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Role of Moral Beliefs in Aggression - An Investigation across two cultures

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Submitted for Degree of Doctor of Philosophy in Psychology

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To my family I dedicate this thesis.
Declaration

The work presented in this thesis is original work of the author carried out to fulfil the requirement for PhD at University of Warwick. This work has not been submitted for a degree at another university.

Some of the work in this thesis, portions of Chapter 3 and 4 was presented at World Meeting of International Society for Research on Aggression (ISRA), Greece, 2004. The paper "An eye for an eye-a cross-cultural comparison of normative beliefs about aggression and retaliation" has been accepted for publication in the proceedings of this conference.

Chapters 6 and 8, 9 were accepted for presentation at World meeting of ISRA, Minnesota, USA, July 2006. Chapter 8 and 9 are joined in a paper submitted for publication.

Students of Psychology department University of Punjab assisted in data collection for Chapter 6 and in running the experiment on extremist behaviour. Their contribution will be acknowledged in all publications coming out of this thesis.
Summary

The overarching aim of this thesis was to contribute to the understanding of specific moral-cognitive processes and mechanisms and their association with aggressive behaviour across age groups and across two cultures.

A review of the literature identified the key questions for present research. There is extensive evidence that the normative acceptability of aggression is associated with aggressive behaviour. However the acceptability for retaliation in specific situations and discernment between justified and unjustified retaliation has not been thoroughly researched. Secondly the role of self-censure and self-reflection in the regulation of aggressive behaviour needs to be examined further. Finally hostility between groups and its association with beliefs has not been investigated in Muslim samples. Eight empirical studies addressed these specific questions.

Study one investigated the component structure of Normative Beliefs about aggression Scale using samples from Pakistan and the UK. Beliefs about equal retaliation, excessive retaliation and beliefs about general aggression were found to be distinct components, were endorsed differentially and had different level of association with aggressive behaviour across both countries. Study two established the discriminant validity of this distinction by comparing a group of violent adolescents with a matched group of non-violent adolescents on acceptability of these types of retaliation.

Study 3 examined the association of self-censure with aggressive behaviour and normative beliefs about aggression and retaliation. Self-censure was negatively associated with aggressive behaviour as well as with beliefs indicating that higher the endorsement of aggression, lower would be the expected self-censure as a result of aggression.

Study four using retrospective accounts of real aggressive episodes found that private self-consciousness predicted self-censure as well as thinking about one’s own aggressive actions. Both thinking and self-censure were negatively associated with frequency of aggressive acts.

The beliefs about direct and indirect aggression among Pakistani adolescents were tested in Study five and a reliable measure was developed and found to have convergent validity.

Study six examined moral reasoning among children and explored at a preliminary level a possible intervention for changing beliefs about victimization in school.

Study seven and eight extended investigation of beliefs to intergroup context (anti-Semitic beliefs) and found that extreme beliefs were related to hostile intentions. An educational intervention was carried out which showed that beliefs could be influenced through creating empathy and stressing intergroup similarity.
Chapter 1  Thesis Introduction

1.1  Motivations for research

This thesis stems from the argument that we are socio-moral beings to the extent that our social interactions are subject to moral standards and shared rules of conduct. Moral discernment is the ability, which enables us to distinguish between what is right and what is wrong according to moral standards and injunctions of our belief system. This discernment is especially important in situations of interpersonal harm for example in reacting to provoking situations or perceived injustices. Is it appropriate to attack someone physically in reaction to an insulting remark? Is it permissible to injure innocent citizens as a protest against injustice? Such questions involve making the crucial distinction between fairness and revenge and the function of moral discernment is central to this distinction.

However moral discernment on its own is not sufficient for moral actions. It is the volitional control, which translates moral thought into moral action or prevents non-moral impulses from turning into actions. The exercise of moral judgment through self-restraint is a familiar concept in philosophy, religion and spiritual disciplines (Murata, 2001). This concept is reiterated in contemporary theorizing about moral and purposeful behaviour. Several contemporary theories of attitude and behaviour postulate role of cognitive mechanisms in social behaviour for example the concept of self-regulatory beliefs in social-cognitive theory of aggression (Bandura, 1989), normative and injunctive beliefs in theory of reasoned action (Ajzen & Fishbien, 1980), and judgments in theory of moral reasoning.
The present research aims to investigate various aspects of socio-moral cognition implicated in manifestation and regulation of aggression. I recognize that this area of investigation is more than an academic concern; it is related to issues in real world and ultimately has repercussions for peaceful co-existence among individuals and groups. Aggression has been a long term personal concern at many levels; as a woman, as a Muslim, as a Pakistani and as a Psychologist. This concern motivated this research and is reflected in focus of particular studies. Ultimately the aim of aggression research should be to understand and reduce harmful behaviour at all levels, personal, group and global.

I believe that research is a creative process, primarily aimed at answering questions but simultaneously generating new questions at every stage of the research process. The studies in the thesis may be seen as attempts to answer specific questions posed initially as well as some inquiries that emerged in the course of research. All contribute to an understanding of various facets of aggressive behaviour, the overarching aim and motivation of this research and a continuing objective for subsequent work.

1.2 Aims of research

It is proposed that children, adolescents and adults make a distinction between aggression and retaliation and between proportionate and disproportionate retaliation. Doing harm to someone without prior provocation is usually seen as aggression and is disapproved more than retaliation, which is understood as reaction to provocation (Rule & Ferguson, 1984). Findings from research on
revenge indicate that most individuals apply the rules of fairness and justice in situation of retaliation (Cota-McKinley, Woody, & Bell, 2001) and escalation of conflict occurs when harm of retaliation exceeds harm of provocation (Schmid, 2005). It is therefore important to examine this distinction in beliefs that individuals hold about acceptability of retaliation and aggression. The first aim of the thesis was to examine normative beliefs about retaliation and aggression across age groups and across two cultures.

The concept of self-regulation in moral behaviour was developed by Bandura (1989, 1991) in his social-cognitive theory of moral thought and action. Social cognitive theory grounds moral agency in a self-regulatory system that operates through three major sub-functions, self-monitoring, judgmental, and affective self reactions or self-censure. Based on his theory, researchers in aggression research have undertaken investigation of self-regulatory beliefs (e.g., Guerra & Slaby, 1990; Huesmann & Guerra, 1997; Slaby & Guerra, 1988). There is extensive evidence that beliefs accepting of aggression (called normative beliefs) predict aggressive behaviour, both longitudinally as well as cross-sectionally (Erdley & Asher, 1998; Huesmann & Guerra, 1997; Werner & Nixon, 2005; Zelli, Dodge, Lochman & Laird, 1999) and change in beliefs is an important correlate of change in aggressive behaviour (Guerra & Slaby, 1990; Henry, Guerra, Huesmann, Tolan, VanAcker, & Eron, 2000). In view of this evidence the second aim of the thesis was to examine the association between normative beliefs about aggression and aggressive behaviour in interpersonal as well as inter-group context.
Further more, Bandura (1991) emphasized that beliefs specifically moral standards regulate behaviour through self-reprimand and self-approval since external sanctions are at best weak deterrents. The role of self-censure has not been examined extensively in aggression research. A further aim of the research was to examine the association between self-censure and normative beliefs about aggression.

Since exercise of discernment as well as self-restraint are cognitive functions, the thesis further aimed to test the assumption that tendency to reflect on one’s action is associated with reported frequency of personal aggressive actions. Another aim was to extend investigation of beliefs to group context and explore the form as well as beliefs about aggression towards other religious groups and finally I aimed to investigate if beliefs can be influenced through intervention.

An overall aim of thesis was to extend investigation of this area to under researched cultures. Acknowledged experts on aggression recommend cross-cultural approach for two reasons: To redress the imbalance created by dominance of United States in psychological studies of aggression and to test general theories of aggression (e.g., Archer, 2001, p 215). Four studies in this thesis were conducted in Pakistan to contribute to scant literature on aggression in Pakistan.
1.3 Organization of the thesis

Chapter one is an overview of the aims of the thesis and presents the plan of chapters. Chapter Two introduces the concept of aggression, its forms and associated factors. Role of beliefs in aggressive behaviour is discussed and review of main findings in empirical literature related to beliefs about aggression is presented. The cross-cultural evidence on moral approval of aggression is also discussed. It was identified that normative beliefs about aggression emerge as an important area of research. Some of the interesting questions centre around distinction between types of beliefs, role of self-censure, and beliefs about aggression in a group context. It was also noted that there is scant research in non-western cultures specifically in Pakistan on beliefs about aggression and about aggression between religious groups. The empirical studies were designed with the aim of tackling various questions within the arena of beliefs and aggression.

Two empirical studies are presented in chapter three. The first study addressed whether normative beliefs about retaliation and normative beliefs about general aggression are distinct components in a measure of normative beliefs and whether equal and excessive retaliation is endorsed differentially. Samples for this study were taken from Pakistan as well as the UK. This is the first study to establish reliability and construct validity of Normative Beliefs about Aggression Scale in Pakistan and report principal component analysis on this scale. The second study in chapter 3 compared beliefs about retaliation among violent and non-violent
adolescents in the UK, thus providing evidence for discriminant validity of the equal and excessive retaliation distinction.

Chapter four investigated association between normative beliefs about retaliation and aggression, aggressive behaviour and self-censure. Relationship of self-censure with normative beliefs has not been examined before. The study yielded some interesting findings and pointed to both theoretical and empirical directions for future research.

Some further questions emerged in the course of research. Specifically: what are the situations that trigger retaliation; do individuals reflect upon their retaliatory acts and feel bad subsequently? How is this subsequent thinking and feeling related to frequency of retaliation and to private self-consciousness? The study reported in chapter five examined the frequency of aggressive episodes in relation to reflection, feelings about aggressive act and private self-consciousness.

Chapter Six investigated beliefs about direct and indirect aggression and their association with self-report and teacher-report of aggressive behaviour among Pakistani adolescents. A new measure was developed in this study, which showed sound reliability for use with Pakistani samples. Direct and indirect forms of aggression as well as beliefs about aggression have been examined in different cultures (e.g., Björkqvist, Österman, Oommen & Lagerspetz, 2001; Owen & MacMullin, 1995; Thanzami & Archer, 2004; see Ramirez et al., 2001 for a review of aggression approval across societies) but there is scant research in this area in Pakistan.
Having established that normative beliefs particularly extreme retaliation beliefs are related to aggression and retaliation, it was a logical next step to test how beliefs could be modified. Earlier research (Henry et al., 2000) indicated that making group norms salient could reduce personal normative beliefs about aggression hence a brief intervention was carried out among school children to test this assumption. This study is reported in chapter Seven.

Chapter Eight extended the study of moral beliefs about aggression to inter-group context and developed a measure to test the prediction that extreme beliefs are related to hostile intentions against Jewish people. This is the first study to best of my knowledge that has examined normative beliefs about anti-Semitic aggression in a Muslim society. Findings of this study provided impetus for an exploration of ways to reduce and influence anti-Semitic beliefs. Chapter Nine reports an educational intervention carried out in Pakistan, which tested if beliefs could be influenced through providing positive information and challenging misconceptions against Jews.

Chapter Ten summarises and discusses the main findings, bringing the learning from these studies together and taking the empirical work back to the context of understanding the role of psychological mechanisms involved in prevention and intervention of harmful behaviour. I conclude that work of this nature is a moral and intellectual responsibility for researchers since it is crucial for promoting peaceful coexistence between individuals and between groups and highlights the importance of early education and socialization of prosocial beliefs.
Inevitably, everyone experiences or witnesses, some form of violence and aggression in their lives. Whether it is an attack on person or property, a fight at football game, arguments at workplace, crime reports in media or news about bombing of a city, aggression plagues our daily lives in some form or the other. Acts of aggression between individuals are everyday phenomena: people damage careers and reputations, intimidate and abuse, exclude from social networks, assault and insult each other. It seems almost like a truism when a social psychologist points out “Aggression as a research topic has found its way into psychology as a problem taken over directly from everyday life and experiences (Mummendey, Linneweber & Löschper, 1984, p 22). It is not surprising that aggression has generated an extensive amount of theorizing and empirical research (see Tedeschi & Felson, 1994 for a review). According to Mummendey (1984) the task of the social psychologist is not only to understand the phenomena of aggression, both theoretically and empirically, but also to apply this scientific understanding to the solution of social problems of violence and aggression. This task requires re-addressing conceptualisations employed by researchers and evaluating whether they have validity outside the experimental and cultural settings where they were conceived and developed.

Human aggression has been defined as any behaviour directed toward another individual that is carried out with the intent to cause harm directly or indirectly (Anderson & Bushman. 2002; Baron & Richardson, 1994; Berkowitz, 1993:
Geen, 1998). This definition encompasses a very broad rage of behaviour, varied in form, intensity, goals and context (Coie & Dodge, 1998; Siann, 1985; Tedeschi & Felson, 1994). It is therefore essential to establish a consensual definition and specify the form and context of aggressive behaviour that is addressed in a particular empirical investigation.

Due to its harmful and disruptive consequences, aggression has become subject of extensive research in psychology. There is a consensus among researchers that aggression is determined by a multitude of factors (e.g., Anderson & Bushman, 2002; Eron, 1994). Some of these factors are related to individuals and others are nested beyond the individual within the broader social and cultural contexts. A single research project can at best address only a few of these factors implicated in aggression. Previous research suggests that beliefs and norms play an important role in interpersonal (Anderson & Bushman, 2002; Bandura, 1991) as well as intergroup aggression (Anderson & Carnagey, 2004; Segall, 1983) and change in beliefs about aggression is emphasized in interventions in various contexts including: school-based aggression reduction (see Boxer & Dubow, 2002 for review; Conduct Problems Prevention Research Group, 1999), community violence and crime (Segall, 1983), international terrorism (Anderson & Carnagey, 2004; Umar, 2001) and religious and racial hostility (Ajmal, 2006a). It has also been emphasized that other factors such as dispositions, environmental influences and situational instigators influence aggression through knowledge structures of an individual, such as beliefs (Anderson & Carnagey, 2004; Anderson & Huesmann, 2003; Eron, 1994). Clearly beliefs about aggression are an important area of investigation.
Harmful behaviour toward others is governed by norms and moral rules shared across societies (Ramirez, 2001). An investigation of these beliefs has important implications for understanding and reducing aggression not only within a single society but also across societies. Such investigations can also delineate types of beliefs implicated in extremist behaviour of certain groups, which has become a very crucial concern in recent years (Blair, 2006; classified information\(^1\)).

This thesis investigates the role of beliefs in aggressive behaviour between individuals and between groups. Various types of beliefs have been subject of investigation in relation to aggressive behaviour. The particular focus of this thesis is on beliefs approving of aggression, also called, normative beliefs, standards of conduct and beliefs legitimising aggression. The thesis is also concerned with moral cognition that influences regulation of aggression. The investigation is carried out across two cultures with an aim to discover the shared moral beliefs about aggression and to delineate the types of beliefs, which predict aggressive behaviour.

The present chapter begins by offering a consensual definition of aggression and describing the types of aggressive behaviour conceptualised in literature. Next, it specifies the form and context of aggressive behaviour that is subject of investigation in this thesis. Following this, the theoretical and conceptual models of aggressive behaviour relevant to the focus of the thesis are discussed and empirical literature on normative beliefs about aggression is reviewed. Finally the chapter

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\(^1\) Mr. Tony Blair, prime minister of Great Britain held a meeting with selected religious scholars in Islamabad, Pakistan on 19th November 2006 and expressed that understanding Islamic extremism within the UK was his urgent concern.
identifies the research questions that emerge from the current state of literature and
goes on to describe the explanatory framework of this thesis.

2.2 The Concept of Aggression

2.2.1 Arriving at a consensual definition of aggression

The first step towards investigating a phenomenon is to define it accurately and
precisely. When we use the term *aggression* in everyday language, it is assumed
that a shared meaning is being conveyed. That is far from the case. Birnbacher
(1984) points out that the concept of aggression used in scientific and non-scientific
contexts is partly utilized in a value-neutral, purely descriptive way, and partly with
a distinctly normative content, i.e., as an expression of moral disapproval. He
describes three levels of discourse at which this concept operates: (1) Aggression as
a conscious or unconscious motivation, (2) observable aggressive behaviour like
hurting, attacking, offending others, and (3) inherently pejorative, morally or
otherwise condemned act. Due to these diverse meanings and contexts of the use of
the term aggression, many reviewers see the theoretical and empirical definitions of
aggression in the scientific literature as ambiguous and overlapping (Cohen, Hsueh,
Russell, & Ray, 2006; Coie & Dodge, 1998; Parke & Slaby, 1983). The definitions
offered in literature view aggression as a personality trait, a biological process, a
stereotyped reflex, a learned habit, an instinct and a class of observable physical and
verbal responses (Parke & Slaby, 1983).
A consensual definition accepted by most researchers includes (a) an intentional act (b) with potential for harm (c) directed towards another individual (d) who perceives it as aversive and is motivated to avoid the harm (Anderson & Bushman, 2002; Baron & Richardson, 1994; Brain, 1988; Berkowitz, 1993; Geen, 1998). ‘Harm’ can include direct physical harm (e.g., a punch to the jaw), direct psychological harm (e.g. verbal insults), and indirect harm (e.g., damaging victim’s property or social life). Aggressive behaviour must be distinguished from term ‘aggressiveness’ which is generally viewed as a personality trait manifested through a tendency for hostile actions and intentions towards others (Edmunds & Kendrik, 1980). None of the assessments in this research are measures of aggressiveness at trait level. For assessment of aggressive behaviour self-reports of aggressive acts are used and their relationship with cognitive and affective factors such as thinking, feeling and beliefs is examined. Since any empirical measurement of aggressive behaviour must specify the type and range of behaviour it is going to assess, it is useful to review briefly the types of aggressive behaviour described in conceptual literature.

2.2.2 Sub-types of Aggression

Since definitions of aggression generally involve the intention to inflict harm on others, direct acts of verbal and physical aggression in situations of interpersonal conflict readily fit such a definition (Archer & Coyne, 2005). These forms are also homologous with those found in other animals. Direct verbal or physical acts are collectively termed overt aggression (e.g., Huesmann, Eron, Lefkowitz, &
Walder, 1984). Physical acts such as hitting, pushing, throwing something or slapping are seen as direct physical aggression whereas threats, insulting language, face- to- face shouting or derogatory remarks are classified as direct verbal aggression (Archer, 2000; Björkqvist, 1994). Researchers now recognize that another form of aggression also exists in humans, which can be as harmful and damaging to its victims as some types of physical aggression (e.g., Archer & Coyne, 2005; Björkqvist et al., 2001; Craig, 1998; Crick & Bigbee, 1998). It has been given three different names, indirect (Lagerspetz, Björkqvist & Peltonen, 1988), relational (Crick & Grotpeter, 1995), and social (Cairns, Cairns, Neckerman, Ferguson, & Gariépy, 1989). These forms of aggression are intended to cause harm by using others, spreading rumours, backbiting, excluding others from group or ignoring them. Many of the same acts are found in all three categories, nevertheless they do differ in their emphasis and how researchers using these terms have conceptualized them (see Archer & Coyne, 2005 for review). Indirect aggression is defined in relation to the form the aggression takes: it is covert and behind-the-back form of aggression and it is viewed as a low-cost way of harming others (Björkqvist, 1994). Indirect aggression is a type of noxious behaviour in which the target person is attacked not physically or directly through verbal intimidation but in more circuitous way, through social manipulation (Lagerpetz, Björkqvist, & Peltonen, 1988). Relational aggression is defined in terms of its endpoint, which is to manipulate or disrupt relationships and friendships (Crick, Bigbee, & Howes, 1996; Crick and Grotpeter, 1995). The form of relational aggression can be overt or covert, but is usually covert. Social
aggression is also defined in terms of intended endpoints, which are to manipulate group acceptance and damage others’ social standing. Social aggression is targeted at damaging self esteem, social status, or both and may take the form of facial expressions, verbal rejection, body movements or direct forms such as slandering (Galen & Underwood, 1997). Archer and Coyne (2005) argued that all three forms described above can be distinguished from direct aggression because they have different adaptive goals and because these are largely achieved in different ways. They also concluded that the three terms essentially cover the same form of aggression and measure alternate strategy to physical aggression.

There is sufficient research evidence now to argue that defining harm only as physical harm leaves out more subtle forms of hurtful behaviour which shows sex and developmental variations. Indirect, relational and social type of aggression goes through a developmental process and it peaks in late childhood or preadolescence. Indirect aggression is also found in samples of adults (Forrest & McGuckin, 2002; Forrest, Eatough, & Shevlin, 2005; Kaukiainen et al., 2001; Richardson & Greene, 1999) thus showing a developmental continuity from childhood to adulthood. Sex differences in indirect aggression have also been found with considerable variation in the occurrence and size of sex difference as a function of age, type of measurement, and sample (see Archer, 2004a and Archer & Coyne, 2005 for a comprehensive review). Research generally shows that girls prefer to use indirect rather than direct forms of aggression and are found to be more indirectly aggressive than boys. Cairns et al. (1989) proposed that girls engage more frequently in social aggression, described as: ‘the manipulation of
group acceptance through alienation, ostracism, or character defamation’ (p 323). Finnish research group initially (Lagerpetz et al., 1988) found large sex differences (effect size of $d = -0.79$). Later studies using peer reports confirmed these findings among children (Björkqvist, Lagerspetz, & Kaukiainen, 1992; Björkqvist, Österman, & Kaukiainen, 1992; Österman et al., 1998). Other studies on relational aggression have also found sex differences in female direction (e.g., Crick, 1997; Crick & Grotpeter, 1995). However the findings for sex differences are mixed as some studies using younger samples and peer nominations have either not found a sex difference or found a difference in male direction (e.g., Crick, Casas, & Mosher, 1997; Huntington, Hughes, Cavell, & Thompson, 1998; Rys & Bear, 1997). Clearly the finding that girls display more indirect aggression than boys has not been totally supported in North American studies. It was also not supported in a study using a sample of Indian adolescents (Björkqvist, Österman, Oomen, & Lagerspetz, 2001). In this study boys were found to be higher in all forms of aggression, verbal, physical and indirect. This shows that more research needs to be conducted in Asian cultures and findings from western societies can not be easily generalised to non-western societies.

Even though aggression always involves an intention to do harm, injury is not always the main aim. Aggressors can have other goals for attacking their victims; for example a hired assassin may wish to earn money for murder he commits, a soldier may want to kill his enemy to obey orders or to protect his life and an annoyed husband may beat his wife in order to assert his dominant status in the house. In all these instances, though the aggressors do intend to harm their targets,
this isn’t the primary purpose. Quoting a real example, recent events of Red Mosque in Islamabad, Pakistan, culminated in hundreds of deaths mostly occurring in crossfire between army and mosque authorities (‘Islamabad’s Red Mosque’, 2007). People on both sides lost their lives and received injuries, unarguably an example of aggressive interaction yet persons in charge on both sides proclaimed that injury or death of individuals was not the purpose of this interaction (‘Lal Masjid’, 2007). Government was firing at Madrasah students in order to ‘fight extremism’ and ‘restore law’ whereas the mosque authorities were using weapons to ‘defend themselves’ and ‘uphold supremacy of religion’. The aggression was means to attain some other objective that was more important to them than their victim’s injury. Actions that are carried out for some extrinsic purpose rather than just for inflicting harm are called “instrumental aggression” (Berkowitz, 1993, p 11). According to this formulation, human aggression is typically seen as an attempt at coercion or an effort to preserve one’s power, dominance, or social status.

Another type of aggression is called “hostile aggression” (Feshbach, 1964). This is the kind of aggression that occurs when people are unpleasantly aroused and try to hurt someone. Hostile aggression, is also called reactive (or affective) aggression and instrumental aggression is also called proactive aggression (see Bushman & Anderson, 2001 for review). Reactive, hostile or affective aggression has historically been conceived as having the primary goal of harming another person, driven by anger and occurring as a response to provocation whereas proactive aggression is conceived as premeditated acts that
are carried out as means of solving problems or for obtaining a variety of objectives such as domination, money, sexual gratification and control (Bushman & Anderson, 2001; Dodge, 1991; Fontaine & Dodge, 2006; Ramirez & Andreu, 2006; Vitaro & Brendgen, 2005). Research shows that children and adolescents can be reliably distinguished on two dimensions of reactive and proactive aggression, with some individuals demonstrating mixed features of both types (Cohen et al., 2006; Dodge, 1991; Vitaro & Brendgen, 2005). Proactive and reactive aggressive individuals also have different etiologies and temperamental and behavioural correlates (Atkins, Stoff, Osborn, & Brown, 1993). Researchers have found moderate to high correlations between proactive and reactive aggression for example reactive and proactive aggression based on teacher rating of boys’ behaviour, typically show a moderate to high degree of correlation, ranging from $r = .68$ to $r = .77$ (e.g., Brendgen, Vitaro, Trembley & Lavoie, 2001; Price & Dodge, 1989 as cited in Raine et al.). Raine et al. (2006) also reported a significant intercorrelation ($r = .67, N = 334, P < .0001$) between raw mean scores on reactive and proactive aggression measured through self report.

Despite this correlation between reactive and proactive aggression, the rationale for keeping them as different subtypes is derived from the studies which show association of different outcomes with each subtype such as peer rejection and later violent behaviour. Past research has linked reactive aggression with peer rejection (Dodge & Coie, 1987, Poulin & Boivin, 2000) and proactive aggression with delinquency related physical violence (Brendgen et al., 2001).
Raine et al. (2006) also reported validity for two-factor structure and differential correlates of reactive and proactive aggression. Proactive aggression was uniquely associated with initiation of fights, delinquency, hyperactivity, poor school motivation and substance abusing parents at age 7 and with delinquency, serious offending and psychopathic personality at age 16. Reactive aggression was uniquely characterized at age 16 by impulsivity, hostility, social anxiety, lack of close friends and ideas of reference. They concluded that the two sub-types of aggression have much in common and the distinction is more in degree than in absolute kind. In view of the above it can be summarized, that the sub types are seen as coexisting in many individuals but those who use one more than the other sub-type have different personality characteristics and behavioural outcomes. It may be the case that although aggressive individuals demonstrate both reactive and proactive aggression, at the level of the individual act, it is possible to distinguish the two.

The two major theoretical attempts to understand human aggression have emphasized either the proactive or the reactive aspects of aggressive behaviour. The frustration-aggression model (Berkowitz, 1993; Dollard, Dobb, Miller, Mowrer & Sears, 1939) posits that aggression is a hostile, angry reaction to frustration. The aggressive reaction is instigated by goal blocking, heightened anger, threat or frustrated expectations and these operate as a “push” towards the aggressive reaction. On the other hand, social learning theory (Bandura, 1973) postulates that aggression is an acquired instrumental behaviour controlled by its reinforcements. According to Bandura a great deal of aggression is motivated by
anticipated benefits and thus, incentives constitute important impellors of action. In this way, the expected success is a “pull” rather than the “push” suggested by frustration-aggression theorists, who emphasize aversive aggression rather than goal directed aggression. One can take the position that these apparently divergent points of view are addressing different parts of the same process; Berkowitz focused on the instigation of aggression whereas Bandura in his formulation considered the factors in choice of response to provocation. Tedeschi and Felson (1994) support the view that most aggression is goal directed even if it is instigated by aversive push or affect, it has the goal of reducing aversive conditions, saving face, deterring future attack and so on.

These traditional sub-types have been questioned in recent reviews (Anderson & Bushman, 2002; Cohen et al., 2006). One point of argument is that these types are overlapping (Cohen et al., 2006), for example verbal aggression can be both direct and overt (swearing) or indirect/social/relational (backbiting). Similarly physical aggression can be direct (hitting) or indirect (damaging property). Little, Jones, Henrich, & Hawley (2003) and Little, Brauner, Jones, Nock & Hawley (2003) offered the framework of forms and functions of aggression. Forms describe the actual behaviour used by the perpetrator. Functions can be thought of as the purpose or goal behind the aggressive act. Overt and relational aggression represents two different forms of aggression and they differ in method of harm. Proactive and reactive aggression represents two separate functions of aggressive behaviour and they differ in purpose of harm: proactive aggression serves to attain some goal and reactive aggression serves as
retaliation. Little, Brauner et al. (2003) confirmed form and function distinction using structural equation modelling to analyse a new measure based on self-reports of aggression. They found that both functions of aggression, reactive and proactive were composed of both forms of aggression, direct and indirect. A strong positive correlation was reported between overt and relational aggression but correlation between reactive and proactive aggression was small and negative. This was credited to removal of form variance from the constructs of reactive and proactive aggression.

Anderson and Carnagey (2004) argue that many instances of aggressive behaviour contain elements that do not fit the dichotomous scheme of instrumental/proactive versus hostile/reactive aggression. Instrumental and proactive aggression can contain much hostile affect; some anger driven hostile acts appear to be coldly calculated; some proactive aggression has a distinctly emotional aspect; and frequent use of aggression to obtain desired goals can become so automated or habitual that it becomes impulsive (Schneider & Shiffrin, 1977). Bushman and Anderson (2001) introduced the concept of proximate and ultimate goals to replace the reactive-proactive dichotomy. A proximate goal is one that most immediately guides behaviour, whereas the ultimate goal is the broader reason for doing that behaviour. In this new conceptual scheme, intention to harm still is a definitional feature of all aggression, but it is necessary only as a proximate goal.
Interpersonal acts such as reaction to an insult or physical attack may have inflection of harm as both ultimate and proximate goals, and would thus classify as pure reactive aggression. However such reactions can also have the ultimate goal of deterring further attacks and saving social identities (Tedeschi & Felson, 1994) in which case these reactions would classify as a mixture of instrumental and hostile aggression. Bullying in school setting may be purely instrumental, carried out with the ultimate as well as proximate goals of asserting dominance and gaining attention (Sutton, Smith, & Swettenham, 1999). Hostile acts against another religious group such as terrorist attacks are an urgent international concern and have generated much speculative theorizing. It is suggested that ultimate goals of such acts are expressing protest against an injustice, affirming affiliation with an ideological stance (however misinterpreted it may be) and gaining the desired status in the next world (Rizwi, 2004; Umar, 2001). Violent acts can also be driven by frustrations experienced as members of a marginalised group in society (Hays et al., 2002). Clearly the goals of aggression between groups are as mixed as the goals of interpersonal aggression. Since the goals of harmful acts can be mixed in many instances, a distinction in this thesis is made between aggression and retaliation or between provoked and unprovoked aggression.

2.2.3 Retaliation and Aggression

Aggression is, to a marked degree, subject to social norms. One norm often guiding aggressive interactions between individuals is retaliation norm of
equivalent counteraggression (Zurnkley, 1984). Retaliation norm serves to justify an act, which is carried out in defence or as reaction to a prior act of aggression. The acts of retaliation are seen as more justified than acts of unprovoked aggression (Forgas, Brown, Menyhart, 1980; Lagerspetz & Westman, 1980) and unprovoked aggressive acts evoke more negative reactions such as anger and counter-aggression (Lagerspetz & Westman, 1980; Rule & Ferguson, 1984). Someone who commits an unjustified harmful act against another individual transgresses against the norm and therefore the victim of such an act can show spontaneous reactive aggression. The transgressor expects some retaliation and restoration of justice, but if the retaliatory action exceeds what is just in transgressor’s opinion, a cycle of counter retaliation can ensue (Anderson & Carnagey, 2004; Schmid, 2005). Many of conflicts between peers and siblings are triggered by excessive retaliation to an initial act of unprovoked aggression (Durrani, 2002, personal communication; Greene et al., 1998). Anderson and Carnagey (2004) describe a violence escalation cycle: an event triggers an initial act of harm from A to B who then retaliates to this provocation. This retaliation is ‘justified and appropriate’ according to B but is seen as over-retaliation by A, the original perpetrator, who retaliates at a more extreme level and so on. In this cycle of violence, initial events are lost in distant past. Anderson and Carnagey (2004) point out that this is true for any dyadic units, in which members of the dyad are in conflict with each other- two people, two groups, two religions, and two nations. The distinction between retaliation and aggression is therefore essential in investigation of aggression between individuals and between groups.
This distinction is relevant for this thesis because the moral beliefs about aggression and overall evaluation of moral acts are guided by the rationale of retaliation norm and justified and unjustified aggression. A realization between proportionate and disproportionate retaliation is central to moral decisions when a provocation or injustice occurs and a person feels the need for retribution. “A warranted sense of justice can result in an unwarranted, senseless act of disproportionate retaliation. Legitimate moral outrage, untempered by a sense of proportion, can lead to outrageously illegitimate responses” (Garlikov, 2006, p 1).

Anger is a basic emotion that can be defined as a negative feeling state associated with specific cognitive appraisals, physiological changes and action tendencies (Kassinove & Sukhodolsky, 1995). Anger per se does not instigate aggression, but usually only accompanies the inclination to attack a target. Aggression is behaviour with a goal of hurting another person, whereas anger does not necessarily have any particular goal. Typically, anger arises from some provocation and the aggression is aimed at doing harm to the provocateur (Feshbach, 1964). In conventional studies of emotion investigating anger (Averill, 1982; Weiner, Graham & Chandler, 1982; Lazarus & Smith, 1988), participants are usually asked to describe the occasions on which they have become or are likely to become angry. The conclusions drawn by Averill (1982) are that people become angry when they feel that a widely-shared rule has been violated, and the instigator is viewed as having control over what happened. He
also argues that most people become angry when they are frustrated only to the extent that they regard the “frustrator’s” behaviour as unjustified.

2.3 Determinants of Aggression

2.3.1 Factors in development and maintenance of Aggression

Aggression is seen as a multiply determined behaviour (Eron, 1994). Researchers in this area agree that convergence of a number of factors such as environmental influences (e.g., witnessing aggression), biological dispositions (e.g., anger proneness) and situational instigators (e.g., provocation) leads to occurrence of aggression (Anderson & Bushman, 2002; see Coie & Dodge, 1998 for a review). The parental practices and family interactions (Patterson, 1982; Patterson, Stouthamer, Loeber & Loeber, as cited in Parke & Slaby, 1983), early difficult temperament (Caspi, Elder, & Bem, 1987), stressful circumstances (Farrington, 1992; Guerra, Huesmann, Tolan, VanAker, & Eron, 1995) and growing up in violent environments (Goldstein, 1994) are some of the factors implicated in development of aggression. The factors which play a significant role in maintenance of aggression are impulsivity (Caprara et al., 1985), biases in social information processing (e.g., Dodge, & Coie, 1987), problem solving strategies (Pakaslahti, 2000; Rubin, Bream, & Ross-Kraser, 1991), moral reasoning (Crane-Ross, Tisak, & Tisak, 1998; Pakaslahti & Keltikangas-Järvinen, 1997), and attitudes and beliefs (Archer, 2004b; Bellmore, Witkow, Graham & Juvonen,
2005; Huesmann & Guerra, 1997; Slaby & Guerra, 1988). It has been often emphasized that no single factor accounts for a large amount of variance in explanation of aggression (Anderson & Huesmann, 2003; Eron, 1994). These factors may interact and converge in various combinations to produce highly aggressive behaviour among children and adults. According to learning theory, aggression is most likely to develop in children who grow up in environments that reinforce aggression, provide aggressive models, frustrate and victimize them, and teach them that aggression is acceptable (Anderson & Huesmann, 2003).

However, the fact needs to be considered that human beings like animals do have a capacity for aggressing against others. This capacity can serve a variety of purposes for example in the animal kingdom, several kinds of aggression has been observed such as predatory, maternal, and territorial (Geen, 1998). Archer (1988) sees such aggression as animal’s attempt to solve a problem. He maintains that it is best to distinguish between aggression that is prompted by competition for scarce resources, such as food or mate, and aggression which is carried out to as a defense reaction. Among humans, we have already discussed affective and instrumental or reactive and proactive aggression. There is a role of biological processes in aggression that humans display. There is evidence for a hereditary transmission of a disposition to crime as well as influence of sex hormones. The latter seem to affect the likelihood of aggressive reactions to provocations (see Berkowitz, 1993, p 387-406). Biological influences can also be seen in sex differences in aggression and crimes of violence.
2.3.2 Sex Differences in aggression - evidence and explanations

Historically, most researchers defined aggression as harm through physical or verbal acts, collectively termed as overt aggression (Cohen et al., 2006).

Consequently researchers often found boys to be more aggressive than girls and many studies excluded girls as participants. As noted in section 2.2.2 above, including indirect forms of aggression in study of sex differences can present a different picture than if only overt or physical aggression is considered. Similarly, various methods of measurement such as laboratory studies, self-reports, peer reports and observations need to be taken into account. Finally, samples outside North America and Europe and for various age groups can broaden the scope and conclusions of a review of sex differences. Archer (2004a) published a recent comprehensive review of sex differences in aggression in a real world setting which includes form of aggression, developmental patterns, real-life measures and available information on studies outside America and Europe. Earlier reviews have concentrated on laboratory studies from United States (e.g., Bettencourt & Miller, 1996; Eagly & Steffen, 1986). The following section summarizes a view of sex differences in aggression based on meta-analysis of Archer (2004a) as well as from the reviews based on laboratory studies.

Studies reporting sex differences in children’s aggression began in 1920’s and 1930’s and experimental and questionnaire evidence for adults became available from 1960’s onwards (Archer, 2004a). Earlier narrative reviews of these studies
(e.g., Feshbach as cited in Archer 2004a; Maccoby & Jacklin, 1974) present a general agreement that males are more aggressive than females. The first meta-analyses showed that there was no sex difference in aggression among children 6 years and younger (Tieger, 1980 as cited in Archer, 2004a). However more extensive analysis by Maccoby and Jacklin (1980) found males to be more aggressive even below the age of 6. Neither of these analyses involved effect sizes so magnitude of sex differences and variation according to age and measurement methods could not be ascertained. In a comprehensive analysis involving a variety of measures for all available ages and using more modern methods, Hyde (1986) found a mean weighted sex difference ($d$) of .50 for 69 samples across all measures with a slightly larger value for physical ($d = .60$) than verbal aggression ($d = .43$), and, larger value for observations ($d = .51$) than for self-reports ($d = .28$). A reanalysis of same data (Knight, Fabes, & Higgins, 1996 as cited in Archer 2004a, p 294) resulted in larger overall effect size of .66. Eagly and Steffen (1986) analyzed sex differences in aggression from social psychological experiments and found a small overall sex difference ($d = .29$) from North American experimental studies. There was a larger effect ($d = .40$) when pain, such as electric shock or noise, was involved than when psychological or social harm, such as insults or criticisms, was used ($d = .18$). This parallels the finding by Hyde for physical aggression signifying that sex differences are smaller for non-physical than for physical harm. In comparison with men, women reported more guilt and anxiety after aggressing. Bettencourt and Miller (1996) assessed effect of provocation on
the sex difference in aggression which was found to be significantly smaller under provoking conditions.

