive self-esteem was about 40%. The pattern of variability in the aggression measures attributed to the inverse of Rosenberg's positive self-esteem resembles that of Rosenberg's low self-esteem and the variability of physical aggression, anger, and hostility.

There appears to be a pattern in the variability in aggression associated with state shame, Cook's low self-esteem, and state guilt where the percentages in variability tend to be of the same magnitude, i.e., about 25%, 25%, and 40% (see Table 91). Moreover, there appear to be two other patterns in variability. A pattern in the variability in aspects of aggression associated with Rosenberg's low self-esteem is similar to the variability in aspects of aggression associated with the inverse of Rosenberg's positive self-esteem, i.e. about 30%, 20%, and 40% (Table 91). A

pattern in the variability in aspects of aggression associated with the inverse of Cook's positive self-esteem is similar to the variability in aspects of aggression associated with the inverse of state pride, i.e., 20%, 20%, and 25%.

It appears that Cook's low self-esteem, state shame, and state guilt tend to act in the same manner in relation to the variability in physical aggression, anger, hostility, and verbal aggression. Rosenberg's low self-esteem and the inverse of Rosenberg's positive self-esteem seem to act in the same fashion in relation to physical aggression, anger, and hostility. The inverse of Cook's positive self-esteem and the inverse of state pride appear to act in the same way in relation to the variability in physical aggression, anger, and hostility.

The belief in the legitimacy of aggression seems to have a unique pattern of variability in relation to physical aggression, anger, verbal aggression, and hostility. This may account for the similarity of the predictions of aggression using shame, low self-esteem, and legitimacy of aggression, as seen in the following section.

Predicting Aggression

Recall that in Chapter 4, physical aggression was predicted primarily by one variable, the belief in the legitimacy of aggression in conjunction with one other variable such as either state shame, low self-esteem, or state guilt. This pattern was also true for anger. Verbal aggression was predicted by the legitimacy of aggression and one other variable, state shame. The legitimacy of aggression was also a primary variable in the prediction of hostility. State shame and low self-esteem were the other variables that could be interchanged to predict hostility with the legitimacy of aggression. However, in addition to the legitimacy of aggression, Rosenberg's low self-esteem needed to be included with state guilt to predict hostility (see Table 101).

Interestingly, shame proneness and guilt proneness, as personal traits, were not involved in the prediction of different aspects of aggression in this sample. All groups reported shame proneness, detachment, externalisation, and no significant differences were found between groups. Low aggressive adolescent girls were more likely to report guilt proneness, pride in self

(α pride), and pride in behaviour (β pride) when high, moderate, and low aggression groups were considered. Hence, no group could be differentiated as having more group members than the others reporting shame proneness, externalisation, or detachment/unconcern. There was no significant difference between aggressive adolescent girls and the non-aggressive girls or between high, moderate, and low aggression groups in reporting shame proneness. Both aggressive and non-aggressive groups reported comparable levels of shame proneness ranging from an average of 17.33 to 23.35 out of a possible score of 60. Aggressive adolescent girls reported externalizing blame to the same extent as non-aggressive adolescent girls. Aggressive girls and non-aggressive girls reported detachment at comparable levels. All the adolescent girls in the sample reported self-conscious affect to some degree. The TOSCA-A scenario based measure of self-conscious affect failed to differentiate aggressive from non-aggressive adolescent girls in this sample.

Predicting Shame

Correlations between shame and Cook's low self-esteem, and shame and Rosenberg's low self-esteem showed that there was a high positive relationship between these variables. Cook's low self-esteem predicted over 65% of the variance in Rosenberg's low self-esteem and over 60% of the variance in shame. Rosenberg's low self-esteem predicted over 50% of the variance in shame, regardless of the number of participants used in the correlational analysis. Standard multiple regression analysis showed that Rosenberg's low self-esteem and state shame predicted over 70% of the variability in Cook's low self-esteem. Cook's low self-esteem and the inverse of Cook's positive self-esteem predicted over 68% of the variability in Rosenberg's self-esteem. These results provide evidence to suggest that these variables are different aspects of the same phenomenon.

Abuse

A consistent finding was that more highly and moderately aggressive adolescent girls than low aggressive adolescent girls reported verbal abuse by significant others. Another consistent finding was that verbal abuse was moderately correlated with physical aggression, anger, and

hostility. Further, verbal abuse and the legitimacy of aggression predicted physical aggression. Verbal abuse and state shame predicted low self-esteem (both Cook and Rosenberg).

Again, it is not the experience of verbal abuse itself that prompted adolescent girls to an aggressive tendency. The belief in the legitimacy of aggression was an important factor in physical aggression. Non-aggressive adolescent girls also experience a degree of verbal abuse without resorting to aggressive tendencies.

Interestingly, neither physical, sexual, nor verbal abuse were related to shame proneness or state shame in this sample. Verbal abuse was found to be slightly positively related to low self-esteem (Cook and Rosenberg). The variability in verbal abuse predicted about 10 percent of the variance in Cook's low self-esteem and about 18 percent of the variance in Rosenberg's low self-esteem.

Factors

Clear characteristic differences were revealed using analysis of variance and post hoc least significant difference tests between high, moderate, and low aggressive adolescent girls. Correlations and multiple regression analysis also confirmed these characteristics. Aggressive adolescent girls were characterized by reporting physical aggression, verbal aggression, anger, hostility, low self-esteem, shame, guilt, the belief that aggression increases self-esteem, the belief that aggression improves negative self-image, and the belief in the legitimacy of aggression. The belief in the legitimacy of aggression in addition to of one of either shame, low self-esteem, or guilt predicts about 60% of the variability in physical aggression and anger with 40% of the variability predicted by other factors.

Although the analysis was purely exploratory, factor analysis further confirmed and summarised the results found in the previous statistical analysis. Factor analysis produced five factors. The first factor appears to describe the characteristics of the shamed adolescent girl. These characteristics are low self-esteem, the inverse of positive self-esteem and the inverse of pride (again both interpreted as low self-esteem or the lack of positive self-esteem, respectively),

hostility, shame, and state guilt. The second factor describes the characteristics of the aggressive adolescent girl. These components include the belief that aggression is legitimate (a cognitive mediator of aggression), the use of verbal aggression, the cognitive component of anger, physical aggression, the belief that victims deserve the aggression (a belief that justifies aggression and externalises the blame to the victim), and the inverse of guilt proneness (or the lack of guilt proneness). The third factor could be interpreted as the characteristics of the non-aggressive adolescent girl, which include self-conscious affect, as described by Tangney (1995) with pride in self, pride in behaviour, detachment/unconcern, and externalizing blame. Factor four describes the beliefs in the justification of aggression that would benefit the aggressor such as that aggression reduces a negative self-image and increases self-esteem. Factor five describes the justification of aggression that dehumanises the victim such as that the victim does not suffer as a consequence of the aggression.

The first factor appeared to describe the characteristics of shamed adolescent girls as primarily having low self-esteem, shame, hostility, guilt, and lacking positive self-esteem. Highly and moderately aggressive adolescent girls reported shame proneness, but not to a degree that would distinguish them from low aggressive adolescent girls. Interestingly, hostility was included in the first factor since it seemed to have commonalties with shame and self-esteem since shame and self-esteem make a significant contribution to the prediction of hostility. Theory also suggested that shamed individuals have a tendency toward hostility (Harder, 1995).

It appears that having the characteristics of low self-esteem and shame are not enough to determine aggression. The belief in the legitimacy of aggression needed to be present as an important factor in predicting aggression. This belief seems to be an important distinguishing factor between aggressive and non-aggressive adolescent girls, since an adolescent girl can have characteristics of shame and low self-esteem, but still not demonstrate aggressive tendencies such as non-aggressive adolescent girls in-care. The belief that victims deserve aggression makes a smaller contribution to the expression of aggression.

The fourth and fifth factors describe the beliefs that enhance aggression such as beliefs that benefit the aggressor and dehumanise the victim. For the belief that victims do not suffer, post hoc comparisons found that there was no difference between groups and the factor loading was negative suggesting adolescent girls were impartial in their belief that victims suffered.

The third factor appears to describe low aggressive adolescent girls who reported pride in self, pride in behaviour, and guilt proneness. They also reported detachment/unconcern and externalisation of blame, but not to an extent that differentiated them from aggressive adolescent girls.

Factor loadings delineate characteristics reported by aggressive and non-aggressive adolescent girls. Characteristics reported by aggressive adolescent girls, such as low self-esteem, lack of positive self-esteem, shame, and guilt have connotations of valuelessness, self-reproach, and the connotation of concern for how they are perceived by other people, such as with the belief that aggression improves negative self-image. It appears that highly and moderately aggressive adolescent girls believe that they are negative and bad, while low aggressive adolescent girls report positive self-esteem and pride.

