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Moral Emotions in Decision Making:
Towards a Better Understanding of
Shame and Guilt

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Moral Emotions in Decision Making:
Towards a Better Understanding of
Shame and Guilt

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Contents

Chapter 1	Introduction	7
Chapter 2	Moral Sentiments and Cooperation: Differential Effects of Shame and Guilt	21
Chapter 3	Not So Ugly After All: When Shame Acts as a Commitment Device	43
Chapter 4	Restore and Protect Motivations Following Shame	71
Chapter 5	The Dark Side of Guilt: Acting 'Prosocially' At the Expense of Others	93
Chapter 6	Discussion	119
	Samenvatting (Summary in Dutch)	129
	References	135
	Dankwoord (Acknowledgements)	147
	Curriculum Vitae	149

Chapter 1

Introduction

Imagine that you love to do Latin dancing. You think that you are very good at it and you participate in a dance competition where all the top dancers are present. But then it happens: you make a silly mistake and you fall over. You have the feeling that everybody is watching you and that you made a complete fool of yourself.

Now imagine that a good friend tells you about his important dance competition. He knows you are a very good Latin dancer, and therefore he asks you to be his partner for that competition. However, during the competition you make a mistake and you make your friend fall over. Your friend ends last in the competition and you can see he is very sad.

In situations such as these, people often experience emotions such as shame over having made a silly mistake or guilt over having hurt a friend. Emotions play an important role in daily life and influence what we feel, what we think, and what we do. They have an effect on the decisions we make, for example whether we would enter another dance competition after our fall or whether we would apologize after having failed our friend. For a long time, emotions were perceived as unstable phenomena that influence behavior in unpredictable ways, and therefore not to be taken into account in decision making research. Nowadays, it more and more appears that emotions are stable phenomena which behave lawfully (Frijda, 1986, 2006). This means that emotions influence behavior in systematic and predictable ways, which offers the opportunity not only to study what emotions are, but also to study how emotions affect decision making. One such important area in decision making is social behavior. Many scholars, especially economists, have often wondered why people act prosocially towards other people and cooperate in daily interactions. Emotions

might play a large role in social behavior and this dissertation tries to shed light on why and when people act prosocially by focusing on two highly interpersonal emotions: shame and guilt. As will become clear later on, many scholars have theorized about what shame and guilt are and when these emotions arise (e.g., Gilbert & Andrews, 1998; H. B. Lewis, 1971; M. Lewis, 1992; Tangney & Dearing, 2002; Tangney & Fischer, 1995), but it is unclear how these emotions affect behavior. This dissertation aims to contribute to the understanding of shame and guilt in particular and to the understanding of the role of emotions in social behavior in general by taking a good look at what emotions are and by subsequently empirically study the behaviors following from shame and guilt.

What are Emotions?

There has been a lot of debate among psychologists, philosophers, and other scholars about what emotions are. Emotions are complex phenomena, and there is no single characteristic that defines when a phenomenon is an emotion (Kleinginna & Kleinginna, 1981). Currently, however, scholars do agree on some aspects of emotions. Emotions are thought to arise after an evaluation (an appraisal) of an event as positively or negatively relevant to one's goals or concerns (Frijda, 1986). They are about something or someone, and are acute and relatively momentary experiences. This aspect denotes the difference between emotions and moods, since moods are not directed towards an object and are more enduring and less intense than an emotion (Parrott, 2001a).

The appraisal, or the process of judging the significance of an event for personal well-being, not only determines whether an emotion is felt, but also which specific emotion is experienced. A specific pattern of cognitive appraisals of the emotion-eliciting situation gives rise to a specific emotion (Ortony, Clore, & Collins, 1988; C. Smith & Lazarus, 1993). Different people can have

different patterns of cognitive appraisals in a situation, but the same pattern of appraisals gives rise to the same emotion. The appraisal pattern is an important element of an emotion, because it tells us why a specific emotion arises and thus provides the base for understanding why emotions motivate certain behaviors.

Next to appraisals, emotions also contain feelings, thoughts, emotivational goals, action tendencies, and actions (Roseman, Wiest, & Swartz, 1994). Feelings, which are physical or mental sensations, and thoughts, which are ideas, plans, conceptions, or opinions produced by mental activity, concern the experience of the emotion itself. Instead, emotivational goals, action tendencies, and actions are the elements of an emotion that mobilize people to undertake action. Every discrete emotion contains a general goal, such as avoiding danger when feeling fear or taking revenge when feeling angry. The general goal is labelled the emotivational goal by Roseman (1984) and pattern of action readiness by Frijda (1986, 2006). The emotivational goal translates into an inclination to respond with a particular action (the action tendency), and finally, when it is possible in the situation, an action will follow.

Specific Emotions in Decision Making

In general, emotions can be divided into two groups on the basis of their valence: negative emotions and positive emotions. The valence approach has stimulated much research focusing on the different behavioral effects of negative and positive emotions. Even though this approach can be very interesting, it overlooks the fact that specific emotions have specific goals and thus can motivate different behaviors. Consequently, different emotions with the same valence will probably motivate different behaviors. For example, researchers have found contrasting behaviors following anger and fear (Lerner & Keltner, 2001), or following regret and disappointment (Zeelenberg & Pieters, 1999). Thus it seems that a focus on specific emotions will give more insight into the influences of emotions on behavior than a mere valence approach.

For this reason, I will adopt an approach based on specific emotions, namely the feeling-is-for-doing approach.

The feeling-is-for-doing approach (Zeelenberg, Nelissen, & Pieters, 2007; Zeelenberg & Pieters, 2006) views emotions as motivational processes that are instrumental to the goal one is striving for. In the case of negative emotions, when a concern of a person is threatened, the emotion arises to signal this problem and then motivates behavior to close the gap between the present situation and the goal. Because different problems need different solutions, different emotions will arise and they will motivate different behaviors. The behavior depends on the accessibility and acceptability in that situation, and on the instrumentality to the overarching goal.

Importantly, the feeling-is-for-doing approach not only makes a distinction between different emotions, but also between endogenous and exogenous influences of emotions (Zeelenberg, Nelissen, Breugelmans, & Pieters, 2008; Zeelenberg & Pieters, 2006). Emotions can influence behavior while they are related to the current goal (endogenous influences), but also while they are actually unrelated to the current goal (exogenous influences). The endogenous influence of an emotion is an integral part of the goal setting and the goal striving process and thus relevant for the decision at hand. This happens, for example, when feelings of guilt after having made your friend fall down motivate you to put all your effort into making the best of the remainder of the dance competition. The second influence, an exogenous influence of an emotion, is external to the goal setting and goal striving process and is not related to current decisions. This occurs, for example, when feelings of shame for having fallen over in the dance competition motivate you to act harshly towards people on the train back home. Most research on behavioral effects of emotions tend to ignore the distinction between exogenous and endogenous influences and study only exogenous influences. These studies give us many interesting insights in spill-over effects of emotions and show us how emotions influence behaviors in ways that

should logically not occur. However, the results of exogenous influences can not always be used to interpret the function of an emotion, because these effects may be influenced by the changing surrounding. In contrast, endogenous influences of an emotion show us what the emotion signals to the decision maker and therefore do give insights in the function of an emotion. Importantly, exogenous and endogenous influences of a single emotion may give rise to completely different behaviors. When one is not aware of these distinct influences, such different behaviors may result in diverse understandings of the same emotion. As will become apparent in later chapters, this is especially the case with shame and guilt.

Shame and Guilt: Two Moral Emotions

Shame and guilt both belong to the group of moral emotions. Moral emotions are emotions that are linked to the well-being of others and of society as a whole (Haidt, 2003). According to the economist Smith (1759), these emotions motivate people to do what is morally appropriate, even though this can be contrary to one's immediate economic self-interest. As Frank (1988, 2004) explains, when people are in a situation in which immediate self-interests conflict with long-term cooperation, moral emotions offer a solution. As soon as people choose (or imagine choosing) for self-interest, they will experience negative moral emotions such as shame and guilt. As a consequence, the self-interest option becomes less attractive, stimulating people to choose the prosocial, long-term option. The prosocial option is not only beneficial for others and for society, it also benefits people themselves by making future collaborations more probable and by avoiding punishments from others for acting selfishly. In summary, moral emotions act as commitment devices, stimulating prosocial behavior and committing people to options that are best for the society and for themselves in the long run.

What Do We Know About Shame?

In emotion research, most scholars perceive shame to be “one of the most powerful, painful, and potentially destructive experiences known to humans” (Gilbert, 1997, p. 113). Shame arises after a moral transgression or incompetence, in which people perceive the self to have violated a moral or social standard (Fessler, 2004; Keltner & Buswell, 1996). The behavior generalizes to the whole self-image, and as consequence people have a heightened degree of self-awareness or self-consciousness and think the whole self is fundamentally flawed (Izard, 1977; H. B. Lewis, 1971; Sabin & Silver, 1997). For example, after your fall at the dance competition, you would probably have the feeling that you are a terrible Latin dancer and that you can’t do anything right. Besides that, people are often consciously aware of others around and focus on others’ actual or imagined negative evaluations (Fessler, 2004; Haidt, 2003; Tangney & Dearing, 2002). Thus, you would likely be worried about what all the top dancers and the audience of the dance competition will think of you. During a shame experience, people often feel small, alone, powerless, helpless, and inferior to others (Fontaine et al., 2006; Nathanson, 1992; Tangney, 1995, 1999). The feeling expresses itself in the bodily posture: when experiencing shame, the body is often collapsed with the shoulders falling in, a downward lip, and lowered eyes with the gaze downwards (Keltner & Buswell, 1996; M. Lewis, 2003).

According to shame theories, shame has negative influences on behavior. Shame would make speech, movement, and action more difficult and less likely (Gilbert, 1997). It is thought to be related to submission and would motivate social avoidance, withdrawal, rejection and disengagement from others (Dickerson & Gruenewald, 2004; M. Lewis, 2003; Probyn, 2004; Tangney, 1991, 1995; Tangney, Stuewig, & Mashek, 2007a). After having conducted much theoretical and empirical research on shame and guilt, Tangney (1999) states that shame motivates behaviors that “are likely to sever or interfere with interpersonal relationships”.