Archer (2004a) found that overall effect sizes were higher in male direction for direct aggression at younger ages and were higher in school and college samples than in community samples. Studies using self-reports of physical aggression showed a smaller effect size \((d = .39)\) than studies using observation \((d = .53)\) and studies using peer reports \((d = .80)\). The sex differences in physical aggression were consistent across all 13 nations represented in the studies that Archer analyzed. The sex differences in verbal aggression also showed a difference in male direction although the effect sizes were smaller and in some studies not significantly different from zero. Indirect aggression generally showed a sex difference in female direction but there was variation according to method of measurement. Sex differences among adults in indirect aggression showed effect sizes in female direction in American studies, and in the male direction in European studies. Overall this review shows that males are found to be consistently higher in physical aggression and females with some exceptions show preference for indirect aggression rather than physical or direct aggression. These general conclusions are mainly based on European and American samples and availability of studies from other cultures is limited.

Sex differences have been explained according to two main theories; Sexual Selection Theory (SST; Archer, 1996; Daly & Wilson, 1994) and Sex Role Theory (SRT; Bettencourt & Miller, 1996; Eagly & Steffen, 1986). SST locates the origin
of greater male physical aggression in human evolutionary history, as a consequence unequal parental investment leading to greater male than female reproductive competition and, therefore, overt aggression (Trivers, 1972). It is the psychological accompaniment of physical differences between males and females such as those in size, strength, and longevity. Evolutionary accounts tend to emphasize early emergence of sex differences in behaviour, the subsequent development of this behavior is sensitive to social context yet preparatory for adaptive sex differences in adulthood (Archer, 2004a). The initial cause of sex difference in aggression is unknown. Greater male than female variation in reproductive success leads to more intense male competition. Male aggression is more in the direction of risky behaviour such as violence because the reward of victory is high and consequence of loosing is little or no reproduction. In analyses based on SST, sex differences in aggression are viewed as characteristic of humans, to be found across cultures. They arise at a particular point in development, and are maximal during the peak years of sexual activity. They are greater for risky forms of aggression.

According to Social Role Theory, sex differences in social behaviour arose from the historical division of labor into home maker and worker outside the home (Eagly, 1987 as cited in Archer, 2004a, p 293). Roles lead to expectations about gender-related characteristics and patterns of behaviour which are transmitted through process of socialization in families and from one generation to the next. These patterns involve masculine agentic traits and feminine communal traits. Boys learn to use aggression as an instrumental behaviour which facilitates their
role outside house whereas feminine role fits in more with inhibition of aggression. Males being higher in status also acquire a more aggressive tendency. SRT also predicts that overall sex difference in aggression will be in male direction especially physical aggression is encouraged in masculine roles such as military. SRT also predicts moderation of sex differences in aggression according to the action of role-related variables such as perception of provocation or empathy with the victim (Bettencourt & Miller, 1996; Eagly & Steffen, 1986). These predictions have been supported in experimental studies (see review by Bettencourt & Miller, 1996). SRT predicts that sex differences in aggression are small in magnitude and more pronounced for physical aggression. Greater consistency across forms of aggression is also expected because there is no emphasis on risk taking. Archer (2004a) concluded from his meta-analysis that patterns of sex differences in forms of aggression is more consistent with SST prediction. He also suggested that the experimental finding of smaller sex differences under provoking conditions would translate in real-world settings to smaller sex differences in reactive than proactive aggression. Archer (2004a) raised the issue of with-in sex variation in direct aggression. Archer and Mehdikhani (2003) found that the variance in self-reported physical aggression was greater for males than females. This suggests that some men are more like women in their use of physical aggression. This variation may be related to individual difference variables such as risk taking and parental investment or gender role socialization. Various studies in this thesis would investigate sex differences as a side analysis to add to the literature and test theoretical predictions.
2.3.2 Social-Cognitive Mechanisms in Aggressive Behaviour

Some of the situational instigators of aggression are aversive stimulation (e.g., pain, or high temperature), frustrations, aggression-related cues (e.g., presence of gun) and provocation (Berkowitz, 1993). The last one is seen as the strongest situational instigator of human aggression (Berkowitz, 1993; Geen, 1998). Insults, slights, other forms of verbal aggression, physical aggression, and interference with one’s attempts to attain an important goal, are a few examples of provoking situations. The personal factors create a pre-disposition for aggression and situational instigators trigger aggressive behaviour in a particular situation. The social-cognitive models of aggressive behaviour posit that internal and external factors or personal and situational variables exert causal influence on aggression mainly through cognitive mechanisms such as knowledge structures and processing of information (Bandura, 1973; Dodge, 1986; Guerra & Slaby, 1990; Huesmann, 1988, 1998).

Over the past years there has been increasingly expanding literature on the role of cognition in learning and regulation of aggressive behaviour. In many recent studies central role of cognition has been emphasised in maintaining the stability of aggressive behaviour over time and situations (Crick & Dodge, 1994; Huesmann, 1988; Perry, Perry & Rasmussen, 1986). One line of research has focused on cognitive processes such as encoding and interpretation of external and internal cues and goal or response selection. It has been demonstrated that aggressive children differ from their prosocial peers in terms of cognitive deficits in
information processing (e.g., Crick & Ladd, 1990; Dodge, 1986; Dodge & Newman, 1981; Dodge & Tomlin, 1987). Some studies have found that relative to their nonaggressive peers, highly aggressive children and youths presume hostile motives in their peers' actions more often and more consistently. The attribution of hostile intentions to other person were shown both for ambiguous situations (situations which do not explicitly cue any motive, for example being hit in the back by a ball) and for actions which were non-threatening or benign (Dodge & Tomlin, 1987). Another processing deficit identified among aggressive children is accessing more incompetent action-oriented solutions to interpersonal situations for example in provoking situations aggressive children are more prone to generate solutions of immediate retaliation (Dodge, 1986). Finally, habitually aggressive boys also evaluate aggressive strategies more positively and expect more instrumental outcomes (Dodge and Coie, 1987; Pakaslahti, 2000; Sutton, Smith, & Swettenham, 1999) and fewer sanctioned outcomes (Boldizar, Perry, & Perry, 1989; Perry, Perry, & Rasmussen, 1986) for aggressive actions.

Another focus of investigation has been the content of cognition rather than cognitive processes (Huesmann 1988; Huesmann & Guerra, 1997; Slaby & Guerra, 1988; Perry et al., 1986). The individual's generalized beliefs concerning aggression are hypothesized to serve both a motivational as well as regulatory function (Bandura, 1986, 1989). Three main types of beliefs have been identified: (a) the legitimacy of aggression (b) the expected outcome for the aggressor, and (c) the expected outcome for the victim (Slaby & Guerra,
It has been demonstrated that children's beliefs that they will obtain tangible rewards and relief from negative behaviour directed at them by another individual (Perry et al., 1986), or obtain control over peers (Boldizar et al., 1989) will increase the likelihood that they will use an aggressive action. Slaby and Guerra (1988) found that aggressive and delinquent adolescents were more likely than their less aggressive high school counterparts to hold a set of beliefs supporting the use of aggression. These included beliefs, that aggression is a legitimate response, increases self esteem, helps avoid a negative image and victim does not suffer. They were also more likely to solve social problems by defining problems in hostile ways, adapting hostile goal, seeking few alternative solutions and not anticipating bad consequences for aggression. In a subsequent intervention study (Guerra & Slaby, 1990), it was found that change in beliefs about the acceptability of aggression was the only cognitive factor directly related to a reduction in post-treatment aggressive behaviour.

Social cognitive processing skills are essential for prosocial behaviour in both males and females. These skills develop differently in males and females. Developmental deficits in the acquisition of social cognitive skills could provide the framework for explaining gender differences in crime (Bennett, Farrington & Huesmann, 2004). Females on average comprise only six percent of offender populations. It has been suggested that this could be a result of females acquiring social cognitive skills much earlier in life and consequently having superior skills (Bennett et al., 2004).
There are also sex differences in the way people view their own aggression, and aggression in general: men tend to view their aggression more in instrumental terms, whereas women tend to view theirs more expressively (e.g. Archer & Haigh, 1997a; Campbell, Muncer, & Coyle, 1992). These characteristics have been called 'social representations' of aggression in initial research (Campbell & Muncer, 1987; Campbell et al., 1992) and measured through qualitative analysis as well as forced choice 20-item EXPAGG scale. Archer and Haigh (1997a, 1997b) refer to these dimensions as shared social beliefs about aggression and investigated the expressive and instrumental beliefs using a revised 40-item scale. The expressive beliefs mainly represent negative outcome expectancies about aggression whereas instrumental beliefs represent positive outcome expectancies. Archer and Haigh hypothesized that people who hold more expressive beliefs would be less likely to exhibit various types of aggression whereas the individuals who held more instrumental beliefs would be more likely to behave aggressively. This was confirmed in their study and in later studies (Archer & Haigh, 1999; Tapper & Boulton, 2004).

One type of beliefs called ‘normative beliefs’ about aggression are hypothesized to play an important role in regulating aggressive behaviour and it is suggested that differences in normative beliefs about aggression are related to individual differences in the propensity of humans to respond aggressively (Huesmann, 1988; Zumkley, 1984).
2.4 Normative Beliefs about Aggression

2.4.1 Scripts and Normative Beliefs

Children are exposed to aggressive behaviour through a variety of sources in the environment for example family, peers and media. Huesmann (1988, 1998) proposed that these sources provide scripts that serve as guides for behaviour in situations where aggression is a possible course of action for example when one is provoked. Support for learning of aggressive scripts is provided by the research on Television and violent behaviour (see Huesmann, Moise-Titus, Podolski, & Eron, 2003 for review) and by studies on violent video games and aggression (see Anderson, 2003 for a meta-analysis; Krahé, & Möler, 2004). The scripts are stored in memory and retrieved as and when relevant to a situation (for detailed description of script theory see Ableson, 1971, 1981). However not all scripts that are retrieved are translated to overt behaviour. Once a script is retrieved it is evaluated in the light of existing internalised norms and situational context (Huesmann, 1988). The internalised norms or normative beliefs are seen as cognitions that an individual holds about acceptability or unacceptability of certain type of behaviour. It has been suggested that normative beliefs (similar to Bandura’s concept of standards of conduct) regulate actions by defining the range of allowable and prohibited actions. “A broad spectrum of interpersonal actions fall under this type of normative regulation, from social conventional behaviour to
moral behaviour involving harm to others” (Huesmann & Guerra, 1997, p 409). It has been suggested that normative beliefs play an important role in filtering out inappropriate behavioural scripts and stimulate use of appropriate scripts. They may also affect emotional reaction to provocations (Guerra, Huesmann & Hanish, 1995; Huesmann, 1998) and witnessing violence (Kirwil, 2004). It is methodologically difficult to test sequential steps in the proposed process of retrieval, evaluation and rejection of scripts (Coie & Dodge, 1998). However there is considerable evidence for links between aggressive scripts, aggressive behaviour and normative beliefs supporting aggression. There is evidence that aggressive children generate more atypical responses in social conflict situations (Ladd & Odens, 1979) and more aggressive problem solving strategies (Rubin, Bream, & Ross-Kraser, 1991) and have more readily accessible aggressive constructs (Graham & Hudley, 1994).

Normative beliefs can be situation-specific e.g., “It is okay to hit others if they hit you first” or general e.g., “It is generally okay to hit others” (Huesmann & Guerra, 1997). Normative Beliefs have been measured with Normative beliefs about Aggression Scale (NOBAGS, Huesmann & Guerra 1997) which measures both specific (retaliation to provocation) and general beliefs (overall endorsement of aggression). The retaliation items specify a provoking situation for example “suppose a boy, John says something bad to another boy is it ok for him to shout at John?” The general beliefs items do not specify a situation and merely ask whether it is wrong or okay to say mean things about people, yell, hit or get into
fights. It has been modified to include beliefs about relational aggression (Werner & Nixon 2005; Krahé & Möller 2004), and to assess beliefs about aggression against another ethnic group (Shechtman & Basheer, 2005). However none of the studies report a principal component analysis of the complete scale so the distinction between general beliefs about aggression and beliefs about retaliation is not supported statistically.

2.4.2 Normative Beliefs and aggressive behaviour

A number of studies have found that normative beliefs are associated with aggressive behaviour among children and adolescents (Bellmore, Witkow, Graham & Juvonen, 2005; Henry, Guerra, Huesmann, Tolan, & VanAcker, & Eron, 2000; Huesmann, Guerra, Miller, & Zelli, 1992; Huesmann & Guerra, 1997; Salmivalli & Voeten, 2004; Werner & Nixon, 2005; Zelli, Dodge, Lochman & Laird, 1999). Huesmann & Guerra (1997) found that children's normative beliefs about aggression correlated highly with their actual aggressive behaviour even in the first grade. These correlations were significantly higher for boys than for girls. They found no difference across ethnic groups. Both aggressive behaviour and approval of aggression tended to increase with age so children approved more of aggressive behaviour, as they grew older and behaved more aggressively as well. Among younger children earlier aggressive behaviour predicted later normative beliefs about aggression whereas among older children, normative beliefs about appropriateness of aggression seemed to exert an influence on their aggressive
behaviour a year later. Henry et al. (2000) found that classroom norms as well as personal norms about acceptability of aggression predicted aggressive behaviour among school children. In classrooms where students and teachers made norms against aggression salient, aggressive behaviour diminished over time. Salmivalli and Voeten (2004) found evidence that group norms within classrooms could explain variance in bullying behaviour. Teglasi and Rothman (2001) using complete NOBAGS, found no significant difference in the normative beliefs about aggression of two groups identified as aggressive and non-aggressive.

Some studies have found that Normative beliefs also predict other cognitive processes related to aggressive behaviour such as biased interpretations of peers’ actions, access and positive evaluation of aggressive strategies and selection of hostile responses (Bellmore et al., 2005; Zelli et al., 1999). It was found that higher endorsement of aggression as measured by normative beliefs predicted later deviant processing as well as later aggressive behaviour. A stronger belief at a younger age that retaliation was acceptable predicted that as the children grew older, they increasingly processed new social information about their peers and their actions in a deviant way, attributing hostile intent to them and thinking of more aggressive solutions than pro-social ones. This deviant processing then influenced their aggressive behaviour. These findings further add to the importance of normative beliefs as an area of investigation.
2.5 Norms about Aggression and culture

Bandura (1973) observes that many of us label an act as aggressive when it is carried out contrary to a socially accepted rule. Hence, an identical act might be seen as aggressive when it violates a norm, whereas, if it is sanctioned under some rule, it will not be viewed as aggression. In some cultures, specific norms may sanction a behaviour that will be viewed as aggressive by the other societies. In the Arab society of the 6th and 7th centuries AD, it was a regular practice to kill or bury a female child alive soon after her birth to escape the dishonour of having her become wife of another man (Noor, 2007, p 202). At a more micro level, subcultures within a society and groups may exist which support their own norms and beliefs about aggression. An example of this is the code of personal honour among youth gangs. According to this code when a gang member’s right to deferential treatment is challenged, he must defend his honour by punishing those who have offended him (Berkowitz, 1993, p 171). Since fighting is condoned by the group norms, adherence to this norm brings approval from the group. Similarly strong retaliation to insult is seen as masculine in the American southern culture of honour (Cohen & Nisbett, 1996) and in North Western Frontier region of Pakistan (Khan, 1980). Culture specific aggression norms also exist in regional cultures in the Indian sub-consentient and have been documented (e.g. Bharti, 1983). There is evidence that violation of norms evokes anger and causes people to react (Pepitone, 1983 as cited in Rule & Ferguson, 1984).
2.6 Cross-Cultural Research on Aggression

Psychological studies in aggression have investigated similarities as well as variations in various forms and facets of aggression (see Archer, 2001; Ramirez, 2001 for reviews). Other related disciplines like anthropology has also examined factors associated with development of aggression and how these factors differ across societies (see Segall, 1983 for review). A notable expert in cross-cultural research on aggression argues that cross-cultural approach is useful to redress the imbalance resulting from the predominance of the United States in psychological studies of aggression and to address the need for a representative evidence base for testing general theories of aggression (Archer, 2001). Ramirez et al. (2001) studied moral disapproval of aggressive acts varying in severity and dangerousness in several countries and found minor cultural differences in disapproval of specific forms of aggression. They also found that across these countries unprovoked aggression was disapproved more than retaliation and aggression in self-defence was approved more than aggression as punishment.

Broad societal comparisons have found that socialization practices reinforcing and inculcating aggression were related to rates of societal aggression (Segall, 1983). Muslim beliefs about social behaviour and rights of other fellow beings are guided by religious injunctions which are a part of socialization process. On the other hand there are also cultural norms related to dimension of collectivism. Cultures are classified along dimensions of individualism-collectivism (Triandis, 1995). In collectivist societies such as China, India and Pakistan, people give priority to goals and norms arising from community to which they belong whereas in
individualistic societies, people see themselves as independent agents engaged in a competitive culture. Individualism also seems to be highly correlated cross-nationally with lack of sex equality. This profile of individualism is especially true of the USA and Europe. Pakistan is seen as a low gender-empowerment society (Mumtaz, 1999) which is not always reflective of rights of women according to Islam. Together the cultural and the religious Muslim influences may shape the beliefs about aggression among Pakistani society. Much of the existing research on beliefs and aggression has come from the North America. Very few studies have included Muslim samples and none of these studies included Pakistan. While addressing this gap there is a wider and more important learning, the present thesis aims to achieve: if beliefs about aggression specifically normative approval of aggression follows a universal moral rationale shared across societies than any differences based on cultural or regional influences would be minimal and may appear only in minor acts of aggression as indicated by previous research (Ramirez et al., 2001). Such cultural differences may appear in the collectivist-individualistic dimension with low gender empowerment and collectivist culture (Pakistan) showing more endorsement of aggression against women or low endorsement of aggression by women. These remain to be explored and underscore the need for more studies in Pakistan.

Another issue in cross-cultural research is transferring methods from one culture to another. Archer (2001) argues for development of new measures suited to a culture as well as using standard measures which allow systematic comparisons. Cross-cultural researchers also provide various techniques for validating measures
developed in western cultures to non-western cultures (Caprara, Barbaranelli, Bermúdez, Maslach, & Ruch, 2000; Hui, 1985). The argument in this thesis is that translation from English may not always be essential in case of urban samples from societies like Pakistan where English literacy is high among elite class. However devising new measures on format of existing measures that are more reflective of the cultural understanding of various constructs is important. The research in Pakistan is needed to test the cultural equivalence of construct of normative beliefs.

2.7 Moral Reasoning and Aggression

Aggressive acts are seen as moral concerns because they involve inflicting harm on others and undermining their welfare (Amjad, 1998; Arsenio & Lemrise, 2004; Turiel, 1998). Moral philosophy, world religions and esoteric traditions have a long history of regulating harmful behaviour through prescribed rules of conduct, moral imperatives and self-control (Ghazali, trans. 2000; Rizwi, Umar, & Tufail, 1997). Religious Scriptures also emphasize distinction between justified and unjustified retaliation in interpersonal and intergroup situations of conflict (New Testament: Quran.transl.1975; Umar, 2001). Moral emotions like remorse, repentance and guilt are seen as positive aids to moral conduct and characteristic of a righteous and humane person (Murata, 2001). It has also been observed that harmful acts are justified in name of religion and self proclaimed higher goals (Bandura, 1991: Ajmal, 2006a). To a great extent our beliefs are still informed by
age old moral imperatives though contemporary theories of moral reasoning couch them in different terms.

Theories of moral reasoning stress moral thought and the way people reason about moral dilemmas (e.g., Kohlberg, 1978; Turiel, 1998). A substantial amount of research has focused on how people understand and reason about moral issues (see Guerra, Nucci & Huesmann, 1994; also see Harvey, Fletcher & French, 2001 for review). According to domain theory of moral reasoning (Turiel, 1998) concepts of morality (fairness and human welfare), convention (consensually determined norms that maintain social structure) and personal issues (areas of perspective and privacy, actions that impinge primarily on the self) are structured within distinct conceptual and developmental frameworks (Nucci, 1981; Nucci & Nucci, 1982; Smetana, 1990; Turiel, 1998). Studies of moral reasoning show that children assess moral transgressions to be more serious than social conventional transgressions and also more deserving of punishment (Tisak, & Turiel, 1984; Harvey et al., 2001).

These theories have been criticized on the basis that they do not pay enough attention to the mechanisms that lead to moral conduct. According to Bandura (1991) any theory of moral behaviour must explain these mechanisms. Social-cognitive theory of moral thought and action (Bandura, 1989; 1991) suggests that moral conduct is grounded in a self-regulatory mechanism. This mechanism involves self-monitoring of conduct by evaluating one’s actions against internal standards and situational circumstances and by ongoing exercise of self-reactions.
It is suggested that people refrain from behaving in ways that violate their moral standards because they expect that such behaviour would result in negative self-reaction or self-censure (Bandura, 1996).

Normative beliefs are based on moral evaluation of an act (whether it is wrong or permissible) and moral reasoning consists of the understanding of the reasons for wrongfulness of that act (e.g., why it is wrong to hit someone). Guerra, Nucci and Huesmann (1994) have pointed out that the two lines of inquiry, one emerging from research on moral reasoning and the other from research on normative beliefs can very well be integrated towards a more comprehensive and meaningful model. They suggest that while aggressive behaviour is learned through both enactive and observational learning, it is the child's cognitive representation of social interaction that ultimately determines behaviour and development. Guerra, Nucci and Huesmann (1994) proposed a relationship between aggressive behaviour and moral reasoning. They hypothesized that aggressive responses are dependent, to some extent, on an individual's understanding of the moral aspects of a situation or event, and the priority they give to these understandings. They go on to suggest that the extent to which an individual focuses on, and gives priority to, issues of harm or welfare in a given situation will have an influence on the judgment and response a person makes to that particular situation. Social and moral reasoning is seen as a source of influence on aggression (see Harvey, Fletcher, & French for review). This suggestion has implications for intervention for aggressive children and adolescents. Earlier research has studied moral reasoning and normative beliefs in isolation (See Guerra et al., 1994; Tureil.
1998). It is worth examining if understanding of moral reasons can influence beliefs about aggression.

The primary argument in this thesis is that people make morally informed judgments about harmful behaviour and are capable of regulating their aggressive actions through exercise of moral agency. The exercise of moral restraint can be automatic or through conscious control. Bandura (1991) has postulated that reprehensible conduct is regulated primarily through fear of self-censure rather than fear of external sanctions. We all ultimately refrain from hurting others, and act in accordance with moral standards in order to avoid self-condemnation.

Findings in earlier research support the link between aggression and negative self-evaluation or negative affect (Archer & Haigh, 1997; Crane-Ross, Tisak & Tisak, 1998). The relationship between moral standards (such as normative beliefs) and self-censure has not been examined. It is also not clear from earlier studies whether self-censure is anticipatory, as suggested by Bandura or retrospective, as suggested by research on guilt and aggression.

2.8 Situational and contextual factors

Fishbein and Ajzen (1975) specified that social behaviour includes an action, target, context, and time. The aggressive interactions also occur in a particular context with all of these features. However very few studies have examined aggressive interactions in real life situations (Archer & Haigh, 1999a; O’Connor, Archer & Wu, 2001; Lawrence, 2006). These studies have found individual differences in response to aggression
triggering situations. These findings underscore the importance of studying individual level variables in conjunction with situational factors using real events.

Anderson and Bushman (2002) and Anderson and Garnagey (2004) offered an integrative General Aggression Model. They listed both proximate and distal causal factors of aggression. Situational factors of aggression and violence are social stress, provocation, frustration, pain and discomfort or other aversive stimuli such as noise and temperature, bad moods, violent scenes and alcohol among others (see Anderson & Carnagey, 2004, p 184 for a complete list). Among personal factors they list, unstable self-esteem, self-efficacy beliefs, attitudes towards violence, biased attributions, normative beliefs about aggression and retaliation, aggression scripts and cultural stereotypes. Distal factors include environmental such as maladaptive parenting, cultural norms, group conflict, deprivation, and peer group influences among others as well as biological modifiers such as low arousal, hormone imbalance and executive cognitive functioning deficits. They recognize that situational factors work in conjunction with personal factors for example a person growing up in a violent environment or a society which condones violence may have learned many aggressive scripts and beliefs supporting aggression. Such a person when frustrated or provoked has greater chances of reacting aggressively than someone without this background.

Anderson and Garnagey (2004) also describe a single episode cycle which includes input of person as well as situational variables and work through internal routes of cognition and arousal to lead to an outcome which can be aggressive or non-aggressive
depending upon the appraisal and decision processes. Once a person is confronted with a social encounter in which aggressive responding is an option, depending upon his or her personal and situational resources and internal state, he/she may react automatically or choose to carry out reappraisal of the situation. Thoughtful action often can result from reappraisal whereas automatic reaction can be impulsive. These proposed steps and processes in aggressive encounters have been derived from research in many areas (see Anderson & Carnagey, p 176 for detailed discussion). In view of the fact that thoughtful action (Anderson & Carnagey, 2004) and consideration of socio-moral issues (Fontaine & Dodge, 2006) is implicated in inhibition of aggression and violent behaviour, it is worth examining how frequency of aggression in real life is related to thinking as well as thoughtfulness. The tendency to reflect and pay attention to one’s actions and moods can vary between individuals. This has been called private self-consciousness which includes internal state awareness as well as self-reflectiveness (Scheier & Carver, 1985). There is evidence for a link between self-reflectiveness and verbal aggression (Nystedt & Ljungberg, 2002) and between private self-consciousness and aggression (Scheier, Buss & Buss, 1978). However it is not clear whether private self-consciousness influences thoughts after aggression and frequency of aggression in real time or real life events. Private self-consciousness as an individual difference variable may be implicated in self-regulation and self-monitoring of aggressive behaviour (Bandura, 1991) just as egoistic self-esteem is related to aggression in view of some researchers (Baumeister, Smart, & Boden, 1996; Stuke & Sporer, 2002). The association between private self-consciousness and aggression needs to be examined.
A clearer understanding of aggressive behaviour can be gained through examination of aggressive actions in varying contexts. Interpersonal context is one level at which aggression occurs. Aggressive acts also occur between groups and there is reason to assume that beliefs and attitudes are important determinants of aggression between groups (Mackie & Smith, 1998). There are many forms of planned inter-group aggression ranging in severity from social exclusion and racial harassment to massacres, genocides, wars and terrorism. Our common vulnerability to fear of violence creates an atmosphere in which social scientists are morally compelled to attempt to understand violence and hostility between groups and solve this problem (Painter, 2001). In order to tackle this responsibility, social psychologists’ first task is to survey what factors have been related to aggression between groups. Role of beliefs in condoning aggression against out group has been stressed in anecdotal evidence (Umar, 2001) as well as in empirical literature (Opotow, 1990). However there is need to understand nature and role of extremist beliefs in hostile actions between groups. Despite current heightened concern about terrorism and extremist groups, very little research effort is being aimed at empirical investigation of normative beliefs about aggression between groups. Most of social psychology research on prejudice has focused on anti-Semitic and anti-gay attitudes and racial prejudice in western societies (Dovidio, Brigham, Johnson, & Gaertner, 1996; Gaertner & Dovidio, 1986; Pettigrew, 1995). There are hardly any studies on Muslim populations, specifically Muslim beliefs about aggression towards other groups. In current climate, this has emerged as an important area of concern, which needs to be addressed in research (Ajmal, 2006b; Umar, 2001).
2.9 Considerations for Research

Despite the evidence for link between normative beliefs and aggressive behaviour, some key questions remain to be addressed. Most of the studies on normative beliefs were conducted in the USA with few exceptions (Archer, 2004a; Krahé & Möller 2004; Shechtman & Basheer, 2005) so there is scant evidence on validity of normative beliefs construct and measurement in non-western cultures. The norms about aggression need to be considered in the cultural context in which research takes place. Earlier research shows that moral approval of harmful acts shows considerable similarity across cultures. However neither normative beliefs about aggression nor moral approval of aggression against other groups has been investigated in Muslim cultures extensively. Particularly there is scant research in this area in Pakistan. This a considerable gap in research, which needs to be addressed. Most of the Muslim societies still represent a collectivist culture and differ from western societies in terms of gender empowerment, sex roles, and family structure. Islamic beliefs may also be related to socialization practices which influence beliefs about aggression. On the other hand if culture not religion is the determinant of socialization of aggression, then there should be minimal difference between collectivist cultures such as China and Pakistan. Such comparisons can only be drawn if findings from research in Pakistan are made available.
Earlier research has indicated that beliefs about acceptability of aggression are associated with aggressive behaviour cross-sectionally (Bellmore et al., 2005; Erdley & Asher, 1998; Henry et al., 2000; Slaby & Guerra, 1988; Werner & Nixon, 2005) as well as longitudinally (Huesmann & Guerra, 1997; Zelli et al., 1990). Normative beliefs have been conceptualised as general beliefs about aggression (approval of aggression in general) and situation-specific beliefs (approval of retaliation to provocation; Huesmann & Guerra, 1997). This distinction is conceptually meaningful for various reasons. Firstly reactions to a prior provocation are seen as more justified than unprovoked harm (Zumkley, 1984). It has been established that people’s aggressive behaviour is influenced by their evaluation of others’ behaviour in terms of fairness and intentions (Rule & Ferguson, 1984). Secondly moral codes suggested by most world religions sanction a kind of getting even but do not sanction disproportionate revenge. Presumably these codes influence large majority of people all over the world and inform their social actions and judgments. There is also evidence that retaliation beliefs predict aggression among children longitudinally whereas general approval of aggression becomes stabilized in a later age (Zelli et al., 1999). Despite the fact that the distinction between retaliation and aggression beliefs makes sense conceptually, the founding research in this area has not supported this distinction with empirical analysis such as principal component analysis or any measure of discriminant validity. The distinction would be meaningful if the beliefs about provoked and unprovoked aggression correlated differentially with aggressive behaviour or could be found to discriminate between aggressive or non-aggressive
individuals. Research on group differences in normative beliefs is inconclusive. Very few studies on normative beliefs have used forensic or violent samples so discriminant validity of Normative Beliefs construct is questionable.

The self-regulation of aggressive behaviour through self-reactions and self-monitoring suggests a role of self-censure. However association of self-censure with normative beliefs needs to be examined.

Normative beliefs about aggression at group level—such as hostile actions against other religious groups—have not been examined empirically. This investigation has important implications for peace and coexistence between groups and between societies especially current atmosphere of sensitivity to fear of terrorism. Forms of intergroup aggression may be specific to the situation or specific to the culture studied and can only be understood when examined in context, for example Muslim prejudice against Jews may be related to different factors than western anti-Semitic attitudes.

2.8 Conclusions

It has been emphasised that there is a need to study aggression beyond individuals, within the broader context of groups and relationships (Anderson & Carnagey 2004; Cohen et al., 2006). Individuals are embedded within social systems, which have direct and indirect influence on behaviour. It is recognized that acts of
aggression occur between individuals who are connected through relationships and these relationships are placed within larger settings such as family, peer groups and society. Acts of harm occur between groups framed by societal and cultural boundaries. Since the primary agent of aggression is always an individual, the mechanisms operative within individuals are the key determinants in aggressive behaviour. However this does not mean that these factors do not translate across contexts and across levels of social and group relationships. Placed in this context the factors that are seen as instrumental in individual aggressive behaviour (moral beliefs) are also relevant to aggression that occurs beyond individual level interactions. It is important to study aggression at all levels in order to address the overarching aim of aggression research i.e., reduce problems of aggression in the immediate society where research takes place and reduce occurrence of harm across societies and groups. The studies in this thesis are placed at various levels. Four studies focus on aggressive behaviour between children and adolescents in a particular setting, peer groups and school. One study focuses on understanding of aggressive interactions in the context of relationships and two studies investigate facets of inter-group aggression. The underlying concept linking these studies is the role of moral beliefs and moral affect.
Chapter 3  Do normative beliefs about aggression follow a moral rationale? An investigation in two cultures

3.1 Introduction

The social-cognitive model of aggressive behaviour suggests that individuals are capable of regulating their own aggression through application of internalized norms and standards of conduct (Bandura, 1991; Huesmann, 1988). These internalized norms known as normative beliefs are the knowledge we hold about appropriateness of certain behaviour in a given situation (Huesmann, 1998; Zumkley, 1984). Many studies have demonstrated that normative beliefs about aggression are associated with aggressive behaviour among children and adolescents (Bellmore, Witkow, Graham & Juvonen, 2005; Henry, Guerra, Huesmann, Tolan, VanAcker, & Eron, 2000; Huesmann & Guerra, 1997; Salmivalli & Voeten, 2004; Werner & Nixon, 2005; Zelli, Dodge, Lochman & Laird, 1999). A reliable and widely used measure of normative beliefs is 20-item Normative Beliefs about Aggression Scale (NOBAGS: Huesmann & Guerra, 1997) designed to assess acceptability of physical and verbal aggression both in response to provocation and in general. NOBAGS has demonstrated robust reliability as well as predictive validity (e.g., Henry et al., 2000; Zelli et al., 1999). Despite continued use and usefulness of NOBAGS, psychometric evidence regarding sub-scales is insufficient. NOBAGS is reported to have two main sub-scales, general beliefs about aggression and beliefs about retaliation and further 4 sub-scales within retaliation beliefs sub-scale: approval of retaliation to weak/strong provocation
and retaliation against males/females (Huesmann & Guerra, 1997). The
previous studies show that existing version of NOBAGS has never been
submitted to factor or principal component analysis (Bellmore et al., 2005;
Guerra, Huesmann, Tolan, VanAcker, & Eron, 1995; Henry et al., 2000; Zelli,
reported a single overall factor for an earlier version. Archer (2004a) analysed
component structure of general beliefs items and Werner and Nixon (2005)
investigated the component structure of modified versions of retaliation beliefs
and general beliefs separately. None of these therefore provide complete
information on 20-item NOBAGS. There is also interesting information that
may be derived from further research for example approval of retaliation against
females and approval of retaliation as opposed to approval of general
aggression. There is evidence that people tend to evaluate provoked and
unprovoked aggressive acts differently (Forgas, Brown & Menyhart, 1980;
Pakaslahti & Keltikangas-Jarvinen, 1997) and excessive retaliation is seen as
less appropriate than equal retaliation (Brown & Tedeschi, 1976 as cited in
Mummendey, 1984). Clearly approval of aggression is not a one-dimensional
construct and this may be apparent in component structure of NOBAGS.
Secondly if aggression and retaliation, and types of retaliation are distinct
components as well as evaluated differently than failure to take this into
account may lead to inaccurate conclusions about individual and group
differences in normative beliefs. The primary purpose of this chapter was to
establish the distinction between aggression and retaliation, in component
structure of NOBAGS and in relative approval of retaliation and general
aggression. Since there is scant information about reliability and component
structure of normative beliefs measure in non-western cultures (Shechtman & Basheer, 2005) a secondary purpose was to investigate the invariance of component structure in two cultures and in different age groups. Finally, discriminant validity for a statistical separability of aggression and retaliation needs to be confirmed and the chapter aimed to test the unique discriminant validity of approval of retaliation and approval of aggression in general. Based on these aims, the two studies in this chapter examined (a) whether general beliefs about aggression and beliefs about retaliation are distinct components of NOBAGS (b) whether there is mean difference in the approval of retaliation and general aggression and types of retaliation (c) whether the findings are consistent in the UK and Pakistan and between adolescents and children and, (d) whether there are mean level differences in normative beliefs about appropriateness of retaliation and aggression between aggressive and non-aggressive adolescents.

3.1.1 Normative Beliefs about Aggression and Aggressive Behaviour

The internalized norms or normative beliefs are seen as cognitions that an individual holds about acceptability or unacceptability of certain types of behaviour (Bandura, 1989; Huesmann, 1988; Guerra & Slaby, 1990; Zumkley, 1984). It has been suggested that they serve to regulate aggressive behaviour by defining the range of allowable and prohibited actions and play an important role in screening inappropriate behavioural scripts and stimulating use of appropriate scripts. They may also affect emotional reaction to provocations (Guerra, Huesmann & Hanish, 1995; Huesmann,
A number of studies have shown that normative beliefs predict aggressive behaviour either directly (for example Erdley & Asher, 1998; Guerra & Slaby, 1990; Guerra, Huesmann, Tolan, VanAcker, & Eron, 1995; Huesmann & Guerra, 1997; Henry, Guerra, Huesmann, Tolan, VanAcker, & Eron, 2000; Werner & Nixon, 2005) or through other cognitive processes such as access and selection of aggressive responses (e.g., Bellmore et al, 2005; Dodge, Laird, & Lochman, 2002; Zelli, Dodge, Lochman & Laird, 1999).

Huesmann and Guerra (1997) carried out a longitudinal study with a large sample of elementary school children living in poor urban neighbourhood. Data obtained at three time points over three years showed that normative beliefs about aggression correlated significantly with actual aggressive behaviour. Children also tended to approve more of aggression as they grew older and this increase was correlated with increase in aggressive behaviour. They also found that among younger children aggressive behaviour in grade 1 predicted later normative beliefs in grade 2 whereas among older children, the beliefs approving of aggression predicted later aggression (Huesmann & Guerra, 1997, p 413). Henry et al. (2000) found that classroom norms as well as personal norms about acceptability of aggression predicted aggressive behaviour among school children. In classrooms where students and teachers made norms against aggression salient, aggressive behaviour diminished over time. Salmivalli and Voeten (2004) found evidence that group norms within classrooms could explain variance in bullying behaviour. Normative beliefs also predict other
cognitive processes related to aggressive behaviour such as biased interpretations of peers’ actions, access and positive evaluation of aggressive strategies and selection of hostile responses (Bellmore et al., 2005; Zelli et al., 1999). The review of earlier research, therefore points to a direct as well as mediating role of normative beliefs in aggressive behaviour.