Conclusion

While this study confirmed that shame is related to aggression, the relationship is not a simple one. Other factors are related to aggression that tend to distinguish aggressive adolescent girls from those who are not aggressive. An important factor in this distinction is whether or not the adolescent believes that aggression is a legitimate method of solving problems. Without this belief, adolescent girls who may feel shame are not necessarily aggressive.

Despite what the general population may believe and what the editorial of a Victoria newspaper expressed about the Reena Virk trial[1], i.e. "If other people are hurt by their [aggressive

[1] Fourteen year old Reena Virk was murdered in Victoria, British Columbia, Canada on November 14, 1997 allegedly by an adolescent girl, and an adolescent boy who was subsequently convicted of the crime. The adolescent girl is awaiting trial at the time of this writing. In addition to the murder charges, six other adolescent girls were charged with assault causing bodily harm.

adolescents] actions, they [aggressive adolescents] don't feel it"[2], I have found the contrary to be true. Aggressive adolescent girls reported being in a state of guilt, that is, they were feeling guilty, yet they did not report guilt proneness, that is, a disposition to respond with guilt across negative situations (Tangney, 1995). Aggressive adolescent girls feel guilt, which is a self-evaluation of behaviour. In addition to feeling guilt, aggressive adolescent girls report feeling shame, a global evaluation of the self as no good. Although the aggressive adolescents feel guilty, they may feel that they need to stifle the expression of their guilt in order not to be perceived as weak.

Non-aggressive adolescent girls reported guilt proneness, which means that they reported that they would be more disposed to respond with guilt, an evaluation about their behaviour. Guilt proneness may serve as a self-monitoring mechanism to prevent the non-aggressive adolescents from making behavioural mistakes. This feeling may stimulate an information processing mechanism to remember similar instances which aid the adolescent in avoiding further situations that could be guilt inducing.

Another factor related to shame that is associated with aggression is self-esteem. Shame can be predicted by low self-esteem. Cook (1994) stated that measures of global self-esteem, such as the Rosenberg Scale and the Internalized Shame Scale, which both measure feelings about the self, would show convergence with each other. Cook (1994) concluded that shame and self-esteem are the same dimension, that is, there is only one dimension of shame and self-esteem. Aggressive adolescent girls may equate shame and self-esteem (they do not feel good about themselves). They may be aware that they do not feel good about themselves (low self-esteem) and they may not distinguish the self-evaluation that they are no good (shame) from low self-esteem (they do not feel good about themselves). They may also have difficulty distinguishing low self-esteem, shame, and guilt (I've done a bad action).

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[2] Times Colonist, Our View, Thursday, April 22, 1999.

Aggressive adolescent girls reportedly believe that aggression increases self-esteem and improves their self-image. They are concerned about finding a way to improve their self-esteem since they report feeling that they have low self-esteem. This suggests that the aggressive adolescents are aware of their low self-esteem and their negative self-image and they believe that an option to improve it is through aggression.

Adolescents who are not aggressive tend to report positive self-esteem. It is beyond the realm of this study to determine if the adolescents were not aggressive as a consequence of their positive self-esteem or if they have positive self-esteem as a consequence of being non-aggressive. It is likely that other intervening variables such as parental influences, values, and beliefs play a part in the direction of this relationship. They may also have more options to solve their problems at their disposal than to resort to aggression.

The experience of physical, sexual, or verbal abuse did not necessarily predispose adolescent girls to aggression. Most of the adolescent girls experienced some form of abuse. More aggressive adolescent girls reported verbal abuse. The determining factor tended to be the whether or not the adolescent's belief system supported aggression. Finally, physical, sexual, and verbal abuse were not related to shame although many adolescent girls in this sample experienced physical, sexual, verbal abuse, and shame.

CHAPTER 6

Implications

The theoretical implications of the characteristics of aggressive adolescent girls found in this study are proposed in this chapter. Subsequent to the discussion of characteristics, practical implication will be suggested and further theoretical considerations will be reviewed. The limitations of the present study and suggestions regarding directions for future research will be addressed.

Some Characteristics of Aggressive Adolescent Girls

Highly aggressive adolescent girls were characterized in this study by shame, guilt, and the belief in the legitimacy of aggression. Tangney, Burggraf, and Wagner (1995) proposed that guilt in combination with shame becomes maladaptive. They suggested that guilt becomes maladaptive when guilt becomes magnified over the effect of some behaviour and generalises to the self. Tangney et al. (1995) suggested that shame triggers unhealthy emotions and thoughts from anxiety and regret over a particular behaviour to more all-encompassing feelings of self-contempt and disgust. The shame aspect of this amalgamation sets up an irresolvable dilemma. The negative effects of behaviour can be repaired, amended or softened by an apology. In contrast, transforming and amending the person's self is more difficult if it is totally defective. Shame and shame-fused guilt offer no chance of redemption. Tangney et al. (1995) suggested that guilt superimposed with shame tends to result in ceaseless preoccupation and self-reproach. Tangney et al. (1995) also found that many people are inclined to experience both shame and guilt in response to negative events and guilt fused with shame seems to be exceedingly maladaptive.

Harder (1995) found that guilt more than shame was associated with hostility and anger and that guilt is more important to pathological symptomology than shame. The results of this present study showed that the percentage of variability in common between hostility and shame (40.96%) was greater than the variability in common between hostility and guilt (37.45%) (Table 91). However, taking measurement error into account suggests that the variability in common

between hostility and both shame and guilt is very similar. This result suggests that the association between guilt, shame, and hostility be considered carefully. Aggressive adolescent girls were found more likely to report hostility and anger, as well as, shame and guilt than non-aggressive adolescent girls.

Ferguson and Stegge (1995) suggested that persistent exposure to particular emotions can lead to surfeit pathology, a maladaptive affective style where a person expresses too much of an emotion. In surfeit pathology the person interprets and organises all experiences according to a particular emotion. Guilt and shame become surfeit maladaptive emotions when the person habituaily and undeservedly takes responsibility for negative events (guilt) and has pervasive feelings of worthlessness, incompetence, and helplessness (shame). In this case of surfeit pathology, guilt and shame are in evidence chronically and inappropriately. Since aggressive girls reported state shame and state guilt, it appears that the highly and moderately aggressive adolescents may have "misplaced responsibility" and may have developed unrealistic theories about how they are to blame for the traumatic experiences that befall them or other family members. This may give rise to distorted conceptions of their power to hurt others.

Further, Ferguson and Stegge (1995) noted the important role of caregivers who provide socialization experiences in the development of shame and guilt as self-evaluative emotions. These researchers found that parental practices determined the socialization of shame and guilt. In their research with children, parents' anger reactions combined with parents supplying information or explanations to assist in stimulating insight and understanding of the behavioural changes expected by the parent predicted guilt in children. The absence of parental affection, the lack of tangible rewards, and the absence of positive outcomes involving the parental provision of information and explanations were associated with shame.

More highly and moderately aggressive adolescent girls than low aggressive adolescent girls reported state guilt. Ferguson and Stegge (1995) proposed that moderate levels of state guilt serve unique adaptive functions. State guilt promotes prosocial behaviours, inhibits aggressive

behaviours, and indicates an empathic concern for others and a tendency to accept rather than externalize responsibility for negative events. Reporting the combination of state shame and state guilt appears to be a characteristic of aggressive adolescent girls. Perhaps the aggressive adolescent girls attempted to make amends for their real or perceived transgressions, but regardless of their attempts, continue to be indiscriminately punished or they may feel that the transgressions they have committed are irreparable (Lewis, 1971). Lewis suggested that when guilt is aroused in response to an insoluble dilemma, the intensity of the guilt feeling indicated despair.

This difference in reported guilt between high and moderate aggressive and low aggressive adolescent girls also may be attributed to the differing incidence of parental anger reactions. More high and moderate aggressive adolescent girls than low aggressive girls reported verbal abuse, which is an expression of anger by parents or significant others directed toward the adolescent. The verbal abuse that adolescent girls experienced was significantly correlated to their reported use of physical aggression ($r = .451$), anger ($r = .410$) and hostility ($r = .354$). Verbal abuse was significantly related to state guilt ($r = .422$). This difference in reported experiences of verbal abuse of high and moderate aggressive adolescent girls might be attributed to a difference in parental socialization styles.

The results indicated that more low aggressive adolescent girls than high and moderate aggressive adolescent girls reported positive self-esteem. In contrast, more high and moderate aggressive adolescent girls reported low self-esteem and state shame. This result may be an indication of differing parenting styles and reactions. Low aggressive adolescent girls may have experienced positive outcomes, tangible rewards and parental affection. Whereas highly and moderately aggressive adolescent girls may not have had a consistent experience of positive reactions from parents, but rather negative parental reactions, such as the lack of positive outcomes as a result of information and explanations provided by the parents and lack of parental affection. Since most high and moderate aggressive adolescent girls were either in-care or in

detention, the high and moderate aggressive adolescent girls were likely to have been abandoned, repeatedly neglected, rejected by their parents, and verbally abused by three or more significant others. While some low aggressive adolescents experienced verbal abuse, it tended to be moderate, where they reported two or fewer significant others verbally abusing them.