These submissive and withdrawal behaviors function as a form of appeasement, signaling to others that people are aware of their norm-violating behavior and will not fight back but will conform to the group standards (Gilbert, 1997; Izard, 1977; Mills, 2005; Nathanson, 1987). So, shame theories would predict that, after having fallen over in the dance competition, you would most likely leave the dance floor immediately without looking at anyone, change clothes, and go home. Overall, the picture that emerges from shame literature is that there is little positive about shame.

What Do We Know About Guilt?

The picture that emerges from emotion literature for guilt is much more positive than that for shame. Guilt is thought to arise after a moral transgression in which one has hurt, intentionally or unintentionally, another person (Fessler & Haley, 2003; Izard, 1977; Tangney, 1991). The most common category of causes of guilt are neglecting partners in close relationships and failing to live up to commitments or obligations to others (Baumeister, Reis, & Delespaul, 1995). As a consequence, people are completely focused on the harm and distress that they have caused to the other person (Baumeister, Stillwell, & Heatherton, 1994; H. B. Lewis, 1987). For example, after having made your friend fall over in the dance competition, you would probably only think about what you have done to your friend. After the transgression, people often feel tense, remorseful, worried and less competent (Ferguson, Stegge, & Damhuis, 1991; H. B. Lewis, 1971). There is no known bodily expression for guilt.

In contrast with shame, most theories state that guilt has positive influences on behavior. Guilt would be linked to better perspective taking and feelings of empathy (Leith & Baumeister, 1998; Tangney & Dearing, 2002). It is thought to motivate a desire to compensate the victim, and actions to repair the hurt caused, to make amends, or to apologize (Caplovitz Barrett, 1995; Lindsay-Hartz, 1984; Thrane, 1979). The function is to preserve and

strengthen the hurt relationship by making up past the past transgression and stimulating more appropriate behavior in the future (Amodio, Devine, & Harmon-Jones, 2007; Baumeister et al., 1994). So, guilt theories would predict that, after having made your friend fall down, you would probably do your utmost best during the remainder of the competition, or would treat your friend to a dinner and cinema afterwards.

Behaviors Following from Shame and Guilt

When we summarize the theories discussed previously, it seems easy to predict what people do when they experience shame or guilt. Nothing is further from the truth. Different theories give different predictions about what behaviors shame and guilt motivate, and research conducted on consequences of shame and guilt has yielded contrasting results. On the one hand, theories about moral emotions state that both shame and guilt are moral emotions and thus that both motivate prosocial behavior. On the other hand, emotion theories state that shame motivates avoidance and withdrawal behaviors and that guilt motivates reparative actions toward the hurt other. Especially for shame, these are contrasting behaviors and it seems very unlikely, if not impossible, that a single emotion can motivate both.

Unfortunately, there is no empirical research that can give an answer to the question what behaviors shame and guilt motivate. I am not aware of any studies that have measured actual behavior following from shame and there are only two studies that have measured behavioral effects of guilt. The important first step was made by Ketelaar and Au (2003), who found that, after recalling a situation in which they experienced guilt, people acted more prosocially in social dilemma game. In a second study, the researchers showed that people acted more prosocially in a dilemma game after making an unfair offer in an earlier round of the game. Nelissen, Dijkster, and De Vries (2007) added to these findings by focusing on effects of guilt and fear, showing that

people acted more prosocially towards an unknown other in a social dilemma game after remembering a situation in which they experienced guilt but not after remembering a fear experience. Like in the first study of Ketelaar and Au, the influence of guilt in the study of Nelissen et al. is an exogenous influence because the remembered guilt situation was unrelated to the social dilemma game. The findings of Ketelaar and Au and of Nelissen et al. suggest that, in a dyadic situation with a person not related to the guilt feelings, guilt motivates prosocial behavior as a spill-over effect.

Next to these two behavioral studies, a limited set of studies has focused on the consequences of shame and guilt without measuring behavior. A part of these studies has focused on action tendencies following shame and guilt (Frijda, Kuipers, & Ter Schure, 1989; Roseman et al., 1994; Tangney, Miller, Flicker, & Barlow, 1996; Wicker, Payne, & Morgan, 1983). In these studies participants were asked to recall a situation in which they had experienced shame or guilt. After this autobiographical recall induction, participants rated on different items what they felt, what they thought, and what they wanted to do after the described situation. Even though these studies used the same method, the results contradicted each other, even sometimes within a single study. For example, Wicker et al. (1983) and Roseman et al. (1994) found that shame was not related to an action, while Tangney et al. (1996) and Frijda et al. (1989) found that shame activated both a desire to disappear from view and a desire to undo the action or to make amends. For guilt, some scholars found that guilt was not related to an action (Frijda et al., 1989; Wicker et al., 1983), while other scholars found that guilt motivated a tendency to make up for one's misdeeds and to make amends (Roseman et al., 1994; Tangney et al., 1996). These contrasting findings make it difficult to draw definite conclusions about what actions and action tendencies follow from shame and guilt.

Another part of studies has focused on consequences of shame and guilt proneness instead of situational experiences of shame

and guilt. Shame-proneness and guilt-proneness are the general tendencies of a person to experience shame or guilt (Tangney, 1990), and have mostly been measured with a personality scale called TOSCA, the Test Of Self-Conscious Affect (Tangney, Wagner, & Gramzow, 1989). Studies using this scale have given us interesting insights, showing for example that people who have a general tendency to experience shame are prone to feelings of anxiety, lessened empathy, shyness, interpersonal distrust, eating disorders, posttraumatic stress disorders, and depression (Harder, 1995; Harder, Cutler, & Rockart, 1992; Mills, 2005; Sanftner, Barlow, Marschall, & Tangney, 1995). The question is whether the findings with shame and guilt proneness can be generalized to situational experiences of shame and guilt. Some scholars have simultaneously studied the consequences of shame and guilt proneness and of situational experiences of shame and guilt and have found different relations with social dysfunction, feelings of inferiority, and anger (Rüsch et al., 2007). For example, Allan, Gilbert, and Goss (1994) found that shame-proneness was strongly related to depression and social dysfunction, while situational experiences of shame were related to feelings of inferiority and anger at self and others. In addition, there are some recent indications that the TOSCA mainly measures adaptive aspects of guilt and maladaptive aspects of shame (Ferguson, Brugman, White, & Eyre, 2007; Luyten, Fontaine, & Corveleyn, 2002).

In sum, it is not entirely clear what behaviors follow from shame and guilt. Theories predict different, and sometimes contrasting behaviors. Empirical research can also not provide an answer, as existing studies have only focused on exogenous influences of guilt in dyadic situations, or on action tendencies, or on shame and guilt proneness. The aim of this dissertation is to fill this gap and to empirically study what behaviors shame and guilt motivate.

Towards a Better Understanding of Shame and Guilt

In this dissertation I will try to gain a better understanding of shame and guilt by making use of a pragmatic approach based on two elements. First, this dissertation assumes that when one wants to know what behaviors follow from a specific emotion, it is necessary to take a good look at the elements of the emotion and at what the emotion stands for. This means that one needs to know what feelings and thoughts people experience with the emotion, what emotivational goal the emotion activates, and what action tendencies will follow. Second, when one wants to understand emotions, it is necessary to take into account the emotional influence. Exogenous and endogenous influences may activate different behaviors, leading to different conclusions about an emotion. When one takes into account the different influences and knows what kind of influence is being studied, it is possible to gain a better understanding of an emotion. Applying this pragmatic approach to shame and guilt, the following images arise.

When we take a good look at shame, it appears that this emotion revolves around a threatened self. As described previously, shame gives rise to feelings of inferiority and worthlessness, and to negative thoughts about the self and about what others would think about the self. The failure that gives rise to feelings of shame generalizes to the whole self-image, signaling a problem of a threatened self. Because people have a fundamental human motive to have a positive image of the self, the emotivational goal of shame is to deal with the threatened self. The following action tendencies depend on the situation and on the emotion influence. I suggest that, because people prefer to have a positive self, shame first motivates approach behaviors to restore the self, and when this is not possible or too risky, it motivates avoidance behaviors to protect the self. One way to deal with the threatened self and to improve the image people and their audience have would be to act prosocially. The prosocial behavior also corresponds with what moral emotions theory would predict (Frank, 1988). Because these approach behaviors to restore the self reflect the function of

shame, prosocial effects are expected to appear when studying endogenous influences of shame. In contrast, I do not expect approach behaviors following from shame when studying exogenous influences. The reasoning is that another way to deal with the threatened self would be to leave the threatening shame situation. When the influence of shame is exogenous, the situation in which the self was threatened is already different from the decision situation at hand. As a consequence, people have already fulfilled the emotivational goal to deal with the threatened self and therefore will not act upon their shame feelings. The absence of effects for exogenous influences of shame also corresponds with what shame theories would predict (Tangney, 1991; M. Lewis, 2003)

Taking a closer look at guilt, it becomes clear that this emotion revolves around a threatened relationship that needs to be dealt with. Guilt gives rise to feelings of remorse and to thoughts about the hurt person. It follows that guilt has the emotivational goal to improve the hurt relationship. Similar to shame, the following action tendencies will depend on the situation and on the emotion influence. When the hurt person is present (i.e., endogenous influences of guilt), it is possible to repair the damage and guilt will motivate prosocial behavior towards the hurt person. However, the preoccupation with the hurt person is hypothesized to result in a neglect of the well-being of third others. I therefore expect endogenous influences of guilt to motivate prosocial behavior towards the hurt person at the expense of others around, and not at the expense of oneself. In contrast, when the hurt person is not present (i.e., exogenous influences of guilt), it is not possible to restore the damage. The emotivational goal of improving the hurt relationship will then translate into improving relationships in general, stimulating actions to avoid damaging other relationships. In other words, I expect exogenous influences of guilt to stimulate prosocial behavior, convergent with the findings of Ketelaar and Au (2003) and Nelissen et al. (2007).

In the following chapters I report studies that were designed to

address the question what people do when they experience shame or guilt. The four chapters are based on individual papers that have either been published or have been submitted for publication. Because these papers were written in collaboration with colleagues the text refers to “we” when is spoken about the authors. The benefit of the individual papers is that each chapter can be read separately. The downside is that there may exist some overlap between the chapters.

Chapter 2 focuses on exogenous influences of shame and guilt in dyadic situations. Moral emotions theory predicts that, as two moral emotions, both shame and guilt would motivate prosocial behavior (Frank, 1988, 2004; Smith, 1759). But focusing on the emotion elements of shame and guilt, one would expect only prosocial effects of guilt and not of shame. The predictions are supported by two studies, showing that exogenous influences of guilt motivate prosocial behavior, while exogenous influences of shame do not have an effect on prosocial behavior.