3.1.2 Measurement of Normative Beliefs

Normative beliefs can be situation-specific e.g., “It is okay to hit others if they hit you first” or general e.g., “It is generally okay to hit others” (Huesmann & Guerra, 1997). NOBAGS (Huesmann & Guerra, 1997) used in previous research measures both specific (retaliation to provocation) and general beliefs (overall endorsement of aggression). The retaliation items specify a provoking situation for example “suppose a boy, John says something bad to another boy is it ok for him to shout at John?” The general beliefs items do not specify a situation and merely ask whether it is wrong or okay to say mean things about people, yell, hit or get into fights. In original study both retaliation beliefs and general beliefs positively correlated with aggressive behaviour among a multi-ethnic sample of children in the USA (Huesmann & Guerra, 1997). One year stabilities were consistent for retaliation beliefs for all sub-samples but were not consistent for general beliefs in some samples. In subsequent study only total score of NOBAGS was used for investigating longitudinal relation between aggressive behaviour and normative beliefs about aggression. Since then NOBAGS has been used
in various ways; as one scale and one overall score (Guerra, Huesmann, & Hanish, 1995; Teglasi and Rothman, 2001, in intervention study), two sub-scales with separate scores (Henry et al., 2000; Zelli et al., 1999) only retaliation beliefs items (Bellmore et al., 2005) and only general beliefs items (Archer, 2004). It has also been modified for a particular sample or situation and to measure beliefs about relational aggression (Krahé & Möller, 2004; Shechtman & Basheer, 2005; Werner & Nixon, 2006). It is clear that the scale is being used in research and psychometric evidence for distinction between retaliation and aggression would be useful. However, only two studies have so far reported a principal components analysis for NOBAGS. Archer (2004) conducted a PCA on 8 general beliefs items and reported two sub-scales, NOBAGS-positive and NOBAGS negative. Werner and Nixon (2005) reported component structure for a modified NOBAGS. They added items measuring beliefs about relational aggression for example rumour spreading, excluding from the group and friendship threat and dropped several items about physical aggression. The revised measure had 27 items making up two scales (general approval of aggression and retaliation approval), with each scale consisting of subscales assessing normative beliefs about a particular form of aggression (relational, verbal, physical). They conducted principal components analysis separately on retaliation scales and general beliefs scales and used an absolute eigenvalues criterion (k1) retaining all factors over 1 that were initially extracted. "[The Eigen-value-over-one] method, although commonly used, is believed by some critics to sometimes underestimate and by many others to grossly overestimate the number of components" (Zwick & Velicer, 1986, p 434). In the case of Werner and Nixon study the use of K1
method resulted in 4 components for retaliation beliefs and 3 components for
general beliefs, which are not theoretically meaningful, for example items
about rumour spreading loaded on a component separate from other relational
aggression items. The Cronbach’s alpha for two-item sub-scale, approval of
physical aggression was .46. The subsequent confirmatory factor analysis in
their second study showed that none of the models (1-factor, 3-factor, and 4-
factor) proved to be an adequate fit to the data. The best fit model according
to authors was 4-factor (GFI = 0.81; RMSEA = 0.12; CFI = .076). According
to Bentler (1990, as cited in Zwick & Velicer, 1986) these are below the
criteria for reasonable fit (GFI = close to .95, RMSEA < .05, and CFI = .95; a
.05 variation below these levels is sometimes considered acceptable). The
item inclusion as well as exploratory analysis is questionable in Werner and
Nixon study and PCA results are not adequately displayed. It can be argued
that original NOBGS was developed as one scale, and treating general beliefs
and retaliation beliefs as two separate scales without psychometric or
theoretical grounds is questionable. In view of this there is a need to
investigate component structure of NOBAGS.

Normative beliefs have been investigated in countries other than the USA and
studies showed association of normative beliefs about aggression with: exposure
to violence (Kirwil, 2004, Poland), playing violent video games (Krahé &
Möller, 2004, Germany), and inter-group conflict (Shechtman & Basheer, 2005,
Israel). The investigation of normative beliefs about aggression has so far not
extended to Indian sub-continent. Cross-cultural reliability and validity of a
measure should be verified prior to use in diverse samples (Archer, 2001)
especially in view of the fact that some studies in aggression research have found lower reliability for American and European scales when used with non-western samples (Shechtman & Basheer, 2005 for NOBAGS; Thanzami & Archer, 2004 for EXPAGG). Therefore one aim of the chapter was to confirm component structure of NOBAGS in a Pakistani sample and to carry out a preliminary test of convergent validity.

3.1.3 Distinction between Retaliation and Aggression

NOBAGS specifies two sub-scales as retaliation beliefs and general beliefs. Zelli et al., (1999) found that aggressive behaviour among children over time was reliably predicted only by retaliatory beliefs not by general aggression beliefs. They also found that retaliation was approved more than general aggression. Huesmann and Guerra (1997) reported inconsistent stabilities for general beliefs items. Since NOBAGS has not been factor analysed as a complete scale, there is no statistical evidence that general beliefs and retaliation beliefs are two sub-scales. Moreover empirical studies also provide evidence that acts of retaliation are seen as more appropriate than acts of unprovoked aggression (Forgas, Brown & Menyhart, 1980; Keltikangas-Jarvinen, Terave & Pakaslahti, 1999; Legerspetz & Weston, 1980) and unprovoked aggressive acts evoke more negative reactions such as anger and counteraggression since they violate norms of proper conduct (Rule & Ferguson, 1984; Zurnkley, 1984). It is likely that mean scores on retaliation beliefs and general aggression beliefs would reflect this discernment. Moreover the evidence about mean level differences between aggressive and
non-aggressive adolescents in normative beliefs is mixed (Slaby & Guerra, 1988; Teglasi & Rothman, 2001). This may be due to a failure to take into account the distinction between aggression and facets of retaliation. Statistical separability between these two dimensions may be useful in delineating group differences and developing targeted interventions for challenging adolescents.

3.1.4 Distinction between Excessive and Equal Retaliation

Further, the retaliatory beliefs items of NOBAGS vary according to types of provocation, types of retaliation, gender of target and gender of aggressor. The respondents indicate approval of verbal (shouting) and physical (hitting) retaliation to verbal provocation (someone saying something bad) and physical retaliation (hitting) in response to physical provocation, retaliation against a female by a male and so on. It is logical to assume that approval of retaliation can vary according to these situations. Let us consider the case of physical retaliation to verbal provocation. This is typically measured with items, “Is it okay for a boy to hit another boy if he says something bad to him”. There is evidence that physical aggression is usually judged worse than verbal aggression (Winstok, 2006; Lagerspetz & Westman, 1980). Previous research suggests that retaliatory behaviour which does not exceed original provocation is seen neither as inappropriate nor aggressive but considered a form of retribution (Brown & Tedeschi, 1976 as cited in Felson, 1984; Tedeschi, Smith & Brown, 1974 as cited in Rule & Ferguson, 1984; Zumkley, 1984) and escalation of conflict occurs when harm of retaliation exceeds harm of provocation (Mummendey, Linneweber & Löschper, 1984). It has been
documented that many violent assaults are triggered by verbal insults
(Baumeister et al, 1996; Cohen et al., 1996; Gilani, personal communication,
2006; Greene et al., 1998; Durrani, 2001) and violent children are more likely
than non-violent children to condone hitting in response to name calling (Astor,
1994). It is therefore crucial to disentangle approval of excessive retaliation and
approval of equal retaliation. Huesmann et al., (1992) found that
appropriateness of aggressive response increased significantly as a function of
provocation: for example retaliation to weak provocation (someone saying
something bad) was approved less than retaliation to strong provocation (being
hit). However their factor analysis for an older version of NOBAGS used in this
study, found one single overall factor. This finding needs to be re-examined
with existing version of NOBAGS.

3.1.5 Group differences in Normative Beliefs

Cronbach and Meehl (1955 as cited in Edmunds and Kendrik) advised that if
theory underlying a construct being measured in a scale predicts two groups
to differ on that scale, the investigation of this prediction constitutes a
validation procedure. There is evidence that adolescents with history of
violent offences differ in their attitudes and beliefs about aggression (e.g.,
Slaby & Guerra, 1988). However there is limited information about
differences on NOBAGS scores between offender and non-offender groups.
Huesmann and Guerra (1997) in their founding study did not use a
comparison group of aggressive children. They reported significant
correlations between normative beliefs and peer nominated aggression for
mainstream school children. They divided their sample of mainstream school
children into three groups according to their scores on NOBAGS (upper
quartile, middle 50% and lower quartile) and compared the aggressive
behaviour of these groups. They found that those scoring in the upper quartile
on approval of retaliation were about .25 standard deviation higher on
aggressive behaviour than the middle group. The method they used is called
dichotomization of continuous or quantitative variables. MacCallum, Zhang,
Preacher and Rucker (2002) in a recent analysis advised against this practice
as it can result in loss of information about individual differences as well as
loss of effect size and power. Tagalasi and Rothman (2001) using NOBAGS
did not find any difference between teacher-rated aggressive and non-
aggressive adolescents. Therefore it is advisable to find groups, which are
divided by an objective criterion such as violent offence record or a known
group status and further investigate whether NOBAGS can discriminate
between violent and non-violent groups of children.

Although sex differences in aggressive behaviour have been reliably reported in
aggression research, they tend to vary according to method of assessment, form
of aggression and age group (see Archer, 2004a for comprehensive meta-
analysis) and are attenuated by presence of provocation (Bettencourt & Miller,
1996). Given the link between normative beliefs and aggressive behaviour, it
would be interesting to examine if females approve similarly of equal
retaliation as males. It has been suggested that sex differences in violence and
crime are partially explained by sex differences in social-cognitive skills
including normative beliefs about aggression (Bennett, Farrington, &
Sex differences in overall normative beliefs about aggression and retaliation have been found in earlier studies in the USA (Huesmann & Guerra, 1997; Huesmann et al., 1992; Souweidane & Huesmann, 1999) and need to be investigated further. In view of this it may be useful to compare males and females in approval of types of retaliation as well on approval of aggression in general.

3.2 Overview of studies

The first study in the chapter examined component structure of NOBAGS using three samples: Pakistani and British children and adolescents and an adult sample within the UK. In line with assumption of Huesmann & Guerra (1997) it was expected that general beliefs about aggression and beliefs about retaliation are distinct components. Further, it was also expected that equal and excessive retaliation are distinct components of NOBAGS and equal retaliation is approved more than excessive retaliation across both cultures. Sex differences were also examined. It was expected that in line with earlier findings females would score lower on approval of general aggression and retaliation than males.

The second study compared a group of adolescents with history of violent offences and arrests with same age adolescents from a main stream school. In line with assumption that general aggression and retaliation are distinct, and in line with earlier research (Erdley & Asher, 1998; Slaby & Guerra, 1988) it was expected that violent adolescents would support general use of aggression more
than mainstream adolescents. In line with assumption that excessive and equal retaliation are distinct and in view of previous research (Astor, 1994), it was expected that violent adolescents would endorse excessive retaliation more than non-violent adolescents. This investigation was seen as a step towards establishing discriminant validity of the proposed components of NOBAGS.

3.3 Study 1 Component structure of NOBAGS

3.3.1 Method

3.3.1.1 Participants

In order to examine component structure of the normative beliefs about aggression scale in the UK as well as in Pakistan, samples in both countries were selected according to recommended item-respondent ratio (Tabachnik & Fidell, 1996). An adult sample from the UK was also selected to compare component structure in two age groups. The data was collected from three samples as part of various studies in the thesis and some of the participants completed other measures as part of a later study. Only normative beliefs psychometric data and aggressive behaviour data is reported for the UK samples in this chapter.

Sample 1 (British Children and adolescents). Two hundred children and adolescents (102 females, 98 males) ranging in age from 10 to 18 years ($M = 14.3$, $SD = 2.71$) took part in the study. They were studying in local schools in west midlands, England. Participants were primarily White British (65 %), Indian origin (16 %), Caribbean origin (10 %), Pakistani origin (7 %) and international (2 %).
Sample 2 (Pakistani children and adolescents). Two hundred Pakistani adolescents and children (92 males, 108 females) took part in the study. They were students in a private school in Pakistan, between the age range of 10 to 19 (M = 14.3, SD = 2.87). All participants were Pakistani nationals; 98 % were Muslim, 2 % were Christians. The medium of instruction in the school was English. All students studied the prescribed syllabus for Cambridge international O level examinations and their language competence was considered adequate for attempting NOBAGS.

Sample 3 (Adults). Sixty-nine females and eight-one males (n = 150) ranging in age from 20 to 35 years (M = 23.3, SD = 3.65) participated in the study. They were recruited on availability basis from a University in west midlands, England. The purpose was to reach a diverse sample although it can not be ascertained how representative the sample is of the general population. The participants were White British (40 %), British Indian (20 %) and international students (40 %). The international students had spent at least a minimum of one year in the UK and had English Language test (IELTS) overall score of 7 or above which was the minimum English language requirement for admission to the University.

3.3.1.2 Measurement

NOBAGS (Huesmann & Guerra, 1997). A 20-item scale measuring beliefs about retaliation (12 items) and general beliefs about aggression (8 items: Table 4.1). Half the items are worded in the negative (it is wrong to...) and half the
items are worded in positive (it is ok to...) to control effect of positive response bias. The response options in this 4-point scale are, 1 = completely wrong, 2 = somewhat wrong, 3 = somewhat O.K, 4 = completely O.K. Higher score indicates beliefs more approving of aggression. The Cronbach’s alpha coefficients reported are .86 for the overall scale and .82 and .80 for retaliation and general beliefs items respectively (Huesmann & Guerra, 1997). For use with the UK and Pakistani participants two minor changes were made. The word ‘scream’ was changed to ‘shout’ after consultation with English language teachers and through pilot testing with children in both countries. The verb *scream* was not perceived as an act equivalent to yelling or shouting in anger among British and Pakistani children. In pilot testing, the children were asked “when does someone scream?” and the consensual reply was that one screamed in pain or fright. Then they were asked what one did in anger. The word ‘shout’ was mentioned by both teachers and children. For administration in Pakistan, the names John and Mary in NOBAGS were changed to Pakistani names. In the adult version of NOBAGS, ‘girl’ and ‘boy’ were replaced with ‘man’ and ‘woman’ as advised by the author.
<table>
<thead>
<tr>
<th>Beliefs about Retaliation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Suppose a boy says something bad to another boy, John(^1).</td>
</tr>
<tr>
<td>1. Do you think it's OK for John to shout(^2) at him?</td>
</tr>
<tr>
<td>2. Do you think it's OK for John to hit him?</td>
</tr>
<tr>
<td>Suppose a boy says something bad to a girl.</td>
</tr>
<tr>
<td>3. Do you think it's wrong for the girl to shout at him?</td>
</tr>
<tr>
<td>4. Do you think it's wrong for the girl to hit him?</td>
</tr>
<tr>
<td>Suppose a girl says something bad to another girl, Mary(^3).</td>
</tr>
<tr>
<td>5. Do you think it's OK for Mary to shout at her?</td>
</tr>
<tr>
<td>6. Do you think it's OK for Mary to hit him?</td>
</tr>
<tr>
<td>Suppose a girl says something bad to a boy.</td>
</tr>
<tr>
<td>7. Do you think it is wrong for the boy to shout at her?</td>
</tr>
<tr>
<td>8. Do you think it is wrong for the boy to hit her?</td>
</tr>
<tr>
<td>Suppose a boy hits another boy, John?</td>
</tr>
<tr>
<td>9. Do you think it's wrong for John to hit him back?</td>
</tr>
<tr>
<td>Suppose a boy hits a girl?</td>
</tr>
<tr>
<td>10. Do you think it is ok for the girl to hit him back?</td>
</tr>
<tr>
<td>Suppose a girl hits another girl, Mary?</td>
</tr>
<tr>
<td>11. Do you think it is wrong for Mary to hit her back?</td>
</tr>
<tr>
<td>Suppose a girl hits a boy?</td>
</tr>
<tr>
<td>12. Do you think it is wrong for the boy to hit her back?</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Beliefs about aggression</th>
</tr>
</thead>
<tbody>
<tr>
<td>13. In general, it is wrong to hit other people.</td>
</tr>
<tr>
<td>14. If you are angry, it is ok to say mean things to other people.</td>
</tr>
<tr>
<td>15. In general, it is ok to yell at others and say bad things.</td>
</tr>
<tr>
<td>16. It is usually ok to push others if you are mad.</td>
</tr>
<tr>
<td>17. It is wrong to insult other people.</td>
</tr>
<tr>
<td>18. It is wrong to take it out on others by saying mean things when you're angry.</td>
</tr>
<tr>
<td>19. It is generally wrong to get into physical fights with others.</td>
</tr>
<tr>
<td>20. In general, it is ok to take your anger out on others by using physical force.</td>
</tr>
</tbody>
</table>

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\(^1\) The name John was changed to Faisal in NOBAGS used with Pakistani participants.

\(^2\) In original NOBAGS 'scream' instead of shout was used.

\(^3\) The name Mary was changed to Maryam in NOBAGS used with Pakistani participants.

\(^4\) The scale is reprinted with permission from Dr. Rowell Huesmann, University of Michigan, USA.
**Direct aggression scale.** Ten items were used to measure physical and verbal aggression. These were a modified version of physical and verbal aggression items in Direct and Indirect Aggression Scale (DIAS: Björkqvist, Österman, & Kaukiainen, 1992). The scale has been used in non-western countries like India (Björkqvist, Österman, Oommen, & Lagerspetz, 2001). Five items measured physical aggressive acts (hitting, pushing, throwing something, pulling hair and slapping,) and five items measured verbal and non-verbal aggression (shouting, swearing, name-calling, rude gestures, and threatening). The children indicated on a five-point scale (0 = never, 4 = very often) how often they carried out these acts. Higher scores on the scale show higher frequency of aggressive behaviour.

DIAS was originally a peer-report scale in the initial studies carried out in Finland but children were also asked to rate their own behaviour. The details of studies are reported in Björkqvist, Österman, and Kaukiainen (1992) and Lagerspetz and Björkqvist (1994). The authors reported correlations between self and peer ratings on DIAS for 8-year-old, 11-year-old, and 18-year-old cohorts. In the case of 11-year-old cohort, the correlations between self and peer ratings were lower for indirect than for direct aggression (.34, p< .001; and .60, p<.001, respectively). The correlations were also lower between self and peer ratings in case of girls (.23, p<.01 for indirect and .29, p < .01 for direct aggression) than boys (.24, p<.01 for indirect and .63 for direct aggression). In the 8-year-old cohort, correlations between self and peer estimates were not significant except in the case of individual items. In the case of 18-year-old cohort, peer and self ratings of indirect aggression did not correlate.
significantly in either sex, whereas correlations for direct aggression were
significant for both boys and girls. Authors conclude that it is difficult to admit
indirect aggression. In the present study only direct aggression items were used
since NOBAGS only measures beliefs about direct aggression. The reliability
estimates reported by authors for original DIAS are better for peer estimates ($\alpha = .80$) than for self-reports ($\alpha = .60$ to .78). However self-reports of aggressive
behaviour have been shown to significantly correlate with peer estimates of
aggressive behaviour and are reliably associated with aggressive behaviour
(Huesmann & Guerra, 1997; Zelli et al., 1999). In current study direct scale
was used as a preliminary evidence for convergent validity of NOBAGS, which
has never been used with a Pakistani sample.

3.3.1.3 Procedure

Formal consent was obtained from the school and the parents. The consent
from parents was obtained by the school by sending a consent form. They
were requested to return the forms by a certain date if they had any objection
to their child taking part in the study. None of the parents objected to the
participation. This was the usual procedure followed by the school and has
been previously used in studies with school children in the UK (Crispin,
2003) as well in aggression research (Erdley & Asher, 1998). None of the
parents raised any objection however, ten children were absent on the day and
were not tested. For the Pakistani participants, parental consent was obtained
through the letters sent to the parents by the school. The letters included
purpose and description of study, contact details of researcher and request for
consent. The children and adolescents who returned consent forms signed by
their parents were included in the study. Eighty percent of the children returned signed consent forms. All the participants were informed that participation was voluntary, the researcher was only interested in their views and no names are required. The children were asked to read the statements and then answer the questions by putting a circle around one option only. They were encouraged to ask questions if any of the sentences were ambiguous or the response options were not easy to understand. The response options were also discussed by pointing out how "sort of ok" is less than "completely ok". Participants completed the questionnaires in tutorial periods or at the end of class as arranged by the teachers. All participants were thanked.

3.3.2 Results

3.3.2.1 Analysis

Exploratory Principal-components analysis was conducted on 20-item NOBAGS completed by participants in three samples. Each sample was analysed separately. The Kaiser-Meyer-Oklin value was .79, .80 and .72 for British sample, Pakistani sample and adult sample respectively and the Bartlett's test of Sphericity reached statistical significance, supporting factorability of the correlation matrix. The eigenvalues-greater-than-one criterion is known to potentially inflate the number of factors to be extracted, because it is sensitive to the number of variables in the analysis. Cattell’s scree test is considered a more reliable indicator and is recommended in cases where there is a clear and easily interpretable scree slope (Zwick &

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1 Factor analysis was also carried out on these samples as it is a recommended technique for investigating latent variables or constructs underlying a measure (Floyd & Widaman, 1995; Cronbach & Meehl, 1955). The results were very similar hence only PCA is reported.
Velicer, 1986). Therefore the number of components extracted in PCA (Oblique rotation) was based on scree test inspection.

A total aggression score was computed for each participant on direct aggression scale. The Cronbach’s alpha coefficient for direct aggression scale was .70. Correlations analyses were conducted between NOBAGS scores and aggressive behaviour measure to establish convergent validity.

3.3.2.2 Component structure of NOBAGS

In sample 1 (UK children), the first six components had the eigenvalues of 8.45, 2.08, 1.36, 1.17, .98, and .86 and accounted for 42%, 10%, 6%, 5%, and 4% of variance respectively. In the Pakistani sample, the first six components had the eigenvalues of 7.57, 2.30, 1.38, 1.23, 1.05, and .96 and accounted for 37%, 11%, 7%, 6%, and 5% of variance respectively. The first six components in the adult sample had eigenvalues of 7.60, 3.09, 2.09, 1.50, 1.31, and .96, explaining 38%, 15%, 10%, 7%, and 6% of variance. The scree plots for three samples are given in Figures 3.1, 3.2 and 3.3.
Figure 3.1 Scree plot for 20-item NOBAGS (UK adolescent sample)

Figure 3.2 Scree plot NOBAGS (PAK sample)

Figure 3.3 Scree plot NOBAGS (UK Adult sample)
The result of PCA showed that NOBAGS has two components however pattern of items loading were different for two age groups (Table 3.2). A closer inspection of the pattern of item loadings among sample 1 and 2 (Pakistani and British children) showed that 13 items with higher loadings on component 1 were related to approval of aggression in general and approval of excessive retaliation (physical retaliation to verbal provocation i.e. hitting someone who says something). Item 12 (hitting a girl back) also loaded on component 1. Seven items loading on component 2 were related to equal retaliation (verbal retaliation to verbal provocation and physical retaliation to physical provocation with the exception of hitting a girl back). A different pattern of loading emerged for adult sample; 12 retaliation items loaded on component 1 and 8 general aggression items loaded on component 2. Hence the retaliation and general beliefs subscales suggested by authors seem to be supported by the pattern of loadings on two components in adult sample but not in the adolescent sample. The two components among younger samples (both Pakistani and British) were consistent with the assumption that excessive retaliation is distinct from equal retaliation but it does not support the clear distinction between retaliation and aggression. In order to further clarify the component structure of NOBAGS, a separate principal components analysis was conducted on 12 retaliation beliefs items. The results showed that 4 items related to excessive retaliation as well as item 12 (hitting a girl back) loaded on component 1 and 7 items related to equal retaliation loaded on component 2. This pattern was consistent across three samples (Table 3.3). In view of these results, two new scoring solutions for NOBAGS can be considered. NOBAGS can be seen as having two subscales, aggression beliefs (general beliefs and excessive retaliation beliefs) and equal retaliation beliefs. However this subscale solution is only supported by adolescent samples and this could result in using two different scoring
solutions or subscale compositions for adolescents and adults. This is also not supported by conceptual distinction between aggression and retaliation. The other option is to devise three subscales of NOBAGS: aggression beliefs, equal retaliation beliefs, and excessive retaliation beliefs. This is similar to a hierarchical factor structure. On theoretical grounds suggested in the introduction, the latter option was chosen in the current study. The scores of items were combined and averaged to form three subscales, equal retaliation beliefs (7 items), excessive retaliation (5 items) and general aggression (8 items).
<table>
<thead>
<tr>
<th>Items</th>
<th>Sample 1 components</th>
<th>Sample 2 components</th>
<th>Sample 3 components</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>boy says something bad to boy, ok to shout</td>
<td>0.15</td>
<td>0.70</td>
<td>0.23</td>
</tr>
<tr>
<td>boy says bad to boy ok to hit</td>
<td>0.76</td>
<td>0.06</td>
<td>0.82</td>
</tr>
<tr>
<td>boy says bad to girl ok for her to shout</td>
<td>0.16</td>
<td>0.83</td>
<td>0.13</td>
</tr>
<tr>
<td>boy says bad to girl ok for her to hit</td>
<td>0.44</td>
<td>0.18</td>
<td>0.61</td>
</tr>
<tr>
<td>girl says bad to girl ok to shout</td>
<td>0.13</td>
<td>0.74</td>
<td>0.25</td>
</tr>
<tr>
<td>girl says bad to girl ok to hit</td>
<td>0.65</td>
<td>0.11</td>
<td>0.54</td>
</tr>
<tr>
<td>girl says bad to boy ok for him to shout</td>
<td>0.07</td>
<td>0.64</td>
<td>0.16</td>
</tr>
<tr>
<td>girl says bad to boy ok for him to hit</td>
<td>0.55</td>
<td>0.08</td>
<td>0.61</td>
</tr>
<tr>
<td>boy hits boy ok for him to hit back</td>
<td>0.21</td>
<td>0.61</td>
<td>0.06</td>
</tr>
<tr>
<td>boy hits a girl ok for her to hit back</td>
<td>0.19</td>
<td>0.75</td>
<td>0.09</td>
</tr>
<tr>
<td>girl hits another girl ok for her to hit back</td>
<td>0.14</td>
<td>0.67</td>
<td>0.06</td>
</tr>
<tr>
<td>girl hits a boy ok for him to hit back</td>
<td>0.32</td>
<td>0.25</td>
<td>0.53</td>
</tr>
<tr>
<td>in general it is wrong to hit others</td>
<td>0.76</td>
<td>0.03</td>
<td>0.94</td>
</tr>
<tr>
<td>ok to say mean things</td>
<td>0.57</td>
<td>0.18</td>
<td>0.65</td>
</tr>
<tr>
<td>ok to shout and say bad things</td>
<td>0.75</td>
<td>0.05</td>
<td>0.87</td>
</tr>
<tr>
<td>ok to push others</td>
<td>0.89</td>
<td>0.18</td>
<td>0.93</td>
</tr>
<tr>
<td>wrong to insult others</td>
<td>0.54</td>
<td>0.01</td>
<td>0.48</td>
</tr>
<tr>
<td>wrong to say mean things</td>
<td>0.68</td>
<td>0.18</td>
<td>0.60</td>
</tr>
<tr>
<td>wrong to get into fights</td>
<td>0.59</td>
<td>0.11</td>
<td>0.45</td>
</tr>
<tr>
<td>ok to use physical force</td>
<td>0.88</td>
<td>0.13</td>
<td>0.96</td>
</tr>
<tr>
<td>Items</td>
<td>Sample 1 Components</td>
<td>Sample 2 Components</td>
<td>Sample 3 Components</td>
</tr>
<tr>
<td>-------------------------------------------</td>
<td>---------------------</td>
<td>---------------------</td>
<td>---------------------</td>
</tr>
<tr>
<td>boy says bad to boy ok to shout</td>
<td>0.66</td>
<td>0.64</td>
<td>0.90</td>
</tr>
<tr>
<td>boy says bad to boy ok to hit</td>
<td>0.08</td>
<td>-0.05</td>
<td>0.15</td>
</tr>
<tr>
<td>boy says bad to girl ok for her to shout</td>
<td>0.76</td>
<td>0.74</td>
<td>0.92</td>
</tr>
<tr>
<td>boy says bad to girl ok for her to hit</td>
<td>-0.01</td>
<td>0.05</td>
<td>0.26</td>
</tr>
<tr>
<td>girl says bad to girl ok to shout</td>
<td>0.72</td>
<td>0.70</td>
<td>0.93</td>
</tr>
<tr>
<td>girl says bad to girl ok to hit</td>
<td>0.02</td>
<td>0.06</td>
<td>0.11</td>
</tr>
<tr>
<td>girl says bad to boy ok for him to shout</td>
<td>0.66</td>
<td>0.64</td>
<td>0.78</td>
</tr>
<tr>
<td>girl says bad to boy ok for him to hit</td>
<td>0.09</td>
<td>-0.01</td>
<td>-0.18</td>
</tr>
<tr>
<td>boy hits boy ok for him to hit back</td>
<td>0.68</td>
<td>0.70</td>
<td>0.83</td>
</tr>
<tr>
<td>boy hits a girl ok for her to hit back</td>
<td>0.72</td>
<td>0.70</td>
<td>0.72</td>
</tr>
<tr>
<td>girl hits another girl ok for her to hit</td>
<td>0.66</td>
<td>0.68</td>
<td>0.6</td>
</tr>
<tr>
<td>girl hits a boy ok for him to hit back</td>
<td>0.27</td>
<td>0.10</td>
<td>-0.02</td>
</tr>
</tbody>
</table>

Sample 1 = UK adolescents, n = 200
Sample 2 = Pakistani Adolescents, n = 200
Sample 3 = UK adults, n = 150
Table 3.4  Descriptives, Alpha values and correlations for NOBAGS subscales

<table>
<thead>
<tr>
<th>UK younger (n = 200)</th>
<th>Mean</th>
<th>SD</th>
<th>α</th>
<th>Intercorrelations</th>
<th>Agg. Behaviour</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Excessive</td>
<td>App.gen agg</td>
</tr>
<tr>
<td>Approval of equal retaliation</td>
<td>2.56</td>
<td>.77</td>
<td>.82</td>
<td>.52**</td>
<td>.57**</td>
</tr>
<tr>
<td>Approval of excessive retaliation</td>
<td>1.67</td>
<td>.70</td>
<td>.86</td>
<td>-</td>
<td>.67**</td>
</tr>
<tr>
<td>General approval of Aggression</td>
<td>1.71</td>
<td>.65</td>
<td>.83</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>UK Adult (n = 150)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Approval of equal retaliation</td>
<td>2.42</td>
<td>.56</td>
<td>.87</td>
<td>.49**</td>
<td>.42**</td>
</tr>
<tr>
<td>Approval of excessive retaliation</td>
<td>1.50</td>
<td>.40</td>
<td>.80</td>
<td>-</td>
<td>.31**</td>
</tr>
<tr>
<td>General approval of Aggression</td>
<td>1.46</td>
<td>.48</td>
<td>.84</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Pakistani (n = 200)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Approval of equal retaliation</td>
<td>2.45</td>
<td>.72</td>
<td>.81</td>
<td>.47**</td>
<td>.45**</td>
</tr>
<tr>
<td>Approval of excessive retaliation</td>
<td>1.64</td>
<td>.66</td>
<td>.78</td>
<td>-</td>
<td>.67**</td>
</tr>
<tr>
<td>General approval of Aggression</td>
<td>1.54</td>
<td>.63</td>
<td>.86</td>
<td>-</td>
<td>-</td>
</tr>
</tbody>
</table>

App gen agg = approval of general aggression
Agg Behaviour = Aggressive behaviour as measured through Direct aggression
Excessive = approval of excessive retaliation
3.3.2.3 Correlations between types of normative beliefs and aggressive behaviour

The correlations of three subscales of NOBAGS with aggressive behaviour were all significant (Table 3.4). Equal retaliation beliefs had higher correlation with aggressive behaviour than either excessive retaliation beliefs or general aggression beliefs.

Table 3.5 Descriptives for Males and Females on Subscales of NOBAGS

<table>
<thead>
<tr>
<th>Pak adolescents</th>
<th>Males (n = 92)</th>
<th>Females (n = 108)</th>
<th>Total (n =200)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Equal retaliation</td>
<td>M 2.38, SD .70</td>
<td>M 2.24, SD .81</td>
<td>M 2.31, SD .76</td>
</tr>
<tr>
<td>Excessive retaliation</td>
<td>M 1.75, SD .76</td>
<td>M 1.48, SD .63</td>
<td>M 1.64, SD .66</td>
</tr>
<tr>
<td>General aggression</td>
<td>M 1.74, SD .81</td>
<td>M 1.42, SD .58</td>
<td>M 1.54, SD .63</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>UK adolescents</th>
<th>Males (n = 98)</th>
<th>Females (n = 102)</th>
<th>Total (n =200)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Equal retaliation</td>
<td>M 2.54, SD .68</td>
<td>M 2.57, SD .63</td>
<td>M 2.57, SD .76</td>
</tr>
<tr>
<td>Excessive retaliation</td>
<td>M 1.54, SD .63</td>
<td>M 1.46, SD .43</td>
<td>M 1.66, SD .64</td>
</tr>
<tr>
<td>General aggression</td>
<td>M 1.33, SD .44</td>
<td>M 1.41, SD .40</td>
<td>M 1.37, SD .42</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>UK adults</th>
<th>Males (n= 81)</th>
<th>Females (n = 69)</th>
<th>Total (n =150)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Equal retaliation</td>
<td>M 2.55, SD .65</td>
<td>M 2.44, SD .70</td>
<td>M 2.56, SD .63</td>
</tr>
<tr>
<td>Excessive retaliation</td>
<td>M 1.61, SD .54</td>
<td>M 1.56, SD .55</td>
<td>M 1.46, SD .51</td>
</tr>
<tr>
<td>General aggression</td>
<td>M 1.54, SD .58</td>
<td>M 1.43, SD .43</td>
<td>M 1.47, SD .49</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Total</th>
<th>Males (n = 254)</th>
<th>Females (n = 296)</th>
<th>Total N = 550</th>
</tr>
</thead>
<tbody>
<tr>
<td>Equal retaliation</td>
<td>M 2.45, SD .69</td>
<td>M 2.45, SD .71</td>
<td>M 2.45, SD .70</td>
</tr>
<tr>
<td>Excessive retaliation</td>
<td>M 1.64, SD .67</td>
<td>M 1.50, SD .54</td>
<td>M 1.56, SD .61</td>
</tr>
<tr>
<td>General aggression</td>
<td>M 1.54, SD .66</td>
<td>M 1.42, SD .47</td>
<td>M 1.48, SD .57</td>
</tr>
</tbody>
</table>

N = 550, df national = 2, df gender = 1
3.3.2.4 Difference in approval of equal retaliation, excessive retaliation and aggression—sex and national comparison

The mean and standard deviations according to country and sex are given in Table 3.5. Mean scores were compared between groups through analysis of variance. Independent variables were sex and national group and three dependent variables were equal retaliation beliefs, excessive retaliation beliefs and general aggression beliefs. As recommended, the significance level was set at .017 because three dependent variables were being analysed (Tabachnick & Fidell, 1996, p 402). The analysis showed a main effect of national [F (6, 1084) = 8.69, p< .001] a main effect of sex [F (3, 542) = 3.74, p<.01] and a significant sex and national group interaction [F (6, 1084) = 2.55, p<.05] in combined dependent variables. When the results for dependent variables were considered separately, the only difference between females and males to reach statistical significance was in excessive retaliation beliefs and general aggression beliefs.

Females overall approved significantly less of excessive retaliation (M females = 1.50, SD = .54) than males (M males = 1.64, SD = .67, d = -.23), F (1,544) = 6.44, p=.011]. Females also approved less of general aggression (M = 1.42, SD = .47) than males (M = 1.54, SD = .66, F (1,544) = 5.69, p=.017, d = .20) though this difference was barely significant and effect size was small. The difference in equal retaliation beliefs was not significant between males (M = 2.45, SD = .69) and females (M = 2.45, SD = .71, F (2, 544) = .001. ns). In case of national
group when dependent variables were considered separately, the analysis showed that only difference between the three groups was on equal retaliation beliefs and general aggression beliefs. The post-hoc comparison of national groups showed that Pakistani adolescents (M = 1.54, SD = .63) were significantly higher in general aggression beliefs than British adolescents (M = 1.37, SD = .42, F (2,544) = 7.19, p = .001) but not significantly different from British adults (M = 1.47, SD = .49). British adults were not significantly different from British adolescents in general aggression beliefs. British adolescents (M = 2.55, SD = .65) were significantly different from Pakistani adolescents (M = 2.31, SD = .76, F (2,544) = 6.39) but not from British adults (M = 2.51, SD = .70) in equal retaliation beliefs. British adolescents approved significantly more of equal retaliation than Pakistani adolescents (d = .37) but not significantly more than British adults. Pakistani adolescents approved significantly more of general aggression than British adolescents (d = .33) but not significantly more than British adults. There was a significant interaction of sex and national group in general aggression beliefs with Pakistani males (M = 1.74, SD = .81) reporting more approval of aggression than Pakistani females (M = 1.42, SD = .58, d = .45), British adolescent females (M = 1.41, SD = .40, d = .50), British adolescent males (M = 1.33, SD = .44), British adult females (M = 1.43, SD = .43, d = .62) and British adult males (M = 1.54, SD = .58, d = .28).
A further analysis of variance was carried out to compare beliefs about retaliation between same sex and opposite sex. Sex of opponent has been linked to beliefs about aggression (see Archer, 2000 and Archer, 2004a for discussion). There was no significant difference between males and females and between two cultures on boys’ retaliation to girls but there was a significant difference between Pakistani and British samples on girls’ retaliation to boys. Pakistani adolescents (M = 2.37, SD = .88) were significantly lower in approval of girls’ retaliation to boys than British adolescents (M = 2.68, SD = .78, d = .37) and British adults (M = 2.65, SD = .82, F (2, 544) = 7.87, p<.001, d = .32).