Scheff (1995) suggested that seemingly irresolvable and ceaseless conflict in families originate from unhealthy communication patterns. Scheff proposed that this ceaseless intensification of conflict might be caused by disrespectful words and demeanour, and by unacknowledged (bypassed/covert) shame. The results of his study showed that families with interminable conflict had indirect communication patterns. The evasive and indirect pattern of communication indicated that the acknowledgement of shame was denied despite its prevalence in family relationships. The family appeared ashamed of shame and anger, the thoughts and feelings that are inescapable in close relationships. Shame, in these situations, is an indication of the existence of misunderstanding between family members. Scheff concluded that the denial of shame caused unending conflict and that continuing shame is the result of persistent conflict. Individuals in the family circuit through disrespectful words and demeanour, shame, and anger, which leads to further disrespectful words and demeanour and so on in a vicious circle. People in this conflicted, static system of relationships tended to deny their shame about the persistent cycle of deception and self-deception about thoughts and feelings. By denying their role in generating unresolved quarrels and impasses, each family member experienced the conflict as coming from others that were controlling and limiting their behaviour.

Most highly aggressive adolescent girls were in-care and these children are usually in-care because of family conflict. Highly and moderately aggressive adolescent girls may be in family conflict, a possibility that needs to be researched further. This result may be evidence of the phenomenon described by Scheff. The aggressive adolescents in-care may come from families who were in irresolvable conflict blaming the adolescent, consequently the adolescent was placed in-care.

More non-aggressive adolescent girls in-care than any other group reported state pride. It is well known that children in the care of the government come into care as a result of acute conflict with their family. Results indicated that non-aggressive adolescent girls in-care tended to report high levels of pride and zero levels of shame or guilt compared to the other three groups of adolescent girls who tended to vary their reports of shame, guilt, and pride. This result may indicate that the non-aggressive adolescent girls may tend to deny shame and guilt in favour of pride, a positive self-evaluative descriptor, since these non-aggressive girls were likely in-care as a result of family conflict. Research needs to be conducted to determine if the non-aggressive adolescents in-care were in fact denying shame and guilt while replacing these emotions with pride, or if, in fact they felt proud and for what reason.

The results indicated a significant difference between high and moderate aggressive and low aggressive adolescent girls in the reported belief in the legitimacy of aggression. More high and moderate aggressive adolescent girls reported that they believed that the use of aggression to solve their problems was legitimate. Since more high and moderate aggressive adolescent girls also reported that they were verbally abused by significant others, that is, verbal aggression was used against them, they may have been exposed to an environment where problem-solving options were limited and aggression was valued. Whereas low aggressive adolescent girls were possibly exposed to a greater range of problem solving options, where aggression was not a viable option, a possibility that needs further research. This difference in the belief in the legitimacy of aggression, again, could possibly be an indication of a difference in the influence and demonstration of parental values. Research needs to be conducted to determine if the non-aggressive adolescents in-care were influenced by parental values supporting aggression.

The adolescent girls who tend to have the highest scores for aggression are those adolescents in-care of the government. Besides having high aggression scores, more of these adolescents report guilt, shame, low self-esteem, and believe that aggression is a legitimate problem solving method. These aggressive girls in-care reported experiencing a high level of

verbal abuse from significant others in their life. Most aggressive adolescent girls in-care reported marital conflict between their parents (9/12) and most witnessed family violence (7/12). It is well known that the adolescents in-care of the government come into care as a result of acute conflict within their families the result of which is the inability of the parents to protect and adequately care for their children. It is conceivable that these adolescents have internalized the guilt and shame feelings that were denied, unexpressed, and projected towards them by their parents or the adolescent girls took the undeserved responsibility for the events in their family. In contrast to the conventional belief that aggressive adolescent girls lack empathy, highly aggressive adolescent girls may be overly empathetic and overly responsible to a maladaptive degree. Perhaps they feel overly responsible to the extent that they repeatedly try to make amends for situations for which the adolescent has inadequate resources to solve the difficulty resulting in anger, frustration and despair. The adolescent may have attempted repeatedly to make amends to parents or significant others who consistently refuse to accept the adolescent's reparation and continue to blame the adolescent for difficulties which may or may not be the adolescent's responsibility resulting in the adolescent's frustration, anger, and despair. The message to the adolescent in such a situation is that they must be defective to cause consistent irreparable damage, hence, they must also be damaged. Consequently, these adolescents resort to the problem solving option valued and demonstrated by their parents, aggression. Aggression could then be considered not so much a characteristic of these adolescent girls, but an indication of the conflict and resulting despair they have difficulty expressing or communicating in any other way.

The predicament described above for aggressive adolescents in-care could equally describe the situation for the public aggressive adolescent girls in this sample. Most of the public aggressive adolescents reported marital conflict between their parents (10/12) and half of them witnessed family violence. The public aggressive adolescents, besides their highly and moderately aggressive tendencies, were distinguished from low aggressive adolescent girls by the public aggressive adolescent girls reporting shame, guilt, and the belief in the legitimacy of aggression.

The public aggressive adolescent girls consisted of adolescents who were incarcerated in the Youth Detention Centre (7), lived on their own or on the street (2), or at home (3). These public aggressive adolescent girls also may be overly empathetic and overly responsible to a maladaptive degree where they may have repeatedly tried to make amends for situations for which the adolescent had inadequate resources to solve the difficulty resulting in anger, frustration, and despair. Their options for communicating or expressing their feelings may have been limited and they opted for parentally sanctioned aggression as a form of expressing their despair (I'll show you how much I hurt).

Low aggressive adolescents may have had parental influences that may have provided alternative options to aggression. It seems likely that aggression was not valued by significant others or caregivers in this group since they tended not to believe in the legitimacy of aggression.

Practice Implications

The results of this study indicated that the context within which the adolescent develops influences the choices the adolescent made in terms of using aggression or not. Adolescents develop within a social context, which includes the economic opportunities available to them and their family.

Social context

Earlier in the demographic results section, Tables 29 and 30 showed that the adolescent girls in-care reported that their parents had less education than the level of education public adolescent girls reported for their parents. This difference in education is an approximate indication of the level of economic opportunities available to the parents of in-care and public adolescents. Also, an indication of economic opportunities is the presence or absence of mental illness. Lack of education and mental illness compromise a person's ability to earn a living. Elliot Leyton (1996), a Canadian sociologist who studied violence and murder across cultures, stated that approximately 90% of the murders are committed by people who are poor, who have little

education, have no professional qualifications, are chronically unemployed, are on welfare, live in subsidised housing, have chronic drug and alcohol problems, and often are mentally ill.

The majority of adolescent girls who reported a high or moderate degree of aggressive tendencies were those in-care (16 in-care versus 11 public, Table 41). Generally, these adolescent girls belonged to poor families who lacked resources and opportunities. This could also be true for the public aggressive adolescent girls since the majority of these girls either lived in the Youth Detention Centre (7) or on the street (2).

The majority of adolescents in society are provided with resources and opportunities, and usually are not aggressive. Their values and beliefs, education and economic level provide them with options more in keeping with their best interests. The social context from which aggressive adolescent girls emerge is easily identifiable and predictable. Their social context is of the poor, uneducated and mentally ill, who are in-care of the government, are on welfare, and live in subsidised housing. In other words, these adolescents live in a compromised social context with few resources and opportunities.

Family context

The family context in which aggressive adolescent girls live is also compromised. Aggressive adolescent girls reported feeling shame and guilt. Recall that Ferguson and Stegge (1995) suggested that parental practices determine the socialization of shame and guilt usually by applying anger, lack of tangible rewards, and the absence of affection. Parents of aggressive adolescent girls likely used punitive socialization methods with their children.

Although most adolescent girls in this study were abused (64.6%, Table 31) more aggressive adolescent girls reported verbal abuse from more significant others. Significant others in their family context tend to have abusive and punitive relationships with these aggressive adolescent girls. Further, aggressive adolescent girls also experienced physical and sexual abuse. Quite often, the physical abuse and sexual abuse occurs within the family, extended family or family friends. Regardless whether the physical or sexual abuse was within the family, for

whatever reason, the adolescent girls who were physically and sexually abused were not protected from this abuse by significant others. In short, aggressive adolescent girls experienced traumatic and punitive incidents within their family context. Aggressive girls were exposed to feelings of shame and guilt and were likely to have taken the responsibility and blame for the traumatic experiences that occurred to them or their family. These adolescents likely feel overwhelmed with the impossible task of solving problems that are beyond their capability or responsibility. Often, other adults mistakenly re-shamed and re-blamed these adolescents for their difficulties.