Chapter 3 extends the findings of Chapter 2 and concentrates on exogenous and endogenous influences of shame. As stated previously, exogenous influences of shame are expected to have no effect on prosocial behavior, replicating the findings of Chapter 2. In contrast, endogenous influences of shame are expected to reflect the function of shame, and therefore to motivate prosocial behavior. Indeed, four studies show that endogenous shame motivates prosocial behavior, while exogenous shame has no influence on behavior.

Chapter 4 focuses in more detail on the motivations underlying shame. Supporting both emotion theories and the theory of moral emotions, Chapters 2 and 3 show that shame can motivate withdrawal behavior (leaving the threatening situation) but also prosocial behavior. These seem to be contrasting behaviors, and Chapter 4 examines how a single emotion can motivate such contrasting behaviors. Five studies offer support for the suggestion that shame has a restore and a protect motive that together

predict the behaviors following from shame.

After having concentrated on shame, the focus of Chapter 5 shifts back to guilt. Chapter 2 has shown that when reparation is not possible, guilt motivates prosocial behavior towards unrelated others. Chapter 5 extends these findings by broadening the perspective to multiple-person situations. If guilt indeed signals a hurt relationship, then all attention would be on the hurt other and no attention would be paid to others present. Five studies show that, when the hurt other is present and reparation is thus possible, guilt motivates prosocial behavior towards the hurt person at the expense of third parties and not at the expense of oneself.

Finally, Chapter 6 integrates the empirical results presented in Chapters 2 to 5 and discusses the contributions of this research to our understanding of shame and guilt and the consequences for the study of emotions in decision making in general. I hope that you are by now very curious and will follow me along the exciting path of discovering shame and guilt.

Chapter 2

Moral Sentiments and Cooperation: Differential Influences of Shame and Guilt¹

Most people would agree that the experiences of guilt and shame are unpleasant and not something that we would strive for. Still, experiences of negative emotions can have positive consequences. For centuries economists and psychologists have argued that moral emotions such as guilt and shame lead to prosocial or cooperative behaviors (Frank, 1988/2004; Ketelaar, 2004; Smith, 1759). The idea is that when people feel guilty, they will try to make up for the harm that they caused. Put differently, moral emotions motivate people to act prosocially, which has positive consequences for the people around them. However, the question is whether these positive effects are present for all moral emotions. In this article we argue and show that prosocial effects in the short term are found for the moral emotion guilt but not for shame, another moral emotion.

Moral Emotions and Cooperative Behavior

Moral emotions can be understood as emotions that are linked to the interests or welfare of society as a whole or of other people (Haidt, 2003). These emotions originate in social relationships and are built on reciprocal evaluations and judgments of the self and others (Tangney & Fischer, 1995). Adam Smith, the founder of modern economics, stated as early as 1759 that moral emotions motivate cooperation. These emotions lead people to focus on the other and on how one's own behavior affects the other's well-being. In situations where there is a conflict between the self-

¹ This chapter is based on De Hooge, Zeelenberg & Breugelmans (2007) 21

interest of a person and interest of a group (a social dilemma), moral emotions are claimed to motivate people to act in favor of other people's interests (Frank, 1988/2004; Ketelaar, 2004; Smith, 1759). In this way, moral sentiments motivate cooperative behaviors.

Frank (1988/2004) has elaborated on the cooperative effect of moral emotions in his commitment theory. People are often confronted with situations where they have to choose between defection, which rewards the individual in the short run but is costly for the group and the individual in the long run, and cooperation, which is costly for the individual in the short run but beneficial for the group and the individual's self-interest in the long run. People's selfishness may seduce them to choose the attractive immediate reward at the expense of long-term benefits. According to Frank (1988/2004), emotions can act as commitment devices that help us to resolve these social dilemmas. Choosing for immediate individual rewards in a social dilemma situation gives rise to negative moral emotions like guilt. These emotions make the option of immediate individual rewards less attractive than the more effective long-term strategy. In this way moral emotions commit people to choose for the long-term strategy or for the group's interest and thus motivate cooperative behaviors.

Only recently Ketelaar and Au (2003) found empirical results that are consistent with these claims. They studied the effects of guilt on cooperation. Ketelaar and Au hypothesized that guilt would increase cooperation especially for people with the general tendency to act uncooperatively. These people (hereafter referred to as proselfs) would perceive their feelings of guilt as a consequence of their negative behavior and use this as information about future costs of pursuing an uncooperative strategy. This would lead them to act more cooperatively compared to proselfs who do not experience guilt. People with the general tendency to act cooperatively (hereafter referred to as prosocials) would already act cooperatively and thus not use the negative feeling state as an inference about their strategy.

In their first study, Ketelaar and Au (2003) started with measuring the general tendencies to act (un)cooperatively by letting participants play 40 rounds of a repeated social dilemma game (on the basis of their choices they were classified as proselfs or prosocials). After these 40 rounds, an autobiographical recall procedure followed, by which feelings of guilt were induced. Participants were asked to give a detailed description of a recent experience in which they felt very guilty. After writing for 10 minutes, participants again played the same social dilemma game for 40 rounds. Their choices in the first 10 rounds of these 40 rounds formed the dependent measure of cooperative behavior. The results showed that for proselfs feelings of guilt led to more cooperative behavior. The induction of guilt had no effect on prosocials. In a second study, Ketelaar and Au found similar results for naturally occurring guilt in a two-round ultimatum bargaining game. Those who felt guilty over an unfair offer in the first round were more likely to make a prosocial offer in the second round than those who did not feel guilty.

These findings were recently replicated by Nelissen, Dijker, & De Vries (2007), who studied the influences of fear and guilt on cooperation in a one-shot give-some dilemma game. They hypothesized guilt mainly to motivate cooperation for proselfs, as prosocials would already have cooperation as chronically accessible goal activated in cooperation situations. As hypothesized, induction of guilt by an autobiographical recall procedure motivated cooperation only for proselfs and not for prosocials. Contrary to guilt, the induction of fear decreased cooperation for prosocials and not for proselfs.

Taken together, the findings of Ketelaar and Au (2003) and Nelissen et al. (2007) show that the moral emotion guilt motivates cooperation. The question that is addressed in this chapter is whether this effect on cooperative behavior generalizes to other another moral emotion: shame. We have reason to expect that shame does not produce cooperative tendencies.

Shame and Guilt as Two Moral Emotions

The emotion literature assumes that differential emotions have differential influences on judgment and behavior (e.g., Izard, 1993; Lerner & Keltner, 2000; Zeelenberg & Pieters, 2006). Emotions can be differentiated in terms of feelings, thoughts, appraisals, action tendencies, and actions (e.g., Frijda, 1986; Roseman, Wiest, & Swartz, 1994). Specific emotions give information about specific problems to be dealt with and motivate people to behave in ways to solve the problem (Zeelenberg & Pieters, 2006). The present study focuses on these motivational influences of specific emotions on behavior.

Guilt is an emotion that arises after a moral transgression (Baumeister, Stillwell, & Heatherton, 1994). People experiencing guilt have hurt someone with their behavior and perceive themselves as a bad person (Lewis, 1971). What follows is the tendency to make up for the wrongdoing and to undertake actions to minimize the damage caused (Tangney, Miller, Flicker, & Barlow, 1996). Thus, the motivations that are associated with guilt are consistent with the prosocial behaviors observed in the study of Ketelaar and Au (2003). As cooperative behaviors are already chronically activated in prosocials, the motivational effect of guilt on cooperation will primarily be present in the behavior of prosocials (Nelissen et al., 2007).

Shame is another moral emotion that is closely related to guilt. This emotion arises after a moral transgression or after exposure of incompetence (Keltner & Buswell, 1996). The person has shown to be inadequate and feels worthless and inferior compared to others (Ausubel, 1955; Tangney, Wagner, & Gramzow, 1992). When experiencing shame, the focus is on the self and the general tendency of an ashamed person in the short term is to hide or withdraw from the situation (Tangney et al., 1996). The differences between guilt and shame can be found in Table 2.1.

The question that is posed here is whether shame also motivates

prosocial behavior. We pose this question because shame is associated with a focus on the self and a motivation to hide or withdraw from the social situation. These motivational tendencies are very different from those of guilt (i.e., reparation) and we argue that they are not logically related to cooperative behavior. Therefore, it is expected that shame will not promote short-term cooperation. Such a finding could have important consequences for theories about moral emotions and cooperation. Accordingly, this finding would contradict the general assumption that moral emotions unequivocally motivate prosocial behaviors.

Two experiments were conducted to test the hypotheses about the effects of guilt and shame. Social motives were measured with the often used Triple Dominance Measure of Social Value Orientations (Van Lange, Otten, De Bruin, & Joireman, 1997). In both experiments first feelings of shame or of guilt were induced

Table 2.1

Differences between Guilt and Shame according to Emotion Literature

	Emotion		Reference
	Guilt	Shame	
Eliciting event	Moral transgression	Moral transgression or incompetence	(Baumeister et al., 1994; Keltner & Buswell, 1996)
Appraisal	Done damage	Center of attention	(Lewis, 1971; Tangney, 1991)
Self-experience	Bad person	Weak person	(Lewis, 1971; Tangney & Fischer, 1995)
Action tendency	Make up for wrongdoing	Hide/withdraw	(Lindsay-Hartz, 1984; Tangney et al., 1996)

using an autobiographical recall procedure, similar to that of Ketelaar and Au (2003). After this manipulation, participants in Experiment 2.1 played a dyadic social dilemma game. They decided to what extent they would act cooperatively when interacting with another person. In Experiment 2.2, cooperation was assessed by means of a newly developed prosocial tendencies scale. In both experiments we expected and found guilt to increase cooperative behavior, especially for proselves, as was found by Ketelaar and Au (2003). For shame, we expected and found no effect on cooperation.