3.3.2.5 Sex differences in self-report of aggression

Item-wise scores on DIAS were compared for the total sample to investigate sex differences in type of aggressive acts. There was a significant difference between females and males overall in hitting, slapping/punching, pushing, swearing, threatening and showing finger. Males reported more of these physical acts than females. There was no difference in shouting, throwing something and calling names. Means, standard deviations and t values are given in Table 3.6.

3.3.2.6 Approval of equal retaliation and excessive retaliation

The mean of all three samples was lower in approval of excessive retaliation than approval of equal retaliation. A paired samples t-test was used with total sample (N = 550, df = 549) to find out if this difference was significant. The result showed that equal retaliation (M = 2.45, SD = .70) was approved more
than excessive retaliation ($M = 1.56, SD = .61, t (549) = 32.59, p< .0001$). This confirms the hypothesis set in the beginning of study.

Table 3.6  Sex differences in types of aggressive acts as measured by DIAS

<table>
<thead>
<tr>
<th>Aggressive Act</th>
<th>Mean</th>
<th>S D</th>
<th>t</th>
<th>p</th>
<th>d</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hit</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Female</td>
<td>1.11</td>
<td>0.85</td>
<td>-6.83</td>
<td>.001</td>
<td>.34</td>
</tr>
<tr>
<td>Male</td>
<td>1.60</td>
<td>0.84</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Push</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Female</td>
<td>1.23</td>
<td>0.76</td>
<td>-4.96</td>
<td>.001</td>
<td>.42</td>
</tr>
<tr>
<td>Male</td>
<td>1.54</td>
<td>0.70</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Throw something</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Female</td>
<td>1.61</td>
<td>0.81</td>
<td>- .64</td>
<td>Ns</td>
<td></td>
</tr>
<tr>
<td>Male</td>
<td>1.66</td>
<td>0.67</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Swear</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Female</td>
<td>1.06</td>
<td>0.60</td>
<td>-6.61</td>
<td>.001</td>
<td>.38</td>
</tr>
<tr>
<td>Male</td>
<td>1.42</td>
<td>0.65</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Name-calling</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Female</td>
<td>1.52</td>
<td>0.79</td>
<td>-.91</td>
<td>ns</td>
<td></td>
</tr>
<tr>
<td>Male</td>
<td>1.57</td>
<td>.60</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Threaten</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Female</td>
<td>1.43</td>
<td>0.51</td>
<td>-3.78</td>
<td>.001</td>
<td>.33</td>
</tr>
<tr>
<td>Male</td>
<td>1.63</td>
<td>0.66</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Show Finger</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Female</td>
<td>0.89</td>
<td>0.56</td>
<td>-7.15</td>
<td>.006</td>
<td>.58</td>
</tr>
<tr>
<td>Male</td>
<td>1.24</td>
<td>0.56</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Shout</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Female</td>
<td>1.94</td>
<td>0.79</td>
<td>-.23</td>
<td>ns</td>
<td></td>
</tr>
<tr>
<td>Male</td>
<td>1.95</td>
<td>0.62</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Slap/Punch</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Female</td>
<td>1.03</td>
<td>0.62</td>
<td>-9.56</td>
<td>.001</td>
<td>.80</td>
</tr>
<tr>
<td>Male</td>
<td>1.57</td>
<td>0.70</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

$N = 550, females = 269, males = 281, df = 548$
**Summary of results**

The analyses were carried out to test specific hypotheses set out in the beginning of the chapter:

1. Beliefs about retaliation and beliefs about aggression are distinct components of NOBAGS. Results showed that aggression and retaliation items in original NOBAGS overlap on two components among younger groups. Separate analysis of beliefs about retaliation items showed that these items split into two-components in all three samples. Therefore a three subscale scoring solution was used in further analysing the data. The three subscales were significantly positively correlated.

2. Females scored significantly lower on approval of general aggression as well on approval of excessive retaliation. British adolescents approved significantly more of equal retaliation than Pakistani adolescents \((d = .37)\) but not significantly more than British adults. Pakistani adolescents approved significantly more of general aggression than British adolescents \((d = .33)\) but not significantly more than British adults.

3. Males were significantly higher than females on all physically aggressive acts except throwing something. Pakistani adolescents were significantly higher in approval of general aggression whereas British adolescents were significantly higher in approval of equal retaliation.

4. Overall excessive retaliation was approved less than equal retaliation.
3.3.3 Discussion

The study investigated component structure and internal consistency of NOBAGS (Huesmann & Guerra, 1997) in three samples, Pakistani adolescents, British adolescents and young adults living in the UK. This is the first study to examine component structure of complete NOBAGS in two cultures and in two age groups. The results provided evidence for two components with different composition of items for adults and younger group. For theoretical reasons, a three subscale scoring solution was opted to make subscales comparable across adult and younger samples. The three subscales were excessive retaliation, equal retaliation and general aggression, which showed good internal reliability and were moderately and significantly correlated. Unlike subscales reported in previous studies, these subscales are supported by psychometric evidence. The three subscales were found to have convergent validity as they correlated significantly with aggressive behaviour across three samples.

Further evidence for distinction between excessive retaliation and equal retaliation was provided by the finding that across two cultures, equal retaliation is seen as more appropriate than excessive retaliation. This is in line with earlier conceptualisations (Rule & Ferguson, 1984) and with moral norms advocated by world religions (Ghazali, trans. 2000). A recent study has also found that people express more intentions to react with verbal aggression than physical aggression in reaction to actions of hypothetical offenders (Winstok, 2006). This shows that
beliefs about retaliation follow a moral rationale according to which an eye for an eye response is less disapproved than a retaliation which exceeds original provocation. Similarities in moral approval of aggressive and harmful acts have been found across cultures in earlier studies (see Ramirez, 2001 for a review) and seem to be far more universal than cultural variations in specific norms about aggression would suggest. The retaliation norm is ingrained in children through parental and school practices, for example children were more likely to be punished when they physically attacked another child in response to verbal provocation (Durrani, 2001). This norm is reflected in all three samples of this study. Anderson and Carnagey (2004) pointed out that a cycle of violence is started when the victim responds to a provocation with a higher level of retaliation. "One person’s ‘appropriate and justified’ retaliation is the other’s next provocation" (Anderson & Carnagey, 2004, p 180). Ability to discriminate between excessive and equal retaliation is central to moral discernment and failure to exercise or develop this ability may underlie persistent problems of retaliation and counter-retaliation among peers and siblings (Astor, 1994).

Cross-national comparison yielded two interesting findings: Pakistani adolescents reported more approval of general aggression than British adolescents whereas British adolescents reported more approval of equal retaliation than Pakistani adolescents. The higher approval of general aggression among Pakistani adolescents was due to very high mean of Pakistani males who were significantly different from all other groups. It has been suggested that a
male norm of violence exists in Indian culture (Bharti, 1983). As for higher endorsement of equal retaliation among British adolescents, again there is a parsimonious statistical explanation: Pakistani adolescents disapproved of girls’ retaliation to boys (both physical and verbal) more than British adolescents and more than British adults which may have led to a lower overall mean on equal retaliation scale. Although there is no previous study in support of this finding but it is consistent with general ratio of male to female domestic violence reported in empirical research (Hassan, 2002) and with anecdotal evidence in media regarding male intolerance of female assertiveness. It may be the case that British adolescents believe more in an eye-for-an-eye retaliation due to other features of individualistic culture such as greater assertiveness and competition (Segall, 1983). Although different from each other, the British and Pakistani adolescents were not significantly different from British adult sample in any type of aggression beliefs. It must be remembered that British adult sample was composed of English as well as international students who were staying in the country. This sample represents an age as well as culture confound which makes it difficult to generalize from this to other ‘pure’ cultural samples. The finding needs to be replicated with adult samples from two cultures before a conclusion can be drawn.

The division was also supported by the finding that females who usually score lower on physical aggression also scored lower on approval of excessive aggression than boys but not on equal retaliation. This is indirectly supported by
earlier research that physical fights in response to verbal provocation occur between males in some honour cultures (Cohen, Nisbet, Bowdle, & Schwarz, 1996) and females prefer less risky forms of aggression than males (Archer, 2004a). A recent study (Winstok, 2006) also found sex differences in intention to react with verbal or physical aggression. It is useful to consider separately the excessive and equal retaliation as combining these two can mute the sex differences that were obtained in this study.

Males reported all forms of physically aggressive acts (except for throwing an object) more than females. In general these findings are consistent with earlier research (see Archer 2004a for review). These findings are also supported by the sexual selection theory (Archer, 1996; Daly & Wilson, 1994) which postulates that men are higher in risky forms of aggression due to intense competition for reproduction success. However since the analysis were carried out on combined British and Pakistani samples, there may be cultural differences in physical forms of aggression which did not become clear in this analysis.

One further point must be mentioned here. Overall even the mean approval of equal retaliation was not very high in all samples ranging from 2.31-2.57. This indicates a general response pattern between sort of wrong to sort of ok.

Although the study presents evidence for distinction between equal and excessive retaliation and between general aggression and equal retaliation, a
final test of discriminant validity of this new scoring solution of NOBAGS can be to investigate the approval of these types of retaliation among those persons who are involved in violent behaviour. Earlier research shows that adolescents with history of violent offences show more beliefs approving of aggression and more accepting attitudes of violence than non-aggressive adolescents (e.g., Slaby & Guerra, 1988). However this has not been established for NOBAGS. In order to address this gap, data is needed on NOBAGS from violent adolescents.

3.4 Study 2 Normative Beliefs about Retaliation among violent adolescents

Method 3.4.1

3.4.1.1 Participants

The sample consisted of 36 boys (age range 13-17, M = 14.8, SD = 1.24) with history of violent offences and 88 boys from a mainstream school. The boys from mainstream school were an age matched sub-sample of the sample used in the first study. Violent samples are not easy to select and recruit. In this study they were contacted and included primarily through personal contact and through snowballing technique. A purely chance instance started the recruitment process: a group of boys from a nearby council estate were involved in a racial harassment attack on researcher’s house. In the process of identifying the attackers, contact was made with the police anti-social officer as well as some neighbours. Some boys involved in this attack, gradually became familiar faces as they usually stood idly outside the local shops. They were gradually
befriended through a neighbour and were requested to answer the questionnaire (NOBAGS). They were given various compensations for their time (chocolates, soft drinks, ride in car). Five participants met the criteria of violent recorded offences. Further eleven were recruited through them. Twenty participants were selected with help of anti-social behaviour police officer and from a school in west midlands for children with emotional and behavioural problems (EBD).

Twelve adolescents in the violent group were living with a single parent (usually mother), 7 lived in a foster home, 5 were living with mother and stepfather (or mother’s partner), 10 were living with both parents and 2 were living without adult supervision at home. Twenty-two of the boys in violent group currently attended a special school for children with behavioural and emotional problems, 6 were at present out of school but had attended a special school in past, and 8 were working part time.

According to the informants (described later in measurement section) the violent offences they had been involved in were: attacking a teacher (10 %), attacking a police officer (2 %), attacking an old neighbour (3 %), vandalism (26%) street fights (44%) and racial harassment (5%) and others (10 %). Ten boys had injured someone seriously enough to require medical attention.
The boys from mainstream school, a sub-sample of bigger sample used in study 1 (mean age = 15) were selected through procedure described in study one. Parental and school consent was obtained.

3.4.2 Measurement and procedure

NOBAGS. Participants completed NOBAG subscales individually in free time after school or at their own house. These arrangements were made to suit the participants in view of their diverse locations. Three scores were computed for each participant; excessive retaliation, equal retaliation and general aggression. The data of adolescent sample from study one was used for comparison.

Violent offences report. Demographic as well as violent offences report was obtained for participants by available single informant and verified by multiple informants in some cases. The main informants were anti-social behaviour police officer, school sports coach and parents. All participants gave their consent prior to completing questionnaires and providing other information. Parental consent (for those who were living with parents) and foster home consent was obtained.

3.4.3 Results

An independent samples t-test was used to compare mean differences in beliefs about aggression between main stream school adolescents and violent group
assessed in this study. Figure 3.4 illustrates the mean and standard deviations for violent and non-violent group.

![Graph showing mean and error bars for violent and non-violent adolescents](image)

**Figure 3.4** Mean and error bars for violent and non-violent adolescents (N = 124, df = 123)

An independent samples t-test showed no significant difference in beliefs about equal retaliation among violent and non-violent boys (N = 124, t (123) = .65, p > .05). However there was a significant difference in both excessive retaliation beliefs (t (123) = 2.28, p < .01) and general aggression beliefs (t (123) = 2.35, p < .01, Cohen's $d = .40$).
3.4.4 Discussion

The study assessed normative beliefs about retaliation and aggression among a small group of adolescents who had a history of violent behaviour. The subscales of NOBAGS (Huesmann & Guerra, 1997) formed in first study were used to assess beliefs about excessive and equal retaliation and beliefs about general aggression. The scores of violent boys were compared to scores of adolescents from mainstream school. The results showed that violent boys were significantly more approving of excessive retaliation than boys from mainstream school but there was no difference in approval of equal retaliation. This finding is similar to Astor (1994) who found that aggressive children were more likely than non-aggressive children to believe that hitting in response to verbal provocation was acceptable. This result confirms the discriminant validity of new scoring solution and also suggests that interventions for violent boys should address their beliefs about appropriateness of excessive retaliation.

The obvious limitation of the study was small sample size as well as a convenience sampling technique. The violent behaviour was not assessed with any standard scale. The informants may have different levels of accessibility to information. Despite these limitations, the study was useful in providing a preliminary measure of convergent validity of the proposed sub-scale structure of NOBAGS. It makes no claims further than this. Extensive and excellent
empirical literature on factors related to development of violent and delinquent
behaviour exists and can be referred to (e.g., Farrington, Cambridge youth study.

The observation of these violent boys and their life circumstances warrants some
discussion. Most of these boys lived in council estate houses and low income
neighbourhood; many of them had single parent households, little recreational
activity and inadequate adult supervision. They spent time with out of school
peers or other boys with behavioural problems. These circumstances are
conducive to learning of beliefs legitimising aggression as well as developing
anti-social attitudes (Coie & Dodge, 1998; Huesmann, 1998). These conditions
are also related to experiencing frustration and the reactionary behaviour that
stems from deprivation and frustration (Guerra, Huesmann, & Hanish, 1995).
Despite this socially, morally and economically impoverished background, some
of these boys were approachable enough to participate in the study and become
friendly to researcher. These strengths can be used for intervention initiatives,
which need to target among other factors, moral education of these youngsters.

3.5 Summary

The aim of this chapter was to establish distinction between retaliation and
aggression in terms of their endorsement by individuals. First study examined
component structure of the Normative Beliefs about Aggression Scale
(NOBAGS: Huesmann & Guerra, 1997) across diverse samples and compared the pattern of endorsement for retaliation and aggression. The second study investigated mean level differences in beliefs about aggression among aggressive and non-aggressive adolescents as a test of discriminant validity. The new scoring solution of NOBAGS with three subscales was found to have convergent as well as divergent validity and good reliability. A contribution of this chapter was to establish reliability of NOBAGS for future use in Pakistan where evidence on normative beliefs about aggression is scant. Second contribution was to show that excessive retaliation beliefs are statistically as well as conceptually separate and thus need to be considered in further studies using NOBAGS.
Chapter 4  Normative beliefs about aggression and retaliation: association with aggressive behaviour and anticipatory self-censure

4.1 Introduction

It was identified in review of literature in Chapter 2 that two essential psychological mechanisms implicated in regulation of harmful behaviour towards others are (a) moral beliefs or standards of conduct and (b) self-censure (Bandura, 1989, 1991). It has been suggested that moral beliefs exert an influence on behaviour through negative self-reactions such as self-censure and self-reproach (Bandura, 1991). Although there is substantial evidence on standards of conduct e.g., beliefs about legitimacy of aggression and their association with aggressive behaviour (Erdley & Asher, 1998; Guerra & Slaby, 1990; Huesmann & Guerra, 1997; Slaby & Guerra, 1988; Zelli et al., 1999), role of self-censure has received less attention (e.g., Bandura, Barbaranelli, Caprara & Pastorelli, 1996). Chapter 3 established the distinction between general aggression beliefs, excessive retaliation beliefs and equal retaliation beliefs. Association of these types of beliefs with aggressive behaviour and self-censure has not been examined in previous studies. A possible mediating or moderating role of self-censure also needs to be investigated. Intervention initiatives for aggressive behaviour can benefit from an exploration of these aspects. This chapter aimed to investigate association of sub-types of normative beliefs about aggression with aggressive behaviour and self-
censure as well as verify the proposed anticipatory role of self-censure in regulating aggressive actions. It also aimed to verify the finding from chapter 3 that females approved less of excessive retaliation than males. It further aimed to test the sex differences in aggressive behaviour and self-censure.

It has been proposed that children and adolescents have multitude of opportunities to adopt for themselves as standards of conduct the belief that aggression is an acceptable response in a variety of situations (e.g., "It's O.K. to hit someone if he/she annoys you") (Bandura, 1973; Parke & Slaby, 1983). It has been proposed that children who observe more positive and fewer negative consequences for aggression learn a set of response-outcome expectancies, which promote aggressive behaviour (Bandura, 1989; Huesmann, 1988; Perry, Perry, & Boldizar, 1990). On the basis of anticipated negative or positive consequences, children also learn to discriminate between acceptable and unacceptable standards of behaviour and to regulate their actions accordingly (Bandura, 1989; Huesmann, 1988; Perry, Perry, & Boldizar, 1990). The anticipated negative circumstances e.g., external sanctions and punishment are particularly salient in guiding the behaviour of younger children whereas with age people learn to refrain from behaving aggressively even in the absence of external sanctions merely through the self-generated reactions of self-censure (Perry et al., 1990).
As Perry et al., (1990) point out,

"If children see that certain forms of aggression in certain situations and towards certain targets are inappropriate (e.g., physical aggression towards females or aggression against someone whose frustrating behaviour is not intentional), they may avoid acting aggressively under these circumstances for fear of self-censure (p.136).

Although an anticipatory and deterring role of self-censure has been suggested by both Bandura and Perry et al., there is no operational definition or measure of self-censure in literature. Negative self-reactions are variously called guilt, self-censure, negative self-evaluations and feeling bad (Bandura et al., 1996; Campbell, Muncer, McManus, & Woodhouse, 1999; Crane-Ross et al., 1998). Censure means severe criticism and to censure means to criticise someone for something he/she has done (Oxford Advanced learners’ Dictionary, 2005). Self-censure by this definition means criticising oneself for an act one has done. Anticipatory self-censure would be an expectation of self-criticism if one acted in a certain way. According to Bandura, this ability or function underpins self-regulation and monitoring of behaviour. Bandura and Walters (1959) found that assaultive delinquents expressed little or no self-censure about their violent conduct. Clinical interview data also supports the lack of self-censure in violent boys and batterers (Khan, personal communication, July 2004; Amjad & Khan, 2005). The flip side of this idea is that people who rarely behave aggressively have a high degree of anticipated self-
censure. Bandura’s concept of anticipatory self-censure may be reflected in people known for their peaceful and non-violent ideology such as prophets (e.g., Jesus Christ, Muhammad), Ghandi, and Dalai Lama who refrained from retaliation and were quick to reprimand themselves for thoughts of revenge. The common individuals who are exceptionally peace-loving and non-aggressive may also exercise a high degree of self-censure. Empirical studies have rarely studied non-aggressive individuals. One way to develop a measure of self-censure and check its validity can be to interview such individuals.

There is scant empirical evidence for anticipatory role of self-censure. Crane-Ross, Tisak and Tisak, (1998) presented four vignettes pertaining to aggressive behaviour which depicted an individual who was provoked or frustrated by a peer and who considered reacting in an aggressive manner (using physical force or yelling at a classmate). After each vignette, participants were asked whether aggressive acts were acceptable in specific situations described in each vignette. They were also asked to indicate whether, in deciding to commit an aggressive act, they would be concerned about negative self-evaluations that could result, such as feelings of guilt. They also obtained self reports and peer nominations of aggressive behaviour. Beliefs that aggression was a legitimate response were highly correlated with positive self evaluations following aggression and aggressive behaviour was predicted by beliefs and values about aggression.
There is empirical support for the proposed association between beliefs about legitimacy of aggression and negative self-reactions. Bandura, Barbaranelli, Caprara and Pastorelli (1996) found that the tendency to feel guilt and remorse was moderately associated with justifications of antisocial and aggressive behaviour. Caprara, Barbaranelli, Pastorelli, Cermak & Rosza (2001) found that negative affectivity following one’s own aggression was a key factor in enhancing need for reparation which was positively associated with pro-social behaviour. Some studies indicate that feeling bad about one’s own aggression (expressive beliefs) and having a positive view of aggression (instrumental beliefs) are negatively associated (Archer, 2004; Archer & Haigh, 1997a, Campbell & Muncer, 1987). Expressive beliefs about aggression, such as feeling bad and upset about one’s aggression are also negatively associated with trait aggression (Archer & Haigh, 1999). This review indicates that negative self-reactions are associated with aggressive behaviour as well as with attitudes and beliefs about aggression though very few studies reviewed have specifically addressed the interaction of beliefs, self-censure and aggressive behaviour. Moreover specific beliefs about retaliation have not been analysed separately.

Script model of Huesmann (1998) suggests a direct link between knowledge structures i.e., normative beliefs about aggression and aggressive behaviour. Normative beliefs are seen as cognitions that an individual holds about acceptability or unacceptability of certain type of behaviour and it is suggested that they serve to regulate corresponding actions by defining the range of allowable and
prohibited actions. Hence they play an important role in filtering out inappropriate behaviour; they may also affect emotional reaction to provocations and stimulate the use of appropriate scripts (Guerra, Huesmann & Hanish, 1995). Literature reviewed in chapter 2 and 3 showed that normative beliefs are associated with aggressive behaviour (Bellmore, Witkow, Graham & Juvonen, 2005; Dodge, Laird, & Lochman, 2002; Henry, Guerra, Huesmann, Tolan, VanAcker, & Eron 2000; Huesmann & Guerra, 1997; Werner & Nixon, 2005; Zelli, Dodge, Lochman, & Laird, 1999). The beliefs are construed as cognitive mechanisms or knowledge structures and the process is described in purely cognitive terms (Huesmann, 1998). The association between anticipatory self-censure and types of normative beliefs and their combined or unique effect on aggressive behaviour has not been examined before.

The review of empirical studies on normative beliefs indicates that most of earlier studies have been conducted in the U.S. and there is scant evidence in the UK on normative beliefs about aggression among children and adolescents. In a recent study (Archer, 2004b) showed that general normative beliefs about aggression had a low association with verbal aggression but no significant association with physical aggression. This study was conducted with undergraduate students and retaliation beliefs were not examined. There is a need to investigate normative beliefs about retaliation among children in the UK since the school concerns with aggression in schools are increasingly being voiced (e.g., Elsea, 2004).
4.2 Overview

The study in this chapter examined association of normative beliefs about aggression with aggressive behaviour and anticipatory self-censure among children and adolescents in the UK. A measure of anticipatory self-censure was developed through interviews of well known peace activists. Various hypotheses were tested. First of all it was hypothesised that equal retaliation beliefs predict aggressive behaviour better than excessive retaliation beliefs. This assumption was made in view of the finding in chapter 3 that equal retaliation beliefs had significantly higher correlation than excessive retaliation beliefs with aggressive behaviour.

In line with Bandura's model, it was hypothesized that excessive retaliation beliefs, equal retaliation beliefs and general aggression beliefs will be associated with anticipatory self-censure as well as with aggressive behaviour and the effect of normative beliefs on aggressive behaviour will be mediated by anticipatory self-censure. It was to be explored if self-censure differentially mediated effect of excessive retaliation beliefs and equal retaliation beliefs on aggressive behaviour. In line with script theory of Huesmann (1988), it was hypothesized that self-censure will not mediate effect of equal retaliation beliefs and excessive retaliation beliefs on aggressive behaviour.

Finally sex differences in self-censure, aggressive behaviour and sub-types of
normative beliefs about aggression were also examined. In view of earlier evidence that females report more negative self evaluation as a result of aggression as well as higher expressive beliefs about aggression than males (Archer, 2004b; Crane-Ross, Tisak, & Tisak, 1998), it was expected that females would report more anticipatory self-censure than males. The first study reported in Chapter 3 found that males approved more of excessive retaliation (but not equal retaliation) than females. This was to be verified in this study. Sex differences in normative beliefs about aggression and retaliation have been reported before (e.g., Huesmann & Guerra, 1997; Henry et al., 2000). Sex differences in aggressive behaviour have been reliably reported in aggression research, though they are not large, vary according to age and tend to vary according to method of assessment (see Archer, 2004a for review) and are attenuated by presence of provocation (Bettencourt & Miller, 1996). Sex differences on all variables were analysed to add to the existing literature.

4.3 Method

4.3.1 Participants

118 children and adolescents (60 boys, 58 girls) participated in the study. Fifty participants (age range = 9-11 years, mean age = 10.5, SD = .76, 27 girls, 23 boys) were studying in a primary school in West midlands, England. Sixty-eight adolescents (age range 16-19, mean age = 17.4, SD = .85) were studying in sixth form. The schools’ student population represented the ethnic mix in west midlands. Sixty percent of participants were white native British, fifteen percent were Indian
British, ten percent were Pakistani British, and seven percent were of Caribbean origin. Six percent were classed as international (Chinese, Bangladeshi, Russian, Arab, Pakistani and Latin American). The majority of the participants (70 percent) were living with both parents.

4.3.2 Measures

Normative Beliefs about Aggression Scale (NOBAGS). NOBAGS is a 20-item scale developed by Guerra and Huesmann (1997). The detailed description of sub-scales and corresponding items has been given in Chapter 3. NOBAGS has been reliably used with children, adolescents and adults in the USA and other countries (Archer, 2004, Britain; Bender, 2000; Huesmann & Guerra, USA, 1997; Krahe & Möller, Germany, 2004; Shechtman & Basheer, 2005, Israel). The Cronbach alpha coefficients reported are; .86 for the overall scale and .82 and .80 for retaliation and general beliefs items respectively (Huesmann & Guerra, 1997). It was established in Chapter 3 that scale has two higher order sub-scales, beliefs about general aggression (Cronbach Alpha Coefficient = .84) and beliefs about retaliation (Cronbach Alpha Coefficient = .80). The retaliation beliefs sub-scale has two further sub-scales, equal retaliation beliefs (Cronbach Alpha Coefficient = .82) and excessive retaliation beliefs (Cronbach Alpha Coefficient = .78). These three sub-scale scores were used in present study.

Direct Aggression Scale (DAS). Aggressive behaviour was assessed with the ten self-report items described in Chapter 3. Four items measured physical
aggressive acts (hitting, pushing, throwing something, and slapping,) and five items measured verbal and non-verbal aggression (shouting, swearing, name-calling, rude gestures, and threatening). Ratings on the scale are made on a five-point scale ranging from ‘0’ (never) to ‘4’ (very often). Higher scores on the scale show higher frequency of aggressive behaviour.

**Anticipatory self-censure.** The items for this measure were drawn from interviews with 5 individuals known for their non-aggressive personalities as well as from earlier studies, theoretical paper of Bandura and Oxford dictionary. The interviewees ranged in age from 14 to 55 and included one school student, two Buddhists, one Sufi, and one post graduate student. The non-aggressive reputations of these people were known through personal contact and confirmed through their friends. They responded to an open ended question about their anticipated feelings when they considered acting aggressively. The qualitative study based on their responses is not reported in this thesis. Some of the responses were, "I cringe from the thought of hitting others", "I would tell myself off even for thinking of being nasty to someone", "I wont be happy with myself if I yelled at someone", and "I would feel really bad about myself if I pushed or attacked anyone". The final 6 items used in this study were related to the feelings and self-criticism people anticipated if they considered behaving aggressively. The participants were asked to imagine that they were considering acting in certain ways. They were asked to indicate how they would feel about
themselves when they thought of hitting someone or shouting at someone. The items were:

I would feel bad and upset with myself if shouted at someone.
I would feel bad and upset with myself if I hit someone.
I would tell myself off for saying nasty things to someone.
I would be unhappy with myself for having pushed someone.
I would tell myself off if I got into a fight.
I dislike the thought of getting into an argument.

Response options ranged from 5 = completely agree to 1 = completely disagree. Higher scores represented more negative feelings.

4.3.3 Procedure

The consent from school and parents was obtained. Children and adolescents were also asked for their consent and were assured that no names were required, their answers were only required for research purposes and they could decline to take part if they desired. The children were tested in their classrooms in a relaxed atmosphere. The researcher introduced herself, greeted the children and started an informal discussion about how children play and study together and how they sometimes can have issues and conflicts with each other. The children were then handed out the questionnaires with the instruction to respond honestly and carefully. All measures were given together and order of each measure within the set of measures was counterbalanced. All participants were thanked for their participation.
Correlation analyses were used to test the association between variables. Partial correlations were additionally used to test the mediation hypotheses. Regression analysis was used to test the prediction of aggressive behaviour from types of beliefs.

4.4 Results

4.4.1 Reliability estimates

Based on scoring solution supported by PCA in Chapter 3, three scores were computed for each participant: general beliefs, excessive retaliation, and equal retaliation. The Cronbach alpha coefficients for the three sub-scales are given in Table 4.1. Cronbach’s alpha coefficients for direct aggression scale and anticipatory self-censure items were .78 and .69 respectively.

Table 4.1 Cronbach’s Alpha Coefficients of Normative Beliefs about Aggression sub-scales by gender and age group (N = 118, df = 117)

<table>
<thead>
<tr>
<th>Approval of</th>
<th>Overall n=118</th>
<th>Girls n=58</th>
<th>Boys n=60</th>
<th>Younger n=50</th>
<th>Older n=68</th>
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<td>.80</td>
<td>.85</td>
<td>.84</td>
<td>.88</td>
<td>.75</td>
</tr>
<tr>
<td>Extreme retaliation</td>
<td>.81</td>
<td>.72</td>
<td>.86</td>
<td>.89</td>
<td>.73</td>
</tr>
</tbody>
</table>
Table 4.2 Pearson's Correlations between aggressive behaviour, normative beliefs sub-scales and self-censure (N = 118, df = 117)

<table>
<thead>
<tr>
<th></th>
<th>Excessive ret</th>
<th>gen. beliefs</th>
<th>equal. ret</th>
<th>selfcensure</th>
<th>Agg. beh</th>
</tr>
</thead>
<tbody>
<tr>
<td>Excessive ret</td>
<td>-</td>
<td>.46**</td>
<td>.32**</td>
<td>-.19*</td>
<td>.23*</td>
</tr>
<tr>
<td>Gen. beliefs</td>
<td>.38**</td>
<td>-</td>
<td>-.03</td>
<td>.29*</td>
<td></td>
</tr>
<tr>
<td>Equal. ret</td>
<td>-.23**</td>
<td>.76**</td>
<td>-</td>
<td>.25**</td>
<td></td>
</tr>
<tr>
<td>Selfcensure</td>
<td>.25**</td>
<td>-.25**</td>
<td>-</td>
<td></td>
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<tr>
<td>Agg. beh</td>
<td></td>
<td></td>
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</table>

** Correlation is significant at .01. * Correlation is significant at .05.
Excess. ret = beliefs about excessive retaliation, equal. ret = beliefs about equal retaliation, gen. beliefs = general beliefs about aggression, agg. beh = aggressive behaviour.

4.4.2 Correlations between variables and mediation analysis

Correlations between normative beliefs, self-censure and aggressive behaviour are presented in Table 4.2. Equal retaliation beliefs, excessive retaliation beliefs and general aggression beliefs were significantly and positively associated with aggressive behaviour and negatively associated with anticipated self-censure.

The study tested the hypothesis that self-censure would mediate the effect of normative beliefs on aggressive behaviour. Kenny, Kashy, and Bolger (1998) described four steps to determine whether mediation occurs. Step 1 is to show a significant correlation between predictor and outcome (here between excessive retaliation beliefs and equal retaliation beliefs and aggressive behaviour). Table 4.2 shows a significant correlation between equal retaliation beliefs and aggressive behaviour (r (N =118, df = 117) = .76, p< .01) excessive retaliation beliefs and aggressive behaviour (r = .23, p < .05) and general aggression beliefs...
and aggressive behaviour ($r = .29, p< .01$). Step two is to show a significant correlation between predictor and mediator (here between beliefs and self-censure). Two sub-types of normative beliefs, excessive retaliation beliefs ($r = -.19, p< .05$) and equal retaliation beliefs ($r = -.23, p< .05$) were significantly and negatively correlated with self-censure (Table 4.2). General aggression beliefs were not correlated with self-censure. Step 3 is that the mediator affects the outcome when predictor is controlled. Consistent with Step 3, partial correlation between self-censure and aggressive behaviour remained significant when excessive retaliation beliefs were controlled for ($r = -.21, p< .05$). However self-censure was no longer associated with aggressive behaviour when equal retaliation beliefs were controlled ($r = -.11, p> .05$). This result showed that self-censure mediated effect of excessive retaliation beliefs on aggressive behaviour but did not mediate the effect of equal retaliation beliefs on aggressive behaviour. Step 4 determines whether partial or complete mediation has occurred. Complete mediation is indicated when effect of predictor (here excessive retaliation beliefs) is completely removed when mediator (self-censure) is controlled. The data failed to meet this criterion of mediation as the partial correlation between excessive beliefs and aggressive behaviour remained significant when self-censure was controlled ($r = .19, p< .05$). Therefore it can be concluded that self-censure partially mediated the effect of excessive retaliation beliefs and general aggression beliefs on aggressive behaviour but did not mediate the effect of equal retaliation beliefs on aggressive behaviour.
Another hypothesis that excessive retaliation beliefs mediate the effect of self-censure on aggressive behaviour was also tested. Consistent with Step 3 of mediation analysis, partial correlation was carried out between aggressive behaviour (outcome) and excessive retaliation beliefs (mediator) controlling for self-censure (in this case the predictor). Excessive retaliation beliefs were significantly associated with aggressive behaviour when self-censure (predictor) was controlled ($r (N = 118, df = 117) = .21, p < .01$). Similar process was repeated with equal retaliation beliefs. Equal retaliation beliefs were significantly associated with aggressive behaviour when self-censure (predictor) was controlled ($r = .76, p < .001$). Step 4 was carried out by controlling for three types of beliefs in turn (mediators). The partial correlation between self-censure and aggressive behaviour was no longer significant, i.e., effect of self-censure on aggressive behaviour was completely removed when beliefs were controlled. This finding showed that anticipated self-censure on aggressive behaviour is mediated by beliefs about aggression.

Finally, I also tested if association between beliefs and self-censure would remain significant controlling for aggressive behaviour. The correlation between the three types of beliefs and self-censure was no longer significant when aggressive behaviour was controlled. This finding suggests that beliefs evoke anticipation of self-censure only if people behave aggressively.
4.4.3 Sex differences

Descriptive analysis (means and standard deviations) for all measures according to age and sex are given in Table 4.3.

<table>
<thead>
<tr>
<th></th>
<th>Excess. ret</th>
<th>Equal. ret</th>
<th>Gen. agg</th>
<th>Agg. beh</th>
<th>Self censure</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>M</td>
<td>SD</td>
<td>M</td>
<td>SD</td>
<td>M</td>
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<td><strong>Female</strong></td>
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<tr>
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<tr>
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</tr>
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<td><strong>Male</strong></td>
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<tr>
<td>younger</td>
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<td>1.43</td>
<td>.51</td>
<td>2.42</td>
<td>.60</td>
<td>1.40</td>
</tr>
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</table>

N = 118, df = 117

A two-way analysis of variance was carried out to examine sex and age differences in sub-types of beliefs, aggressive behaviour and self-censure. The dependent variables were aggressive behaviour, equal retaliation beliefs, excessive retaliation beliefs and self-censure. The independent variables were sex and age group. The multivariate tests (N = 118, df = 112) showed that there was a significant main effect of sex on combined dependent variables: F (3,112) = 21.34, p < .001; Wilks’ Lambda = .63. There was also a significant sex and age interaction on combined dependent variables: F (3,112) = 10.80, p < .001; Wilks’ Lambda = .77. However when the results for dependent variables were considered separately, two significant differences between males and females appeared to be in self-censure and excessive retaliation beliefs. Females reported more self-censure (M = 3.33, SD = .77) than boys (M = 3.01, SD = .59 F (1,117) = 5.98, p < .001. d = -.36.
Females also reported less approval of excessive retaliation ($M = 1.40, SD = .45$) than boys ($M = 1.60, SD = .69$, $F(1,117) = 5.87, p < .05, d = -.46$). There was no significant difference in overall aggressive behaviour, $t(117) = .54$, ns. There was also a significant age and sex interaction in excessive retaliation beliefs, equal retaliation beliefs, and aggressive behaviour. Examination of means indicated that younger males ($n = 24$) were significantly higher in excessive retaliation beliefs ($M = 1.87, SD = .84$, $F(3,114) = 5.15, p < .05$) than all other groups (younger females ($n = 26$), $M = 1.38, SD = .44$, Cohen’s $d = .73$, older females ($n = 32$) $M = 1.41$, $SD = .46$, $d = .67$, older males ($n = 36$) $M = 1.43$, $SD = .51$, $d = .63$). They were also higher in equal retaliation beliefs ($M = 2.83$, $SD = .78$) than older males ($M = 2.42$, $SD = .60$, $d = .58$) younger females ($M = 2.46$, $SD = .76$, $d = .48$) and older females ($M = 2.60$, $SD = .44$, $d = .36$). Younger males were also significantly higher in aggressive behaviour ($M = 1.61$, $SD = .56$) than older males ($M = 1.30$, $SD = .34$, $d = .66$), younger females ($1.32$, $SD = .42$, $d = .58$) and older females ($M = 1.41$, $SD = .22$, $d = .47$).