Aggressive adolescent girls lived within a compromised social and family context. Their parents' lack of economic and educational resources reduced the parents' and children's options. The parents of aggressive adolescent girls lack parenting skills and knowledge of child development. These parents also lack the understanding of current non-punitive parenting practices that are currently performed in our society.

The families that are at risk for aggressive adolescent girls are predictable and identifiable. They tend to be those who use social assistance, subsidised housing, who are chronically unemployed, and are poor. Programs that target these families could be initiated.

Programs

Parents of aggressive girls need help in raising and nurturing their children. Proactive post-natal prevention programs through public health for low-income parents should be available to help them with proper care, feeding, nurturance and routine of their infants. These educational programs would expose parents to nurturing beliefs and values for non-punitive socialization of children. A program for modeling appropriate parenting skills for toddlers, latency aged children, and adolescents could be tied to this post-natal program. These could be run by public health since there tends to be fewer stigmas around public health centres than mental health centres.

Parents of aggressive girls could benefit from groups that discuss alternatives to coercion and aggression when coping with anger. These parents could benefit from groups advocating and modeling non-violent approaches to problem solving and relationship difficulties, whether the

difficulties were between the parents or with the child or adolescent. In all likelihood, the parents of aggressive adolescent girls could have experienced the same difficulties with their parents and feel shame and guilt also. Adolescents could also benefit from these same groups in the schools where adolescents from different backgrounds could discuss approaches to solving conflict non-violently. Aggressive adolescents and their parents could benefit from family therapy with groups of families so they could experience different models of conflict resolution between families.

Most adolescent girls could benefit from trauma therapy for their experiences of abuse. Particularly aggressive adolescent girls could benefit from trauma therapy since they have fewer resources and options to help them understand that they were not responsible for the assaults they suffered. Adolescent girls would benefit from having the therapist discuss feelings of shame, guilt, and the difference between them. The adolescent could benefit from the therapist giving her permission to tell the therapist about the shame experienced within the client-therapist relationship. The discussion of shame within the client-therapist relationship will help the adolescent discuss her experience of shame in other relationships and this will, in turn, help her deal with the issues of trauma.

Finally, aggressive adolescent girls could benefit from structured nurturing recreation and work programs with non-aggressive adolescent participant role models who could model proper social skills. Aggressive adolescent girls could benefit from adult role models who refrained from shaming and blaming them for their difficulties. Aggressive adolescent girls need exposure to nurturing, stimulating situations without conflict.

Theoretical Considerations

Shame

The Test of Self-conscious Affect for adolescents failed to distinguish between high and moderate aggressive and low aggressive adolescent girls on all subtests except guilt proneness, pride in self, and pride in behaviour and the differences between groups on these variables had small effect sizes. Tangney et al. (1992) showed that shame proneness was not linked to measures

of direct verbal and physical aggression. In this present study, correlations showed that shame proneness was related to hostility, but not to measures of anger, verbal aggression, or physical aggression. Both aggressive and low aggressive adolescent girls reported shame proneness, externalisation, and detachment. High and moderate aggressive and low aggressive adolescent girls have similar tendencies to externalize blame, detach, and be shame prone.

Tangney et al. (1992) suggested that guilt proneness was an adaptive tendency since a guilt prone person would more likely take responsibility for negative situations. Shame proneness may reflect an adaptive response as a reminder to deter the shame prone person from becoming involved in potentially shaming situations. For high and moderate aggressive adolescent girls, perhaps knowing that physical aggression is potentially shaming is outweighed by their beliefs that aggression is legitimate, that aggression will increase their self-esteem, and that aggression avoids negative self-image. A more likely scenario for high and moderate aggressive adolescent girls is that their shame is unacknowledged or thought of as low self-esteem rather than shame. Another consideration is that the scenarios may not be applicable to aggressive adolescents since most aggressive adolescents are children in-care who may not have the same values or experiences as middle class adolescents.

Tangney (1995b) cites the results of a developmental study of shame and anger that indicated that across all ages, shame-proneness was substantially correlated with anger arousal. The outcomes suggested that shame-prone individuals who are more prone to anger were less constructive with their anger than compared with their less shame prone peers. Shame prone individuals were more likely to use maladaptive and unconstructive responses to anger including malevolent or malicious intentions such as direct, indirect, and displaced aggression, as well as self-directed hostility. In other words, shame-proneness was associated with increasing the likelihood of employing direct verbal and symbolic aggression, indirect aggression, all forms of displaced aggression, self-directed aggression, and ruminative, unexpressed anger.

This present research produced equivocal results with respect to Tangney's previous results, since this present study did not find a correlation between shame proneness and anger, verbal aggression or direct physical aggression, but found a positive relationship between hostility and shame proneness. According to Tangney, shame prone individuals would be most likely to be angry, verbally aggressive, and hostile but not directly physically aggressive.

Shame proneness is correlated with low self-esteem and state shame. This result may indicate that these variables are measuring different aspects of the same phenomenon. Shame proneness may be an adaptive feature of shame, state shame may be an indication of covert shame, and low self-esteem may be a subset of shame. Harper and Hoopes (1990) stated that shame was an affect, shame proneness was the affective experience of a person who had a shame-based identity, and low self-esteem was a negative cognitive evaluation of the self. Borrowing from H. B. Lewis, Tangney (1995b) and Harper and Hoopes (1990) defined shame as an evaluation of the self as no good. They characterized a shame prone person as having experienced chronic shame experiences that influenced their identity. Shame prone individuals interpret every incident as confirmation of how worthless, bad, and unlovable they are. Harper and Hoopes (1990) state that shame prone individuals also have excessive and chronic guilt which further confirms their shame since their behaviour is bad as well as everything else about them. Tangney (1995) defined shame proneness as a tendency to experience shame in response to negative situations. A person who is chronically overcome by feelings of worthlessness, incompetence, and helplessness exhibits a shame prone style.

No unambiguous differentiation exists between the definition of covert shame and shame proneness. One common aspect of the definitions provided by the different authors is that shame is a negative evaluation of the self. Since shame is a multidimensional concept, both a disposition (trait) and a state, and this concept is in the process of being determined, it could conceivably include low self-esteem and chronic, shame proneness as two of its dimensions.

In the case of aggressive adolescent girls, they are evaluating the self negatively. They may be feeling that "I am unworthy, incompetent, or bad". The shamed person often imagines how their defective self would appear to others, that is, the person imagines herself being observed negatively (Tangney, 1995b). Retzinger (1991) noted a distinction between feeling ashamed, that is, undifferentiated or overt shame, and a shame state, which is bypassed or covert shame. The familiar type is overt shame where feelings of discomfort and bodily arousal such as blushing, sweating, and rapid heartbeat are prominent. Covert shame cannot be detected through bodily arousal since bodily arousal is bypassed by the thought processes and the ideation of the self in relation to other people (Retzinger, 1991). Covert shame or bypassed shame remains largely unacknowledged and is primarily detected in the content of conscious thought, the focus of which is the self and includes a diversity of thoughts about the inadequacy of the self. Aggressive adolescent girls may think of covert shame, guilt, and low self-esteem as the same phenomenon, and thinking of themselves as globally "bad", acting bad, feeling bad and as having a bad self.

People who feel covert shame, according to Harper and Hoopes (1990), Kaufman (1989), and Lewis (1971), had cumulative experiences throughout life, which confirmed that the basic core of their self is defective. Such experiences involve a consistently shaming environment of emotional, physical, and/or sexual abuse, which convinces them that they are flawed as people (Kaufman, 1989). These chronic, recurring shame experiences lead people to expect others to victimise them and they consequently acquire shame as a large component of their identities.

Most of the adolescents in the study sample reported feeling shame and they also reported experiences of physical, sexual, or verbal abuse. However, in this present study, physical, sexual, and verbal abuse were not related to shame. This result contradicts Kaufman's (1989) assumption that physical, sexual and emotional abuse is a consequence of shame. This result suggested that the relationship between physical, sexual, verbal abuse, and shame needs further clarification and research.

Beliefs about aggression

Contrary to Slaby and Guerra's (1988) results, which found that highly aggressive adolescents believe that victims do not suffer, the present study did not substantiate these results. Both high and low aggressive adolescent girls did not believe that victims do not suffer. This is an indication that high and low aggressive adolescent girls were not completely externalizing blame on to the victim. The high and low aggressive adolescents may tend to feel some empathy towards the victim. Most girls, aggressive and non-aggressive, believed that the victim suffered indicating that most of the girls felt some empathy for the victim of aggression. Aggressive adolescent girls in this study indicated that they felt guilt. However, since they also feel shame (defective), they may not feel confident or safe enough to express their guilt at the time of the aggression or when confronted about the aggressive act. Shamed individuals may appear self-centred or self-absorbed since they are concerned about their inadequacies. They may feel that showing remorse places them in an intolerably vulnerable position of admitting to their "defects", that is, behaving inappropriately. They may feel great reluctance to further expose their "weakness" i.e. feeling that they performed an improper action.