Experiment 2.1

Method

Participants. Undergraduate economics and psychology students at Tilburg University (66 males and 76 females, $M_{age} = 20$, $SD = 1.89$) participated in this study in partial fulfillment of a course requirement. The study had a 3 (Emotion condition: Control vs. Guilt vs. Shame) \times 2 (SVO: Prosocial vs. Proself) between subjects-factorial design with cooperation in a one-shot social dilemma game as dependent variable. Participants were randomly assigned to one of the three emotion conditions. Originally, 142 students participated in this study, but 16 participants who could not be classified as prosocial or proself were therefore left out of the analyses. In studies using this measure of social motives it is common that 10% - 20% of the participants are unclassifiable (Nelissen et al., 2007; Van Lange & Visser, 1999). Seventy one percent of the males and 52% of the females were proselves.

Procedure and Variables. Participants entered the laboratory in groups of eight to twelve participants. They were seated in separate cubicles and informed that the hour consisted of multiple, unrelated studies. All the tasks were unrelated and we were interested in whether emotion induction in one task would influence cooperation in a subsequent unrelated task. The studies

consisted of computer tasks and paper-and-pencil tasks and were all in Dutch. First, participants were asked to complete a questionnaire that was placed next to the computer. This questionnaire was the emotion induction manipulation and was adopted from Ketelaar and Au (2003). The Dutch emotion words “schuld” and “schaamte” were used for the English emotion words “guilt” and “shame.” Previous cross-cultural research showed that these words in both languages refer to similar emotion experiences, emotion elements and feelings (Breugelmans & Poortinga, 2006; Fontaine et al., 2006). In the Guilt condition, participants were asked to report a personal experience in which they felt very guilty. Participants wrote for example about cheating on their romantic partner, forgetting a friend’s birthday, breaking valuable things of others and other related behaviors. In the Shame condition, participants were asked to report a personal experience in which they felt very ashamed. For example, they wrote about bad performance in sports, giving a bad presentation, or failing an exam. In the Control condition, participants were asked to describe a regular weekday. Participants worked approximately 10 minutes on this emotion induction task.

Next, participants continued with an unrelated cooperation game, which was the dependent measure. Participants played, via the computer, a ten-coin give-some dilemma game with another participant (Van Lange & Kuhlman, 1994). At the beginning of the game the participants had ten coins, each worth €0.50 for the participant but €1 for the interaction partner. The interaction partners also had ten coins, each worth €0.50 for themselves but €1 for the participant. The participant decided how many coins to give to the interaction partner, without knowing how many coins the interaction partner would give. In this game, participants would earn most together when both offered all coins to the interaction partner (the cooperative option). In contrast, the participants themselves would earn most when keeping all their coins to themselves (the selfish option). The number of coins offered was the measure of cooperation.

After the game ended participants continued with a third task. Here they were asked to go back to the first questionnaire and to reread the description they provided in the first task (the emotion induction task). To check if the emotion manipulation worked properly, participants subsequently indicated how much shame and guilt they felt in the described situation. Because one could experience a number of different emotions in these situations, participants were also asked to indicate how much regret, disappointment, sadness, fear, anger at self, anger at others, and dissatisfaction they felt in the situation. All emotions were rated on 11-point scales ranging from 0 (not at all) to 10 (very strongly).

The task including the manipulation checks was followed by multiple, unrelated computer tasks and paper-and-pencil studies. At the end of the hour, participants' social value orientation (SVO) was assessed via the Triple Dominance Measure (Van Lange et al., 1997). Usually, two types of SVO are distinguished: prosocials (who maximize joint gain and strive for equality) and proselfs (who maximize their own outcome). Participants were classified as prosocials ($n = 49$) or proselfs ($n = 77$) based on at least six (out of nine) consistent choices. Importantly, the proself/prosocial classification was unaffected by the emotion induction, $\chi^2(2, N = 126) = 0.56, ns$. After completion of all tasks participants were thanked and debriefed.

Results

Manipulation Checks. Results of both the manipulation checks and cooperation are displayed in Table 2.2. The manipulation checks and cooperation are displayed in Table 2.2. The manipulation checks showed that the emotion induction was successful. Participants in the Guilt condition reported significantly more guilt than participants in the Shame condition, $t(85) = 5.37, p < .001$, and participants in the Control condition, $t(79) = 14.27, p < .001$. Participants in the Shame condition reported significantly more shame than participants in the Guilt condition, $t(85) = 3.77, p < .001$, and participants in the Control condition, $t(82) = 26.94, p <$

Table 2.2

Means with Standard Deviations in Parentheses of Experienced Emotion and Cooperation in Experiment 2.1

	Emotion Condition		
	Control	Guilt	Shame
	(<i>n</i> =39)	(<i>n</i> =42)	(<i>n</i> =45)
	<i>M</i> (<i>SD</i>)	<i>M</i> (<i>SD</i>)	<i>M</i> (<i>SD</i>)
Experienced Emotion			
Guilt	1.87 (1.89)	8.60 (1.53)	5.38 (3.59)
Prosocial	1.91 (2.35)	8.65 (1.39)	5.12 (3.84)
Proself	1.81 (3.02)	8.55 (1.68)	5.74 (3.28)
Shame	1.10 (1.43)	7.57 (1.89)	8.84 (1.21)
Prosocial	1.30 (1.49)	7.60 (1.70)	9.00 (1.20)
Proself	0.81 (1.33)	7.55 (2.09)	8.63 (1.21)
Cooperation			
Prosocials	5.24 (3.70)	4.93 (3.20)	5.53 (2.27)
Proselfs	3.41 (3.94)	6.04 (3.04)	3.04 (3.31)

Note. *Shame and guilt were measured on an 11-point scale, ranging from 0 (not at all) to 10 (very strongly). Cooperation reflects the number of coins (out of 10) that the participant donated to the other person in the dyad. A higher score signifies higher cooperation.*

.001. Furthermore, participants in the Guilt condition felt more guilty than ashamed, $t(41) = 4.97, p < .001$, and participants in the Shame condition felt more ashamed than guilty, $t(44) = 6.47, p < .001$. There were no differences between the Guilt and Shame conditions on the other emotions assessed (all $t_s(85) < 1.76$). The emotion manipulation worked for both proselfs and prosocials, as all reported tests were also significant for prosocials and proselfs.

Cooperation. Two hypotheses were tested. First, guilt was hypothesized to increase cooperation especially for proselfs, replicating the findings of Ketelaar and Au (2003). Participants in the Guilt condition (especially proselfs) were expected to contribute more to the other person than participants in the Control

condition. Second, shame was hypothesized to have no effect on cooperation. Participants in the Shame condition were expected to contribute the same amount of coins as participants in the Control condition.

The findings supported our hypotheses. A 3 (Emotion condition) \times 2 (SVO) ANOVA on the number of coins contributed to the other player showed only a significant Emotion \times SVO interaction, $F(2, 120) = 3.33, p < .05, \eta_p^2 = .05$. The effects of emotion condition on cooperation differed for prosocials and proselfs. For proselfs, guilt feelings had a significant influence on cooperation. Proselfs in the Guilt condition contributed significantly more than proselfs in the Control condition, $t(47) = 2.64, p < .05$, and proselfs in the Shame condition, $t(53) = 3.50, p < .001$. Proselfs in the Shame condition did not contribute significantly more than proselfs in the Control condition, $t(48) = 0.37, ns$. If anything, proselfs in the Shame condition contributed less than participants in the Control condition. For prosocials, there was no significant difference between the Guilt condition and the Control condition, $t(30) = 0.25, ns$, and between the Guilt condition and the Shame condition, $t(30) = 0.61, ns$. Also, contributions of prosocials in the Shame condition did not differ significantly from contributions of prosocials in the Control condition, $t(32) = 0.28, ns$. These results could not be explained by Gender, as a 3 (Emotion condition) \times 2 (Gender) ANOVA showed no significant results, $F(2, 120) = 0.43, ns$. Thus, guilt motivated cooperation only for proselfs whereas shame did not have any influence on cooperation.

Discussion

Contrary to the assumption of scholars like Smith (1759) and Frank (1988/2004), this study showed that not all moral emotions motivate cooperation. Using a procedure similar to that of Ketelaar and Au (2003) and Nelissen et al. (2007), we found that guilt increased cooperation in a dyadic social dilemma game especially for proselfs. Shame, another moral emotion, did not motivate cooperation in a dyadic social dilemma.

It is important to note that the effect of guilt on cooperation is a perfect replication of Ketelaar and Au (2003), even though different measures were used. While they used the first 40 rounds of a repeated bargaining game to assess the social motives of their participants, the present study used an independent and validated measure to classify participants as prosocials or proselfs (Van Lange et al., 1997). In addition, Ketelaar and Au used the first 10 rounds of the second set of 40 rounds of the repeated social dilemma game to measure cooperation, while the present study used a single-shot give-some dilemma game that was clearly unrelated to the SVO measure. Despite these procedural differences, the cooperative effect of guilt on behavior for proselfs was replicated. We consider this a very valuable replication, because until now the results of Ketelaar and Au and Nelissen et al. (2007) constituted the sole support for increased cooperation after guilt. The effect of guilt on cooperation appears to be fairly robust.

In contrast to the current findings for guilt, no evidence was found for increased cooperation in the social dilemma game after induction of shame. If anything, this emotion led to a (nonsignificant) decrease in cooperation in the social dilemma. At least in the situations examined here, this finding suggests that not all moral emotions motivate cooperative behavior.

There are three alternative explanations for the results that cannot be ruled out on the basis of the data obtained in Experiment 2.1. First, it could be that the induction of shame was less successful or less intense than the induction of guilt. The emotion manipulation check in Experiment 2.1 does not preclude this, because participants were asked to indicate the intensity of the emotions experienced in the described situation and not the emotions experienced at that moment. Thus, we do not know whether autobiographical recall had similar effects for shame as for guilt on current emotional experience.

A second reason why the induction of shame might not have been

successful is the time elapsed between the recalled event and the moment in which the experiment took place. Rimé, Mesquita, Philippot, and Boca (1991), for example, found that shame events took place longer ago than guilt events in their study on the social sharing of emotions. This may imply that the shame events reported in the current study could have taken place longer ago than the guilt events. If this is the case, shame experiences could have been less intense than guilt experiences and therefore would have no effect on cooperation. We do not think that the results of Rimé et al. can be easily generalized to our study, because they investigated emotional events that people tended to talk about with others and these may differ from the one that people write about in the task we used. But, because the time elapsed since the event was not asked, this possibility cannot be ruled out.