Since there was no significant sex difference in overall aggressive behaviour, sex differences in various types of aggressive acts (represented by individual items on DIAS) were analysed next through an independent t-test ($N = 118$, df = 117). The item-wise mean, standard deviations, and t-values are presented in Table 4.4. As the results show, the boys reported more slapping/punching ($Boys M = 1.33$, $SD = .60$, girls $M = 1.09$, $SD = .47$, $d = .44$), swearing ($Boys M = 1.38$, $SD = .71$, girls $M = 1.14$, $SD = .51$, $d = -.38$) and showing finger
(Boys $M = 1.20$, $SD = .60$, Girls $M = .93$, $SD = .41$, $d = -.52$) whereas girls reported more shouting ($M = 2.14$, $SD = .66$) than boys ($M = 1.78$, $SD = .76$, $d = .50$).

The analysis carried out so far showed that females reported more self-censure than males and were significantly different from males in certain types of aggressive acts. Further correlation analysis was carried out to test the hypothesis that sex differences in specific aggressive acts was mediated by self-censure. An overall correlation between gender and types of aggressive acts as well partial correlations between gender and aggressive acts controlling for self-censure is given in Table 4.5.
Table 4.4  Sex difference in types of aggressive acts

<table>
<thead>
<tr>
<th>Aggressive Act</th>
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<th>SD</th>
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<th>P</th>
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<td>Threaten</td>
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</tr>
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<td>0.20</td>
<td>ns</td>
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</tr>
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<tr>
<td>Show Finger</td>
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<td>0.41</td>
<td>10.4</td>
<td>.006</td>
<td></td>
</tr>
<tr>
<td>Male</td>
<td>1.20</td>
<td>0.60</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Shout</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Female</td>
<td>2.14</td>
<td>0.66</td>
<td>19.2</td>
<td>.008</td>
<td></td>
</tr>
<tr>
<td>Male</td>
<td>1.78</td>
<td>0.76</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Slap/Punch</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Female</td>
<td>1.09</td>
<td>0.47</td>
<td>9.33</td>
<td>.01</td>
<td></td>
</tr>
<tr>
<td>Male</td>
<td>1.33</td>
<td>0.60</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

N = 118, Females n = 58, males n = 60, df = 117

Table 4.5 Correlations between sex and specific aggressive acts

<table>
<thead>
<tr>
<th></th>
<th>Slap/punch</th>
<th>Swear</th>
<th>Show finger</th>
<th>shout</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sex</td>
<td>.22*</td>
<td>.19*</td>
<td>.25*</td>
<td>-.24*</td>
</tr>
<tr>
<td>p</td>
<td>.01</td>
<td>.03</td>
<td>.006</td>
<td>.008</td>
</tr>
<tr>
<td>Partial correlations controlling for self-censure</td>
<td>.16</td>
<td>.14</td>
<td>.22*</td>
<td>-.26*</td>
</tr>
<tr>
<td>p</td>
<td>.07</td>
<td>.11</td>
<td>.01</td>
<td>.004</td>
</tr>
</tbody>
</table>

N = 118, df = 117
As the Table shows, two types of aggressive acts, slap/punch and swearing were no longer significantly related to sex once self-censure is controlled. This supports the hypothesis that self-censure mediates sex differences in these specific acts. Two types of aggressive acts, showing finger and shouting were not mediated by self-censure as they remained significantly related to sex even when self-censure was controlled.

4.5 Discussion

The present study was conducted to understand the relation between anticipated self-censure, aggressive behaviour and three types of normative beliefs about aggression. The results revealed that aggressive behaviour, normative beliefs about aggression and self-censure were associated. Sub-types of normative beliefs were positively associated with aggressive behaviour. This finding is supported by Huesmann’s theory of normative beliefs and confirms earlier research findings. Self-censure was negatively associated with beliefs as well as with aggressive behaviour. This indicates that higher the beliefs supporting aggression and retaliation lower is the anticipated self-censure.

Bandura (1991) posited that standards of conduct regulate aggressive behaviour through negative self-reactions such as self-censure and self-reproach. Mediation analysis showed that self-censure partially mediated the effect of excessive retaliation beliefs on aggressive behaviour but did not mediate at all effect of equal retaliation beliefs on aggressive behaviour. This suggests that
even when an individual holds the belief that excessive retaliation is legitimate, self-censure is anticipated and therefore regulation of aggressive responding occurs to some extent. It may be the case that self-censure is disregarded when retaliation is believed to be justified. It has been suggested that retaliation is underpinned by the conviction that culprit ought to be punished (Sommers, 2006) and a retaliation norm is exercised when people react to provocation (Zumkley, 1984). Further analysis showed that beliefs completely mediated the effect of self-censure on aggressive behaviour. This supports the assertion in Bandura’s theory that negative self-reactions are experienced only if one thinks that aggression is wrong. On the other hand, analysis also revealed that self-censure was no longer significantly associated with beliefs about aggression if aggressive behaviour was controlled. This suggests that people only anticipate self-censure if they behave aggressively and contrary to their beliefs. This does not support the anticipatory role of self-censure but rather a retrospective function.

Females reported more self-censure than males. This is also in line with earlier research. In previous studies women were typically found to be higher on expressive beliefs than men (e.g., Campbell, Sapochnik, & Muncer, 1997) and negative self-evaluations after aggression (Crane-Ross et al., 1998). Expressive beliefs represent a person’s negative evaluation of aggressive actions, loss of control in an aggressive incident and subsequent negative self-reactions (Archer, 2004; Campbell, Muncer, & Coyle, 1992, Tapper & Boulton, 2002). A partial
correlation between gender and specific types of aggressive acts showed that self-censure mediated sex differences in two aggressive acts, slap/punch and swearing but it did not mediate sex difference in shouting and showing finger. It may be the case that swearing and slapping is seen as gender normative for boys but not for girls (Crick, Bigbee & Howes, 1996) and therefore may be regulated through self-censure i.e., girls anticipating feeling bad if they slapped someone. On the other shouting for girls and showing finger for boys may be milder acts that do not cause enough self-censure for them to inhibit these acts.

The self-censure measured in this study was supposed to be anticipatory; the items specified that respondents were to indicate how they ‘would’ feel if they behaved aggressively. This measure correlated negatively with beliefs about aggression. This lends support to Bandura’s assertion that one’s moral standards may evoke self-censure in anticipation when aggressive action is considered. However the findings from partial correlation analysis need to be explained as well. The beliefs completely mediated the relationship between self-censure and aggressive behaviour which is not contradictory to Bandura’s assertion. He states that fear of external sanctions as well as fear of self-censure work in anticipation (1991, p 19) in a constant self-monitoring of social action in accordance with ones moral beliefs. However the relation between beliefs and self-censure was no longer significant when aggressive behaviour was controlled. This may be due to the fact that people only anticipated self-censure if they behaved aggressively, in which case the self-censure is retrospective.
rather than anticipatory. This can also be due to covariation of the three variables and needs to be addressed in future studies.
Chapter 5 Relationship between frequency of aggressive acts, thinking, self-censure and private self-consciousness—an examination of real life aggressive episodes

5.1 Introduction

This chapter explores some questions raised in Chapter four and also investigates some points suggested by earlier research. Findings of study in chapter four indicated that aggressive behaviour was more highly correlated with equal retaliation beliefs than excessive retaliation beliefs. It may be the case that aggressive behaviour reported by participants occurred in retaliation situations. Present study aims to examine actual situations in which aggressive actions take place. Chapter Four also found self-censure was negatively associated with aggressive behaviour and partially mediated the effect of normative beliefs about excessive retaliation on aggressive behaviour but did not mediate the effect of equal retaliation beliefs on aggressive behaviour. The present study aims to investigate negative feelings after aggression in actual situations and situational variation in feeling bad after aggression. Further more, it has been suggested that thoughtful action (Anderson & Carnagey, 2004; Ajmal, 2004; Habib & Amjad, 1996) and consideration of socio-moral issues (Fontaine & Dodge, 2006) is implicated in inhibition of aggression. Impulsiveness, a tendency to act without consideration of consequences is
associated with aggressive behaviour (Alexander, Allen, Brookes, Cole and Campbell, 2004; Caprara et al., 1985). In view of this it is worth examining how frequency of aggressive actions in real life is related to thinking as well as thoughtfulness. Private self-consciousness involves a focus on the covert aspects of oneself—feelings, thoughts and self-memories (Buss & Perry, 1992). The evidence for relation between private self-consciousness and aggression is mixed and needs to be examined further (Buss & Perry, 1992; Nystedt & Ljungberg, 2002). Moreover, link between thinking and feelings after aggression, and private self-consciousness has not been investigated before. This chapter further aims to analyses afterthought and feeling bad in relation to real life aggression episodes and the relationship of these two with private self-consciousness and frequency of aggressive acts.

Chapter Four presented findings showing that self-censure was negatively associated with aggressive behaviour frequency. However it did not show what type of situations were associated with higher self-censure as the aggressive behaviour was measured generally not in relation to specific situations. The study also showed that self-censure partially mediated the relation between excessive retaliation beliefs and aggressive behaviour but did not mediate the relationship between equal retaliation beliefs and aggressive behaviour. One possible explanation for this pattern of associations could be that people reported aggressive behaviour which occurred mostly in situations of justified or equal retaliation and self-censure was experienced more when retaliation was excessive rather than equal. The present study aimed to
test these plausible explanations by examining specific aggressive interactions in terms of their nature (reactions to provocations as opposed to reaction to other aggression triggering situations) and to examine feelings in relation to these two types of situations.

Anderson and Garnagey (2004) suggested that a single episode of aggression includes input of personal as well as situational variables and work through internal routes of cognition and arousal to lead to an outcome that can be aggressive or non-aggressive depending upon the appraisal and decision processes. Once a person is confronted with a social encounter in which aggressive responding is an option, depending upon his or her personal and situational resources and internal state, he/she may react automatically or choose to carry out reappraisal of the situation. Thoughtful action often can result from reappraisal whereas automatic reaction can be impulsive. These proposed steps and processes in aggressive encounters have been derived from research in many areas (see Anderson & Carnagey, p 176 for detailed discussion). Alexander et al. (2004) also found that self-control specifically impulsiveness which can be considered a somewhat opposite trait to thoughtfulness was related to instrumental representations of aggression and was associated with poor inhibition of aggression. There is also evidence that mindfulness training which inserts thought between impulse to aggress and aggressive action can reduce frequency of aggression (Ajmal, 2004). Anger management counselling using Islamic principal of counting and moving away when anger arousal began also showed a significant reduction in aggressive retaliation (Habib & Amjad, 1996).
Lawrence (2006) found that those individuals, who found provocations from others more anger arousing than frustrations, were higher on physical aggression, trait hostility and narcissism, as compared to individuals who experienced more negative feelings in response to frustrations. O’Connor, Archer, & Wu (2001) also developed a scenario based Aggression Provocation Questionnaire and found that the aggressive responding to provoking situations correlated with verbal and physical aggression and anger sub-scales of Aggression Questionnaire (Buss & Perry, 1992), a measure of trait aggressiveness. Archer and Haigh (1999) measured expressive and instrumental beliefs about aggression. They also asked the participants whether they had answered the questions about their feelings and thoughts about aggression based on a real or a hypothetical event. They found that instrumental beliefs were higher whereas expressive beliefs were similar when people used real events. Boldizar, Perry and Perry (1989) suggested that the values assigned by children to various outcomes of aggressive acts might hinge on situational factors. These findings underscore the importance of studying individual level variables in conjunction with situations of aggressive episodes.

Such episodes also provide an opportunity to discern the various elements of aggression as a social behaviour. Fishbein and Ajzen (1975) specified that all social behaviour includes an action, target, context, and time. Aggressive interactions similarly include actions (e.g., hitting, pushing, shouting, yelling, backbiting). The situational context in previous studies has been defined as the event preceding the action of participant such as a provocation by another person, a frustrating event or a
norm violation (Felson, 1984; Guerra, Huesmann & Hanish, 1995; Lawrence, 2006).
The target is understood as the person towards whom participant behaved in an
aggressive manner. In present study, descriptions of aggressive episodes including
the action of respondent (shouting, insulting, hitting), context of situation and target
of action were obtained from participants and analysed. Specifically relationship
with the target was also taken into account as it has been pointed out that aggressive
interactions and conflicts need to be analysed within the context of social
relationships (Cohen, Hsueh, Russell, & Roy, 2006).

The main aim of the study was to examine the feelings and thinking in reference to
aggressive episodes reported retrospectively by participants and how these two were
related to frequency of aggressive acts and private self-consciousness. It was expected
that thinking about an actual self-reported act, feeling bad after aggression and private
self-consciousness are associated. It was also expected that thinking and feeling would
be negatively associated with frequency of aggressive acts. No prediction was made
about relation between private self-consciousness and aggressive behaviour. A further
aim was to test the hypothesis from study in Chapter Four that most situations of
aggressive interactions arise in response to provocations and people are more likely to
feel bad after reacting aggressively to non-provoking situations than provoking
situations.

5.2 Method

5.2.1 Participants
Sixty-two participants (33 girls, 29 boys) took part in this study. They ranged in age from 13-25 (mean age = 16.10, SD = 2.70). They were students at a local school and at a leading University in the midlands. The sample was selected on availability basis. Forty-seven (75%) of the participants were native British, 12 (19%) were British Asian from Indian sub-continent, 3 (4%) were foreign students. The adolescents were contacted through the school and consent was obtained from parents by the school.

5.2.2 Measurement

The participants were asked to describe episodes in which they had behaved in an aggressive way towards someone. They responded to a questionnaire in which they were asked to recall three situations when: they shouted at someone, said insulting remarks to someone or hit someone. They were asked to give a brief description of the occasion, saying what the circumstances were, who it was, what led up to it and how it ended. For each of these acts they answered three following questions on a 4-point scale:

(a) How much did you think about it afterwards? The response options were: 1 = hardly at all, 2 = a little, 3 = quite a lot, 4 = a lot

(b) How did you feel about it afterwards? The response options were: 1 = not at all badly, 2 = not very badly, 3 = quite badly, 4 = very badly.

(c) How often might an occasion like this arise? The response options were: 1 once a year or less, 2 = once a month, 3 = once a week, 4 = once a day or more.

The participants also completed the private self-consciousness sub-scale of Self-consciousness Scale (Scheier & Carver, 1985). It is a 9-item scale with
Apart from these clinical studies, relation between frequency of aggression and thought after aggression has not been empirically tested. Tendency to think about one's actions may be related to one's level of self-awareness. Evidence for self-awareness and aggressive behaviour comes from laboratory experiments (e.g., Carver, 1973 as cited in Berkowitz, 1993). It has been suggested that heightened self-awareness theoretically produces increased adherence to one's own established values and standards. Private self-consciousness involves a focus on the covert aspects of oneself- feelings, thoughts and self-memories (Scheier & Carver, 1985). Scheier, Buss and Buss (1978) studied the effect of dispositional self-consciousness on the accuracy of self-reports of aggression and found that persons high in private self-consciousness had a significant positive correlation between aggressive behaviour observed in laboratory and self-reports of aggressive behaviour outside laboratory. However they did not assess whether people actually thought about their actions afterwards and how they felt about these acts. In view of this, the link between PSC and feelings and thoughts about aggression needs to be investigated further.

Most previous studies have used hypothetical situations when investigating reasoning about aggression or attributional style (e.g., Dodge & Newman, 1981; Dodge & Coie, 1987; Fontaine & Dodge, 2006; Rubin et al., 1991; Zelli et al., 1999). A few studies have examined aggressive interactions in real life situations (Felson, 1984; Lawrence, 2006; O'Connor, Archer, & Wu, 2001). Felson (1984) found that norm violation was an important feature of most aggressive interactions.
Cronbach’s alpha of .75. The scale is supposed to assess two aspects of private self-consciousness, self-reflectiveness and internal state awareness.

The descriptions given by participants were content analysed and coded. The coding was done by the researcher and an independent coder who was a psychology lecturer. The categories were explained to the rater with examples. He coded 40% of the descriptions. This rater was blind to the sex and age of the participant and episodes from various participants were mixed. Each incident described by the participants was coded for target, number of words, type of description (general or specific) and the situation. The description was coded as specific if the episode described was a specific incident with detail. The description was coded as general if no particular episode was described and instead the participant gave a general circumstances or conditions in which he/she hit someone or shouted at someone (for example, ‘if someone bad mouths my mates I would lash at them’). The targets were coded as they were named, for example, I shouted at my mother’ or ‘I hit a boy during football game’. The overall inter-rater agreement for target and number of words was 100%. Since these are both objective, complete agreement was expected. For specific and general category, overall agreement was 90%.

Situations were coded by categorizing the preceding action of other person towards whom participants behaved in an aggressive manner or situation, which led to aggressive action by respondent. Offensive verbal acts like insult or
shouting were categorised as verbal aggression, physical acts like being hit, pushed, and punched were categorized as physical aggression and all acts in which someone indirectly tried to harm the participant (for example backbiting) were coded as indirect aggression. These categories correspond to the definition of aggression used in aggression research (see Chapter Two for consensual definitions and forms of aggression). All other situations were categorised in light of earlier research and as these categories emerged from the data. Earlier researchers have coded aggression triggering situations under different categories for example; Felson coded taking property or showing inconsiderate behaviour under norm violation whereas Lawrence coded these under frustration and supported the coding with principle components analysis. Norm violation is defined by Tedeschi (1994) as violations of the norms of politeness, disregard for others' feelings or property and not fulfilling a prior commitment. For purpose of present study any behaviour, which clearly showed any of the above dimensions, was coded as norm violation. For example: “My sister borrowed my best jeans without asking, so I had to shout at her”. Frustration has been defined as unjustified blocking or deprivation of a goal (Lawrence, 2006). A mother not giving permission for the girlfriend to stay in her son’s room and the bus driver not stopping when one is waiting at the bus stop are two examples of such frustrating situations which triggered an aggressive reaction by the respondent. In cases where no specific reason was given except bad mood or irritation, the situation was coded as irritation. This has been similarly coded by Barratt et al., (1999). For purpose of testing the specific hypothesis set out for the study, all
situations were further coded as either provocations or frustrations based on analyses by Lawrence.

The overall agreement regarding categories of aggression triggering situations was 82%, except for norm violation in which the agreement was 76%, which was resolved by mutual discussion. The agreement for coding as provocation and frustration was 90%. The categories of situations and their descriptions are given in Table 5.1. The examples of each code are provided in Table 5.2. There were a few descriptions, which could be coded under more than one type of action. For example argument was part of many interactions resulting from violation of some norm. In that case the act was coded under the explicitly mentioned original act.
Table 5.1 Coding scheme for the situations in episodes

<table>
<thead>
<tr>
<th>Coding Categories</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Verbal aggression</td>
<td>Someone called him/her names, used swearing words, shouted</td>
</tr>
<tr>
<td>Physical attack</td>
<td>Hitting, punching, pushing, kicking, slapping or another physical act</td>
</tr>
<tr>
<td>Indirect aggression</td>
<td>Someone said something about him/her behind his/her back</td>
</tr>
<tr>
<td>Norm violation</td>
<td>Someone invaded privacy, took personal property without permission, did not keep a promise</td>
</tr>
<tr>
<td>Argument</td>
<td>Word argument was mentioned</td>
</tr>
<tr>
<td>Frustration</td>
<td>A deliberate blocking of a desired goal by someone</td>
</tr>
<tr>
<td>Winding up</td>
<td>No other reason was given except ‘winding up’</td>
</tr>
<tr>
<td>Irritation</td>
<td>No act was mentioned except bad mood or irritation</td>
</tr>
</tbody>
</table>
Table 5.2 Examples of each category from episodes reported in study

<table>
<thead>
<tr>
<th>Coding categories</th>
<th>Examples</th>
</tr>
</thead>
<tbody>
<tr>
<td>Verbal</td>
<td>“A kid in football team was holding my shirt and saying offensive things”. “My step-dad something bad about my real father, so I shouted at him”.</td>
</tr>
<tr>
<td>Physical attack</td>
<td>“My brother was repeatedly hitting me with his bat”.</td>
</tr>
<tr>
<td>Argument</td>
<td>“My parents were having a go at me for the way I handled my money and we had an argument. I shouted a lot and stormed out”.</td>
</tr>
<tr>
<td>Indirect aggression</td>
<td>“My friend was nice and friendly to my face and behind my back he had been saying nasty things”.</td>
</tr>
<tr>
<td>Norm violation</td>
<td>“My mom insisted on getting something from the toilet where I was taking a shower”. “My roommate stole my things”.</td>
</tr>
<tr>
<td>Frustration</td>
<td>“When I was running to catch the bus, the driver drove away. I showed him the finger and shouted at him”.</td>
</tr>
<tr>
<td>Winding up</td>
<td>“My mate was winding me up so I threw something at him”.</td>
</tr>
<tr>
<td>Irritation</td>
<td>“I once told an ex-girlfriend that I would kill her because she wouldn’t stop talking about herself and her pitiful life. I guess I was a bit worked up”. “I shouted at my mom because I was irritated over something”.</td>
</tr>
</tbody>
</table>

5.2.3 Procedure

The researcher and purpose of research was introduced in a preliminary meeting with students arranged by the school. In order to engage the interest of the students, the researcher said after introducing herself, “I have something to tell you. I had a row with someone today. I have been thinking about what I did. Do you have rows, arguments or fights? I would like to know about things like that. This study is about how we get along
with each other and when we disagree on something how do we react". The participants were asked for their consent and those who agreed were included in data collection. The students completed the questionnaire measures in their classrooms during tutorials supervised by the year head and subject teachers. The instructions for completing the questionnaires were given as “You will describe the situations in which you shouted at someone, hit someone or said something insulting to someone. Please write what happened, who it was that you shouted at, what that person had done or said to make you angry. After this, I want you to answer the questions. In your answers please tell me about your feelings, how you felt after shouting or hitting, how you felt about your own act and within yourself. In the same way please answer the questions about thinking as if you were thinking about what you did. Anything you felt or thought about others person’s action, how he/she behaved with you can be given as part of the story you tell me”. The students were assured that their answers were completely anonymous and no one except the researcher would see them. The teachers who were supervising data collection were provided with instructions in a meeting with the researcher before hand. All students were thanked for their participation when questionnaires were collected.

Each student had been asked to provide three accounts, one each for each type of act, saying unkind or insulting things, shouting and hitting. Three participants reported that they could not recall ever insulting anyone. Two participants reported that they had never shouted at anyone (never happened, or can’t recall). Sixteen participants (27%) reported that they had never hit anyone. Some of the descriptions did not contain any information, which could be coded in a useful way. These had to be discarded. In
total from 62 participants, 163 descriptions could be obtained. There were 58 insult
descriptions (respondent had insulted someone), 59 shouting descriptions and 46
hitting descriptions. These were entered as single variable in the same way that each
individual case is entered in SPSS data sheet. The unit of analysis in this study was
episodes. Incidents have been used as unit of analysis before (e.g., Felson, 1984). The
purpose is usually to study various characteristics of these interactions rather than
individual differences. Sex of actor was also entered along with each description in
the data set. Total numbers of words used were counted and entered as a separate
variable.

Each episode was coded for type of situation, which were: physical provocation,
verbal provocation, norm violation, frustrations and irritation if no other action of the
other person was mentioned. Frequencies for each type of situation were counted. The
types of situations were used as independent variables and feeling bad was used as
dependent variable in quantitative analysis. Correlations between thinking, feeling
bad, frequency and private self-consciousness were computed separately for each
aggressive action, insult, shouting and hitting. All measures had significant
correlations with each other. Following this total scores for each of these measures
were computed. The Cronbach’s alpha coefficient for feeling, thinking and frequency
items was .65 .69, and .72 respectively. The overall correlations for these measures
are given in results section.
5.3 Results

5.3.1 Descriptive analyses

The number of words used to describe an incident ranged from 5 to 74 and the average number of words used across all participants was 24. The number of words used in one description correlated positively with number of words used in other descriptions by same respondents ($r (62) = .69$, $p< .005$). Eighty percent of participants described specific incidents, whereas 20 % gave a general answer such as “I shout when brother teases me”.

Relationship with the target

Overall following targets were identified; peer, sibling, parent, another adult, friend and girl friend/boyfriend. The examples of other adults are bus driver, swimming club chairman, a shopkeeper and in two cases a group of robbers. Among the shouting and insulting incidents, 35 % took place in interactions with siblings, whereas among the hitting incidents, 30% took place with peers and 27 % with siblings. 16 (25 %) participants reported shouting at their parents. Out of these 16 incidents, 14 incidents (87 %) took place with mother. Ten percent of shouting incidents took place with peers, 16 % took place with friends. Five percent of shouting, 3 % of insulting and 6 % of hitting incidents took place with another adult. Shouting incidents were also reported (6%) with girl friend or boy friend as were hitting incidents (3 %). The percentages for each target according to each act are given in Figures 5.1, 5.2, and 5.3.
Figure 5.1 Target people for insult

Figure 5.2 Target people for shouting
Figure 5.3 Target people for hitting

Situations of aggressive episodes

The survey of the aggressive episodes showed that most of the aggressive encounters were reported as response to someone’s provocation such as verbal aggression, physical attack or indirect aggression. Total provoking situations were 124 and non-provoking situations were 39. This confirms the suggestion in the last study that people more often behave aggressively in response to provocation than other situations. Only in 10% of the situations the description did not specify an act, for example no attack on self or person or property, no goal blocking or norm violation was reported. “My little sister is infuriatingly logicless, I scream blue murder at her occasionally” or “I was just irritated that day”. Table 5.3 presents the break up of situations or contexts in which the participant behaved aggressively.
Table 5.3 Situations for aggressive actions—Frequencies and percentages

<table>
<thead>
<tr>
<th>Action</th>
<th>Frequency (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Insult</strong></td>
<td></td>
</tr>
<tr>
<td>Context/Situation</td>
<td>Frequency</td>
</tr>
<tr>
<td>Physical attack</td>
<td>4 (6)</td>
</tr>
<tr>
<td>Verbal provocation/aggression</td>
<td>31 (53)</td>
</tr>
<tr>
<td>Indirect aggression</td>
<td>14 (24)</td>
</tr>
<tr>
<td>Frustration</td>
<td>4 (6)</td>
</tr>
<tr>
<td>Norm violation</td>
<td>4 (6)</td>
</tr>
<tr>
<td>Other (drunk)</td>
<td>1 (1)</td>
</tr>
<tr>
<td>Total insult situations reported = 58</td>
<td></td>
</tr>
</tbody>
</table>

**Shouting**

<table>
<thead>
<tr>
<th>Context/Situation</th>
<th>Frequency</th>
</tr>
</thead>
<tbody>
<tr>
<td>Physical attack</td>
<td>2 (3)</td>
</tr>
<tr>
<td>Verbal provocation/aggression</td>
<td>29 (49)</td>
</tr>
<tr>
<td>Indirect aggression</td>
<td>6 (10)</td>
</tr>
<tr>
<td>Frustration</td>
<td>3 (5)</td>
</tr>
<tr>
<td>Norm violation</td>
<td>16 (27)</td>
</tr>
<tr>
<td>Other (irritation)</td>
<td>3 (5)</td>
</tr>
<tr>
<td>Total shouting situations reported = 59</td>
<td></td>
</tr>
</tbody>
</table>

**Hitting**

<table>
<thead>
<tr>
<th>Context/Situation</th>
<th>Frequency</th>
</tr>
</thead>
<tbody>
<tr>
<td>Physical attack</td>
<td>20 (43)</td>
</tr>
<tr>
<td>Verbal provocation/aggression</td>
<td>15 (32)</td>
</tr>
<tr>
<td>Indirect aggression</td>
<td>3 (6)</td>
</tr>
<tr>
<td>Frustration</td>
<td>2</td>
</tr>
<tr>
<td>Norm violation</td>
<td>4 (8)</td>
</tr>
<tr>
<td>Other (Drunk)</td>
<td>2</td>
</tr>
<tr>
<td>Total hitting situations reported = 46</td>
<td></td>
</tr>
</tbody>
</table>

N (Total participants) = 62, df = 61
N (total situations = 163, df = 162)

Paired-samples t-test was carried out (N = 163, df = 162) to test the hypothesis that people feel less bad after retaliating to provocations against self than behaving aggressively in response to other type of annoying situations such as frustrations and norm violations. There was a significant difference in feeling bad after the two categories of situations (n provocations = 124, M provocations = 1.95, SD =
1.0, n other situations = 39, M other situations = 2.55, SD = .98, t (162) = 3.20, p < .05, d = -.60). People reported fewer negative feelings after reacting to provocations than after behaving aggressively in other situations. A further analysis was carried out to test if people were less likely to feel bad after hitting someone in response to hitting as compared to hitting someone who had verbally provoked them. There were 35 of hitting situations all together which were used in these analysis (20 in which hitting occurred as a response to physical attack and 15 in which hitting occurred as response to verbal provocation). There was no significant difference in feeling bad after hitting in response to verbal provocation (N = 35, df = 34, M = 2.0, SD = 1.05) and hitting in response to being physically attacked (M = 1.97, SD = .88, t (34) = .34, ns).

In order to test the hypothesis that thinking after an aggressive action is related to feeling bad after that action and frequency of aggression, correlations between overall thinking after aggression, feeling after aggression, frequency of aggression and private self-consciousness were computed. As a first step these correlations were computed separately for each type of action, shouting, insult and hitting. The correlations between measures were very similar except for hitting where due to smaller number of cases some correlations were not significant. The separate correlations are given in Table 5.4. The overall scores for thinking, feeling, frequency and PSC were then computed adjusting for missing values. The correlations between overall scores on all measures are presented in Table 5.5.

1 There is disagreement about using Cohen's d as effect size measure in two dependent groups (Dunlop et al. 1996).
Frequency was an estimate of how often a similar type of incident occurred. In other words it can be taken as a measure of how typical or characteristic this type of interaction is for a given individual.

Table 5.4  Inter-correlations between all measures separately for each aggressive action (N = 62, df=61)

<table>
<thead>
<tr>
<th></th>
<th>Frequency</th>
<th>feelbad</th>
<th>think</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Insult</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Frequency</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Feelbad</td>
<td>-.42**</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>thinking</td>
<td>-.49**</td>
<td>.53**</td>
<td>-</td>
</tr>
<tr>
<td>PSC</td>
<td>-.32*</td>
<td>.43**</td>
<td>.56**</td>
</tr>
<tr>
<td>(n= 58, df=57)</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th></th>
<th>Frequency</th>
<th>feelbad</th>
<th>think</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Shouting</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Frequency</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Feelbad</td>
<td>-.40**</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>thinking</td>
<td>-.51**</td>
<td>.66**</td>
<td>-</td>
</tr>
<tr>
<td>PSC</td>
<td>-.35*</td>
<td>.38*</td>
<td>.53**</td>
</tr>
<tr>
<td>(n= 59, df=58)</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th></th>
<th>Frequency</th>
<th>feelbad</th>
<th>think</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Hitting</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Frequency</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Feelbad</td>
<td>-.11</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>thinking</td>
<td>-.28</td>
<td>.40*</td>
<td>-</td>
</tr>
<tr>
<td>PSC</td>
<td>-.20</td>
<td>.39*</td>
<td>.45**</td>
</tr>
<tr>
<td>(n= 46, df=45)</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
As the table shows the frequency is negatively and significantly correlated with both feeling and thinking after aggression. A regression analysis was carried out with frequency as dependent variable and feeling, thinking and private self-consciousness as independent variables. The frequency of aggression was predicted only by thinking (\(N = 62, \text{df} = 61, \beta = -.38, t = -2.45, \text{adj} r^2 = .25, p = .01\)). Further regression analysis showed that thinking (but not feeling) was predicted by private self-consciousness (\(\beta = .31, t = 6.58, \text{adj} r^2 = .50, p<.001\)).

### 5.5 Discussion

The present study analysed retrospective accounts of aggressive episodes reported by adolescents. The description of aggressive incidents were content analysed to find whether situation described were specific or general, number of words used, relationship with targets, and situations in which aggressive actions occurred. The
study also explored the relationship between private self-consciousness, thinking and feeling bad after aggression and frequency of aggressive actions. Descriptive analysis showed that adolescents shouted at siblings, mothers, friends, peers and other adults in this order of frequency. Targets in insult situations were siblings, peers, friends, parents (mostly mothers), girlfriends/boyfriends and adult strangers in this order of frequency. Hitting occurred between peers, siblings, another adult and friends in this order of frequency. Situations that led to aggressive action were verbal provocation, physical provocation, norm violation and indirect aggression in order of frequency. Quantitative analysis showed that people reported less negative feelings after reacting to provocations than after behaving aggressively in other situations. Analyses also showed that feeling, thinking and private self-consciousness were negatively related to frequency of aggressive actions. Thinking predicted frequency even when other measures were controlled.

Most of the previous studies of aggressive acts by adolescents are carried out in school settings and the situations of retaliation consequently involve peers in school. In this study participants were asked to report only the overt acts and the context in which it occurred. Hence the descriptions given by respondents included situations at home and school as well as situations elsewhere. Hopefully some new and meaningful information on everyday retaliation and aggression of young persons was obtained. The results of this study indicate that greatest frequency of verbal aggression occurs within families as compared to outside the home, mostly between siblings and between children and mothers. In other words exchange of unkind words, arguments,
and shouting are directed towards family members more often than it is against strangers or peers although arguments between friends are fairly common as well. In view of the fact that family members spend a lot of time together and share a common space, the chances of friction are greater. Moreover there is less to lose when an aggressive episode occurs with a family member as compared to when it occurs with an outsider.

The opportunity for dispute among family members are many considering there can be violations of property norms, violation of rules and disagreement over share of duties. The social control also operates between parents and children and is reason for many incidents of shouting in our sample. Only two examples will be illustrated here. A mother objecting to her son bringing his girl friend for overnight stay at home is an example of disagreement over rules. Such a rule may cause frustration to the teen-age boy. On the other hand in the incident where a sister borrowed things without asking, it is a clear violation of property right and has been found to be related to anger reactions in earlier studies (Averill, 1982; Felson, 1984). An intriguing explanation for higher incidence of verbal aggression between family members comes from the research on anger (e.g., Averill, 1982). It has been suggested that the desire to avoid negative consequences such as aggressive counter-reaction of others and dislike by others may serve to inhibit verbal aggression (Smits, Jones & Brown, 2004 as cited in Tedeschi & Felson, 1994). It may be the case that there is less fear of dislike or disturbance in relationships between siblings as a result of verbal exchange of insults, hence
there may be less inhibition. The mothers or siblings will not sever their ties due
to such skirmishes. This is not in any way denying the fact that friction, rude
words and yelling does cause distress in a home and family members would be
better off handling conflicts in a calm manner. As Bandura (1973) has noted,
social behaviour is extensively regulated by verbal cues. When demands or
requests voiced in mild tones are ignored, children and parents learn that only
shouts produce results. He makes a pertinent observation, “Because of the
differential signal value of parental directives, many households are run at fairly
high decibel level” (p 46). It is also interesting that hitting took place between
peers with greater frequency (nearly as much as between siblings) than between
friends. It may be the case again that there is more to loose by hitting a friend.

Respondents also reported feeling less bad after retaliating to provoking situations
rather than acting aggressively due to other circumstances (frustration, norm
violation, being drunk or simple bad mood). This finding indicates that a moral
rationale is at work when people react to others’ actions or external events. They
feel more justified in reacting to an insult or physical attack than reacting
aggressively to a frustrating event or acting aggressively due to bad mood or
someone’s annoying behaviour which is not provoking. Since retaliation to
provocation is believed to be justified according to retaliation norm and beliefs
and self-censure negatively correlate, it was expected that there would be less
negative feeling after provoking situations than after other situations.
The respondents reported their feelings and thinking about their own acts which relate meaningfully to each other. Most of the participants referred to specific incidents therefore the measure of thinking and feeling is more meaningful than it would be if hypothetical vignettes were used.

The variables of private self-consciousness, feeling and thinking were all correlated positively with each other and negatively with frequency of aggression. According to Scheier (1976 as cited in Scheier et al., 1978) suggested that the individuals high on private self-consciousness are more aware of their thoughts and moods and therefore may react more intensely to an insult. He tested this by making men angry and then allowing them to aggress. Those who were high on private self-consciousness aggressed more intensely than those low on private self-consciousness. In the present study, this finding was not supported; private self-consciousness was negatively related to frequency of aggression. In Scheier’s study, the aggressive behaviour was measured using aggression machine. In present study the thinking, feeling and frequency of aggression was measured with reference to a specific episode. The possible explanation of negative relationship between PSC and frequency of aggression is that high private self-consciousness makes people more reflective about their actions and also more aware of their moods. When giving retrospective accounts this awareness may cause them to report thinking more about a past action than they actually did at the time. Another explanation is that people high in private self-consciousness are more likely to react with careful reflection to provoking situations and therefore may exert better self-control. It has been suggested that self-control is
related to inhibition of aggression (Lawrence, 2006). However without investigating emotional reactivity in conjunction with private self-consciousness, this is only a conjecture.

The fact that frequency is predicted by thinking but not independently by feeling suggests that both reflecting on one's aggression and feeling bad are related dimensions of one's expressive social representation of aggression or shared beliefs about aggression. Archer (2004b) found that expressive beliefs about aggression were negatively correlated with verbal aggression and hostility. The path of influence suggested by the results of this study is as follows; the self-consciousness impacts reflecting on one's aggression, which in turn predicts feeling bad after aggression and also predicts the frequency of aggressive acts. However, it is very much possible that the direction of influence is from frequency of acts to thinking and feeling; those who behave aggressively more frequently tend not to think about it afterwards, as posited by information processing theory.

One methodological issue in the study was the retrospective method. Although retrospective accounts are first hand source of data on actual behaviour, they can be subject to biased memory processes (see Banaji & Hardin, 1994 for review of retrospective memory). The affect remembered afterwards can also be coloured by the autobiographical memory. The question then arises about the significance of finding about relation between feeling bad and thinking about the aggressive act. Is it possible that persons with higher private self-consciousness tend to report
more feeling bad and thinking about their acts in retrospect due to their tendency to reflect on their actions rather than due to actually feeling bad at the time they acted aggressively? This is a speculation which needs to be tested. Despite this constraint in the study, the fact remains that retrospective account is a replacement of real time observation (even if an inadequate one) and provides a window on to the real world situations and raw politics of everyday life of adolescents (Cairns et al., 1989).