Low aggressive adolescent girls were more likely to report positive self-esteem. In contrast, high and moderate aggressive adolescent females did not report positive self-esteem. High and moderate aggressive adolescent girls were more likely to report that aggression was legitimate, aggression avoids negative self-image, and aggression increases self-esteem. Regardless of the aggressive adolescent girls' beliefs that aggression increases self-esteem and avoids negative self-image, the aggressive girls still reported low self-esteem and did not report positive self-esteem. Aggressive adolescent girls were likely aware of their low self-esteem and want to remedy the situation, adhering to the false belief that aggression will provide the means to positive self-esteem. Aggressive adolescent girls may not be aware that they feel shame but they are aware that they are negatively evaluating themselves and may be turning to aggression to gain positive evaluation of themselves by others. Aggressive adolescent girls may not be aware of

other options to improve their self-esteem other than through aggression, while the low aggressive adolescent girls are aware of other methods of improving self-esteem.

Limitations and Modifications

The limitations of the present study are concerned largely with the data and design of the study. First, the differences between groups would have been easier to obtain if the study were limited to aggressive and non-aggressive adolescents instead of adding a second dimension of adolescents being in or out of the care of the government.

Second, increasing the number of participants in the study would increase the power of the least significant difference test and the differences between aggressive and non-aggressive groups would be easier to obtain. The effect size of shame and guilt increased in this study by dividing the participants into unequal groups of high, medium, and low aggressive adolescent girls. If high, moderate, and low aggressive adolescent girls were chosen by using the Buss-Perry Aggression Questionnaire before administering the shame and self-esteem questionnaires, the study would have been more powerful and more definitive in terms of the differences between groups, the correlations, and the multiple regression analysis.

Third, using different measures of shame and comparing the responses of aggressive and non-aggressive adolescent girls may help clarify and determine the definitions of shame proneness, the situational state of shame, and low self-esteem. Low self-esteem may be considered as the cognitive dimension of the self-evaluative process and shame may be considered the affective dimension of self-evaluation. Both low self-esteem and shame are abstract concepts that are difficult to define. Low self-esteem is a term that means different things to different people. Measuring devices imitate the theoretical position of the designer and sometimes intercorrelate inadequately, suggesting that they are detecting different constructs (Gardner, 1992). Cook (1994) considers low self-esteem and shame to be the same; Harper and Hoopes (1990) and Tangney (1995) do not. A definitive measure of shame still needs to be developed.

Suggestions for Further Research

Since this study was exploratory, the findings cannot speak to the causal links between shame, guilt, and aggression. This present study does suggest that devising an experimental study to establish a causal relationship between shame, low self-esteem, beliefs about aggression, and aggression would be worth seriously considering. One of the difficulties in contriving such a study would be the ethical considerations involved in causing either shame or aggression in order to measure the relationship. A longitudinal study following infants who were improperly nurtured and cared for at birth may prove to be more tenable than a cause and effect procedure. Clinical observations have suggested that children neglected during infancy have difficulties in brain development that compromise social-emotional development resulting in aggressive behaviour at a very young age (Shore, 1997). A study examining the early childhood history of these aggressive adolescents may help determine if these adolescent were compromised in infancy.

A longitudinal study ties in with exploring the possibility that aggressive adolescent girls may be involved in situations with high family conflict. The possibility of aggressive adolescent girls being blamed for all the communication difficulties in the home clarify a possible origin of the adolescents' feeling of guilt and shame. This study could explore the possibility that aggressive adolescent girls feel despair as a result of the burden of responsibility for carrying the family guilt and shame. An examination of the beliefs and values supported by the adults in the adolescents' family of origin may clarify the origin of the belief in the legitimacy of aggression.

The longitudinal study could also explore the range of problem solving options provided by the adolescents' family and social environment. The range of options provided to aggressive adolescents could be contrasted with those of low aggressive adolescent girls who may be exposed to a greater range of problem solving options, where aggression was not a viable option. A longitudinal comparison of aggressive adolescent girls and low aggressive adolescent girls could determine whether or not guilt proneness and positive self-esteem prevent or deter aggression.

The relationship between physical, sexual, verbal abuse, and shame needs further clarification and research. A larger sample of aggressive and non-aggressive girls needs to be questioned about their physical, sexual, and verbal abuse experiences and their feelings of shame to determine if shame and abuse are indeed related.

Aggressive adolescent girls need to be interviewed and asked about relevant scenarios that would more appropriately describe their experiences. Aggressive adolescent girls do not tend to spend much time in mainstream public schools since they are often suspended or expelled for their aggressive tendencies. They may not be disturbed or shamed by the same scenarios that most adolescent girls regularly attending school would be concerned about. Aggressive adolescent girls may be more concerned by scenarios with their friends at parties or scenarios with their family. These scenarios could then be adapted to a test of self-conscious affect that applies to aggressive adolescent girls. This scenario-based measure of shame may further clarify the definition of shame and shame proneness.

General Conclusions

Aggressive adolescent girls develop within a context. The context appears considerably compromised compared to adolescent girls who are non-aggressive. Aggressive adolescent girls may have developed in a highly conflicted environment, lacking in nurturance, establishing their low self-esteem where they, as children, were held responsible for their family's misfortune. This message was likely accompanied by beliefs and values that legitimised aggression as a viable problem solving method and where alternative options were limited.

In contrast, most adolescents are non-aggressive. Non-aggressive adolescents developed within a context of nurturing, caring families who provided them with conflict resolving values and beliefs within a wide range of communication and problem solving options. The use of multiple communication patterns and problem solving methods by developing adolescent girls may allow these adolescents a consistent means of gaining and maintaining positive self-esteem.

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Appendix A

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SHAME AND AGGRESSION IN ADOLESCENT FEMALES
CONSENT FORM FOR QUESTIONNAIRE-Research Participants

I understand that this research project is a study of the feelings, reactions and beliefs of adolescent girls about acts of aggression they may have witnessed, may have had inflicted on them or may have performed against others. In this study information is being collected about the feelings, reactions, and beliefs adolescent girls have about aggression, about how they personally would react in certain situations and about how they describe themselves. It is hoped that the results of this research project will contribute to our understanding of how best to treat and prevent female adolescent aggressive behaviour.

I understand that I am giving my permission to Marilyn Allison to collect information from me using questionnaires. I understand that **if I choose not to allow the information obtained from the questionnaires to be used for research purposes, this decision will make no difference to the way my family and I are treated by the Ministry for Children and Families**. That is, I understand that my participation is completely voluntary. I also understand that I may withdraw my permission at any time, without explanation, with no negative consequences. If I choose to withdraw from the study midway after I have answered some questionnaires, the information I have provided and questionnaires I have answered will be destroyed immediately. There are no costs or benefits to me as a result of participating in this study, that is, there will be **no special benefits** to me if I agree to participate in this study.

In this study using questionnaires, information is being collected about young women's feelings and beliefs about aggression. I understand that my participation is complete in about two hours. I understand that in the course of completing the questionnaires, I may experience discomfort or distress from painful memories, thoughts, or feelings regarding aggression. I understand that if I should experience discomfort, I can notify Marilyn Allison and she will provide an immediate debriefing. If I require any further counselling, Marilyn Allison will contact my personal counsellor or make a referral to the appropriate Mental Health Centre. I understand the debriefing provided by Marilyn Allison is intended to reduce my distress and is not intended to replace counselling provided by my personal counsellor or mental health therapist.

I understand that the information obtained from questionnaires I answer will be kept confidential (private) and only members of the research team will have access to the data. I agree to participate in this research study under these circumstances. I understand that steps will be taken to ensure that my **confidentiality** and **anonymity** will be protected in this research project.

The results of this study will be used for Marilyn Allison's doctoral dissertation. In addition, the results of this research will be shared with the Ministry for Children and Families and may be published in a scholarly journal. Only the researcher, Marilyn Allison, and her supervisors (Dr. Brian Harvey, Dr. John Anderson and Dr. Nancy Galambos) will have access to the research data. The data will be destroyed after 7 years, according to the guidelines of the Canadian Psychological Association.

I understand that any information collected will be kept in a locked filing cabinet in a locked office. **My name will not be attached to any papers or published results based on this research and that no one will be able to identify my information** because code numbers will be used instead of my name. **My information will never be looked at by itself, it will only be looked at along with other participants information** (that is, as a group). I understand that if I sign the consent form, **the consent form will be kept separate from my information** so the two cannot be connected.

I understand that I can call **Marilyn Allison (721-7799)** or her supervisor **Dr. Brian Harvey (721-7856)** if I have any questions or concerns about the study.

By signing below, I give my permission that the information obtained questionnaires may be used for the Shame and Aggression in Adolescent Females Study.