A third reason for the non-effects of shame may be that the measure of cooperation was not sensitive to the effects of shame. Cooperation was measured in a one-shot, dyadic social dilemma game. It is possible that the effects of shame on cooperation can not be picked up by social dilemma games. Other measures for cooperation could show whether the present results in Experiment 2.1 can be generalized to other cooperation settings.

In order to address these points, a second experiment was conducted. In Experiment 2.2, shame and guilt again were induced using the autobiographical recall procedure. Following the emotion induction, participants reported the emotions they were feeling at that very moment. To control for possible differences in shame and guilt in time elapsed between the moment the reported event took place and the experiment, participants were asked to indicate the time elapsed since the event took place. Finally, to see whether the results of Experiment 2.1 can be generalized outside social dilemma games, we measured cooperation with the Prosocial Tendencies Scale, a nine-item scale considering cooperation in daily situations. A replication of Experiment 2.1 for the effects of both guilt and shame was expected.

Experiment 2.2

Method

Participants. Undergraduate students at Avans University Breda and at Tilburg University (78 males and 73 females, $M_{age} = 21$, $SD = 2.72$) volunteered to participate in this study. They were randomly assigned to one of the three emotion conditions of the 3 (Emotion condition: Control vs. Guilt vs. Shame) \times 2 (SVO: Prosocial vs. Proself) between subjects-factorial design. Originally, one hundred and fifty one students participated in this study, but thirty three participants who could not be classified as prosocial or proself were left out of analyses. Fifty two percent of the males and 35% of the females were proselfs.

Procedure and Variables. Participants were seated and informed that the questionnaire they would fill in consisted of multiple, unrelated studies. Again, all the tasks were unrelated and we were interested in whether emotion induction in task one would influence cooperation in task two. First, depending upon the condition, participants were asked to report a personal experience in which they felt very guilty (Guilt condition) or very ashamed (Shame condition), or to describe a regular weekday (Control condition). This is the same manipulation as in Experiment 2.1.

After describing the personal experience, participants were asked to indicate the time elapsed since this event took place. They indicated how many weeks, months and years ago the event took place. The reported time elapsed was converted to weeks. Then, to check whether the emotion manipulation worked properly, participants rated how much shame and guilt they felt at that very moment. Participants were also asked to rate how much regret, disappointment, sadness, fear, anger at self, anger at others, and dissatisfaction they felt at that moment. All emotions were rated on 11-point scales ranging from 0 (not at all) to 10 (very strongly).

Next, participants continued with a new task, a cooperation

questionnaire that was the dependent measure. This questionnaire was a specially developed measure of general cooperation tendencies, hereafter referred to as the Prosocial Tendencies Scale. This 9-item state measure was inspired by a 23-item trait cooperation measure, the Prosocial Tendencies Measure (Carlo & Randall, 2002). From the Prosocial Tendencies Measure the items concerning compliant helping (that is, helping others in response to a request), items concerning money or goods, and items concerning helping in order to enhance one's own position were left out because these items did not reflect everyday, voluntary cooperation. A Factor Analysis on the nine items showed a clear one factor solution (see the Appendix 2.1 for the items and factor loadings). This factor had an eigenvalue of 4.85, explained 50% of the variance, and the nine items formed a reliable scale ($\alpha = .89$). For each item, participants were asked to report how much they wanted to undertake that action at that very moment. All items were rated on 11-point scales ranging from 0 (not at all) to 10 (very much).

At the end of the questionnaire, participants' social value orientation (SVO) was assessed via the Triple Dominance Measure (Van Lange et al., 1997). Participants were classified as prosocials ($n = 66$) or proselves ($n = 52$) based on at least six (out of nine) consistent choices. This classification was unaffected by the emotion induction, $\chi^2(2, N = 118) = 0.39, ns$. After completion of all tasks participants were thanked and debriefed.

Results

Manipulation Check. Results of both the manipulation checks and cooperation are displayed in Table 2.3. The manipulation checks showed that the emotion inductions were successful. Participants in the Guilt condition reported significantly more guilt than participants in the Shame condition, $t(90) = 2.02, p < .05$, and participants in the Control condition, $t(79) = 15.80, p < .001$. Participants in the Shame condition reported significantly more shame than participants in the Guilt condition, $t(90) = 2.92, p <$

.01, and participants in the Control condition, $t(83) = 10.18, p < .001$. More importantly, participants in the Guilt condition felt more guilty than ashamed, $t(43) = 2.98, p < .01$, and participants in the Shame condition felt more ashamed than guilty, $t(47) = 4.18, p < .001$. There were no differences between Guilt and Shame conditions on the other assessed emotions (all $t_s(90) < 1.61$). The emotion manipulation worked for both proselves and prosocials, as all reported tests were also significant for prosocials and proselves. There was no difference between reported time elapsed in the Guilt condition ($M = 117, SD = 198$) and the Shame condition ($M = 91, SD = 115, t(90) = 0.70, ns$). Furthermore, the reported time elapsed had no influence on the reported guilt, $\beta = .12, ns$, no influence on reported shame, $\beta = .14, ns$, and no influence on cooperation, $\beta = .11, ns$.

Table 2.3

Means with Standard Deviations in Parentheses of Experienced Emotion and Cooperation in Experiment 2.2

		Emotion Condition		
		Control (<i>n</i> =37)	Guilt (<i>n</i> =44)	Shame (<i>n</i> =48)
		<i>M</i> (<i>SD</i>)	<i>M</i> (<i>SD</i>)	<i>M</i> (<i>SD</i>)
Experienced Emotion				
Guilt		0.41 (0.69)	6.11 (2.10)	5.08 (2.73)
	Prosocial	0.41 (0.67)	6.42 (2.02)	5.06 (2.69)
	Proself	0.40 (0.74)	5.84 (2.22)	5.13 (2.90)
Shame		0.62 (1.04)	5.25 (2.50)	6.65 (2.09)
	Prosocial	0.73 (1.16)	5.42 (2.67)	6.75 (1.97)
	Proself	0.47 (0.83)	4.95 (2.35)	6.44 (2.34)
Cooperation				
	Prosocials	6.72 (1.21)	6.06 (.90)	6.26 (1.12)
	Proselfs	5.31 (1.90)	6.36 (.78)	5.41 (1.44)

Note. Shame and guilt were measured on an 11-point scale, ranging from 0 (not at all) to 10 (very strongly). Cooperation reflects the mean score on the nine cooperation items, ranging from 0 (not at all) to 10 (very much).

Cooperation. This experiment again tested two hypotheses. First, guilt was hypothesized to increase cooperation especially for proselves, replicating Experiment 2.1 and the findings of Ketelaar and Au (2003). Proselfs in the Guilt condition were expected to have a higher score on the cooperation scale than proselves in the Control condition. Second, also replicating Experiment 2.1, shame was hypothesized to have no effect on cooperation. Participants in the Shame condition were expected to have the same score on the cooperation scale as participants in the Control condition.

The findings supported our hypotheses. As predicted, a 3 (Emotion condition) \times 2 (SVO) ANOVA showed only a significant Emotion \times SVO interaction, $F(2, 99) = 4.02, p < .05, \eta_p^2 = .08$. The effects of emotion condition on cooperation differed for prosocials and proselves. For proselves, guilt feelings had a significant influence on cooperation. Proselfs in the Guilt condition had a significant higher score than proselves in the Control condition, $t(29) = 1.97, p = .05$, and proselves in the Shame condition, $t(28) = 2.24, p < .05$. Proselfs in the Shame condition did not have a significant different score compared to proselves in the Control condition, $t(29) = .16, ns$. For prosocials, there was no significant difference between the Guilt condition and the Control condition, $t(36) = 1.92, ns$, and between the Guilt condition and the Shame condition, $t(36) = 0.64, ns$. Also, scores of prosocials in the Shame condition did not differ significantly from scores of prosocials in the Control condition, $t(40) = 1.30, ns$. These results could not be explained by Gender, as a 3 (Emotion condition) \times 2 (Gender) ANOVA showed no significant results, $F(2, 99) = 2.04, ns$. Thus, again, guilt motivated cooperation for proselves whereas shame did not have any influence on cooperation.

Discussion

In this experiment, the findings of Experiment 2.1 were fully replicated. Guilt again motivated cooperation for proselves, this time on the Prosocial Tendencies Scale. In contrast, shame, the other moral emotion, did not have any influence on cooperation in

everyday situations.

These results showing the positive effect of guilt on cooperation and the non-effect of shame on cooperation cannot be explained by a less successful or less intense induction of shame compared to guilt, neither by the time elapsed since the reported event took place. Both of these were possible alternative explanations of the absence of an effect of shame in Experiment 2.1. We consider the most important finding the replication for both guilt and shame on a totally different cooperation measure, the specially developed Prosocial Tendencies Scale. This makes the findings from Experiment 2.1 more reliable and shows that the effects of guilt and shame on cooperation can be generalized to different situations.

General Discussion

Economists and psychologists like Frank (1988/2004), Ketelaar (2004), and Smith (1759) assumed that moral emotions motivate cooperation. Two studies have shown that this claim is not applicable to all moral emotions. While the moral emotion guilt motivated cooperation in both social dilemma situations and everyday situations, shame, another moral emotion, did not have an effect on cooperation in either of these measures. Thus, not all moral emotions motivate cooperative behavior.

The differential effects of guilt and shame on cooperation can be explained by inspecting the motivations that accompany the emotions (Zeelenberg, Nelissen, & Pieters, 2007). We think that specific emotions motivate people to behave in different ways, leading to different behaviors. Guilt signals that one has hurt another person and motivates reparative behavior in order to undo the wrongdoing (Tangney et al., 1996). As prosocial or cooperative behavior is a way to repair, this emotion motivates cooperation in social dilemmas and in everyday situations. Shame signals that one has made a mistake and motivates withdrawal in the short

term in order to avoid more mistakes (Tangney et al., 1996). As cooperation or prosocial behavior is not a withdrawal strategy, shame will not have any influence on cooperation in the short term.

The effect of guilt on cooperation appears to be fairly robust. Ketelaar and Au (2003), Nelissen et al. (2007) and Experiment 2.1 found guilt to motivate cooperation in social dilemma games. This finding was replicated with an everyday cooperation measure in Experiment 2.2. This effect of guilt can play an important role in economic behavior. While economic theory assumes that people act according to immediate self-interest, guilt is a moral emotion that can easily motivate people to act more cooperatively.