Thinking about our own actions may be an act of self-judgment and may work towards better future monitoring of our own aggression. “The accounts of retaliatory acts and censure one feels has a function. We see our moral language and practices as being essentially forward looking, not backward looking. We couldn’t have done otherwise in the situation exactly as it arose, but our moral evaluations are exactly that which make anticipated future situations different, so we’ll behave differently” (Sommers, 2006).
Chapter 6  Beliefs about direct and indirect retaliation-association with direct and indirect aggression

6.1  Introduction

In the studies reported in chapter 1 and 2 showed that normative beliefs about aggression and retaliation are related to self-reported aggressive behaviour. This is a finding, which confirms what earlier research has shown. However the normative beliefs scale used in previous studies has a limitation. The scale specifies two types of aggression, verbal (shouting) and physical (hitting). This focus is rather limited considering the fact that aggressive behaviour can be displayed in ways other than hitting and shouting. A widely accepted definition of aggression states that aggression is a behaviour which is carried out with the purpose of inflicting harm on another person who is motivated to avoid such harm (Baron & Richardson, 1994). According to this definition acts like damaging someone’s property or defaming them are also acts of aggression and so are actions which cause psychological harm such as undue criticism, unfair evaluation of someone’s work which can harm their career and deliberate exclusion from social network.

Researchers now recognize that another form of aggression also exists in humans, which can be as harmful and damaging to its victims as some types of physical aggression (e.g., Archer & Coyne, 2005; Björkqvist et al., 2001; Craig, 1998;
Crick, Bigbee, & Howes, 1996). It has been given three different names, indirect (Lagerspetz, Björkqvist & Peltonen, 1988), relational (Crick & Grotpeter, 1995), and social (Cairns, Cairns, Neckerman, Ferguson, & Gariépy, 1989). These forms of aggression are intended to cause harm by using others, spreading rumours, backbiting, excluding others from group or ignoring them (see Archer & Coyne, 2005 for review). Many of the same acts are found in all three categories, nevertheless they do differ in their emphasis and how researchers using these terms have conceptualized them (Archer, 2004a). Archer and Coyne (2005) argued that all three forms described above can be distinguished from direct aggression because they have different adaptive goals and because these are largely achieved in different ways. They also concluded that the three terms essentially cover the same form of aggression and measure alternate strategy to physical aggression.

Indirect aggression goes through a developmental process and it peaks in late childhood or preadolescence. Indirect aggression is also found in samples of adults (Forrest & McGuckin, 2002; Forrest, Eatough, & Shevlin, 2005; Kaukiainen et al., 2001; Richardson & Greene, 1999) thus showing a developmental continuity from childhood to adulthood. Sex differences in indirect aggression have also been found with considerable variation in the occurrence and size of sex difference as a function of age, type of measurement, and sample (see Archer, 2004a and Archer & Coyne, 2005 for a comprehensive review). Research generally shows that girls prefer to use indirect rather than direct forms of aggression and are found to be more indirectly aggressive than boys. Cairns et al. (1989) proposed that girls engage more frequently in social aggression, described as 'the manipulation of group
acceptance through alienation, ostracism, or character defamation' (p 323). Finnish research group initially (Lagerspetz, Björkqvist & Peltonen, 1988) found large sex differences (effect size of $d = -.79$). Later studies using peer reports confirmed these findings among children (Björkqvist, Lagerspetz, & Kaukiainen, 1992; Björkqvist, Österman, & Kaukiainen, 1992). Other studies on relational aggression have also found sex differences in female direction (e.g., Crick, 1997; Crick & Grotpeter, 1995). However the findings for sex differences are mixed as some studies using younger samples and peer nominations have either not found a sex difference or found a difference in male direction (e.g., Crick, Casas, & Mosher, 1997; Hentington, Hughes, Cavell, & Thompson, 1998; Rys & Bear, 1997). Clearly the finding that girls display more indirect aggression than boys has not been totally supported in North American studies.

The studies examining direct and indirect aggression tend to be restricted to Finnish and American samples. Some studies carried out in other countries have failed to replicate the findings of American and Finnish studies (Österman, Björkqvist, Lagerspetz, Kaukiainen, Huesmann, & Fraçzek, 1994, in Poland and Chicago; Owen & MacMullin, 1995, in Australia; Björkqvist, Österman, Oomen, & Lagerspetz, 2001, in India). Hence the evidence is still far from conclusive that boys or men use more direct forms of aggression and girls or women employ more indirect forms of aggression. In one study carried out in India, the Indian boys scored higher on all forms of aggression, direct, indirect, physical and verbal (Björkqvist et al., 2001) This result suggests that findings from European and American studies may not generalize across cultures. A recent study by Thanzami
and Archer (2004) supports this point. The researchers used the revised Expressions about Aggression Scale (EXPAGG) to measure instrumental and expressive beliefs among Indian men and women. The men were high on instrumental as well as expressive beliefs and the reliability estimate of the scale was low. This is contrary to previous findings in the UK and the USA in which men were found to be higher in instrumental beliefs about aggression and women to be higher on expressive beliefs about aggression. It is a logical concern that South Asian societies may display a different pattern of gender differences in forms of aggressive behaviour than European and American cultures. This implication of different patterns across societies raises questions about the validity of conceptual distinctions and the extent to which they can be generalized.

According to Buss (1961, p 8) “indirect aggression may be verbal (spreading nasty gossip) or physical (a man sets fire to his neighbour’s house). Björkqvist et al. (1992) developed Direct and Indirect Aggression Scale (DIAS), which has been used in many studies to assess gender differences in indirect and direct aggression. They report that factor analysis showed them to be distinct factors (Lagerspetz & Björkqvist, 1994). In chapter Three and Four of this thesis, a slightly modified version of direct aggression sub-scale of DIAS was used. In the study reported in this chapter, the DIAS was used again to measure direct and indirect aggression. DIAS was designed initially as a peer-estimate measure of aggression. However authors have used it as self-report as well as peer estimate and computed correlations between the two. This has been described in detail in Chapter 3 (also
see Lagerspetz & Björkqvist, 1994). Evidence on normative beliefs about indirect and relational aggression comes from two studies. Krahé and Möller (2004) added items assessing relational aggression to Normative Beliefs Scale. In this study with German adolescents, the researchers examined the relationship between watching violent video games and normative acceptance of aggression. They found that boys endorsed physical aggression more than relational aggression but there was no significant difference between boys and girls in acceptance of relational aggression. Werner and Nixon (2005) investigated normative beliefs about relational and physical aggression and its relation to physically and relationally aggressive behaviour among adolescents. They found that physical and relational aggressions were distinct constructs among adolescents and relational beliefs predicted relationally aggressive behaviour but not physically aggressive behaviour. However, a factor model of retaliation beliefs was not so clear. They suggested that adolescents make more fine-grained distinctions between forms of aggressive behaviour than they originally hypothesized in their study.

The primary aim of the present study was to develop a scale, which could assess endorsement of direct as well as indirect forms of retaliation among adolescents and compare the endorsement of these two types of retaliation. It has been suggested that indirect forms of aggression can be as or often more damaging than direct aggression (Underwood, 2002), but by virtue of being less visible involves less fear of retaliation. In view of this it was of interest to explore if indirect
aggression is approved less than direct aggression. The distinction between direct and indirect forms of retaliation has been made primarily in the context of sex differences. Therefore sex differences in beliefs about direct and indirect retaliation and direct and indirect aggression reported by adolescents was assumed based on earlier research. A further aim was to test the relationship between the normative beliefs endorsing direct and indirect aggression and direct and indirect self-reported and teacher-reported aggressive behaviour.

6.2 Method

6.2.1 Participants

The participants in this study were selected from a private high school in Lahore, Pakistan. The school is co-educational and most of the children come from middle and upper middle class. There were 52 boys and 48 girls (age range, 13-15.5 years, mean age = 14, SD = .69). They were all students of class 9 (first year of International O level, University of Cambridge Board, equivalent of GCSE).

6.2.2 Measures

Beliefs about direct and indirect aggression. The source used for item generation was the teacher's report of fighting incidents among students. In this school any fights or complaints about aggressive behaviour between children is reported to the class teacher. She was asked to give an account of most recent fights occurring in last one month. A list was made of the incidents reported by the teacher. The teacher gave written description of 10 officially reported incidents of fighting.
This description included: what led to the fight, the gender of two main persons involved (perpetrator and target) and the type of retaliation. This provided a list of 52 situations in which an aggressive interaction had occurred. Similar situations were omitted and a final twenty items were developed out of this list to represent physical aggression (5 items), verbal aggression (5 items), and indirect aggression (10 items). Each item was phrased in a way as to access attitude and beliefs about behaving aggressively in these situations for example ‘It is ok to shout at a class fellow who makes fun of you’ and “It is not nice to disclose someone’s private information to make her look bad”. The participants responded to each item using a five-point Likert format scale (1 = completely disagree; 5 = completely agree).

The same version of questionnaire was given to both girls and boys with a minor variation: in questionnaires given to girls, pronouns ‘she’ and ‘her’ were used instead of ‘he’ and ‘him’. The main reason for doing this was that Pakistani adolescents mainly keep to same sex groups in their social interaction and it is more straightforward to measure boys’ aggression towards boys and girls’ aggression towards girls.

*Direct and Indirect Aggression scale* (DIAS, Björkqvist, Österman, & Kaukiainen, 1992). DIAS has 24 items, 7 items measure physical aggression, 5 items measure verbal aggression and 12 items measure indirect aggression.

Example of physical aggression items are: “I may hit another person”. and “I push the other person if I am angry”. Examples of verbal items are: “I yell and argue with others”, “I tease others”. Example of indirect aggression items are: “I may
ignore the person I am angry with" and "I may gossip about someone I am annoyed at". These items are introduced by the statement "Tell us how you (your classmates) may behave when you have problems with someone or get angry with someone". In the present study, the scale was used as self report because the school authorities did not approve of peer estimate procedure. It was also used to obtain teacher report on indirect and direct aggression of participants. This scale was chosen because it has been used with children and adolescents in cross-cultural studies. DIAS is currently being used in an ongoing international research project involving researchers from Israel, Italy, India, Turkey, Finland, Poland, Puerto Rico, Russia and U.S.A. Permission was sought from the author and the findings have been communicated to the research team (Björkqvist et al.).
Table 6.1 Items in Beliefs about Direct and Indirect Aggression Scale

<table>
<thead>
<tr>
<th></th>
<th>Statement</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Somebody who bangs into you deserves to be yelled at.</td>
</tr>
<tr>
<td>2</td>
<td>There is nothing wrong in calling someone names when she is being clumsy.</td>
</tr>
<tr>
<td>3</td>
<td>It is justified to leak secrets if the other person revealed yours.</td>
</tr>
<tr>
<td>4</td>
<td>It is wrong to sulk and ignore a class fellow if she was selected to be the class prefect instead of you.</td>
</tr>
<tr>
<td>5</td>
<td>Those who push in queues should be pushed in return.</td>
</tr>
<tr>
<td>6</td>
<td>It is wrong to stop being friends with someone if she did not do what you wanted.</td>
</tr>
<tr>
<td>7</td>
<td>It is not nice to disclose somebody's private information to make her look bad.</td>
</tr>
<tr>
<td>8</td>
<td>It is ok to slap a class fellow if she teases you.</td>
</tr>
<tr>
<td>9</td>
<td>Somebody who often bullies or teases others ought to be kicked.</td>
</tr>
<tr>
<td>10</td>
<td>It is ok to say nasty things about a person you find annoying.</td>
</tr>
<tr>
<td>11</td>
<td>If your class fellows plan a grand party and don't inform you, it would be fair to stop seeing them.</td>
</tr>
<tr>
<td>12</td>
<td>It is ok to make a rival class fellow look bad in front of others by telling tales about her.</td>
</tr>
<tr>
<td>13</td>
<td>There is no harm in borrowing your class fellow's things even when she is unwilling to share.</td>
</tr>
<tr>
<td>14</td>
<td>It is wrong to damage a girl's mobile phone if she damages yours.</td>
</tr>
<tr>
<td>15</td>
<td>It is justified to swear at a class fellow who repeatedly disobeys the rules of a game.</td>
</tr>
<tr>
<td>16</td>
<td>A class fellow not willing to attend a party should be given the silent treatment.</td>
</tr>
<tr>
<td>17</td>
<td>It would be fair to swear at someone who played a prank on you and caused embarrassment.</td>
</tr>
<tr>
<td>18</td>
<td>When a class fellow deliberately ignores you, it is justified to shove her to get attention.</td>
</tr>
<tr>
<td>19</td>
<td>It is acceptable to make others dislike someone who annoyed you.</td>
</tr>
<tr>
<td>20</td>
<td>It is ok to shout at a class fellow who insults you in front of the whole class.</td>
</tr>
</tbody>
</table>
6.2.3 Procedure

The consent was obtained from the school principal by providing copies of questionnaires and a covering letter from researcher describing purpose of research, student status at Warwick University and assurance of confidentiality. The parental consent was obtained by the school senior section head mistress. Adolescents completed the questionnaires in their classrooms in groups. The researcher was present to answer any questions.

6.3 Results

Separate composite scores for indirect and direct beliefs were computed by adding scores on individual items representing direct and indirect aggression. The Cronbach alpha coefficient for Beliefs about Direct and Indirect Aggression subscales were .71 and .79 respectively, which shows good reliability. The Cronbach alpha coefficients for direct and indirect aggression sub-scales of DIAS were .73 and .75 respectively. Principal component analysis was not carried out because the number of respondents was less than a hundred. When KMO and Bartlett’s test of sphericity was carried out the Kaiser-Meyer-Olkin measure of sample adequacy criteria (a value of .70) was not met.
6.3.1 Prediction of aggressive behaviour

Pearson’s correlations were computed between direct and indirect aggression measures and beliefs about direct and indirect aggression. As expected aggressive behaviour was related highly significantly to beliefs about aggression. Correlation coefficients between teacher reports of aggression, self-reports of aggression and beliefs about aggression are displayed in Table 6.2. Self report of direct aggression was significantly correlated with teacher report of direct aggression \( r(100) = .42, p < .01 \) as well as with teacher report of indirect aggression \( r = .21, p < .05 \). Self-report of indirect aggression correlated significantly with teacher report of indirect aggression \( r = .23, p < .01 \) but not with teacher report of direct aggression \( r = .12, p > .05 \). Teacher’s report of direct aggression correlated significantly with beliefs about direct aggression \( r = .35, p < .01 \) and to a lesser extent with beliefs about indirect aggression \( r = .21, p < .05 \). Teacher’s report of indirect aggression was correlated significantly with beliefs about direct aggression but not with beliefs about indirect aggression (Table 6.2).
<table>
<thead>
<tr>
<th></th>
<th>Teacher Report Inadequate</th>
<th>Self Report Direct Aggression</th>
<th>Beliefs Inadequate</th>
<th>Beliefs Indirect Aggression</th>
<th>Beliefs Inadequate Direct Aggression</th>
</tr>
</thead>
<tbody>
<tr>
<td>su</td>
<td>80.0%</td>
<td>1.4</td>
<td>2.22, 2.22</td>
<td>1.45, 2.22</td>
<td>1.46, 2.22</td>
</tr>
<tr>
<td>su</td>
<td>95.9%</td>
<td>2.0</td>
<td>1.3, 2.13</td>
<td>1.45, 2.22</td>
<td>1.46, 2.22</td>
</tr>
<tr>
<td>su</td>
<td>62.3%</td>
<td>3.4</td>
<td>1.26, 2.12</td>
<td>1.45, 2.22</td>
<td>1.46, 2.22</td>
</tr>
<tr>
<td>su</td>
<td>0.04</td>
<td>3.4</td>
<td>1.45, 2.22</td>
<td>1.46, 2.22</td>
<td>1.46, 2.22</td>
</tr>
<tr>
<td>su</td>
<td>0.04</td>
<td>3.4</td>
<td>1.45, 2.22</td>
<td>1.46, 2.22</td>
<td>1.46, 2.22</td>
</tr>
</tbody>
</table>

Table 6.3: Mean and Standard Deviations for Beliefs about Aggression and Aggressive Behavior among Boys and Girls

**Correlation Significance at .05**

Table 6.2: Correlations between Beliefs about Direct and Indirect Aggression
Two separate regression analyses were carried out with direct and indirect aggression as dependent variables and beliefs about direct and indirect aggression as predictor variables. The indirect aggression was predicted by beliefs about indirect aggression but not by beliefs about direct aggression ($\beta = .65$, $t(92) = 7.49$, $\text{adj} R^2 = .52$, $p < .01$). Similarly beliefs about direct aggression only predicted direct aggression not indirect aggression ($\beta = .76$, $t(92) = 9.32$, $\text{adj} R^2 = .57$, $p < .01$).

6.3.2 Sex differences in Beliefs about aggression

An independent samples t-test was used to compare the beliefs about aggression and aggressive behaviour among girls and boys. Means and standard deviations separately for girls and boys on three measures and t values are displayed in Table 6.3. There was no significant difference between boys and girls in beliefs about direct aggression, beliefs about indirect aggression, self-report of direct aggression, self-report of indirect aggression and teacher’s reports of direct and indirect aggression. To understand further this finding, the data was sorted in descending order according to scores on DIAS and the gender of 20 participants highest in aggressive behaviour was noted. This procedure was repeated for indirect aggression scores on DIAS as well as direct aggression scores. The ratio of girls and boys highest in overall aggression, indirect aggression and direct aggression are displayed in Figure 6.1. A similar ratio is displayed for 20 adolescents showing lowest scores on DIAS. Twenty adolescents who scored
highest in overall aggression had a ratio of 17 boys and 3 girls, the twenty adolescents lowest in overall aggression had a ratio of 8 girls and 12 boys. Twenty adolescents who reported highest indirect aggression was composed of 13 boys and 7 girls and finally 20 adolescents who reported highest level of direct aggression had a ratio of 13 boys and 7 girls. These ratios show that there were few highly aggressive boys who reported high level of both indirect and direct aggression. Similarly there were few boys at the other end of continuum. This is supported by the higher standard deviations for boys than for girls. One previous study reported a similar finding on sex differences (see Archer & Mehdikhani, 2003). Figure 6.1 displays the ratios of boys and girls at the higher end of continuum and Figure 6.2 displays the ratios of boys and girls at the lower end of continuum.

Figure 6.1 Ratios of boys and girls scoring high on aggression
5.3.4 Approval of indirect and direct retaliation and self-report of direct and indirect aggression

In order to compare the approval of direct and indirect retaliation, a paired sample t-test was carried out. Indirect retaliation (mean = 2.53, SD = .58) was approved significantly less than direct retaliation (mean = 3.22, SD = .61, t (98) = 9.61, p< .0005). Self-reported direct aggression (mean = 2.08, SD = .55) was also compared through a paired sample t-test to indirect aggression (mean = 1.68, SD = .68, t (98) = 9.56, p< .0005). This analysis showed that direct aggression was approved more than indirect aggression and students reported more direct than indirect aggression.

6.4 Discussion

The present study measured beliefs about direct and indirect aggression among Pakistani adolescents. A scale was developed using the examples of episodes of aggression reported in school. This scale has good internal consistency and significant correlation with direct and indirect aggression. A novel finding was that indirect acts were endorsed less than direct acts.
Results also show that endorsement of specific type of retaliation only predicts the related form of retaliation. The endorsement of indirect aggression has not been studied before in Pakistan and therefore is a pioneer effort. Contrary to some earlier studies in Europe no significant sex differences in beliefs about aggression or aggressive behaviour were found. Absence of sex differences in indirect and direct aggression as well as in indirect and direct beliefs needs to be further examined in future studies in Pakistan as it is inconsistent with some of earlier studies with children on direct and indirect aggression (see Lagerspetz & Björkqvist, 1994 for a review). Although the difference in aggressive beliefs and aggressive behaviour between males and females was not significant, males showed more variability indicating that some boys were placed on both higher and lower end of scores in the sample. This is consistent with another earlier study (Archer & Mehdikhani, 2003).

However not all studies have found sex differences for example previous research has found little evidence for sex differences in self reports of indirect aggression among adults with exception of one study (Björkqvist, Österman, & Lagerspetz, 1994; see Archer & Coyne, 2005 for review). Sex differences are also small or non-existent at younger ages. It may be the case that the age sample used in this study is either more similar to adults in western studies or to younger age groups in their aggressive behaviour. This may raise many questions regarding social development across cultures.
The finding of some interest from theoretical point of view is that indirect aggression is approved of less than direct aggression. It can be argued that since indirect aggression causes more distress to the victim they vicariously realize the effect of such retaliation and hence normatively approve it less than direct aggression. It also may be the case that direct aggression is demonstrated earlier in life when moral development is also going through stages of maturity, whereas indirect aggression requires a degree of social intelligence which amounts to deviousness and underhand manipulations and implies a scheming disposition. It may also be frowned upon because there are very strong injunctions against backbiting and devious harm in Islam. However till further verification in Islamic societies, this remains a speculation. Earlier studies show that self reports of indirect aggression have low or insignificant correlations with peer estimates (Lagerspetz & Björkqvist, 1994) and the researchers conclude that relational aggression is more difficult to admit in self-report measures. This may be due to greater undesirability of indirect or relational type of aggression. Any generalization from this study even within Pakistani society can only be justified after replication of this research with a sufficiently large sample.
Chapter 7 Changing beliefs about aggression among children

7.1 Introduction

The study of childhood aggression stems from many concerns. The urgent concern is with the immediate consequences of aggressive behaviour such as distress caused to victim, disruption in school, home and community and detrimental effects on school achievement and social relations of aggressive children (Boxer & Dubow, 2002). The more crucial concern is the long-term stability of aggression from childhood to adolescence that has been consistently reported in empirical literature (Coie & Dodge, 1998; Farrington, 1991, 1992; Huesmann, Eron, Lefkowitz, & Walder, 1984; Loeber, Wung, Keenan., & Giroux, 1993; Olweus, 1979). The childhood aggression is also related to adjustment problems and anti-social behaviour in adolescence and adulthood (Caspi, Elder, & Bem, 1987; Coie & Dodge, 1998). The aggressive problem solving strategies can cause rejection by non-aggressive peers and later association with deviant peers (Coie, Dodge, Terry, & Wright, 1991; Dodge, 1986). In view of this the long-term societal concerns necessitate understanding, prevention and treatment of aggressive behaviour in childhood.
School-based programmes are seen as a necessary part of the solution to the problem of youth aggression (Farrell, Meyer, Kung, & Sullivan, 2001). A number of these programmes have been in place for many years and have used various intervention techniques (see Farrell et al., 2001 for a review) and have addressed various aspects of childhood aggression including social-cognitive approaches which have yielded modest to moderate positive effects (Boxer & Dubow, 2002).

There is evidence from a number of studies that beliefs approving of aggression are significant predictors of aggressive behaviour among children directly as well as indirectly (Crane-Ross, Tisak, & Tisak, 1998; Erdley & Asher, 1998; Guerra & Slaby, 1990; Huesmann & Guerra, 1997; Pakaslahti & Keltikangas-Järvinen, 1997; Slaby & Guerra, 1988; Zelli et al., 1999).

Guerra and Slaby (1990) carried out a 12-session intervention programme with adolescent offenders based on model of social-cognitive development. The purpose was to remediate cognitive factors identified as correlates of aggression and investigate if changes in cognitive factors mediate changes in aggressive behaviour. The cognitive correlates of aggressive behaviour were identified in an earlier study (Slaby & Guerra, 1988) as deficits in social problem solving skills and beliefs supporting the use of aggression. The intervention programme called Cognitive Mediation training was designed to address both these factors. One-hundred and twenty male and female
adolescent offenders were assigned to three groups: cognitive mediation training (CMT), attention control (AC), and no training (NTC). The problem solving skills component of the programme provided training in skills such as (a) attending to relevant and non-hostile cues when defining a social problem and setting a goal, (b) seeking additional information, (c) generating a variety of responses and consequences, and (d) prioritizing potential responses in terms of their effectiveness in providing goal directed, legal and non-violent outcomes. The eight steps in sequence of programme were as follows: (a) is there a problem? (b) stop and think, (c) why is there a conflict? (d) what do I want, (e) think of solutions, (f) look at consequences, (g) choose what to do and do it and (h) evaluate the results. In sessions 6 and 7, the participants practiced generating alternate solutions to several hypothetical situations and challenged beliefs about the legitimacy of responding aggressively. In session 8 and 9, the participants challenged beliefs about the consequences of aggression for self and others. The social problem solving skills were assessed before and after the study by presenting subjects with hypothetical stories involving a same sex unidentified peer and asking them to define the problem (hostile vs. nonhostile), goal selection (hostile vs. nonhostile), number of facts requested, number of solutions generated, effectiveness of best solution, and number of consequences generated. To assess beliefs supporting aggression, subjects responded to an 18-item questionnaire in which five beliefs were measured: aggression is legitimate, aggression increases self esteem, aggression helps to avoid a negative image, victims
deserve aggression, and victims don’t suffer. The aggressive behaviour was assessed by the supervisors of offenders in the state juvenile correctional facility. In post-test assessment the CMT group showed greater social problem solving skills than the two control groups. The researchers also found that the CMT group was less likely than other groups to endorse that, aggression is legitimate, aggression increases self-esteem and aggression helps to avoid negative image. The only significant predictor of reduced aggression in post-test scores after controlling for pre-test aggression was the belief that aggression is legitimate. This finding clearly shows that normative acceptability of aggression is a key factor in aggression.

Findings from other studies are mixed. Bender (2000) examined the influence of violent metaphor on children’s processing of social information, arousal and normative beliefs about aggression in an experimental study. He did not find any significant difference between the normative beliefs of the groups who were exposed to violent as opposed to non-violent stories. Teglasi and Rothman (2001) designed an intervention programme to reduce aggressive, externalising and disruptive behaviour among school children. The 15-session Structure/Themes/ Open Communication/ Reflection/ Individuality/ Experiential Learning/ Social Problem-Solving (STORIES) programme used the peer group and story form as vehicles to improve social problem solving for aggressors, victims, and bystanders. Groups consisting of four to six primary school children contained one or two children identified by school staff with concerns of
bullying, general hostility, or aggression. These groups received the intervention in which structured stories were read depicting situations of bullying. The problem, feelings and thoughts as well as goals and intentions of the characters and solutions were discussed. The researchers assessed normative beliefs among all children pre-intervention and post-intervention and found no significant differences. There was also no significance difference in the normative beliefs of children identified as aggressive and those not identified as aggressive. They also compared the beliefs of children waiting to go through the programme with the children who had completed the intervention programme. The aggressive children who had completed the programme had slightly lower scores than aggressive children who had not yet received this intervention. Teacher reports only showed a decrease in actual externalising problems among children who were not identified as aggressive.

Frey et al. (2005) evaluated the impact of a school based programme for reduction of bullying. They assessed beliefs and attitudes supporting bullying among other indicators of programme effectiveness. A typical item in the questionnaire of beliefs about bullying was; “it is ok to bully a child whom you find annoying”. This programme called ‘Steps to Respect’ was implemented over a 12 week period with one-hour weekly lessons in social skills, ways to deal with bullying, responsibility to report bullying and peaceful conflict resolution. The programme involved teachers and instructors at school. The children provided reports of their own aggressive behaviour over a time period of one
month both before and after the programme and they were also observed in the playground. They found that there was a significant reduction in beliefs supporting bullying among the intervention group but not among the control group which showed an increase in such beliefs. However in this study there was no reduction in overall aggressive behaviour in intervention group after going through the programme. The findings from all the studies described above provide evidence that beliefs can be changed through intervention but only one study by Guerra and Slaby (1990) has accomplished reduction in aggression. In this study the only significant predictor of that reduction was a change in beliefs about legitimacy of aggression. The sample in this study was adolescents in young offenders’ institution charged with aggression offences. A similar programme can be developed to change aggression-related beliefs among mainstream children in schools where there are frequent complaints of fighting and friction among children.

It has been suggested that personal norms about aggression are related to shared norms in school setting. Henry, Guerra, Huesmann, Tolan, VanAcker and Eron (2000) examined norms about aggression in relation to aggressive behaviour among children. Norms about aggression were defined in terms of personal norms (beliefs that individual child holds about acceptability of aggression), injunctive norms (shared norms about aggression across a classroom), and descriptive norms (the central tendency of classmates’ aggressive behaviour). The researchers tested hypotheses related to the effects of personal normative
beliefs, descriptive classroom norms, injunctive classroom norms, and norm salience on longitudinal changes in aggressive behaviour and beliefs. They used 12-item Retaliation Beliefs sub-scale of Normative Beliefs about Aggression Scale (NOBAGS) of Huesmann and Guerra (1997) to assess the personal normative beliefs. They used aggregate scores of all children on General Beliefs about Aggression sub-scale of NOBAGS to devise a measure of classroom norms about aggression. Descriptive classroom norms were determined using the mean of classmates’ aggressive behaviour excluding the participant. Individual aggression was assessed by peer nomination inventory (Eron, Walder & Lefkowitz, 1971) and by teacher report using Child behaviour checklist (Achenbach as cited in Henry et al., 2000). They used observations of student and teacher behaviour to assess norm salience in terms of teacher reprimand for aggressive behaviour. The popularity and rejection of aggressive children among peers was also calculated based on peer nomination. The measures were taken at two points in time, in 1991 and 1993. These findings present a complex picture of normative influences in classroom. The descriptive classroom norms had no effect, either direct or indirect, on aggressive behaviour. Injunctive norms, however, predicted change in aggression directly, and through personal norms over a period of two years. The results differed slightly by grade level in a way that injunctive norms had direct effects on aggressive behaviour only among sixth grade children and individual aggression predicted personal norms among third grade children. They also found that classrooms varied in respect to student and teacher measures of norm salience. Students in classrooms where peers and
teachers discouraged aggression were less likely to show increased aggression over time than were children in other types of classrooms. This study provides strong evidence that shared norms can influence individual norms as well as individual aggressive behaviour over time. The researchers posit that although numerous investigations rely on modelling to change aggressive behaviour, their investigation suggests that children do not merely imitate behaviour of their classmates but that behavioural choices are mediated by beliefs about morality of aggressive behaviour.

The findings from the studies described above contribute to the understanding of moral aspects of aggression although they have been advanced within distinct theoretical frameworks. Guerra, Nucci and Huesmann (1994) have suggested that an integrated model of these frameworks can enhance the understanding of relation between moral cognitions and aggression and this understanding is useful in efforts at prevention and intervention to reduce childhood aggression. Guerra et al. (1994) proposed that aggressive actions are directed by judgments which draw primarily from the moral knowledge system. These judgements can become highly routine in nature, to the point where behaviour appears relatively automatic and insensitive to the unique features of each situation. Factors that determine which knowledge systems are utilized in decision making stem from many sources, including: (1) the person’s self-guiding beliefs; and (2) the salience of the situational cues. Transformations in knowledge structure enable the generation of more
sophisticated procedures, which in turn through reflection, enable the construction of more developed structures. This implies that as children develop better moral reasoning they are more likely to make appropriate moral judgements. In states of arousal or under peer influence moral aspects of aggressive actions may become less salient. A similar point is made by social-cognitive theory which emphasizes the role of self-regulating beliefs in motivating and regulating aggressive behaviour (Bandura, 1989). Huesmann (1988) has proposed that with development, aggressive behaviour is increasingly governed by normative standards of acceptable conduct. He also proposed that the influence of normative beliefs becomes automatic over time, as children form cognitive representations, or scripts about sequence of events which occur in well known situations. The scripts may be used to guide behaviour in a controlled manner, producing seemingly reflective behaviour. After they are well learned they function in a more automatic fashion producing seemingly impulsive behaviour. Guerra et al. (1994) suggested that the relation between moral cognition and aggression is complex and intervention efforts should focus on at least three components of this relation. First, interventions should increase salience of the morality dimensions of social interactions. Second, interventions should promote the development of more sophisticated moral reasoning structures that focus on internal sanctions for causing harm to others. Finally, children should be encouraged to develop and practice behavioural repertoires which include
pro-social responses and which can be engaged automatically in real-life social interactions.

In view of the above the assumptions can be made that if children are exposed to non-aggressive scripts, it can influence the beliefs. Moreover if norms are made salient the personal beliefs about aggression can be influenced and discussing moral aspects of aggression can be a useful way of developing better moral reasoning. All of these are possible channels for teaching conciliatory behaviour and reducing aggressive behaviour. The brief intervention designed in the present study was focused on changing beliefs through a presentation of every day acts of interpersonal harm in moral terms. It employed the strategy of making the norms salient through group discussion because within the confines of the study this was more suitable and practical. There is evidence that group discussions can lead to shift in attitudes of individual group members towards attitudes of the majority (Richardson & Latané, 2001). However this strategy can best work in groups where majority holds beliefs disapproving of aggression. Therefore as a first step, moral approval of aggressive acts among children was explored. Reasons for considering the aggressive acts as wrong and strategies for dealing with aggression were also explored. Following this the intervention was carried out by presenting the shared norms of the class in group discussions to influence overall classroom normative beliefs about aggression.
7.1.1 Present study

The school authorities where the study was conducted had a concern about the frictions among children caused by interpersonal spiteful behaviour, fighting and teasing. Therefore the school head welcomed the idea of a study on aggressive behaviour among children. However she was more interested in ways of reducing such behaviour. There had been attempts by school teachers and school head to address the issue of interpersonal aggression in morning assembly talks as well as in citizenship behaviour class. The school was planning to involve a local school counselor to tackle the complaints of children towards each other. The school head informed the researcher that the complaints always involved a small group of children but due to these few children a spiral of retaliation had set in, resulting in increasing complaints of fighting, teasing and general nastiness. As a full scale intervention programme was beyond the scope of this research the present study was designed to test if a brief intervention can influence children's beliefs about aggression. The researcher held meetings with the school head and the two class teachers in which information on role of beliefs and moral reasoning in aggression was shared with them. With their consent the researcher planned sessions in classroom in which various aspects of interpersonal acts of aggression were addressed. It was agreed that the teacher would continue to use the exercise in citizenship behaviour classes. The children were actively involved in supplying answers to questions and carrying out the discussion. The details of these sessions are given in method section. Henry et al.
(2000) have reported that in the classrooms where teachers made the norms salient the aggressive behaviour declined. In view of this and taking guidance from intervention studies, the present study focused on making the norms salient by presenting shared norms (how many children evaluated aggressive acts as wrong, why these acts were considered to be wrong by most children and what was considered to be an appropriate response to aggression). Beliefs about aggression were measured before and after the intervention sessions. It was expected that endorsement of aggression would decrease after these discussions. The frequency of aggression was measured to explore if there was any effect of this norm salience on occurrence of actual episodes in school.

7.2 Method

7.2.1 Participants

Participants were 48 (26 girls and 22 boys) children from a primary school in the West Midlands. The children were all students in year 5 and year 6, with an age range of 9-11 years (mean age = 10.48, SD = .76). Consent was obtained from parents by the school by sending them a letter with the aim of research described as “to understand how children reason about aggression”. The children were given a briefing about the research and were informed that they could decline to participate if they wanted. All children except two gave their verbal consent in classroom in front of the teacher and the researcher.
7.2.2 Measures

Assessment of Beliefs about Aggression: The beliefs about aggression were measured with 12 item Endorsement of Aggression scale (Krahé & Möller, 2004) which is a revised version of General Beliefs about Aggression Scale of Huesmann and Guerra (1997). Krahé and Möller added items to tap physical, verbal as well as relational aggression. The internal consistency reported by them was \( \alpha = .83 \). The present study used the endorsement of aggression scale of Krahé and Möller with few revisions of wordings which were found to be unclear or not familiar by children in pilot study. The scale used in the present study taps two forms of aggression: relational and physical. Seven items referred to relational aggression (e.g. "to say nasty things behind someone's back" and "to ask others not to play with someone"), and five items refer to physical ("to push others around if you are angry with them" and "to get into physical fights with others"). For each item the children indicated the extent to which they considered the respective behaviour acceptable, using a four-point scale from "not at all ok" (1) to "totally ok" (4). The scale was modified through a pilot testing with five children (2 boys and 3 girls, two from year 5 and three from year 6). Two items were replaced because four children indicated they were not clear what these meant. These were "to show someone up in front of others" and, "to stir others up against a particular person". These were replaced with "to make fun of someone in front of others" and "to tell other children not to play
with someone”. Since these were the sort of actions mentioned by the teacher, it seemed more appropriate to assess beliefs about acts that were going to be discussed. One item “to hit another person the same age as oneself” was changed because two children pointed out that it may imply that it is ok to hit older children or younger children. The class teachers read the final version of the questionnaire which was to be used in the class room and approved it.

*Development of a measure of shared norms.* A measure was developed which provided some situations which could be used for initiating discussions. The two class teachers of year 5 and 6 described ten complaints (five by each teacher) that they had handled among children in last one week. These were: four physical fights (hitting, pushing and throwing an object at someone), four teasing and name calling incidents and two complaints of bullying of a new child by a group of children. Out of these three examples were selected, and then questions about these specific acts were developed based on following aspects: legitimacy of the act (was it wrong to tease?), degree of disapproval (how wrong was it?), the reasons for considering the act as wrong, feelings of the victim (how did Sarah feel?), and finally what should the victim do?
Table 7.1  Stories used for group discussions

<table>
<thead>
<tr>
<th>Story</th>
<th>Story</th>
<th>Story</th>
<th>Story</th>
</tr>
</thead>
<tbody>
<tr>
<td>I</td>
<td>John was in the cinema watching a film with some of his friends. A boy was throwing popcorn at him from the back. He asked him to stop but the other boy did not listen to him. John got up and hit the other boy on the head with a plastic bottle.</td>
<td>2</td>
<td>Sarah found out that another girl in the class had said some unkind things about her behind her back, which were not true. This girl also asked other children not to play with Sarah.</td>
</tr>
</tbody>
</table>

The measure consisted of four stories (Table 7.1). After first three stories there were three identical questions:

1. Was it wrong for that girl to tease..? Children responded in 'yes' or 'no' to this question. The frequency of yes and no responses was computed.