SIGNATURE: _____ DATE: _____

Appendix B

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SHAME AND AGGRESSION IN ADOLESCENT FEMALES
CONSENT FORM FOR QUESTIONNAIRE -Parent/Guardian

I understand that this research project is a study of the feelings, reactions and beliefs of adolescent girls about acts of aggression they may have witnessed, may have had inflicted on them or may have performed against others. In this study information is being collected about the feelings, reactions, and beliefs adolescent girls have about aggression, about how they personally would react in certain situations and about how they describe themselves. It is hoped that the results of this research project will contribute to our understanding of how best to treat and prevent female adolescent aggressive behaviour.

I understand that my child/ward may participate in this study by giving my permission to obtain information collected by Marilyn Allison using questionnaires. I understand that **if I choose not to allow the information obtained from the questionnaires answered by my child/ward to be used for research purposes, this decision will make no difference to the way my family and I are treated by the Ministry for Children and Families.** That is, I understand that my child's/ward's participation is completely voluntary. I also understand that I may withdraw my permission at any time, without explanation, with no negative consequences. There are no costs or benefits to my child/ward as a result of participating in this study, that is, there will be **no special benefits** to my child/ward if I agree to have them participate in this study.

In this study using questionnaires, information is being collected about young women's feelings and beliefs about aggression. I understand that my child's/ward's participation is complete in about two hours. I understand that in the course of completing the questionnaires, my child/ward may experience discomfort or distress from painful memories, thoughts, or feelings regarding aggression. I understand that if she should experience discomfort, she can notify Marilyn Allison and Marilyn Allison will provide an immediate debriefing. If my child/ward requires any further counselling, Marilyn Allison will contact my child's/ward's personal counsellor or make a referral to the appropriate Mental Health Centre. I understand the debriefing provided by Marilyn Allison is intended to reduce my child's/ward's distress and is not intended to replace counselling provided by my child's/ward's personal counsellor or mental health therapist.

I understand that the information obtained from the questionnaires my child/ward answers will be kept confidential (private) and only members of the research team will have access to the data. I agree to have my child/ward participate in this research study under these circumstances. I understand that steps will be taken to ensure that my child's/ward's **confidentiality** and **anonymity** will be protected in this research project.

The results of this study will be used for Marilyn Allison's doctoral dissertation. In addition, the results of this research will be shared with the Ministry for Children and Families and may be published in a scholarly journal. Only the researcher, Marilyn Allison, and her supervisors (Dr. Brian Harvey, Dr. John Anderson and Dr. Nancy Galambos) will have access to the research data. The data will be destroyed after 7 years, according to the guidelines of the Canadian Psychological Association.

I understand that any information collected will be kept in a locked filing cabinet in a locked office. **My child's/ward's name will not be attached to any papers or published results based on this research and that no one will be able to identify my child's/ward's information** because code numbers will be used instead of the child's/ward's name. **My child's/ward's information will never be looked at by itself, it will only be looked at along with other participants information** (that is, as a group). I understand that if I sign the consent form, **the consent form will be kept separate from my child's/ward's information** so the two cannot be connected.

I understand that I can call **Marilyn Allison (721-7799)** or her supervisor **Dr. Brian Harvey (721-7856)** if I have any questions or concerns about the study.
By signing below, I give my permission that the information obtained from my child/ward using interviews and questionnaires may be used for the Shame and Aggression in Adolescent Females Study.

SIGNATURE: _____ DATE: _____

Appendix C
Aggression Questionnaire

The following are a series of statements about how young people sometimes might feel. Put an X in the circle that describes how likely it is that the statement would be true for you. The largest circle means that you are very likely to think or feel that way, and the smallest circle means that you are not at all likely to think or feel that way.

	Not Likely at all	**Unlikely**	**Maybe (half & half)**	**Likely**	**Very Likely**
1. Once in a while I can't control the urge to strike another person.	○	○	○	○	○
2. I tell my friends openly when I disagree with them.	○	○	○	○	○
3. I flare up quickly but get over it quickly.	○	○	○	○	○
4. I am sometimes eaten up with jealousy.	○	○	○	○	○
5. Given enough harassment, I may hit another person.	○	○	○	○	○
6. I often find myself disagreeing with people.	○	○	○	○	○
7. When frustrated, I let my irritation show.	○	○	○	○	○
8. At times I feel I have gotten the raw deal out of life.	○	○	○	○	○
9. If someone hits me I hit back.	○	○	○	○	○

	Not Likely at all	Unlikely	Maybe (half & half)	Likely	Very Likely
10. When people annoy me, I may tell them what I think of them.	○	○	○	○	○
11. Sometimes I think I am a powder keg ready to explode.	○	○	○	○	○
12. Other people always seem to get the breaks.	○	○	○	○	○
13. I get into fights a little more than the average person.	○	○	○	○	○
14. I can't help getting into arguments when people disagree with me.	○	○	○	○	○
15. I am an even-tempered person.*	○	○	○	○	○
16. I wonder why sometimes I feel so bitter about things.	○	○	○	○	○
17. If I have to resort to violence to protect my rights, I will.	○	○	○	○	○
18. My friends say that I am somewhat argumentative.	○	○	○	○	○
19. Some of my friends think that I am a hothead.	○	○	○	○	○

	Not Likely at all	Unlikely	Maybe (half & half)	Likely	Very Likely
20. I know that "friends" talk about me behind my back.	○	○	○	○	○
21. There are people who pushed me so far that we came to blows.	○	○	○	○	○
22. Sometimes I fly off the handle for no good reason.	○	○	○	○	○
23. I am suspicious of overly friendly strangers.	○	○	○	○	○
24. I can think of no good reason for* ever hitting another person.	○	○	○	○	○
25. Sometimes I feel that people are laughing at me behind my back.	○	○	○	○	○
26. I have threatened people I know.	○	○	○	○	○
27. I have trouble controlling my temper.	○	○	○	○	○
28. When people are especially nice I wonder what they want.	○	○	○	○	○
29. I have become so mad that I have broken things.	○	○	○	○	○

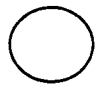
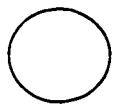
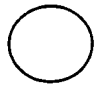
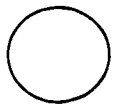
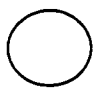
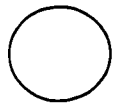
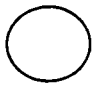
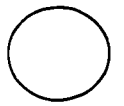
Appendix D
TOSCA-ADOL

On the following pages, you will find description of a variety of situations. After each situation, you will see several statements about different ways that people might think or feel.

As you read about each situation, really imagine that you are in that situation now. Imagine how your might think or feel. Then read each statement. Put an X in the circle that describes how likely it is that the statement would be true for you. The largest circle means that you are very likely to think or feel that way, and the smallest circle means that your are not at all likely to think or feel that way.

For example:

A. You wake up very early one morning on a school day.

	Not Likely at all	**Unlikely**	**Maybe (half & half)**	**Likely**	**Very Likely**
a) I would eat breakfast right away.					
b) I would try to finish my homework before going to school.					
c) I would feel like staying in bed.					
d) I would wonder why I woke up so early.					

There are no right or wrong answers to these questions. We are simply interested in your own thoughts and ideas about these situations.

1. You trip in the cafeteria and spill your friend's drink.

	Not Likely at all	Unlikely	Maybe (half & half)	Likely	Very Likely
(a) I would think that everyone is watching me and laughing.	○	○	○	○	○
(b) I would feel very sorry. I should have watched where I was going.	○	○	○	○	○
(c) I wouldn't feel bad because it didn't cost very much.	○	○	○	○	○
(d) I would think: "I couldn't help it. the floor was slippery."	○	○	○	○	○

2. For several days you put off talking to the teacher about a missed assignment. At the last minute you talk to the teacher about it and all goes well.

	Not Likely at all	Unlikely	Maybe (half & half)	Likely	Very Likely
a) I would think: "I guess I'm more convincing than I thought."	○	○	○	○	○
b) I would regret I put it off.	○	○	○	○	○
c) I would feel like a coward.	○	○	○	○	○
a) I would think: "I handled that well."	○	○	○	○	○
e) I would think: "The teacher should have asked me about it first. It's her job."	○	○	○	○	○

3. While fooling around, you throw a ball and it hits your friend in the face.

	Not Likely at all	Unlikely	Maybe (half & half)	Likely	Very Likely
a) I would feel stupid that I can't even throw the ball.	○	○	○	○	○
b) I would think: "Maybe my friend needs more practice at catching."	○	○	○	○	○
c) I would think: "It was just an accident."	○	○	○	○	○
d) I would apologise and make sure my friend feels better.	○	○	○	○	○

4. You and a group of classmates worked very hard on a project. Your teacher singles you out for a better grade than anyone else.