The findings can also play an important role in emotion research. The present studies show that in addition to the variables measured in traditional emotion research, guilt and shame can be differentiated on the basis of the behavioral consequences that ensue from the emotions. Here, emotion researchers can benefit adopting a decision-making perspective. Decision researchers have traditionally focused on the effects of variables on behavioral choice, and the current research shows how some of their paradigms can be useful in differentiating emotions.

Like Ketelaar and Au (2003) and Nelissen et al. (2007), we only found a cooperative effect of guilt for proselfs. One may argue that in prosocials the motivation to act cooperatively is chronically activated (Nelissen et al., 2007), hence no additional activation of this motivation by guilt is to be expected. In contrast, for proselfs a cooperative motivation is not chronically activated. For these people, the experience of guilt activates this motivation and subsequently increases cooperation. As shame does not activate a motivation to cooperate, there are no differential effects of this emotion for proselfs and prosocials.

Before closing, we would like to make three observations regarding the specifics of the present experiments that call for

future research. The first observation pertains to the reported emotions in the Shame and Guilt conditions. The amount of guilt reported in the Shame condition is lower than the amount of reported shame, but still greater than the amount of guilt reported in the Control condition. If guilt has a separate bearing on cooperative behavior then we would have expected proselves to have shown at least some increase in cooperation in the Shame condition in comparison to the Control condition. The fact that such an effect was not found may suggest that, even though we may experience multiple emotions at the same time, our behaviors are motivated by a single emotion at that time. There may be several explanations for this finding. It is possible that the strongest emotion cancels out the action tendencies of any other emotions, leaving only shame to influence cooperation in the Shame condition. It is also possible that the strongest emotion gets action priority (see Frijda, 1986) whereas less intense emotions, when not faded yet, can influence behavior after the strongest emotion has been reacted upon. This would mean that guilt could still affect cooperative behaviors after the effects of shame have faded. There is a clear need for future research considering how multiple experienced emotions influence our behavior.

A second observation concerns the used measures for cooperation. The replication of the present results on these two very different measures suggests that the findings can be considered fairly robust. However, the finding that shame does not motivate cooperation on these measures does not necessarily imply that shame does not motivate cooperation in general. We only considered short-term cooperation and not long-term cooperation. It is possible that shame motivates cooperation in the long term, for example by conformity to group norms (see Fessler, 2004). Further empirical research is needed to investigate whether the long-term effects of shame on cooperation are similar to the short-term effects of shame.

A third observation relates to the emotion manipulation used in the

current studies. In both studies, emotions were induced with an autobiographical recall procedure. This procedure was also used by Ketelaar and Au (2003), Nelissen et al. (2007) and others. In such a procedure, the emotional state that is elicited is not directly related to the following task (in this case the dyadic interaction and the cooperation scale). Zeelenberg and Pieters (2006) term emotions in such situations as “exogenous,” to emphasize the fact that the emotional influence comes from outside the relevant situation. In the present studies, it was assumed that the motivation activated by the emotion influences behavior across situations. This is supported by the findings that exogenous guilt motivated cooperation, corresponding to the motivation to repair, and that exogenous shame did not influence cooperation, corresponding to the motivation to withdraw. As yet it is not clear whether these exogenous effects of emotions are always similar to their endogenous effects (that is, when the emotion is directly relevant for the task at hand). One study supporting the assumption that exogenous and endogenous effects of emotions are similar is the second study of Ketelaar and Au (2003). The results of this study showed that endogenous guilt had the same effects on cooperation as exogenous guilt. This finding gives support for the assumption that the present results also apply to endogenous guilt. There is, however, no research considering the effects of endogenous shame. It may be the case that experiences of shame that are directly relevant for a current social interaction do have an effect on that interaction. For example, some social dilemma games include an exit option. This option offers people the possibility to avoid the interaction situation altogether without the would-be interaction partner ever knowing about the possibility of interacting (Dana, Cain, & Dawes, 2006). We would expect shame to have effects in such a situation, because of its motivational tendency to withdraw from the situation. It may also be the case that exogenous shame does not motivate cooperation, but that endogenous shame does motivate cooperation. We are currently exploring the effects of endogenous shame on cooperation.

In closing, let us return to the question that motivated the research, namely whether moral emotions in general promote cooperative behavior. We have obtained clear support for the idea that different moral emotions may have specific effects on cooperative behavior. As such, this research demonstrated the use of thinking about emotions in motivational terms and the importance of emotion specific predictions, even when considering emotions that are so closely related as shame and guilt.

Appendix 2.1

Items and Factor Loadings of the Prosocial Tendencies Scale used in Experiment 2.2 (N = 117, $\alpha = .89$)

Item	Factor loading
1. help an unknown other	.72
2. help a person while others are looking at me	.70
3. comfort someone who is emotionally very upset	.68
4. help a person when (s)he does not know who is helping	.72
5. help a person while I get in the spotlight as a consequence	.59
6. support a person who is emotionally distressed	.74
7. help a person without him/her knowing	.59
8. help a person while others are watching the way I do everything	.68
9. help someone who hurt him/herself	.60

Note. Items were complements to the sentence “At this moment I would like to...” and could be answered at 11-point scales with end points labeled 0 (not at all) and 10 (very much).

Chapter 3

Not So Ugly After All: When Shame Acts As a Commitment Device²

Shame is one of the most intense self-conscious emotions (Lindsay-Hartz, 1984; Tangney, 1991), playing a central role in development, pathology and self-regulation (Erikson, 1963; Freud, 1923/1961). Many psychologists tend to think of shame as a painful emotion that has profound negative psychological and behavioral consequences (see Tangney & Dearing, 2002). These negative consequences raise questions with respect to the function of shame, because emotion theorists generally assume that emotions are functional in the sense that they promote behavior that has beneficial consequences for the individual or community (Frijda, 1986; Keltner & Gross, 1999). As such, the current psychological knowledge of shame poses a kind of paradox: how could shame be a functional emotion when it has only negative psychological consequences?

Emotions that entail negative experiences can be functional. Moral emotions, for example, are assumed to motivate prosocial interpersonal behaviors (e.g., Haidt, 2003). Moral emotions make selfish behavior less attractive, thereby promoting behavior that is beneficial to others within one's social group (Frank, 1988, 2004; Ketelaar, 2004; Smith, 1759). However, such prosocial effects have been found for guilt but not yet for shame (see Chapter 2). In this article we solve the apparent paradox concerning the function of shame by revealing that shame motivates prosocial behavior when its experience is relevant for the decision at hand (what we refer to as endogenous), but that its experience has no such effect when it is not relevant (what we refer to as exogenous). First an overview is provided regarding the supposedly opposing views of

² This chapter is based on De Hooge, Breugelmans & Zeelenberg (in press) 43

shame as an ugly emotion on the one hand and as a moral emotion on the other hand, and then the role of the relevance of emotion is explained in solving this paradox. To our knowledge, the data constitute the first empirical evidence of positive interpersonal effects of shame, providing more insight in the function of this prevalent self-conscious emotion.

The Function of Shame as an Ugly Emotion

In 1991, Tangney summarized the scientific knowledge concerning shame as follows: "Shame is an ugly feeling" (p. 600). Shame is an overwhelming and unpleasant emotion associated with feelings of worthlessness, inferiority, and of a damaged self-image (Ausubel, 1955). Experiences of shame are characterized by confusion in thought, inability to speak, and rumination (e.g., Miller, 1995; Orth, Berking, & Burkhardt, 2006). The primary tendency associated with this emotion is to withdraw from the situation that elicited the shame and to hide from other people (Lindsay-Hartz, De Rivera, & Mascolo, 1995; Tangney & Fischer, 1995). Many scholars have described the negative psychological and behavioral consequences of shame, for example by linking chronic experiences of shame to having a lower self-esteem, less empathy, more shyness, more social anxiety, and a higher likelihood of depression (e.g., Gilbert, Pehl, & Allan, 1994; Harder, Cutler, & Rockart, 1992). This consensus on the negative effects of shame has led Tangney (1999) to question whether shame serves any adaptive functions at all.

The absence of a positive function of shame is especially puzzling because emotions are currently understood as psychological processes that function to benefit the person or society (Keltner & Gross, 1999). Emotions react to signals in the environment that one's concerns are at stake and motivate goal-directed behaviors that serve to protect and further these concerns (Frijda, 1986; Zeelenberg & Pieters, 2006). Depending on the situation, their effects can be functional or dysfunctional, and the dysfunctional

effects help to understand what is necessary for emotions to be functional (Parrott, 2001b). It is useful to differentiate the function of an emotion from its behavioral consequences, although the two are obviously related. The function of an emotion is a theoretical account of why it motivates particular types of behavior and is directed towards benefiting one's own best interest. The observable behavioral consequences of emotions are all possible effects that follow from an emotion (Frijda & Zeelenberg, 2001). Functions can be defined at the intrapersonal level, coordinating physiological, perceptual and cognitive processes that enable the person to adapt, and at the interpersonal level, addressing concerns within ongoing interactions such as redressing injustice or mate protection (Keltner & Gross, 1999). Especially for self-conscious emotions, which are grounded in social relationships, a prime function is to adjust interpersonal relationships (De Rivera, 1984; Caplovitz Barrett, 1995). For example, Baumeister, Stillwell, and Heatherton (1994) have argued that guilt serves relationship-enhancing functions by motivating people to treat partners well and to avoid interpersonal transgressions. However, the field of emotion research has remained largely mute with regard to possible interpersonal functions of shame. An exception are Fessler and Haley (2003, p. 26), who speculated about the possible functions of shame: "Shame and pride can promote cooperation in purely dyadic interactions, as the actor can feel shame if she defects and the partner knows about, or is likely to learn of, her defection".

There is an abundance of empirical research on shame, but there are at least two reasons why the empirical record so far has not shed much light upon the possible interpersonal functions of shame. First, research supporting the view of shame as an ugly emotion consists primarily of studies concerning the correlates of shame-proneness and not of situationally induced experiences of shame. Shame-proneness is the general tendency of an individual to experience shame (Tangney, 1990). This research convincingly shows that people who are likely to experience shame, or who experience shame very frequently, are also prone to feelings of

inferiority, anxiety, lessened empathy, shyness, interpersonal distrust, and depression (Gilbert et al., 1994; Harder et al., 1992; Tangney and Dearing, 2002). However, it is not at all clear that these findings of shame-proneness as a trait can be generalized to experiences of the emotion shame as a state. As a case in point, Allan, Gilbert, and Goss (1994) examined the relationship of shame-proneness and actual experiences of shame with multiple factors. Although shame-proneness and experiences of shame were related, they were found to have different relations with social dysfunction, feelings of inferiority, and anger. While shame-proneness was strongly related to depression and social dysfunction, experiences of shame were related to feelings of inferiority and anger at self and others. This finding was recently replicated by Rüsçh et al. (2007), who found that shame-proneness was negatively related to self-efficacy and empowerment, and positively related to psychopathology, while experiences of shame were only related to state anxiety.