2. If it was wrong, please tell me why do you think it was wrong? This was an open ended question. The reasons that children gave were listed.

3. What should Sarah/Ash/John do? The options children suggested were listed.

After the fourth story there was only one question; what should Martin do?
Join his friends? Martin should not join his friends even if they are annoyed with him. Children were to indicate only one option.

In the pilot testing, one child read the scenarios aloud and then asked the questions. The other children answered the questions verbally. The researcher asked them if there was any question they did not understand. Their comments were incorporated by changing the wording of one scenario and two questions.

**Intervention sessions**

Three sessions were planned with each class. In first session, participants were presented with the four scenarios describing three proactive acts (teasing, backbiting and excluding from play) and one direct but mild provocation (throwing popcorns and hitting). Their responses were obtained and in following two sessions the responses were discussed. The details are described in procedure.

**7.2.3. Procedure**

The class teacher and a teaching assistant helped in carrying out the assessment and the discussion sessions. They had a meeting with the researcher in which the procedure was explained. All children completed the endorsement of aggressive norms scale in the classroom a week prior to the first intervention session. In the first session children provided answers to the shared norms measure (scenario based stories. see Table 7.1) and in two later
sessions the responses were discussed. The sessions were held in the class
rooms separately for year 6 and year 5 children on different days over a
period of two weeks. The first session lasted only 30 minutes and the
intervention sessions lasted between 50-60 minutes.

The children sat in a group in the classroom. The researcher introduced
herself and explained to participants that she was interested in finding out
their opinion about some things that children do. The researcher read out the
first story, waited for a few seconds and then pointed to the questions. She
asked the children to take their time to answer the questions and to ask the
teacher if they did not understand anything. This procedure was followed for
all four stories. After children had completed all the questions the researcher
thanked them and told them that she will meet them again after two days. The
next day the answers of children were discussed with the teachers and the
plan of next sessions were conveyed to them. Since most of the children
disapproved of aggressive acts, most of them considered them to be wrong
due to moral reasons and most of them suggested peaceful resolution, it was
possible to use these responses as a measure of shared norms. The
percentages of responses are given in results section.

In the next session, after greeting the children, the researcher produced a sheet
of paper and said, “Do you remember the stories we read last time and the
questions you answered. Well, today let us see what most of you think about
those situations”? The researcher wrote on the board, ‘teasing Sarah’, and then wrote ‘wrong’ and ‘not wrong’. One child from the class was asked to come up and write number of responses under these headings as the researcher counted them. The researcher pointed to frequencies and asked children to note that 40 out of 48 children thought it was wrong to tease Ash. Similarly 40 out of 48 children thought it was wrong not to play with Sarah and so on. The discrepancy in numbers between wrong and not wrong responses was stressed in each story (see Table 7.2). The children were invited to comment on this. Following points were raised and discussed: (a) in some situations it is fun to tease and that is why we all do it at times, (b) those who do it do not realize it is bad, (c) some children are nasty and others just join in (d) may be the child being teased had done something before to those who were teasing. The researcher invited other children to respond to these points. The discussion went on for 10-15 minutes and then the researcher summarised by saying “let us see what everyone agrees on”. The point of agreement was presented as; whatever the reason it is mostly wrong to tease others. Following this the researcher said that they would now discuss why it was wrong since some children did think that it was fun to tease at times or to tease as revenge. The responses to question ‘why it was wrong’ were discussed by reading out and writing on the white board the reasons children had given in their answers in previous session (see Table 7.3). Again it was pointed out that most of the children thought that the girl who was teased or left out from play would be sad and lonely. This procedure was followed for three stories of teasing, saying
untrue things and asking others not to play with Sarah. These were discussed first because they were all proactive acts in which no prior provocation was shown. After these the first story in which John reacted to a child who was throwing popcorns at him, was discussed. The researcher asked the children what was the difference between these episodes. Some children were quick to point out that in John’s story, the other boy was first one to start the teasing and John only reacted to stop the other boy whereas in other stories the victims had not done anything to deserve teasing or nastiness. The researcher appreciated the understanding and stressed that we must always remember that difference. She also pointed out that children thought it was comparatively less wrong to react to someone who was teasing you then to be the first one to tease someone. However most of the children still thought that it was wrong to hit back. The researcher thanked the children and informed them that they will meet again after two days to carry on their discussion.

In the third and last session, the options for responding were discussed. Before starting this discussion the summary of previous sessions (stories, responses and differentiation between retaliation and proactive teasing was repeated). The reasons for considering the acts as wrong were also repeated. In this session, mainly the children were given information on what most of them thought as appropriate to do when someone is nasty to them. A group discussion followed in which following points were raised by children: (a) sometimes the teacher does not respond to complaints so one feels like reacting oneself (b) the other child would not stop if you just ignored (c) it is
always best to tell the teacher or another adult but one must also retort or say something to stop the teasing. These were discussed and this time teacher also joined in the discussion and acknowledged the points that children had raised. The children were thanked for their participation and were asked if they liked the discussions and would like these to go on. Majority of children responded in affirmative so they were told that the teachers would continue to discuss such issues in citizenship behaviour classes.

7.3 Results

7.3.1 A profile of moral reasoning

Although it was not the main purpose of the study to assess moral reasoning of the children, it is useful to give a description of their responses to questions about the moral aspects of aggressive acts presented to them.

Most of the children evaluated the three relational acts, teasing (83%), asking others not to play with another child (83%) and telling lies about someone (77%) to be wrong. The frequency and percentages are given in Table 7.2.
Table 7.2  Comparison of disapproval of four types of acts

<table>
<thead>
<tr>
<th>Question and response</th>
<th>N (percentage)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Wrong to throw popcorn?</td>
<td></td>
</tr>
<tr>
<td>Yes</td>
<td>34 (71)</td>
</tr>
<tr>
<td>No</td>
<td>14 (29)</td>
</tr>
<tr>
<td>Wrong to ask others not to play with Sarah?</td>
<td></td>
</tr>
<tr>
<td>Yes</td>
<td>40 (83)</td>
</tr>
<tr>
<td>No</td>
<td>8 (17)</td>
</tr>
<tr>
<td>Wrong to tease Ash</td>
<td></td>
</tr>
<tr>
<td>Yes</td>
<td>40 (83)</td>
</tr>
<tr>
<td>No</td>
<td>8 (17)</td>
</tr>
<tr>
<td>Wrong to say untrue things</td>
<td></td>
</tr>
<tr>
<td>Yes</td>
<td>37 (77)</td>
</tr>
<tr>
<td>No</td>
<td>11 (23)</td>
</tr>
<tr>
<td>Wrong to hit the boy who threw popcorn at him?</td>
<td></td>
</tr>
<tr>
<td>Yes</td>
<td>30 (63)</td>
</tr>
<tr>
<td>No</td>
<td>18 (37)</td>
</tr>
<tr>
<td>Should martin join his friends in teasing</td>
<td></td>
</tr>
<tr>
<td>Yes</td>
<td>5 (10)</td>
</tr>
<tr>
<td>No</td>
<td>33 (71)</td>
</tr>
</tbody>
</table>

(N = 48, df = 47)
For the three situations of relational acts, the most frequent reasons given were related to the effect on the victim (78 %) such as she will be lonely or sad, it will upset her. The second type of reasons was normative reasons for example it is not done (12 %). Ten percent of children did not give any reason i.e., did not respond to this question. For situations of teasing and backbiting the reasons given were all related to welfare of the victim. In earlier studies such reasons were termed as moral reasons (see Harvey, Fletcher & French, 2001 discussed in Chapter 2). In the situation of popcorn throwing the reasons that the act was considered wrong were: it is rude, or one is not supposed to do it. In earlier studies such reasons were seen as conventional reasons (see Harvey, Fletcher & French, 2001 for distinction between conventional and moral reasoning. Also see Chapter 2, Introduction page 33). Another reason was also given which can be termed as a 'retaliation norm'. The retaliation norm appeared to be that since John had not done anything to other boy it was wrong of him to annoy him.

Table 7.3 Reasons given by children in response to why an act was wrong

<table>
<thead>
<tr>
<th>Reasons</th>
<th>Examples</th>
</tr>
</thead>
<tbody>
<tr>
<td>Welfare</td>
<td></td>
</tr>
<tr>
<td>effect on victim or</td>
<td>It will make her lonely</td>
</tr>
<tr>
<td>consideration of victim's</td>
<td>She will be sad, she will be upset, it is not</td>
</tr>
<tr>
<td>feeling</td>
<td>nice to make someone unhappy.</td>
</tr>
<tr>
<td>Convention</td>
<td></td>
</tr>
<tr>
<td>Rules/norms</td>
<td></td>
</tr>
<tr>
<td></td>
<td>It is not done, one is not supposed to, John</td>
</tr>
<tr>
<td></td>
<td>has not done anything to him, one shouldn't hit.</td>
</tr>
</tbody>
</table>
7.3.2 Problem solving Strategies

Sixty-eight percent of children suggested that victims should tell an adult (mostly a teacher) and ten percent suggested ignoring. This indicates that 78% suggested peaceful resolution strategies. Four percent did not respond to this item.

7.3.3 Normative Beliefs about aggression

A paired sample t-test was carried out to compare scores on general normative beliefs before and after the moral reasoning exercise. There was a significant decrease in normative beliefs after the moral reasoning exercise ($M_1 = 12.07$, $SD = 4.8$, $M_2 = 10.15$, $SD = 2.4$, $t (47) = 6.39$, $p<.0005$).

7.3.4 Frequency of aggressive episodes

The frequency of aggressive episodes that teachers reported was compared before and after the intervention. The total number of complaints handled by teachers of year 6 and year 5 before the intervention was 20 and 23 respectively over a period of ten days. These decreased to 14 and 18 after the intervention. The trend in reduced complaints was as shown in Figure 7.1. The complaints of aggression among children were low immediately after the second session but went up again by the tenth day after the intervention.
7.4 Discussion

An experimental study was conducted to test if discussion of shared norms about aggression in the classroom could produce a change in normative beliefs sanctioning aggression towards other children. Beliefs about aggression were tested before and after the classroom discussions. There was a significant decrease in post-test beliefs about aggression. There was also a temporary reduction in complaints of fighting among children as reported by the teachers. Most of the children understood moral reasons for refraining from teasing, backbiting and being nasty. The problem solving strategies suggested in the class discussions by the majority of children were also either intervention from adult or mild retort rather than strong retaliation. Some children were not clear why an act was wrong although they knew it was wrong.

The obvious and important limitation of the study was absence of a control or comparison group which would have shown the true effect of intervention.
The study mainly focuses on proactive acts of aggression except for one scenario. Previous research has distinguished between proactive and reactive aggression (e.g., Dodge, 1991). Social-cognitive theorists recognize a distinction between planful, instrumental behaviour (e.g., bullying and stealing) and reactive, hostile aggressive acts (e.g., provoked anger and impulsive retaliation) among children (e.g., Atkins et al., 1993; Cohen et al., 2006). Whereas planned and proactive aggressive behaviour is characterized as cold, deliberate and calculated action, reactive aggression is typified by anger, hostility, impulsivity and elevated autonomic activity (see Raine et al., 2006). There is empirical support for the cognitive processing differences between proactive and reactive aggressive children (Crick & Dodge, 1994). Whereas proactive aggressors seem to be more confident in their aggressive actions and are more likely to expect positive outcomes of aggression, reactive aggressors tend to show greater tendencies to attribute hostile intent in social situations that involve ambiguous provocations (Dodge, 1991). The intervention for these two types of aggressive children therefore needs to focus on different components of cognition. The reactive aggression benefits from anger management, mindfulness training and social problem solving skills training whereas proactive acts can be reduced through empathy training, perspective taking and presumably through moral reasoning.

From the point of view of long-term intervention and prevention, the researcher holds the view that if proactive acts are reduced, the retaliation episodes will also decrease. The proactive acts of aggression set in motion a cycle of retaliation and
counter-retaliation. One also needs to make a distinction between aggression and retaliation when labelling behaviour as aggressive. Some children may retaliate to provocation and therefore are more likely to hold an eye-for-an-eye point of view but they might not be involved in proactive acts like bullying, teasing and ridiculing other children. In the present study it was confirmed that children estimated the retaliation response as less wrong than a proactive relational act such as backbiting or teasing.

The most significant finding is the reduction in support of aggression as measured through normative beliefs. It has been suggested that normative beliefs research and moral reasoning research has not been linked however there has been no direction as to how this link can be established. In this study the assumption tested was that normative beliefs which predict aggressive behaviour among children can be accessible to reasoning and on a short term span this has been demonstrated that beliefs can change after children have done an exercise in moral reasoning. This exercise involves various aspects of the situation, victim feelings, legitimacy, authority sanction, and possible strategies. The decrease or change in normative beliefs may be short lived or with repeated interventions there may be long-term change. This aspect needs to be investigated further. However, existing evidence does suggest that this may be the case.

The limitation of the present study is that no individual measure of aggressive behaviour was taken due to constraints on teachers' time. Since the finding that
beliefs are predictors of aggressive behaviour is found to be a robust one in many previous studies, the present study has indicated a possible mechanism through which beliefs can be modified. In the fifth study it was found that thinking about one's own aggression predicted the frequency of aggressive acts. These finding points to the possibility of bringing about a change in aggressive behaviour through making individuals reflect upon acts of aggression. It may be possible that this change is mediated through change in aggressive beliefs.
Chapter 8 Beliefs about anti-Semitic aggression among young Muslims

"Our prime purpose in life is to help people. And if you can't help them at least don't hurt them." - Dalai Lama.

8.1 Introduction

Previous research has identified beliefs legitimizing aggression in a given context as important determinants of actual aggressive behaviour between individuals (Erdley and Asher, 1998; Huesmann & Guerra, 1997; Werner & Nixon, 2005). However it has been less extensively investigated how beliefs about the acceptability of aggression are related to inter-group aggression (see Mackie & Smith, 1998), and particularly how these beliefs are related to actual aggressive behaviour in the situation in which inter-group aggression occurs. Moreover certain cultures are virtually absent from empirical research on inter-group aggression. Existing evidence shows that some variables implicated in hostility between racial and ethnic groups are beliefs about the acceptability of aggressive acts, negative perceptions and stereotypes (Opotow, 1990; Rogers & Prentice-Dunn, 1981; Sternberg, 2003), and actual or perceived conflict (Bar-Tal, 1990; Bar-Tal & Labin, 2001; Struch and Schwartz, 1989). It is not however clear what kinds of beliefs about the acceptability of aggressive acts lead to aggressive behaviour between groups and how are these beliefs related to other factors in inter-group aggression. The findings from first two studies of this thesis indicate that excessive retaliation beliefs are distinct from equal retaliation...
beliefs. It is worth investigating if extreme beliefs about aggression towards other groups are associated with hostile action towards these groups. The points described above form the lines of inquiry in the study presented in this chapter. The study was designed to examine the relationship between anti-Semitic beliefs and anti-Semitic hostile action using a self-developed measure of beliefs. The perceived conflict with Israel and perception of injustice in Palestine (two factors related to anti-Jew sentiments) were examined in association with anti-Semitic beliefs among Pakistani students.

One type of beliefs consistently linked in empirical literature to aggressive behaviour are normative beliefs about aggression. Normative beliefs are the knowledge we hold about appropriateness of certain behaviour in a given situation. Hence they are closely related to perceived social norms about aggression and are similar to internal standards of conduct for behaving towards others (Ajzen & Fishbein, 1980; Bandura, 1991; Huesmann, 1998). Normative beliefs are considered important both in regulating aggressive behaviour (Huesmann, 1998) as well as in determining people’s reactions to harmful incidents (da Gloria, 1977 as cited in Rule & Ferguson, 1984; Rule & Ferguson, 1984). Normative beliefs are typically measured as evaluative statements (see first study for item examples). Many studies have demonstrated that normative beliefs are associated with actual interpersonal aggressive behaviour (Huesmann & Guerra, 1997; Werner & Nixon, 2005; Zelli et al., 1999); children and adolescents who believe that it is wrong to carry out an aggressive act are
perceived as less aggressive compared to those who believe aggression is an appropriate response (Erdley & Asher, 1998; Henry et al., 2000; Salmivalli & Voeten, 2004). Despite this strong empirical evidence from literature on interpersonal aggression, the role of normative beliefs in aggression between groups has not been extensively investigated.

The empirical studies which have examined normative beliefs against other groups are very few. One study (Shechtman & Basheer, 2005) examining normative beliefs of Arab girls and boys in Israel found that Arab children held more normative beliefs endorsing retaliation against a Jewish child than against an Arab child. However, this study did not test the relationship of beliefs with actual aggressive behaviour. Struch and Schwartz (1989) examined perceived conflict, in-group bias and support for aggression in a Jewish sample in Jerusalem. They used four items to assess agreement for hostile action choices against ultra orthodox Jewish out-group but did not include a measure of actual aggressive actions. Apart from these two studies, there is indirect evidence which indicates that group beliefs, prejudice and stereotyping are related to discrimination (for review see Mackie & Smith, 1998) as well as to severe forms of inter-group aggression such as hate crime, genocides and terrorism (Opotow: 1990, Staub, 1990 as cited in Mackie & Smith; Sternberg, 2003). Integrating the learning from interpersonal and inter-group aggression research, it seems that an important but neglected question is whether normative beliefs about aggression towards a particular group are associated with aggressive action towards that
group. Although no empirical study has addressed this specific question, in view of the evidence presented so far, it can be assumed that beliefs about anti-Semitic aggression are associated with hostile anti-Semitic actions. However a distinction between types of beliefs has to be made.

In research on normative beliefs and interpersonal aggression one aspect that is often neglected is examination of types of normative beliefs and their relationship with aggressive behaviour. Earlier studies in this thesis found that beliefs about excessive retaliation and beliefs about equal retaliation were distinct components and could discriminate between violent and non-violent children. Some studies make the distinction between normative beliefs about retaliation and general beliefs about aggression but there is no further examination of their separate correlates and their differential associations with or prediction of aggressive behaviour. Some studies have found specific normative beliefs to differentially predict specific forms of aggressive behaviour (see for example Crane-Ross et al., 1998; Werner & Nixon, 2005) and this type of information has been found useful in designing more targeted interventions (see Boxer & Dubow for review). In the light of above information two main hypotheses can be formulated. Firstly it is hypothesized that normative beliefs supporting extreme acts of aggression and normative beliefs supporting moderate acts of aggression are distinct components and secondly that the extreme beliefs but not moderate beliefs are related to extremist orientation towards hostile action.
It is well documented that acts of aggression between groups vary a great deal in terms of severity of harm (Boeckmann & Turpin-Petrosino, 2002; Sternberg, 2003). Earlier research has shown that acts which cause irreparable or severe harm are more strongly disapproved than acts which cause milder form of harm (Fraçzek, 1985; see for review Ramirez et al., 2001); this pattern of moral approval is similar within cultures as well as across cultures. Theoretically this is supported by survival considerations (we all want to get along) as well as by the argument that humans tend to follow a moral code universally (Segall, 1983; Ramirez, 2001). The hypothesis leading from this is: the direct and severely harmful acts are less endorsed than indirectly harmful acts.

It has been pointed out that aggression and violence with regard to their availability as actions, acceptance and legitimacy should be studied in terms of their construction within particular groups (Painter, 2001). Any investigation of anti-Jewish hostile actions and related beliefs needs to be considered within the context of some background information about setting in which this study was carried out. Although anti-Semitic prejudice and hate crime against Jewish people is regularly reported in Europe and the USA (Dunbar & Dunbar as cited in Boeckmann & Turpin-Petrosino, 2002), the anti-Semitic aggression in Western cultures and the attitude towards Jewish people in Muslim societies are linked to different roots. .

Persecution of Jewish people in Pakistan occurred soon after the creation of Israel (1948) when multiple incidents of violence against Jewish people in Pakistan took place including the synagogue in Karachi (the biggest city of Pakistan) being set on
fire. Since then life became difficult for Jewish people in Pakistan and they have either lived disguised as Zoroastrians or migrated to other countries (Najam, 2005; Shields, 2006).

For initiating present study no previous empirical investigation of perception of Jewish people among Pakistanis could be located in literature. There was some data from group exercises with students (Amjad, 2006) which showed that negative traits were more often associated with Jews than with other racial groups (with the exception of Hindus). It has been proposed that dehumanization of human beings is the core of human prejudice and virtually all cultures openly amplify this process with stigmatization (Bandura, 1989; Sternberg, 2003). It may be the case that verbal category 'Jewish' has become an evaluative stigmatized label which by default retrieves negative traits. There is anecdotal evidence that current perceptions of Jewish people in Pakistan and generally in Muslim world are highly influenced by the Israel-Palestinian conflict (Ahmad, 2006; Najam, 2005). There is political rhetoric about vague Jewish and Israeli conspiracy theories against Muslim countries. Hence the public sentiment is largely anti-Israel in Pakistan (Sayed, 2005). It appears from this anecdotal evidence that hostile intentions are attributed to Israel and by inference to Jewish people. Attribution of hostile intentions to peers was found to be an important predictor of retaliation and aggression among children in many studies (See Arsenio & Lemerise, 2004 for a review) and hostile attribution biases are also linked to normative beliefs about aggression in interpersonal context (Crick &
Dodge, 1994; Zelli et al., 2001; See Bellmore et al., 2005 for a review). The hypothesis leading from this is: perception of Israel will be associated with both directly harmful beliefs and indirectly harmful beliefs.

It is important to address beliefs which may lead to anti-Jew actions because such actions serve to increase hostility while at the same time feeding into the notion that aggression against Jewish people is a norm sanctioned by majority. The present study was designed to examine the beliefs about anti-Semitic aggression among Pakistani students and the association of these beliefs with anti-Semitic intentions. It also examined the association of these beliefs and action with perceptions of injustice in Palestine and hostile perceptions of Israel.

8.2 Method

8.2.1 Participants

144 post-graduate students (75 males and 69 females) participated in this study. They were all postgraduate students in a University in Pakistan. The mean age was 21.5 (SD = .48). All participants were Muslims. Consent was obtained from all participants. The average reading and English comprehension ability of post-graduate students in University education has been estimated at a level sufficient to answer simple scales in English language (Mullick & Hraba, 2001). All the students were bi-lingual, having
studied English since primary school level and having read the assigned text books of Psychology in English.

8.2.2 Development of measures

Normative Beliefs about anti-Semitic aggression. Any measure of beliefs about aggression by definition has to specify the form of aggression. Since direct contact between Jewish people and Pakistani Muslims is almost non-existent, first step was to find out what was the nature of anti-Semitic acts in Pakistan. Discussions with two experts in politics and international relations, responses obtained in a focus group with young persons and content from Islamic web-based groups provided source material for this information. Based on the content analysis of these discussions, it was found that hostile actions against Jewish people could take following forms: praying for God’s wrath on Jewish people, writing against them, speaking against them, distributing anti-Jewish material in printed form or forwarding anti-Jewish email messages, damaging a Jewish owned business or property, motivating people to join an action group, and joining an action group. These were used to construct eight items. Each item was based on one type of aggressive action mentioned above. For example “Damaging a Jewish owned property is”.....or “Forwarding anti-Jewish emails and anti-Jewish print material is....”. Respondents rated their agreement on a five-point scale (1 = absolutely the right thing to do, 2 = somewhat right, 3 = I am not sure, 4 = somewhat wrong, 5 = completely wrong). The sum of these eight items produced a score indicating the level of general endorsement of
aggression ranging from 8 to 40. The items were reverse scored later so the higher the score, the stronger the beliefs about anti-Semitic aggression. This scale ‘beliefs about anti-Semitic aggression’ was used with the participants in this study (Table 8.1).

Table 8.1 Items of beliefs about anti-Semitic aggression Scale

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Writing against Jewish people is.....</td>
</tr>
<tr>
<td>2.</td>
<td>Forwarding anti-Jewish mails/hostile material is ..........</td>
</tr>
<tr>
<td>3.</td>
<td>Joining a militant group against Jewish people is .........</td>
</tr>
<tr>
<td>4.</td>
<td>Making threats against Jewish people is........</td>
</tr>
<tr>
<td>5.</td>
<td>Speaking in public against Jewish people is........</td>
</tr>
<tr>
<td>6.</td>
<td>Getting people together for action against Jewish people is.....</td>
</tr>
<tr>
<td>7.</td>
<td>Damaging a Jewish-owned property is........</td>
</tr>
<tr>
<td>8.</td>
<td>Cursing Jewish people in prayers and asking God to send his wrath upon them is........</td>
</tr>
</tbody>
</table>

Perception of Israel. Perception of Israel was measured through two items, “Israel does injustice to Palestinians” and “Israel is an enemy of all Muslims”. These items were selected from the content of discussions which were used to generate items for beliefs about anti-Semitic aggression. The participants rated on a 5-point scale (1 = completely disagree, 5 = completely agree) how much they agreed with these two statement. The total score was computed by adding these two items.
**Behavioural measure.** There is no consensual definition of extremist behaviour in literature so it is difficult to operationally measure this variable. However after consultation with an expert in this area, the intention to participate in a group which had militant aims was considered to be an adequate indication of extremist orientation at the initial level of this research. The behavioural measure was designed as a consent form for joining a group described as ‘Muslim youth force’ which had the aim of fighting enemies of Muslims. The participants were given three choices; agree to join, refuse to join and not sure. They could indicate one of these by ticking the box next to choice. The behavioural measure was included in a leaflet which included a page about student activities, forthcoming student body elections, an invitation to join a book club, and the consent form for joining Muslim youth force.

8.2.3 Procedure

Beliefs about anti-Semitic aggression scale was pilot tested with thirty bi-lingual psychology students who were not included in the final sample. They completed the scale and Urdu as well as English. There was no discrepancy in scores from two versions. According to Brislin (1980) this is acceptable procedure for bi-lingual samples. For the final data collection, the English version was used in order to develop a measure which could be used with international Muslim samples in later studies. A concern was that some students may find this a sensitive topic. However none of the students
in pilot testing shared any such objection. No ambiguity about the items was reported. For main study, participants were selected through classroom announcement and participation was voluntary. Consent was obtained prior to data collection. The research was described as “a study measuring attitudes”. Students completed two measures, anti-Semitic beliefs and hostile intent attribution of Israel in their lecture halls on regular teaching day along with another buffer measure (driving attitudes inventory) totally unrelated to the study. This was done to create ambiguity about the real purpose of the study. The arrangement for data collection was made by the relevant faculty member with consent from the department. The university research committee gave ethical approval for the procedure. The participants wrote their roll numbers on back of forms.

The behavioural measure (consent form for joining the Muslim youth force) was administered by a team of three confederates who were volunteers. One of them was the class representative elected by the students. These confederates obtained the measure independently over three days by going into the class rooms before the classes started and handing out the leaflet to each participant. The participants were asked to write their roll numbers at the back of leaflet and hand the form back as soon as they ticked on relevant boxes. Once the data collection had been completed, a debriefing session was held in which the purpose of study was explained and participants were invited to discuss their views. Any concerns were openly shared and
acknowledged. Most of the students were amused and expressed interest in the topic of Muslim prejudice towards Jewish people though many of them openly said that they thought anti-Jewish sentiments had solid grounds. It must be mentioned that student union in this particular University and other government universities in Punjab (a province of Pakistan) are influential in policy making and are supported by religious organizations (Malik, 1998). The new students are often approached by the union office holders to join a protest demonstration against government or university administration. The research was carried out in aftermath of Danish cartoon controversy when two violent demonstrations resulted in police action in university. As was mentioned in the introduction, investigation of shared social beliefs must take into account the culture of the society. What may seem unusual to a western researcher can be an accepted practice in another culture.

8.3 Results

8.3.1 Psychometric analysis

As a first step descriptive analysis was carried out for the anti-Semitic Beliefs scale. The mean and standard deviation for each item is given in Table 8.2.
Table 8.2 Mean and standard deviations for each item

<table>
<thead>
<tr>
<th>Item</th>
<th>Mean</th>
<th>Standard deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Joining a militant group against Jewish people</td>
<td>2.77</td>
<td>.82</td>
</tr>
<tr>
<td>Speaking in public against Jewish people</td>
<td>3.52</td>
<td>.81</td>
</tr>
<tr>
<td>Making public threats to Jewish people</td>
<td>2.76</td>
<td>.83</td>
</tr>
<tr>
<td>Writing against Jewish people</td>
<td>3.34</td>
<td>1.01</td>
</tr>
<tr>
<td>Forging hostile mails/ material</td>
<td>3.43</td>
<td>.98</td>
</tr>
<tr>
<td>Getting people together for action against Jews</td>
<td>2.90</td>
<td>.91</td>
</tr>
<tr>
<td>Damaging Jewish-owned property or business</td>
<td>2.49</td>
<td>.84</td>
</tr>
<tr>
<td>Cursing Jewish people in prayers</td>
<td>3.48</td>
<td>.90</td>
</tr>
</tbody>
</table>

N = 144, df = 142

The items in this new scale described hostile acts which were varied in nature and intensity. To test whether participants endorsed them differentially and to examine if they loaded on two components or emerged as a single component, a principal component analysis was carried out on items of anti-Semitic aggression scale. The first two components according to scree plot explained 71% of variance with first component alone explaining 56% of variance (Eigen value = 4.50) and the second component explaining 15% of variance (Eigen value = 1.20). The third component explained seven % variance and fourth component explained six % of variance. However when these solutions were tried the results were not meaningfully interpretable. The two components correlated at \( r = .60 \) so an oblique rotation was performed which showed two components. The
item loadings on each factor are given in Table 8.3. The items which loaded very highly on component one described moderate and indirect acts whereas the items loading on component two described extreme and direct actions (Table 8.3). In view of this, two sub-scale scores were computed. The indirect anti-Semitic beliefs sub-scale comprised of four items loading on component one (Cronbach’s Alpha Coefficient = .82) and the direct anti-Semitic beliefs sub-scale comprised of four items loading on component two (Cronbach’s Alpha Coefficient = .80). A total scale score for eight items was also computed. Beliefs about anti-Semitic aggression scale showed overall high internal consistency (Cronbach’s Alpha Coefficient = .88) and two components which are meaningful at conceptual level.

Table 8.3  Item loadings for two components

<table>
<thead>
<tr>
<th></th>
<th>Component 1</th>
<th>Component 2</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cursing Jewish people in prayers</td>
<td>.86</td>
<td>.08</td>
</tr>
<tr>
<td>Speaking against Jewish people</td>
<td>.84</td>
<td>-.29</td>
</tr>
<tr>
<td>Writing against Jewish people</td>
<td>.83</td>
<td>.15</td>
</tr>
<tr>
<td>Forwarding hostile mails/material</td>
<td>.80</td>
<td>-.09</td>
</tr>
<tr>
<td>Damaging Jewish owned property</td>
<td>-.11</td>
<td>.89</td>
</tr>
<tr>
<td>Joining a militant group against Jewish people</td>
<td>.03</td>
<td>.91</td>
</tr>
<tr>
<td>Making threats against Jewish people</td>
<td>-.22</td>
<td>.72</td>
</tr>
<tr>
<td>Getting people together for action</td>
<td>.40</td>
<td>.64</td>
</tr>
</tbody>
</table>

N = 144, df = 142
Differential endorsement of extreme and moderate anti-Semitic beliefs

Based on conceptual grounds it was predicted that extreme beliefs would be less endorsed than moderate beliefs. In order to test if these two types of beliefs were differentially endorsed, a paired-samples t-test was carried out. The results showed that endorsement for extreme anti-Semitic beliefs (N = 144, df = 143, M = 9.93, SD = 2.93) was lower than endorsement for moderate and indirect anti-Semitic beliefs (M = 11.8, SD = 3.03, t (143) = -8.50, p< .001) indicating that participants endorsed extreme acts less than they endorsed moderate acts against Jewish people. Thus this analysis provided further evidence that direct or extreme and indirect or moderate anti-Semitic beliefs are distinct.

Perception of Israel and anti-Semitic beliefs

In order to test if anti-Semitic beliefs were associated with perception of Israel correlations between anti-Semitic beliefs and perceptions of Israel were calculated. Both types of anti-Semitic beliefs were related to perceptions of Israel. However extreme beliefs were more strongly correlated with perception of Israel as an enemy of Muslims (r = .60, p<.001). The correlations are presented in table 8.4. Hence the prediction that anti-Semitic beliefs are related to perception of Israel was confirmed.
Table 8.4 Correlations between perception of Israel and anti-Semitic beliefs

<table>
<thead>
<tr>
<th></th>
<th>Moderate beliefs</th>
<th>Extreme beliefs</th>
<th>Israel enemy of Muslims</th>
<th>Injustice to Palestinians</th>
</tr>
</thead>
<tbody>
<tr>
<td>Moderate beliefs</td>
<td>-</td>
<td>.59**</td>
<td>.24*</td>
<td>.45**</td>
</tr>
<tr>
<td>Extreme beliefs</td>
<td>-</td>
<td>.60**</td>
<td>.34**</td>
<td></td>
</tr>
<tr>
<td>Israel enemy of Muslims</td>
<td>-</td>
<td></td>
<td>.25*</td>
<td></td>
</tr>
<tr>
<td>Injustice to Palestinians</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

N = 144, df = 143, ** Correlation is significant at 0.01 level (2-tailed). Degrees of freedom is not calculated in Correlation analysis usually unless a t value is extracted. In this N = 1 rule is applied.

Extremist orientation and extreme and moderate anti-Semitic beliefs

It was hypothesized that those participants who agreed to join an anti-Jewish group held more extreme anti-Semitic beliefs than those who declined to join and those who were ambivalent. The participants had said yes to the invitation to join an extremist group, said no or had indicated that they were not sure. This was the most direct and ultimate test of predictive and discriminant validity of the two distinct types of anti-Semitic beliefs.

An analysis was carried out to test if the extremist behaviour (consent to join the extremist group) was discriminated on the basis of extreme and moderate anti-Semitic beliefs.

Since the group sizes were very unequal (only 18 out of 144 participants agreed to join, 56 said they were not sure and 70 said 'no'), a decision was made to compare the difference in direct and indirect anti-Semitic beliefs between the participants who clearly and definitely refused to sign up for an
anti-Jewish group and those who had given the response of 'not sure' and hence were ambivalent about this action. An independent samples t-test was carried out to compare these two groups. There was no difference in the indirect beliefs of two groups (ambivalent and extreme) but those who refused to join the anti-Jewish group were significantly lower in extreme anti-Semitic beliefs than the ambivalent group. The mean, standard deviation and t-values are given in Table 8.5.

**Table 8.5  Extremist orientation and extreme beliefs**

<table>
<thead>
<tr>
<th></th>
<th>Non-extremist orientation (n=70)</th>
<th>Extremist orientation (n=56)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Extreme beliefs</td>
<td>M  8.38  SD 2.42</td>
<td>M  10.4  SD 2.24</td>
</tr>
<tr>
<td></td>
<td>t  -4.9  p  .001  d  .83</td>
<td></td>
</tr>
<tr>
<td>Moderate beliefs</td>
<td>M  11.3  SD 2.85</td>
<td>M  11.7  SD 2.95</td>
</tr>
<tr>
<td></td>
<td>t  -.73  p  ns  d  .11</td>
<td></td>
</tr>
</tbody>
</table>

N = 126, df = 125

**Figure 8.1 Extreme beliefs and extremist orientation**

N = 126, df = 125
Perception of Israel and joining a group

An independent sample t-test was carried out to test if perception of Israel was different among those who declined to join and those who were unsure. The results showed that there was a significant difference in perception of Israel as enemy of Muslims (M decliners = 3.67, SD = .57, M ambivalent = 3.96, SD = .50, t (123) = -3.01, p< .005, d=-.54).

Conclusion: The analyses in this study have shown (a) the variables associated with extreme or direct and moderate or indirect anti-Semitic beliefs are: perception of Israel and perceived injustice in Palestine and (b) the extreme and moderate beliefs need to be considered separately. It has also shown that extreme beliefs are associated with hostile action.

8.4 Discussion

The study examined beliefs about anti-Semitic aggression and devised a measure of these beliefs. The beliefs about anti-Semitic aggression scale shows a good internal reliability and two components which can be conceptually interpreted in terms of the severity of beliefs. The beliefs about extreme acts like damaging property and joining militant group were less endorsed than beliefs about seemingly less extreme acts like forwarding
anti-Jewish messages. That in no way implies that these acts are not harmful. The earlier can be classified as hate crime and later as hate speech.

A hate crime is an illegal act involving intentional selection of a victim based on a perpetrator's bias or prejudice against the actual or perceived status of the victim (American Psychological Association, 1998 as cited in Boeckmann & Turpin-Petrosino, 2002). Hate speech is any form of expression directed at objects of prejudice that perpetrators use to wound and denigrate its recipient (Boeckmann & Turpin-Petrosino, 2002). Both these contribute to deterioration of inter-group relations and lead to ossification of biased opinions (Mackie & Smith, 1998). Hate crime in Pakistan is not systematically studied or documented but according to the definition of APA, the attacks on members of religious sectarian groups and transvestites observed in the society may be classified as hate crime and slandering of Hindus and Jews can be classified as hate speech.

The distinction between extreme and moderate beliefs also has predictive validity as it can distinguish between those who have an ambivalent attitude towards extreme groups and may be swayed and those who do not have this ambivalence. The individuals with moderate anti-Semitic beliefs may hold negative stereotypes about Jewish people and may support the idea that Israel has wronged the Palestinian people but they do not show intention to be actively involved in a group. However holding negative stereotypes of Jewish people may make them more likely to forward hate mails or express anti-Jewish sentiment in conversation. It must be noted that very few
respondents clearly agreed to join an anti-Jewish action group. This is in line with finding in an earlier study (Struch & Schwarz, 1989) which showed that very few people actually indicated that they would carry out an anti-Semitic act.