	Not Likely at all	Unlikely	Maybe (half & half)	Likely	Very Likely
a) I would think: "The teacher is playing favourites."	○	○	○	○	○
b) I would feel alone and apart from my classmates.	○	○	○	○	○
c) I would feel that my hard work paid off.	○	○	○	○	○
d) I would feel competent and proud of myself.	○	○	○	○	○
e) I would tell the teacher that everyone should get the same grade.	○	○	○	○	○

5. You break something at your friend's house and then hide it.

	Not Likely at all	Unlikely	Maybe (half & half)	Likely	Very Likely
a) I would think: "This is making me anxious. I need to either fix it or replace it."	○	○	○	○	○
b) I would avoid seeing that friend for a while.	○	○	○	○	○
c) I would think: "A lot of things aren't made very well."	○	○	○	○	○
d) I would think: "It was only an accident."	○	○	○	○	○

6. A school you wait until the last minute to plan a project, and it turns out badly.

	Not Likely at all	Unlikely	Maybe (half & half)	Likely	Very Likely
a) I would feel useless and incompetent.	○	○	○	○	○
b) I would think: "There are never enough hours in the day."	○	○	○	○	○
c) I would feel that I deserved a bad grade.	○	○	○	○	○
d) I would think: "What's done is done."	○	○	○	○	○

7. You wake up one morning and remember it's your mother's birthday. You forgot to get her something.

	Not Likely at all	Unlikely	Maybe (half & half)	Likely	Very Likely
a) I would think: "It's not the gift that matters. All that really matters is that I care."	○	○	○	○	○
b) I would think: "After everything she's done form me, how could I forget her birthday?"	○	○	○	○	○
c) I would feel irresponsible and thoughtless.	○	○	○	○	○
d) I would think: "Someone should have reminded me."	○	○	○	○	○

8. You walk out of a test thinking you did extremely well. Then you find out you did poorly.

	Not Likely at all	Unlikely	Maybe (half & half)	Likely	Very Likely
a) I would feel that I should have done better. I should have studied more.	○	○	○	○	○
c) I would feel stupid.	○	○	○	○	○
d) I would think: "It's only a test."	○	○	○	○	○
e) I would think: "The teacher must have graded it wrong."	○	○	○	○	○

9. You make a mistake at school and find a classmate is blamed for the error.

	Not Likely at all	Unlikely	Maybe (half & half)	Likely	Very Likely
a) I would think: "The teacher does not like the classmate."	○	○	○	○	○
b) I would think: "Life is not fair."	○	○	○	○	○
c) I would keep quiet and avoid the classmate.	○	○	○	○	○
d) I would feel unhappy and eager to correct the situation.	○	○	○	○	○

10. You were talking in class and your friend got blamed. You go to the teacher and tell him the truth.

	Not Likely at all	Unlikely	Maybe (half & half)	Likely	Very Likely
a) I would think: "The teacher should have gotten the facts straight before he blamed my friend."	○	○	○	○	○
b) I would feel like I always get people in trouble.	○	○	○	○	○
c) I would feel good about getting the record straight	○	○	○	○	○
d) I would feel proud of myself for being an honest person.	○	○	○	○	○
e) I would think: "I'm the one who should get in trouble. I shouldn't have been talking in the first place."	○	○	○	○	○

11. You and your friends are talking in class and you get in trouble.

	Not Likely at all	Unlikely	Maybe (half & half)	Likely	Very Likely
a) I would think: "I should know better. I deserve to get in trouble."	○	○	○	○	○
b) I would think: "We were only whispering."	○	○	○	○	○
c) I would think: "The teacher is unfair."	○	○	○	○	○
d) I would feel like everyone in the class was looking at me and they were about to laugh.	○	○	○	○	○

12. You make plans to meet a friend. Later you realise you stood them up.

	Not Likely at all	Unlikely	Maybe (half & half)	Likely	Very Likely
a) I would think: "I'm inconsiderate."	○	○	○	○	○
b) I would think: "Well, they'll understand."	○	○	○	○	○
c) I would try to make it up to them as soon as possible.	○	○	○	○	○
d) I would think: "Someone distracted me just before I was supposed to meet my friend."	○	○	○	○	○

13. You volunteer to raise money for a good cause. Later you want to quit, but you know your help is important.

	Not Likely at all	Unlikely	Maybe (half & half)	Likely	Very Likely
a) I would feel selfish and I'd think I am basically lazy.	○	○	○	○	○
b) I would think: "I was pressured into helping."	○	○	○	○	○
c) I would think: "I should be more concerned about doing whatever I can do to help."	○	○	○	○	○
d) I would feel great that I had helped.	○	○	○	○	○
e) I would feel very satisfied for myself.	○	○	○	○	○

14. Your report card isn't as good as you wanted. You showed it to your parents when your get home.

	Not Likely at all	Unlikely	Maybe (half & half)	Likely	Very Likely
a) I would think: "Everyone gets bad grades once in a while."	○	○	○	○	○
b) I would think: "I really didn't deserve the grades, it wasn't my fault."	○	○	○	○	○
c) Now that I got a bad report card, I would feel worthless.	○	○	○	○	○
d) I would think: "I should listen to everything the teacher says and study harder."	○	○	○	○	○

15. You have recently moved to a new school and everyone has been very helpful. A few times you had to ask some big favours, but you returned the favours as soon as you could.

	Not Likely at all	**Unlikely**	**Maybe (half & half)**	**Likely**	**Very Likely**
a) I would feel like a failure.	○	○	○	○	○
b) I would think: "Maybe this school doesn't do enough to help new students."	○	○	○	○	○
c) I would think: "I am smart to ask for help when I need it."	○	○	○	○	○
d) I would be proud that I returned the favours.	○	○	○	○	○

Appendix E

Beliefs Measure

The following are a series of statements about what young people sometimes might believe. Put an X in the circle that describes how likely it is that the statement would be true for you. The largest circle means that you are very likely to think or feel that way, and the smallest circle means that you are not at all likely to think or feel that way.

	Not Likely at all	**Unlikely**	**Maybe (half & half)**	**Likely**	**Very Likely**
1. It's okay to hit someone if he or she hits you first.	○	○	○	○	○
2. If you fight a lot people will look up to you.	○	○	○	○	○
3. If you back down from a fight, everyone will think you are a coward.	○	○	○	○	○
4. It's okay to hit someone if you don't like him or her.	○	○	○	○	○
5. People who get beat up don't usually deserve it.	○	○	○	○	○
6. Being raped must be an awful experience.	○	○	○	○	○
7. It's really okay to hit someone just because he or she insults you.	○	○	○	○	○
8. To be popular, you have to like violence.	○	○	○	○	○
9. It's okay to hit someone if you just "go crazy" with anger.	○	○	○	○	○

	Not Likely at all	Unlikely	Maybe (half & half)	Likely	Very Likely
10. Anyone who is not a good fighter is just a sissy.					
11. People who get beat up probably suffer a lot.					
12. No one deserves to be killed.					
13. It's really not okay to hurt someone just because other people are doing it.					
14. It's important to show everyone how tough you are by being a good fighter.					
15. If you are afraid to fight you won't have any friends.					
16. If someone gets beat up or hurt badly, it's generally not his or her own fault.					
17. Even though people in my neighbourhood know they might get hurt, it's still a big deal when it happens.					
18. It's a bad idea to hit someone, even if you think he or she deserves it.					

Appendix F
ISS

DIRECTIONS: Below is a list of statements describing feelings or experiences that you may have from time to time or that are familiar to you because you have had these feelings and experiences for a long time. Most of these statements describe feelings and experiences that are generally painful or negative in some way. Some people will seldom or never have had many of these feelings. Everyone has had some of these feelings at some time, but if you find that these statements describe the way you feel a good deal of the time, it can be painful just reading them. Try to be as honest as you can in responding.

Read each statement carefully and circle the number to the left of the item that indicates the frequency with which you find yourself feeling or experiencing what is described in the statement. Use the scale below. DO NOT OMIT ANY ITEMS.

SCALE

0	1	2	3	4
NEVER	**SELDOM**	**SOMETIMES**	**OFTEN**	**ALMOST ALWAYS**

SCALE					#	
0	1	2	3	4	1.	I feel like I am never quite good enough.
0	1	2	3	4	2.	I feel somehow left out.
0	1	2	3	4	3.	I think that people look down on me.
0	1	2	3	4	4.	All in all, I am inclined to feel that I am a success.
0	1	2	3	4	5.	I scold myself and put myself down.
0	1	2	3	4	6.	I feel insecure about others' opinions of me.
0	1	2	3	4	7.	Compared to other people, I feel like I somehow never measure up.
0	1	2	3	4	8.	I see myself as being very small and insignificant.
0	1	2	3	4	9.	I feel I have much to be proud of.
0	1	2	3	4	10.	I feel intensely inadequate and full of self-doubt.
0	1	2	3	4	11.	I feel as if I am somehow defective as a person, like there is something basically wrong with me.
0	1	2	3	4	12.	When I compare myself to others I am just not important.
0	1	2	3	4	13.	I have an overpowering dread that my faults will be revealed in front of others.