A second reason why studies of shame may have failed to capture the interpersonal functions of shame is methodological. The few studies that did focus on the interpersonal effects of shame as a state only examined a limited set of action tendencies. In line with the view of shame as an ugly emotion, studies have so far mainly focused on tendencies to withdraw or to hide. For example, Wicker, Payne, and Morgan (1983) found that people reported a higher tendency to hide after describing a shame experience than after describing a guilt experience. Tangney, Miller, Flicker, and Barlow (1996) replicated this finding in a comparison of shame, guilt, and embarrassment. In addition, they measured the tendency to admit what people had done and to make amends, showing that people who experienced shame reported a lower inclination of both tendencies compared to guilt. Frijda, Kuipers, and Ter Schure (1989) measured behavioral tendencies to approach others, to disappear, to move away from others, and to reject things. They found that shame was characterized by the tendency to disappear from view but also by the desire to undo the shame situation. These action tendencies are an important

experiential component of emotions, because they reflect the priority of goal-directed behavior that is motivated by the emotion (Frijda, 1986). However, the relationship between action tendencies and actual behavior is not always strong and sometimes even absent because of the many situational, personal, and social factors that may intervene (Frijda, 2004). Thus, we can tentatively conclude that studies of shame experiences so far have not yet addressed the possibility that shame may serve a positive interpersonal function.

The Function of Shame as a Moral Emotion

Apart from being a self-conscious emotion, shame has also been perceived as one of the moral emotions that motivate prosocial behavior (e.g., Emde & Oppenheim, 1995; Goldberg, 1991). Moral emotions are emotions that are linked to the interests of other people (Haidt, 2003). Adam Smith, the founder of modern economics, suggested as early as 1759 that moral sentiments lead people to focus on the other and on how one's own behavior affects the others' well-being. When there is a conflict between self interest and others' interests (i.e., a social dilemma), moral sentiments motivate people to take into account other people's interests. This view has been developed further by Frank (1988, 2004), according to whom moral emotions commit people to a prosocial, long-term strategy, when selfishness might seduce them to choose immediate rewards at the expense of others. When choosing the immediate reward elicits unpleasant moral emotions such as shame or guilt, this behavioral alternative becomes less attractive. Thus, moral emotions have an interpersonal function in that they stimulate prosocial behaviors in the short run, committing people to long-term prosocial strategies. In Frank's words: "these emotions serve as commitment devices" (p. 5). It should be emphasized that this conception does not contradict the view that personal experiences of shame may be negative or even ugly. Rather, it emphasizes that the actual function of shame lies in promoting prosocial behavior. Note, however, that this theorizing

has not yet been the subject of extensive empirical testing.

The proposed prosocial effects of moral emotions have only recently been supported by empirical research. For example, Ketelaar and Au (2003) showed that people with the natural tendency to act selfishly acted more prosocially in social dilemmas and ultimatum games when they experienced guilt. These findings were replicated by Nelissen, Dijksterhuis, and De Vries (2007), who found that induction of the moral emotion guilt increased prosocial behavior for people with the tendency to act selfishly, but that induction of the non-moral emotion fear did not. However, in contrast to guilt, the case for shame as a moral emotion is less clear. In a series of recent studies we found prosocial effects for guilt, but not for shame (Chapter 2). Guilt experiences increased prosocial behavior in everyday situations as well as in a social dilemma, but these effects were not found when participants recalled experiences of shame.

To summarize, the view of shame as a moral emotion suggests that it may have an interpersonal function, but the empirical evidence is still wanting. We think that shame does have this prosocial function, but that previous studies have not been able to find this because of the way that emotions were induced. We argue that the relevance of the induced emotion for the behavioral decision at hand is crucial for understanding the interpersonal function of shame.

Exogenous and Endogenous Influences of Shame

Maybe the most important reason to study emotions is that they can explain or predict human behavior (Frijda, 2004). The influence of emotions on behavior is either exogenous or endogenous to current goal pursuit (Zeelenberg & Pieters, 2006). In the literature, this distinction has been made under different names like integral versus incidental emotions (Lerner & Keltner, 2000) and task-related versus incidental affect (Garg, Inman, &

Mittal, 2005). We prefer to use exogenous and endogenous influences of emotions because these terms precisely capture whether the influence comes from within (endogenous) or outside (exogenous) the goal striving process. Influences of emotions are denoted as endogenous when they concern behaviors in situations that are related to the emotion-causing event. These influences are relevant for and part of current goal pursuit. Examples are the influence of fear of animals on the decision to visit a zoo, or the experience of sadness when taking a loved one to the airport for her departure. One instance of endogenous influence in research is Ketelaar and Au's (2003) study 2, where guilt felt after selfish behavior in a social dilemma influenced subsequent interactions with the same interaction partner. We refer to influences of emotions as exogenous when they influence behaviors in situations that are unrelated to the emotion-causing event. These influences are irrelevant for and external to current goal-pursuit. Examples of exogenous influences are the spill-over effects of emotions resulting from a prior experience, such as watching a happy or a sad movie, on subsequent, unrelated decisions, such as deciding how much to tip the driver of the cab that brings you home. Endogenous and exogenous influences of emotions can have similar behavioral effects, such as guilt motivating prosocial behavior in related and unrelated situations (Ketelaar & Au, 2003). However, due to the specific action tendencies of shame, we think that a distinction between endogenous and exogenous influences of emotions is especially important for understanding the interpersonal effects of shame, as will be outlined below.

The central focus of experiences of shame is a threatened self (Lewis, 1971). Thus, a central motivation of shame will be to cope with this threat. Possible action tendencies following this motivation are social withdrawal (i.e., leaving or hiding; Tangney et al., 1996), but also prosocial behavior (Goldberg, 1991). These action tendencies represent different behavioral options that people can use in order to prevent more damage or even restore the threatened self that is experienced in shame.

When the influence of shame is exogenous, that is not relevant to the current decision situation, the situation in which the self was threatened is already different from the decision situation at hand. For example, one might still feel residual shame over having given a very bad presentation at a conference when one is sitting in an airplane flying home directly after one's talk. In this case, the shame is no longer relevant for any decision taken in the airplane, for example when a stranger asks to swap seats. In fact, by being in a different situation, the motivation underlying shame has already been (partially) satisfied because one has already left the threatening situation (i.e., your peers at the conference venue). Therefore, the shame is no longer part of the current goal pursuit and no effects of shame on prosocial behavior are to be expected. Indeed, in previous studies we found no effects of shame on prosocial behavior in situations unrelated to the induction procedure (Chapter 2).

When the influence of shame is endogenous, that is relevant to the current decision situation, stronger behavioral effects can be expected. For example, if one is still at the conference venue after the very bad presentation, one's self would still be threatened and shame would still motivate action tendencies aimed at reducing or alleviating this threat. One may feel the urge to withdraw from the situation by leaving the conference early, but withdrawal may not always be a realistic option. Alternatively, when confronted with one's peers at the conference dinner, one may cope with the damaged self by complying with norms for prosocial behavior. In this case, the shame is still highly relevant for one's decisions at the dinner, for example when an unknown colleague asks to swap seats. Therefore, we hypothesize that endogenous shame does motivate prosocial behavior, while exogenous shame does not. This prediction is consistent with the analysis of shame as a commitment device, because that theory also predicts prosocial effects and is explicitly designed to explain effects of moral emotions which we call currently endogenous (Frank, 1988, 2004).

Interestingly, the theory of shame as a commitment device also

makes another prediction about who will be affected most by experiences of shame. Some people, called prosocials, have a natural tendency to act prosocially, whereas others, called proselfs, have a natural tendency to act more selfishly (Messick & McClintock, 1968). Moral emotions act as commitment devices by making immediate selfish options less attractive. Shame is expected to motivate prosocial behavior especially in people who are tempted to choose the immediate selfish option (i.e., proselfs). Ample research has shown that situational activation of a goal only affects behavior of people for whom that goal is not already chronically activated (Higgins, 1996). Because acting prosocially can be seen as a chronically activated goal for prosocials (see Nelissen et al., 2007) endogenous shame should have little effect on their level of prosocial behavior. Therefore, we hypothesize that endogenous shame most strongly affects the behavior of proselfs by motivating them to act prosocially. This differential behavioral effect for prosocials and proselfs has already been shown in studies of guilt (Chapter 2; Ketelaar & Au, 2003; Nelissen et al., 2007). Here, we argue that similar results should be found for shame, but only when the emotion is relevant for the current decision, that is, when it is endogenous.

Examining the Prosocial Effects of Shame

Let us summarize: the current research addresses the interpersonal function of shame. The views of shame as an ugly emotion and shame as a moral emotion appear to espouse contrasting predictions with regard to the question of whether shame does or does not have a positive interpersonal function (i.e., can promote prosocial behavior). We try to reconcile these contradicting views by showing that exogenous shame does not augment prosocial behavior (in line with the view of shame as an ugly emotion), but that endogenous shame does augment prosocial behavior (in line with the view of shame as a moral emotion). The behavioral effects of shame should be found mainly for people with proself orientations, because for these people the

motivation to behave prosocially is not chronically activated.

In order to provide a thorough test of our predictions four experiments were conducted, using three different types of shame inductions and two different measures for prosocial behavior. In the first three experiments prosocial behavior was measured in a social dilemma situation. One-shot social dilemma situations are often used to study commitment to long-term prosocial strategies, because the costly choice for mutual cooperation in these situations is only beneficial in the long run (Frank, 2004; Ketelaar, 2004). In Experiment 3.1 shame was induced via a scenario describing a performance situation, in Experiment 3.2 shame was induced with an autobiographical recall procedure, and in Experiment 3.3 shame was induced in the lab using an actual performance situation. In Experiment 3.4, shame was again induced with a scenario, as in Experiment 3.1, but general prosocial tendencies in everyday situations were measured. Because the design of the four studies and the general approach was identical, we describe them here. The specifics of each experiment are described in the separate method sections.