The finding that beliefs about anti-Semitic aggression are related to perception of Israel confirmed the assumption of the study. The indirect beliefs were associated with injustice to Palestinians more strongly than with perception of Israel as enemy of Muslims whereas extreme anti-Semitic beliefs were more strongly associated with perception of Israel as enemy of Muslims. This may be indicative of a trend that direct anti-Semitic beliefs arise out of perception of Israel as an enemy. This needs to be investigated in further research and may be a useful point to consider in interventions that aim to reduce Muslim prejudice towards Jewish people.

The learning from the study was that expression of these beliefs seemed to be normative rather than counter-normative. It has been observed that when expression of prejudice is not supported by the norm of the society, people may hesitate to express it openly for example expression of racist prejudice in Britain and the USA (Mackie & Smith, 1998). Establishing a norm against anti-Semitic beliefs may be a step towards reducing inter-group bias and biased actions.
Finally one limitation of the study was that it was restricted to middle class and upper middle class student sample that may not be completely representative of general Pakistani population.

Due to sensitive nature of information as well as current climate (in aftermath of riots related to Danish Cartoon controversy) simple procedures were used to obtain data. Despite this the study initiated a new line of investigation which has been neglected. It has been pointed out that aggression and violence with regard to their availability as actions, acceptance and legitimacy should be studied in terms of their construction within particular groups (Painter, 2001). Moscovici suggested (as cited in Painter, p. 208) that a group could be defined as collectivity of people sharing social representations. The dynamics that govern aggression at group level are at least partly discursive, based on lay accounts that people hold about aggression. In current international scenario social scientists are morally compelled to understand and resolve the problem of inter-group aggression (Painter, 2001). The study was a response to this moral responsibility as well as to existing scarcity of empirical studies applying theoretical insight to specific contexts and situations of inter-group aggression. It made sense to address this issue in a culture most directly accessible to one however the measure developed and used in this study can be applied to other contexts such as Muslims living in Europe where many instances of anti-Semitism have been reported.
Chapter 9  We are all children of Abraham-creating positive attitudes and beliefs about Jewish people

“The Faith of the Jews and Muslims is so much similar but they hate each other so much. Both are monotheistic and believe they have a bloodline to Abraham. Why can't they get along”? (Question posted on a youth forum)

“I believe that it has to do with education. If they were all more educated about each other and the world they would know that they don't have that much of a difference. They need to stop looking at the small differences and look at the big picture. And they need to stop looking back and start educating their children about each others religions” (Answer posted on same site).

9.1 Introduction

9.1.1 Background and rationale of the study

Chapter Eight presented evidence that extremist anti-Semitic beliefs distinguished between people with extremist orientation and non-extremist orientation. Another finding showed that anti-Semitic beliefs were also related to perception of Israel. Despite increasing concern at international level regarding extremist ideas among Muslim youth and search for solutions to extremist orientation among youth, there is little empirical research from within Muslim societies to address these issues. In view of the evidence from Chapter Eight the first aim of the study was to carry out preliminary test of an
educational intervention for reducing anti-Semitic beliefs among Pakistani youth. The subject of anti-Semitic beliefs among Pakistani youth has not been empirically investigated so there is little evidence regarding the mechanisms for changing these beliefs. There is evidence from studies in other cultures that focused group discussions can bring about a shift in overall attitudes about aggression among group members (Richardson & Latané, 2001) and providing positive information about an out-group can reduce biases (see Mackie & Smith for review). Anecdotal evidence also points to the necessity of focusing on political and ideological debates surrounding Muslim-Jewish relations in order to change anti-Semitic attitudes (Najam, 2005). In present study, a talk and group discussion was used to challenge popular and historical anti-Jewish ideas. Anti-Semitic beliefs and intentions for extremist action were measured before and after the talk among an experimental as well as a control group similar to Chapter Eight.

The need for present study can hardly be over emphasized. Recent world events have alerted the international community about dangers of extremist behaviour. Many interfaith dialogues have been initiated and a search for possible causes of extremist behaviour is on. However there is little empirical research so far especially from within Muslim Psychological community. As the previous study indicated anti-Semitic beliefs are related to anti-Semitic action orientation. In view of this it makes sense to target hostile beliefs as a possible mechanism for preventing extremist behaviour. However there is no previous research in
Pakistan on beliefs about aggression against another religious group and therefore no previous evidence about possible interventions for changing beliefs. The first aim of the study was to explore how anti-Semitic beliefs can be changed.

There were two sources that provided guidance in deciding upon a possible strategy. Firstly, there is evidence that guided group discussions can cause a shift in attitudes toward aggression. Buchholz, Curtayne, Morio, and Richardson (as cited in Richardson & Latané, 2001, p 17) examined the development of social representations of aggression by having students engage in face-to-face discussion about various justifications of aggression. They found that students in the experimental group who discussed justifications for aggression changed their attitudes towards aggression more than those who discussed a topic unrelated to aggression. Curtayne, Hur, Morio, Richardson and Latané (as cited in Richardson & Latané, p 17) also found that post-discussion endorsement of aggression justifications varied as a function of group among female participants. Research on stereotyping and inter-group relations indicates that providing positive and empathetic information can reduce biases against an out-group (see Mackie & Smith for review, 1998). On the other hand it has also been suggested that prejudices and attitudes about other groups form over time through multiple influence sources (see Baron & Banaji, 2006). This view is valid and implies early and long term interventions as well as need for alternate messages from influence sources. However in the present study, the purpose was
to explore how already formed beliefs could be influenced as they are instrumental in inter-group behaviour in present scenario.

A direction was provided by an event that was arranged at a leading university psychology department during their mental health week activities (report on mental health week, Psynews, 2006). A talk was delivered by a British Pakistani psychologist who is currently working on Muslim-Jewish relations. The lecture title was “Perceptions of Jews among Muslims”. It lasted for one hour forty minutes and addressed following points; History of victimization of Jewish people before Crusades, the kind treatment of Jewish people by the Prophet of Islam in early days of Islam, shared Semitic heritage of Judaism and Islam and sharing of knowledge between scholars of Judaism and Islam in history. The talk generated lively and prolonged discussion and debate among participants who were mostly psychology students and academics. Some of the participants were known to the researcher and their views and responses on anti-Semitic beliefs scale could be obtained after the talk. The students who attended the talk expressed that they had never thought about Muslim perception of Jews actively, they felt that Muslim perceptions may be biased and that it is morally wrong to support indiscriminate aggression against Jews in general. This source of information pointed to the possibility and usefulness of educational intervention in form of group discussion and talks to reduce anti-Semitic beliefs. The purpose of present study was to explore if this type of intervention could be useful for reducing anti-Semitic beliefs.
The next step was to decide the content and focus of the talk and guided discussion. Chapter Eight indicated that anti-Semitic beliefs in Pakistan were related to two issues: hostile perception of Israel and perception of injustice in Palestine. There is anecdotal evidence that religious and political rhetoric and media promotes the ideas that Israel is an enemy of Islam and masterminds activities against Pakistan (Ahmad, 2006). Anecdotal evidence also indicates that there is general resentment against Israeli policies in Palestine and the atrocities in recent attacks on Lebanon. However this resentment and resulting protest is not specific to Pakistan. The citizens in the UK show similar humanitarian concern about violations of human rights and killings of innocent citizens. This concern needs to be seen in proper perspective and should not turn into hatred towards Jews in general or lead to involvement in extremist anti-Jewish actions. In view of this there is a need to separate reactions to Palestinian issue, and other Israeli policies and the general anti-Jewish sentiment. There is also a need to challenge the bases of anti-Jewish sentiment. In present study, a talk focusing on these points was planned followed by group discussion to challenge the bases of popular anti-Jewish ideas. It was hypothesized that anti-Semitic beliefs (endorsement of aggression against Jews) would be reduced after the talk.

The previous study also showed that those who were definitely disinclined towards joining an extremist group held less extreme anti-Semitic beliefs than
those who were ambivalent about joining such a group. In view of this a control
group was also included in the study to test the assumption that those who
attended the talk (experimental group) would be less likely to give consent for
joining a hate group than those who did not (control group). It was also
hypothesized that the two groups would be different in their post-intervention
anti-Semitic beliefs but not in their pre-talk beliefs.

9.2 Method

9.2.1 Participants

Ninety-two young men and women between the age range of 21-29 years took
part in the study. They were undergraduate and post-graduate psychology
students at a local college in Lahore. There were 40 girls and 52 boys. All
participants were Muslim. The participation was voluntary and students were
given certificates of participation.

9.2.2 Measures

Anti-Semitic aggression beliefs. The scale developed in previous study was used
to assess endorsement of aggression against Jews. The scale consists of 8
statements related to various acts of aggression against Jews. Participants
indicated their agreement on a scale of 1-5 to various statements about anti-
Semitic acts. The PCA showed two components, moderate beliefs which taped
beliefs about indirectly harmful anti-Semitic acts such as forwarding anti-
Semitic email messages and extreme beliefs which represented directly and extremely harmful anti-Semitic acts such as damaging property owned by Jews and using threatening language in public. In previous study the Cronbach's alpha coefficient for the overall scale was .82 and for two sub-scales, extreme beliefs and moderate aggression beliefs was .79 and .78 respectively.

*Behavioural measure.* Similar to previous study participants indicated whether they would be willing to join an action group. The purpose of the group was described as "to fight enemies of Islam particularly Jews".

### 9.2.3 Design and procedure

A mixed with-in between group experimental design was used in which an independently planned lecture was used as an intervention and a pre and post measure of beliefs was obtained. A matched control group who heard another lecture unrelated to dependent measure was also assessed on same measure. Both groups were also assessed on behavioural measure (consent to join anti-Semitic group) used in previous study.

The study was carried out as part of seminar programme at the college. This occasion provided a good opportunity for carrying out the experiment as it was easy to hide the true purpose, arrange for students to attend the talks and carry out the behavioural measure with the help of confederates. The talk was given by the same British Pakistani psychologist mentioned above. The content of talk
was discussed with him and points to be focused were agreed upon. The beliefs against Jews were measured among both groups before and after the talk. The control group attended another talk on role of cognitive therapy in depressive disorders.

The students were informed that two talks were being held on seminar day but due to shortage of space they will be allowed to attend one of them and the recording of other talk would be run later to allow them to benefit from the event. The students were randomly allocated to experimental and control conditions from the list of class registers keeping number of female and male students roughly equal in control and experimental group. All students also signed consent forms to answer questions after the talk was over. The purpose of questionnaires was described as test of retention and feedback about content of talk. The anti-Semitic beliefs were measured a day earlier during research methodology class along with two other unrelated scales (self-esteem scale and stress inventory). The post-test measure was obtained after the talk before the students left the hall. Each student was required to write their roll numbers at the back in order to receive certificates of participation. The behavioural measure was obtained by the confederates same day in the afternoon cultural event, a poetry competition held by the psychology society. The confederates could identify the students and took their role numbers as well.
All participants were debriefed next day in a joint session in which their presence was essential per instructions of the head of the department. The purpose of the study was explained and students were asked to voice any distress or concerns resulting from the study.

9.3 Results

Table 9.1 Comparison of anti-Semitic beliefs of experimental and control group

<table>
<thead>
<tr>
<th></th>
<th>Experimental group (n=50)</th>
<th>Control group (n=42)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>M</td>
<td>SD</td>
</tr>
<tr>
<td>Pre-test extreme beliefs</td>
<td>2.67</td>
<td>.62</td>
</tr>
<tr>
<td>Post-test extreme beliefs</td>
<td>2.25</td>
<td>.38</td>
</tr>
<tr>
<td>Pre-test indirect beliefs</td>
<td>3.56</td>
<td>.74</td>
</tr>
<tr>
<td>Post-test indirect beliefs</td>
<td>2.49</td>
<td>.54</td>
</tr>
</tbody>
</table>

N = 92, df = 89

Note: The means in the table are adjusted means, with effect of covariate statistically removed.

Anti-Semitic pre-test and post-test beliefs

A one-way between groups analysis of covariance was carried out to test the effect of educational intervention on post-test extreme and indirect anti-Semitic beliefs of two groups. Post-test score on anti-Semitic beliefs scale was the dependent variable and group status (experimental/intervention group, control/no intervention group) was independent variable. Pre-test beliefs (baseline measure) were the covariate. Two separate analyses for two types of
beliefs, extreme and indirect, were carried out. After adjusting for pre-test beliefs, there was a significant difference between the control and experimental group on post-intervention extreme anti-Semitic beliefs $F (1, 89) = 30.8, p = .001, d = .93$. Similarly after adjusting for pre-test indirect beliefs, there was a significant difference between two groups on post-intervention indirect anti-Semitic beliefs $F (1, 89) = 39.2, p = .001, d = 1.06$.

Consent to join anti-Semitic group

Frequencies and percentages for each category of response (yes, no, not sure) within each group is given in Table 9.2. As the table shows in total 14% gave consent for joining an anti-Semitic group, 52% said they were not sure and 33% declined to join such a group. Within each group more participants in experimental group than control group declined to join the anti-Semitic group. Similarly fewer participants in experimental group agreed to join an anti-Semitic group. Nearly equal number of people in both group indicated that they were not sure about joining this group. The overall difference in responses of two groups was significant ($\chi^2 (1) = 8.67$).

Table 9.2 Frequencies and percentages of responses on consent to join anti-Semitic group for experimental and control groups

<table>
<thead>
<tr>
<th></th>
<th>Yes</th>
<th>No</th>
<th>Not sure</th>
</tr>
</thead>
<tbody>
<tr>
<td>Experimental group</td>
<td>3</td>
<td>22</td>
<td>25</td>
</tr>
<tr>
<td>Control group</td>
<td>10</td>
<td>9</td>
<td>23</td>
</tr>
<tr>
<td>Total</td>
<td>13</td>
<td>31</td>
<td>48</td>
</tr>
</tbody>
</table>

220
9.4 Discussion

The study was designed to carry out a preliminary test of an educational intervention aimed at reducing anti-Semitic beliefs. The experimental group showed a decrease in overall group mean endorsement of anti-Semitic beliefs. There was also a significant difference in anti-Semitic beliefs of the control group and experimental group. The control group was also more likely to give consent to join an anti-Semitic group and experimental group was more likely to say no to the offer of joining an anti-Semitic group. Overall these findings indicate that talk addressing basis of anti-Semitic antagonism was successful in reducing beliefs about aggression against Jews. However there are some concerns about study which will be discussed now.

The behavioural measure asked people to give their consent for joining a group which would fight enemies of Islam particularly Jews. They could decline by saying no, say yes or reply with not sure. In the last study giving not sure response was taken as a measure of ambivalence. However the point can be debated whether saying ‘not sure’ indicates a hesitation to commit, a desire not to offend the person who has approached them or as avoidance of open commitment at the same time trying not to appear non-religious. All these motives need to be explored by interviews therefore obtaining a more in-depth view of this response.
There are some limitations and methodological concerns about this study. There may have been a strong expectancy effect due to prior measuring of anti-Semitic beliefs followed by talk. This could not be helped and in future studies some way of reducing this bias must be used. However it must be kept in mind that the purpose of this intervention was to openly challenge anti-Semitic beliefs and engage the participants in an open debate and questioning of these beliefs. To the extent that participants changed or toned down their responses on anti-Semitic scale, it is a successful effort.

Bandura (1973) has pointed out that massive threats to human welfare are generally brought about by deliberate acts of principle rather than by unrestrained acts of impulse. According to him it is the principled resort to aggression such as planned acts against other groups, which is of greatest social concern. However this is often ignored in psychological theorizing and research. There are many forms of inter-group aggression ranging in severity from social exclusion, racial harassment and ethnic crime to massacres, genocides, wars and terrorism. There are theoretical as well as empirical grounds for assuming that norms and beliefs have an influential role in inter-group aggression as they have in interpersonal aggression although processes through which these beliefs operate may be different for two types of aggression. Dehumanization is a psychological process whereby opponents view each other as less than human and thus not deserving of moral consideration. Jews in the eyes of Nazis and Tutsis in the eyes of Hutus (in the Rwandan genocide) are but
two examples. Protracted conflict strains relationships and makes it difficult for parties to recognize that they are part of a shared human community (Bar-Tal, 1990; 2004). Such conditions often lead to feelings of intense hatred and alienation among conflicting parties. The more severe the conflict, more the psychological distance between groups will widen. Eventually, this can result in moral exclusion. Those excluded are typically viewed as inferior, evil or criminal (Opotow, 1990). Hate crimes committed against stigmatized or minority groups are sanctioned through norms and beliefs of the offender group (Sternberg, 2003) and it is important to challenge these beliefs. An interesting finding was that discussion and educational talk succeeded in reducing extreme as well as indirect beliefs. This implies that people after listening to the talk were less willing to endorse both direct and indirect acts of aggression against Jews. Since the talk stressed the similarity between Muslim and Jews and victimization of Jews in ancient times it may have evoked empathy and reduced the dehumanization which is related to moral disengagement and aggression.

The beliefs against Jews were chosen for compelling reasons. Firstly, the researcher (Amjad, 2006) already had information and data on negative associations that students as well as people in Pakistan generally have about Jews. Part of this data was based on an experiment repeated for five alternate years in classroom (1996, 1998, 2000, 2004, and 2006). In order to demonstrate association of traits with members of stereotypical groups, the students were asked to write or say two words that came to mind immediately after the cue word was flashed on screen or spoken aloud. The cue words were always names of nationalities or groups (politician,
German, Jews). The data based on five hundred students over this period showed that the first word in response to the cue ‘Jews’ was almost always negative (90% of respondents). These words were scheming, aggressive, enemy, deceptive, cruel and mean. One noticeable addition in 2004 measurement was terrorist and biased. Occasionally a neutral word like rich, good businessmen, powerful or conventional was mentioned. This exercise was also repeated for Hindus and they were not doing any better than Jews. It was clear that very negative perceptions exist about these two groups. These exercises were carried out in class rooms to demonstrate stereotypes and how they can be addressed. The students also discussed why they thought of these words in association with certain groups. It came up frequently in these class discussions that none of the students had actually ever met any Jewish people and it was recognized that these stereotypes were based on what was learned from media and social exchange.

The second reason for assessing beliefs against Jews was based on a good opportunity that arose in April 2006. A talk by a visiting psychologist titled “Muslim perceptions about Jewish people” was announced in a seminar organized by Psychology department of a major University in Pakistan. After discussion with the speaker, it was felt that it is a good opportunity to test if providing new scripts in form of positive information about a stigmatized group can change perceptions about Jewish people. In this way it became a partnership of two like minded Muslim psychologists.
Three events have caused concern among moderate Muslims regarding attitudes and perceptions towards other religions; World trade Centre attacks of September, 2001, London bombings of July 2005 and the recent Danish cartoon controversy. This concern has provided motivation for inter-faith dialogue initiated by western and non-western scholars and clergy (Umar, July, 2005, personal communication). One such group is composed of Muslim, Christian and Jewish scholars and clergy; they meet in England and USA twice a year and engage in scriptural readings. This is basically a collaboration of religious scholars and intellectuals. They stress that peaceful interaction between people of various faiths requires a balanced and unbiased perception of the 'religious other'. The present study was motivated and informed by their initiative.

The study presented above has been a preliminary exploration of the possibility of changing hostile beliefs against Jewish people. In the case of Judaism, average Pakistani Muslim has no opportunities of encounter with Jewish or Israeli citizens and the information filtered through media and social groups as well as text books furnish the only source for forming perceptions. As was pointed out in the lecture (Ajmal, 2006a), the media selectively imparts biased and politicized information. The policies of the state of Israel are associated with average Jewish people who have nothing to do with these policies. Similarly actions of few extremist groups are associated with all Muslims and with injunctions of Islam. There is a great need to alter these biased views so that process of peace can flourish. For over 50 years Pakistani Muslims had a very hostile view of Hindus across the border in India.
mainly based on history of political conflict with India. In recent years, the initiatives for friendship with India among Pakistani elite have proliferated and so has cultural exchange. Although no study has been conducted on this, a brief survey of pro-India articles in radical press and number of people viewing Indian channels indicates that views are changing. The learning from this can be applied to the case of Jewish people with better results.

It has been postulated that scripts of behaviour are learned from various sources in an individual environment, media, peers, parents and role models (Huesmann, 1988). Normative beliefs as standards of acceptable behaviour serve to filter out the scripts, which are inappropriate. This implies that scripts should also be addressed. The lecture was a good attempt at providing alternate scripts as it emphasized another view of Jews and history of Jew-Muslim relationship. The student population may have been influenced by it because they respected the opinion of an academic who substantiated his points with historical evidence and also because they are trained to listen to and incorporate new information.

The present study demonstrated that it is possible to modify the beliefs against another group if positive information is provided. However this presentation needs to be frequent otherwise modification of beliefs may be short lived. The perceptions form over a period of time and a short term intervention can not combat accumulated effect of long-term conditioning.
The results of this study may not be representative of general Muslim population because the participants were university students who are on the average better educated and better informed than rest of the society. Change in their perceptions may be easier than less educated common man. Despite this, there is reason to be optimistic about a possibility of changing hostile beliefs and negative perceptions towards other groups.
Chapter 10  General Discussion

10.1 Preface

The overarching aim of the thesis has been to understand the role of specific moral-cognitive evaluations in the manifestation and regulation of intentional acts of harm. The theoretical chapter attempted to bring together a comprehensive understanding of the role of social cognition in aggression, specifically that of moral reasoning and self-regulatory beliefs. In aggression research, various distinct but related, theoretical models emphasize the social-cognitive aspects of aggressive behaviour, therefore concepts and explanations from various models featured in this thesis. The main guiding model was the social-cognitive theory of moral thought and action (Bandura, 1989, 1991) which stresses that moral reasoning is translated into actions through self-regulatory mechanisms such as beliefs and self-censure. Self regulated and self monitored moral behaviour has been a core concept in universal mystical, practical and folk wisdom which has also informed this research and perhaps implicitly guided direction and focus of questions.

10.2 Summary of findings

Third chapter examined the component structure of the Normative Beliefs about Aggression Scale which has not been reported in previous research. Beliefs about retaliation and beliefs about aggression in general emerged as two distinct constructs, however careful inspection of data supported a 3-componenet solution. All the scales correlated with aggressive behaviour. The study suggests a new scoring solution. The beliefs about retaliation were distinguished according to a moral rationale. Retaliation that matched the provocation was endorsed more than
retaliation that exceeded the original provocation. This retaliation norm has been suggested in earlier research but this is the first study to support statistical separability of these constructs (Rule & Ferguson, 1984). The second study verified the distinction between justified and extreme retaliation beliefs in a sample of potentially violent adolescents, thereby establishing discriminant validity. The distinction is clearly useful because it can discriminate between violent and non-violent adolescents.

Fourth chapter examined the association between aggressive behaviour, types of normative beliefs and anticipatory self-censure. Although excessive retaliation beliefs, equal retaliation beliefs and general aggression beliefs were all significantly correlated with aggressive behaviour, only equal retaliation beliefs predicted aggressive behaviour. Moreover effect of excessive retaliation beliefs on aggressive behaviour was partially mediated by self-censure. This is a new finding not previously reported elsewhere. The plausible explanation may be that whereas equal beliefs influence behaviour directly by virtue of being more endorsed, they also incur less self-censure. On the other hand excessive retaliation beliefs may be more subject to self-censure which partially mediates the effect of these beliefs on behaviour. Presumably individuals who believed that aggression and extreme retaliation was wrong anticipated less self-censure and negative feelings after an aggressive action and this was instrumental in the regulation of their aggression. This is what Bandura’s model suggests. However, this study indicated that aggressive behaviour mediates the relationship between beliefs and self-censure; beliefs are only associated with self-censure if aggressive behaviour occurs. This suggests that self-censure is retrospective rather than anticipatory. Bandura (1989)
suggested that people get themselves to behave in accordance with their internal standards of conduct through anticipatory positive and negative self-reactions for different courses of action. Self-monitoring, moral judgment and self reaction are sub-functions of this self-regulatory system. People refrain from behaving in ways that violate their standards of moral conduct because this will bring self-censure. Bandura et al. (1996) found that guilt and desire for restitution was related negatively to aggressive behaviour and moral disengagement and positively to pro-social behaviour. Crane-Ross et al. (1998) also found that higher negative self evaluation is associated with lesser aggressive behaviour. My study suggested that the role of self-censure is evoked when violation of internal standards occur. The two are not contradictory since experience of retrospective self-censure over time can make the association stronger with beliefs and it can serve to control behaviour in anticipation. This can only be tested in longitudinal studies or through actual retrospective accounts.

Sex differences in aggressive behaviour and beliefs about aggression were investigated in Chapter 3, Chapter 4 and Chapter 6. Chapter 3 and 4 found no difference between males and females in approval of equal retaliation but females approved of excessive retaliation significantly less than males. No previous study has statistically separated Normative Beliefs about aggression scale into excessive retaliation and equal retaliation sub-scales so the finding can not be confirmed from earlier studies. However in earlier studies, in general females were found to be lower in approval of aggression than males on total scale (see chapter 3, introduction and discussion sections). In both Chapter 3 and 4, males reported some strong forms of physical aggression more than females. In general these findings are consistent with
earlier research (see Archer 2004a for review). These findings are also supported by
the sexual selection theory (Archer, 1996; Daly & Wilson, 1994) which postulates
that men are higher in risky forms of aggression due to intense competition for
reproduction success. An interesting finding in terms of cross-cultural differences in
beliefs about aggression was revealed in Chapter 3. Pakistani adolescents
disapproved of females’ retaliation to males more than British participants (both
adult and adolescent). This seems to be a cultural norm consistent with anecdotal
and observed evidence on Pakistani culture (Amjad, 2001). Chapter 6 did not find
any significant difference in direct or indirect aggression. One possible explanation
was offered by high standard deviations for aggressive behaviour scores among
males. This finding has previously been reported by Archer & Mehdikhani (2003).
However, it is also possible that girls were responding in terms of same sex
aggression and therefore were as approving of aggression as boys. Further studies on
indirect aggression are needed in Pakistan to clarify these findings.

Chapter 5 used a new approach and examined retrospectively reported aggressive
episodes by adolescents and adults rather than a general tendency for aggressive
behaviour. The frequency of real episodes was examined in relation to thinking and
feeling about aggression and private self-consciousness. The personality measure of
private self-consciousness taps the tendency to reflect on actions as well as
awareness of inner feelings hence it is meaningful for understanding retrospective
self-censure and reflection. Both thinking and feeling after aggression were
positively related to private self-consciousness and negatively related to frequency
of aggressive behaviour. Further analysis showed that the frequency of aggressive
acts and self-censure was predicted by reflection, which was predicted by private
self-consciousness. This is a new finding in the literature. Previously, higher private self-consciousness has been associated with more accurate reporting of self-aggression (Scheier, Buss, & Buss, 1978).

Chapter 6 investigated beliefs about direct and indirect aggression and their association with self-report and teacher-report of aggressive behaviour among Pakistani adolescents. A new measure of beliefs about aggression was developed in this study using specific and actual situations reported by adolescents. Contrary to the findings in European countries, there were no sex differences in direct and indirect acts of aggression or in beliefs about aggression. One likely explanation may be that assessment was limited to within same sex and this suggests that girls can be both physically, as well as relationally, as aggressive as boys when it comes to their same sex peers. The higher standard deviation among boys also indicated that there were boys on both ends of continuum of aggressive behaviour. However both boys and girls evaluated physical retaliation more negatively than either verbal or relational aggression. This has not been examined before in cross-cultural studies.

Chapter seven examined the moral reasoning of children. Although the majority of children understood that these acts were wrong, some of them were not clear why these acts were wrong. This understanding is important for moral discernment and moral action (Bandura, 1989; Turiel, 1998). There were also a small number of children who thought that harm towards another child could be legitimate if a teacher or relevant authorities sanctioned it. This suggested that external sanction, rather than internal standards may be in use for interpersonal situations of conflict. Such an investigation of specific deficit in moral reasoning can help in the design of targeted interventions. Subsequently, a brief educational-moral intervention was
designed which focused on: presenting consensual evaluation (all children and adults consider teasing and hitting to be wrong); discussing moral aspects of relational and physical victimization (harm and distress caused to victim); and involving children in active discussion on these aspects. The beliefs about aggression significantly, though marginally, decreased after this intervention. A follow-up of complaints of victimization in school after two weeks revealed that average complaints of aggressive episodes and fighting between children decreased for first few days but increased again towards end of ten days. This has also been reported in previous intervention studies (see Boxer & Dubow, 2002 for a review). The study was limited in scope and short lived effects were not a surprise. Control of aggressive behaviour in school setting involves a team effort and multi-faceted intervention. However the change in normative belief supporting aggression was an encouraging finding. Researchers in this area stress the need for focusing on classroom norms about aggressive behaviour (e.g., Boxer & Dubow, 2002; Henry et al., 2000; Salmivalli & Voeten, 2004). An important limitation of the study was absence of a comparison or control group which would have delineated the effect of intervention more clearly.

It has been pointed out that aggression and violence with regard to their availability as actions, acceptance and legitimacy should be studied in terms of their construction within particular groups (Painter, 2001). Last two studies in the thesis are related to anti-Semitic beliefs among Muslim youth and their association with hostile intentions. A new measure of beliefs about anti-Semitic aggression was developed in chapter 8 which showed clear distinction between extreme and moderate anti-Semitic beliefs. These beliefs were associated with perceptions of
Israel as enemy and injustice to Palestine. Study also explored through an experimental procedure whether these beliefs were related to extremist behaviour. Theory of planned action (Ajzen & Fishbien, 1980) suggests that activated attitudes and normative beliefs produce intentions to act. The behavioural measure used in this study was intention to join an extremist group. This was the closest measure of extremist orientation possible within the constraints of this research. Muslim beliefs about other religious groups are a sensitive issue and the extremist tendencies are currently a source of concern at international level. However there is scant empirical research in this area from within Muslim societies. Chapter Nine reports an educational intervention which focused on changing anti-Semitic beliefs. The anti-Semitic beliefs were significantly reduced in experimental group who attended the educational intervention challenging Muslim perceptions of Jews. The thesis therefore ends on an optimistic note; hostile beliefs can be changed if they are based on biases shared in a culture and challenged with sound reasoning. Bandura (1989) has pointed out that most of the time we avoid to obtain information which would be contrary to our existing beliefs. Therefore providing new and positive information repetitively may be an important direction for future initiatives in reducing inter-group hostility. These studies were a response to the moral responsibility of a social psychologist in present scenario (Plous & Zimbardo, 2005) as well as to existing scarcity of empirical studies applying theoretical insight to specific contexts and situations of inter-group aggression. It made sense to address this issue in a culture most directly accessible to me, however the measure developed and used in this study can be applied to other contexts such as Muslims living in Europe where many instances of anti-Semitism have been reported. The study also revealed a new form of aggression, cursing in prayers. This must be understood in the context of religious
behaviour. In all religions prayer for or against someone is considered a powerful practice and Muslims still strongly believe in the effectiveness of prayer whether it is for a favour or to ask God to send his wrath on someone who has done an injustice. "To curse their enemies in prayers is a weapon of the powerless and oppressed who have no other way of avenging the harm inflicted on them" (Ghamidi, personal communication, August 2006). Existing research has distinguished between direct and indirect aggression. According to definitions of indirect aggression, cursing another person or group in prayers and asking God to punish them may be seen as an indirect form of aggression (see Archer & Coyne, 2005).

An argument was presented in the introduction that moral discernment underpins evaluation of acts of harm. The evaluation of aggressive acts was addressed across empirical studies in this thesis, and findings clearly demonstrated that provoked and unprovoked harmful acts were evaluated differently: retaliation exceeding provocation was considered more wrong than retaliation matching provocation, indirect acts of retaliation were disapproved more than direct acts of aggression and extreme acts of hostility were endorsed less than moderate acts against another group. Moral rationale underlying beliefs about aggression was a consistent finding across age groups, across gender and across two cultures. The only exception was the small group of violent adolescents (second study reported in chapter four) who approved of the use of physical retaliation to verbal provocation more than non-violent children of their age. Clearly consensual norms of justice and fairness are held across situations, individuals and cultural groups. The question arising from this is both important and challenging: why, then, do atrocities and harmful acts happen and glaring violations of moral codes occur
all around us? No single piece of research can offer a comprehensive answer to this global question. My answer is that we overlook and choose to ignore consensual beliefs, ‘we listen but we disobey’ in the service of other motives. Bandura (1989, 1991) has dealt extensively with mechanisms of moral disengagement which are used to justify reprehensible conduct and his model is even more applicable now as it was 15 years ago. My research has also suggested that personal beliefs about aggression are related to personal behaviour and consensual beliefs and a fairness norm are followed by the majority but not by all.

Bandura (1989) has argued that ‘knowing good’ is not always ‘doing good’ and in order to act in accordance with their own standards of moral conduct individuals exercise moral agency through self-regulating beliefs and constant self-correction and self-reproof. He suggested that anticipatory self-censure is a stronger deterrent of aggressive behaviour than external sanctions alone. Hence, anticipatory self-censure was also examined in the present thesis and found to be related negatively to normative beliefs as well as to aggressive behaviour. This is consistent with Bandura et al. (1996) and Caprara et al. (2001) who concluded that desire for restitution and guilt was negatively related to aggression and Crane-Ross et al. (1998) who found that positive evaluation of aggression as a strategy is related to less negative feelings about self. In Chapter Six retrospective accounts of aggressive acts, feeling bad, as well as thinking after these aggressive acts was examined. It was hypothesized that private self-consciousness influences reflection on aggressive acts and retrospective self-censure. The findings confirmed this hypothesis as well as the conception from where this idea was generated: “Clearly those who reflect and those who do not reflect are not equal” (Quran, 26:54).
10.3 Overall conclusions and theoretical insights

There is an increasing trend to suggest a meaningful integration of various models which can extend explanatory boundaries of individual models (Arsenio & Lemrise, 2004; Guerra, Nucci, & Huesmann, 1994; Bellmore et al., 2005). Given the complexity of acts of harm studied under the generic label of aggressive behaviour, this seems to be the road to follow for future researchers.

Various studies in this thesis have addressed various aspects of aggressive actions and aggressive behaviour. As an effort to bring together the learning from the studies as well as from existing research is presented in the model in Figure 10.1.

Figure 10.1 A proposed model of aggressive interactions
It is proposed that all aggressive acts occur in a shared space and in a shared time frame. The scripts stored in memory impact both situational representations as well as final response. The interaction is between person and the other or others, every one of them a unique combination of individual as well as shared characteristics. They share an interpersonal space which includes their relationship to each other (stranger, family, friend, peer). With strangers we share a limited time in interpersonal space. Family members share both wider interpersonal space and share it for longer periods. Hence interactions are more likely.

Situational representation is the cognitive construction of the social reality of the situation. The situational representation is influenced by the mood, perception of intention and perceived norm violation. The situational representation is dynamic and changes as the interaction proceeds or develops. The society, interpersonal space and time and relationships determine and contribute to the situational representation. Each person is a unique combination of his biological inheritance, share evolutionary history, temperament, and life experiences. These elements as well as a person's aggression related norms and beliefs also contribute to the situational representation. In any aggressive interaction, indeed in any social interaction all these elements are assumed to be present.

The empirical studies in this thesis did not aim to or claim to test all the proposed links and impacting factors in this model. The evidence for some links exists in previous research literature which has been discussed in detail in two introductory chapters.

There are number of questions one can ask about aggression: What purpose aggression serves for humans? Is aggression learned? How do children learn aggressive
behaviour? Why some individuals are more aggressive than others? When do people behave aggressively and how does the aggressive act take place psychologically?

There are number of questions one can ask personally: how someone can be so cruel as to injure innocent people? How could my partner hurt me? Why did I say something nasty to that person? Why are my children always fighting? The literature discussed in Chapter Two provides answers to many of these questions. The role of beliefs have come out as an important area for researchers to follow since all other personal, situational and societal variables impact on behaviour through social-cognitive mechanisms such as beliefs.

Finally a unique contribution of the thesis was to address a sensitive topic of crucial importance: beliefs about inter-group aggression, the relation of extreme beliefs to harmful intentions towards another group and how these can be influenced. We live in times when scientific as well as age-old conceptions of moral behaviour need to be revisited and related to real life situations. One way to minimize retaliatory acts is to treat victims and suspects with sympathy, respect and dignity, even if one has to make judgments or perform acts they will not like or think to be right or adequate. Respect and sympathy can go a long way in minimizing or preventing the kind of frustration and feeling of being disrespected that leads to disproportionate retaliations. We are seeing more and more disproportionate retaliatory acts as students shoot up schools where they felt victimized or ignored, employees shoot up offices, and terrorists blow up civilians in acts of vengeful, moralistic, self-righteousness (Garlikov, 2006).
10.4 Limitations and further suggestions

The one limitation of the thesis is that it did not examine longitudinal relation between earlier beliefs and later beliefs and earlier beliefs and later behaviour. The sample size in most of the studies was modest due to various constraints. It is acknowledged for example that bigger sample size in Chapter 5 could have added to the power of the analysis.

One new measure in this research was aimed to assess self-censure. The similarity between concept of self-censure and self-control was not explored. (e.g., Tangney, Baumeister, & Boon, 2004). There may be possible overlap between the two constructs which awaits future investigations. The measure of self-censure developed in Chapter Four, therefore awaits construct validity. A personality measure of empathy would be useful addition in further investigations of normative beliefs and self-censure.

Although inter-group behaviour is related to group beliefs and norms, individual difference variables also play a role in determining who gets involved in active extremist behaviour and who doesn’t. In view of this, future studies of anti-Semitic beliefs or extremist behaviour should include education level, exposure to other cultures and type of religious orientation as possible moderators of extremist orientation and biased attitudes.
References


Ajmal, A. (March, 2006a). Muslim perceptions of Jews-what do we need to change? Lecture delivered at Mental Health week, Government College University, Lahore.


Guerra, N. G., Huesmann, L. R. & Hanish, L. (1995). The role of normative beliefs in children’s social behavior. In N. Eisenberg (ED.), Review of personality and


Huesmann, L. R., Guerra, N., Miller, L., Zelli, A. (1992). The role of social norms in the development of aggressive behavior. In H. Zumkley & A. Fraçzek (Eds.), *Socialization and Aggression* (pp. 139-152), New York: Springer.


in 8-year-old children from five ethnic groups. *Aggressive Behavior, 20,* 411-428.