SCALE

0	1	2	3	4
NEVER	**SELDOM**	**SOMETIMES**	**OFTEN**	**ALMOST ALWAYS**

SCALE					#	
0	1	2	3	4	14.	I feel I have a number of good qualities.
0	1	2	3	4	15.	I see myself striving for perfection only to continually fall short.
0	1	2	3	4	16.	I think others are able to see my defects.
0	1	2	3	4	17.	I could beat myself over the head with a club when I make a mistake.
0	1	2	3	4	18.	On the whole, I am satisfied with myself.
0	1	2	3	4	19.	I would like to shrink away when I make a mistake.
0	1	2	3	4	20.	I replay painful events over and over in my mind until I am overwhelmed.
0	1	2	3	4	21.	I feel I am a person of worth at least on an equal plane with others.
0	1	2	3	4	22.	At times I feel like I will break into a thousand pieces.
0	1	2	3	4	23.	I feel as if I have lost control over my body functions and my feelings.
0	1	2	3	4	24.	Sometimes I feel no bigger than a pea.
0	1	2	3	4	25.	At times I feel so exposed that I wish the earth would open up and swallow me.
0	1	2	3	4	26.	I have this painful gap within me that I have not been able to fill.
0	1	2	3	4	27.	I feel empty and unfulfilled.
0	1	2	3	4	28.	I take a positive attitude toward myself.
0	1	2	3	4	29.	My loneliness is more like emptiness.
0	1	2	3	4	30.	I feel like there is something missing.

Appendix G

MY THOUGHTS

Please circle the number indicating whether you Strongly Agree, Agree, Disagree, or Strongly Disagree with each statement.

		Strongly Agree	Agree	Disagree	Strongly Disagree
1.	I feel that I am a person of worth, at least on an equal plane with others.	1	2	3	4
2.	I feel that I have a number of good qualities.	1	2	3	4
3.	All in all, I am inclined to feel that I am a failure.	1	2	3	4
4.	I am able to do things as well as most other people.	1	2	3	4
5.	I feel I do not have much to be proud of.	1	2	3	4
6.	I take a positive attitude toward myself.	1	2	3	4
7.	On the whole, I am satisfied with myself.	1	2	3	4
8.	I wish I could have more respect for myself.	1	2	3	4
9.	I certainly feel useless at times.	1	2	3	4
10.	At times, I think I am no good at all.	1	2	3	4

Appendix H

SSGS

The following are some statements, which may or may not describe how you are feeling right now. Please rate each statement using the 5-point scale below. Remember to rate each statement based on how you are feeling right at this moment.

		Not feeling this way at all		Feeling this way somewhat		Feeling this way very strongly
1.	I feel good about myself	1	2	3	4	5
2.	I want to sink into the floor and disappear.	1	2	3	4	5
3.	I feel remorse, regret.	1	2	3	4	5
4.	I feel worth while, valuable.	1	2	3	4	5
5.	I feel small.	1	2	3	4	5
6.	I feel tension about something I have done.	1	2	3	4	5
7.	I feel capable, useful.	1	2	3	4	5
8.	I feel like I am a bad person.	1	2	3	4	5
9.	I cannot stop thinking about something bad I have done.	1	2	3	4	5
10.	I feel proud.	1	2	3	4	5
11.	I feel humiliated, disgraced.	1	2	3	4	5
12.	I feel like apologising, confessing.	1	2	3	4	5
13.	I feel pleased about something I have done.	1	2	3	4	5
14.	I feel worthless, powerless.	1	2	3	4	5
15.	I feel bad about something I have done.	1	2	3	4	5

Appendix I

Interview Questions

I would like to ask you general questions about yourself, your place in society and your place in your family. Some of the questions may be emotionally difficult for you. If that is the case, you do not need to answer. These questions are only for basic general information and are not intended to initiate counselling. Counselling will not be provided during these questions.

Demographics and Basic Background Information

1. Birthdate: _____/_____/_____ Age: _____years _____months (round up if > 15 days)
2. Ethnicity: Caucasian Black East Indian Native Oriental
   Other (specify: _____)
3. Father's occupation: _____ Father 2 occupation: _____
4. Mother's occupation: _____ Mother 2 occupation: _____
5. Highest level of education father completed:_____ Father 2 education:_____
6. Highest level of education mother completed: _____ Mother 2 education:_____
7. Highest level of education you completed: _____
8. Are you currently attending school?

   No
   Yes ⟶ _____Mainstream
   _____Alternative
   _____Correspondence
   Other (Specify: _____)

9. What is school like for you?

   _____

10. What are your experiences of "in school" and "out of school" violence?

_____

Family Background

1. Where are you currently living (or if incarcerated, where living before?)

_____With both parents

_____With mother

_____With father

_____With mother and stepfather

_____With father and stepmother

_____With other relatives

_____With foster parents

_____In group home

_____On own

_____Other (Specify: _____)

2. Has either parent died?

No

Yes ⟶ Which parent? M F

How old was the youth when parent died?

3. How many brothers and/or sisters do you have?

Full brothers _____ Half-brothers_____ Stepbrothers _____

Full sisters _____ Half-sisters_____ Stepbrothers _____

Where do you fit in among the children in the family:

Only child _____ Oldest child _____ Youngest child _____

In the middle _____ A twin _____

4. Do you have any children of your own?

   No

   Yes ⟶ How many? _____ In your care? Y N Access Only

5. Were biological parents ever married? N Y If yes, how old were you at the time? _____yrs

6. Did biological parents ever separate? N Y For what reason?

   _____

7. Was there a lot of conflict in the parents' relationships? N Y

8. Did you ever witness any family violence? N Y ⟶ Who was abused?

   _____

   Who was the perpetrator? _____ How old was the youth? _____yrs

   How long did it occur? _____

9. Were you ever physically abused? N Y ⟶ Who was the perpetrator?_____

   How old were you? _____yrs How long did it occur?

_____

10. Were you ever sexually abused? (Code yes if youth was ever forced into unwanted sexual contact or engaged in sexual activity with someone more than 5 years their superior.)
    N Y Who was the perpetrator? _____ How old were you? _____yrs

    How many people in your family call you names or put you down? _____

    Were you ever placed in foster care? N ⟶Y At what age?_____ Until what age?_____

11. Has any parent figure been diagnosed with a mental illness? N Y⟶ Who?

12. What illness? _____

Has any parent figure been arrested on criminal charges? N → Y

Who?_____

What charge? _____

13. Have you ever been arrested on criminal charges? When?_____ What charge?_____

How old were you? _____ How many times arrested? _____

How old were you when first arrested? _____

14. Do you have a counsellor that you are seeing?

Name:_____

15. What is your counsellor's phone number?

_____

Appendix J
Letter of Introduction

Marilyn Allison, M.Ed.
c/o Department of Psychological Foundations in Education
University of Victoria
PO Box 3010 MS 7799
Victoria, BC V8W 3N4
Telephone: (250) 721-7799, Fax (250) 721-7767

Dear Participant:

Why are some young women violent and get so angry that they want to hit, hurt and even kill?

I am conducting a research study on the feelings, reactions and beliefs of adolescent girls, ages 13 to 18, about acts of aggression they may have witnessed, may have had inflicted on them or may have performed against others. In this study, information is being collected about the feelings, reactions, and beliefs adolescent girls have about aggression, about how they personally would react in certain situations, and about how they describe themselves. It is hoped that the results of this research project will contribute to our understanding of how best to treat and prevent female adolescent aggressive behaviour.

I am collecting information about young women's feelings and beliefs about aggression and shame using questionnaires and interviews. In this way I will obtain information in the young person's own words from their own unique experience. You could participate and provide valuable information on this topic. The questionnaires and the interview will be confidential and anonymous so you won't need to worry about your answers being identified as yours. If you have any questions or feel uncomfortable about the process, I will answer your questions and attend to your concerns. You will be asked if you are still willing to continue. If you still feel uncomfortable, the process will stop and your participation will end.

The results of this study will be used for my doctoral dissertation at the University of Victoria. In addition, the results of this research may be shared with the Ministry for Children and Families and may be published in a scholarly journal. Only my supervisors (Dr. Brian Harvey, Dr. John Anderson, Dr. Ann Marshall, Dr. Nancy Galambos and myself, Marilyn Allison) will have access to the research data. If you have any questions about the study, you can contact Dr. Harvey at 721-7856.

Your participation in this study would be greatly appreciated. The questionnaire portion of the study takes approximately two hours and includes some questions for basic general information about yourself, your place in society and your place in your family. They may include questions about physical and sexual abuse that may be uncomfortable for you to answer. You do not need to answer any questions that may be uncomfortable for you.

If you are interested in participating in this study please call Marilyn Allison at 380-9301 and leave a message. I will contact you to set up a time to meet. Thanks again.

Sincerely,

Marilyn Allison