In all experiments participants were assigned to the conditions of a 2 (Emotion condition: Shame vs. Control) \times 2 (Emotion influence: Exogenous vs. Endogenous) between subjects-factorial design with prosocial behavior as the dependent variable. Participants first completed the emotion induction that will be described separately for each experiment.

In Experiments 3.1, 3.2, and 3.3, participants continued with a 10-coin give-some dilemma game (Van Lange & Kuhlman, 1994), the dependent measure of prosocial behavior. This measure is often used in social dilemma research (Chapter 2; Ketelaar & Au, 2003; Nelissen et al., 2007). In this game, the nature of exogenous and endogenous shame was manipulated by coupling the participant with different interaction partners. In the Exogenous condition, the interaction partner was unaware of and unrelated to the shame event. In the Endogenous condition, the interaction partner was

related to and aware of the shame event. In the 10-coin give-some dilemma the participants have ten coins, each worth €0.50 for the participant but €1 for the interaction partner. The interaction partner also has ten coins, each worth €0.50 for themselves but €1 for the participant. The participant decides how many coins to give to the interaction partner, without knowing how many coins the interaction partner would give. In this game, participants would earn most if they kept all their coins for themselves (the most selfish option). In contrast, dyads would earn most if the two members offered all their coins to the other player (the most cooperative option). The number of coins offered was the measure of prosocial behavior. In Experiment 3.4, the nine-item Prosocial Tendencies Scale (Chapter 2) was used as the dependent measure.

In all experiments, the overall tendency to act prosocially or selfishly was measured with the often-used Triple Dominance Measure of Social Value Orientations (Van Lange, Otten, De Bruin, & Joireman, 1997). This measure contains nine items consisting of different monetary divisions between the participant and an unknown other. The divisions encompass both prosocial (equality) and proself (maximizing and individualistic) choices. When participants made six or more consistent choices, they were classified as prosocials or proselfs. Following the standard procedure participants who could not be classified were left out of the analyses. Usually, this constitutes 10 to 20 % of all participants and in the present experiments this ranged from three to 11 %. Social value orientation was always measured last. In all studies, both manipulations of Emotion condition and Emotion influence had no effects on the SVO classification, all χ^2 s < 2.20, *ns* and all χ^2 s < 1.70, *ns*, respectively. After completion of all tasks, participants were thanked and debriefed. In all experiments we tested the hypothesis that endogenous shame motivated prosocial behavior for proselfs and that exogenous shame had no influence on prosocial behavior. In the studies the Dutch emotion word “schaamte” was used for the English emotion word “shame.” Cross-cultural research shows that “schaamte” refers to similar

experiences as the English shame (see Breugelmans et al., 2005; Breugelmans & Poortinga, 2006; Fontaine et al., 2006).

Experiment 3.1

Method

Participants and design. One hundred forty four undergraduate students at Tilburg University participated in a series of unrelated studies and were paid € 7 (= \$9 at the time of the experiment). After exclusion of twelve participants who could not be classified as prosocial or proself, 132 participants remained (41 males and 91 females, $M_{\text{age}} = 21.48$, $SD = 2.41$). There were 62 prosocials and 70 proselfs in the sample.

Participants were asked to: “Imagine you are following a course where everybody has to give a presentation in a work group. In the work group, 25 fellow students are present.” In the Shame condition, participants then read:

When you have to give your presentation everything goes completely wrong. You stumble over your own words, your story is muddled and at the end it is clear that nobody understood what you were trying to tell. At the end some people from the audience ask you questions. Then it becomes clear that you have no mastery of the subject at all.

In the Control condition, participants read: “When you have to give your presentation everything goes normally. Your presentation is as good as those of the other students and in no way do you stand out.” A pretest of these materials ($N = 123$, $M_{\text{age}} = 22$) showed that participants in the Shame condition reported significantly more shame (on a scale ranging from 0 = not at all to 10 = very strongly) ($M = 8.95$, $SD = 1.13$) than participants in the Control condition, ($M = 2.06$, $SD = 2.37$), $t(121) = 21.70$, $p < .001$.

After the emotion induction, participants imagined they played the

10-coin give-some dilemma game with a fellow student whom they did not know very well. In the Exogenous condition the fellow student had not seen the presentation. In the Endogenous condition the fellow student had seen the presentation.

Results and Discussion

Results are displayed in Table 3.1. We hypothesized that only endogenous shame would motivate prosocial behavior for proselves. We expected participants in the Exogenous Shame condition to contribute the same amount of coins as participants in the Control conditions and we expected proselves in the Endogenous Shame condition would contribute more to the other person than proselves in the other three conditions.

The findings supported our hypothesis. A 2 (Emotion condition: Shame vs. Control) \times 2 (Emotion influence: Exogenous vs. Endogenous) \times 2 (SVO: Prosocial vs. Proself) ANOVA with prosocial behavior as dependent variable showed significant main effects of Emotion influence, $F(1, 124) = 9.95, p < .01, \eta_p^2 = .07$, and of SVO, $F(1, 124) = 16.43, p < .001, \eta_p^2 = .12$, and showed no significant two-way interactions, all $F_s(1, 124) < 3.01, ns$. More importantly, the results showed a significant three-way interaction, $F(1, 124) = 3.82, p = .05, \eta_p^2 = .03$. The effects of shame on prosocial behavior differed for prosocials and proselves, depending on Emotion influence. Prosocials and proselves did not contribute more in the Exogenous Shame condition compared to the Exogenous Control condition. Prosocials and proselves also did not contribute more in the Exogenous Shame condition compared to the Endogenous Control condition, $t(58) = 1.11, ns$, and $t(66) = 1.70, ns$, respectively.

Endogenous shame did influence prosocial behavior. Proselfs in the Endogenous Shame condition contributed more to the interaction partner than proselves in the Endogenous Control condition and proselves in the Exogenous Control condition, $t(66) = 3.95, p < .001$. A contrast analysis of Endogenous Shame versus

Exogenous Shame, Endogenous Control, and Exogenous Control also showed that proselves acted more prosocially when experiencing endogenous shame, $t(124) = 4.17, p < .001$. For prosocials, there was no difference between Endogenous Shame and Endogenous Control, or between Endogenous Shame and Exogenous Control, $t(58) = 0.13, ns$. A contrast analysis of Endogenous Shame versus Exogenous Shame, Endogenous Control, and Exogenous Control showed no differences for prosocials, $t(124) = 0.26, ns$.

Experiment 3.1 thus provided support for the hypothesis considering the prosocial effects of exogenous and endogenous shame. Exogenous shame did not influence behavior. In contrast, endogenous shame motivated prosocial behavior for proselves. To replicate the findings of Experiment 3.1, we conducted Experiment 3.2 using a different induction of shame.

Experiment 3.2

Method

Participants and design. One hundred forty-seven undergraduate students of Tilburg University participated in this Experiment in partial fulfillment of a course requirement. After exclusion of twelve participants who could not be classified as prosocial or prosself, 135 participants remained (32 males and 103 females, $M_{age} = 19.68, SD = 2.86$). There were 66 prosocials and 69 proselves in the sample.

Procedure and Variables. For the emotion induction manipulation, participants were asked to complete a questionnaire that was placed next to the computer. This questionnaire was adopted from Ketelaar and Au (2003). In the Shame condition, participants were asked to report a personal experience in which they felt very ashamed. For example, they wrote about failing an exam, a bad performance in sports, or behaving inappropriately while drunk. In

the Control condition, participants were asked to describe a normal weekday. Participants worked approximately 10 minutes on the emotion induction task.

Next, participants continued with the 10-coin give-some dilemma game. In the Exogenous condition, participants imagined they played this game with a person whom they had never met before and would probably never meet again in the future. In the Endogenous condition, participants imagined they played with a person who was present at or knew of the described event (Shame condition) or the normal weekday (Control condition).

After the game, participants were asked to reread their situation description and indicate how alone they felt, how much they felt that all attention was drawn towards them, how much they did not want others to know about the described event, and how much they were worried about what others would think of them. These are described in the emotion literature as basic elements of shame (Caplovitz Barrett, 1995; Tangney & Fischer, 1995). Subsequently, participants rated how much shame they felt in the situation or on the normal weekday. Participants were also asked to indicate how much guilt, regret, disappointment, sadness, fear, anger at self, anger at others, and dissatisfaction they felt in the situation. All items were rated on 11-point scales ranging from 0 (not at all) to 10 (very strongly). Furthermore, to control for possible differences in type of interaction partner between conditions, participants were asked to indicate whether the person present was a close relative or partner, a friend or colleague, or a vaguely known or unknown other.

Results and Discussion

Manipulation Checks. The manipulation checks showed that the manipulation of the emotion shame was successful. Participants in the Shame condition scored significantly higher on all basic elements of shame compared to participants in the Control condition, all t_s (133) > 7.39, all p_s < .01. Furthermore, participants

in the Shame condition felt significantly more shame ($M = 8.49$, $SD = 1.45$) than participants in the Control condition ($M = 1.27$, $SD = 1.91$), $t(133) = 24.60$, $p < .001$, and felt significantly more shame than other emotions, all $t_s(64) > 6.51$, all $p_s < .001$. There were no differences between the emotion conditions on the other assessed emotions.

Prosocial behavior. Results for prosocial behavior are displayed in Table 3.1. Similar to Experiment 3.1, we expected that only endogenous shame would motivate prosocial behavior for proselves. A 2 (Emotion condition) \times 2 (Emotion influence) \times 2 (SVO) ANOVA with prosocial behavior as dependent variable supported our hypotheses. First, there were significant main effects of Emotion condition, $F(1, 127) = 3.30$, $p = .07$, $\eta_p^2 = .03$, of Emotion influence, $F(1, 127) = 10.02$, $p < .01$, $\eta_p^2 = .07$, and of SVO, $F(1, 127) = 20.32$, $p < .001$, $\eta_p^2 = .14$, and there was a significant two-way interaction of Emotion condition and SVO, $F(1, 127) = 8.64$, $p < .01$. More importantly, the results showed a significant three-way interaction, $F(1, 127) = 9.17$, $p < .01$, $\eta_p^2 = .07$. The effects of shame on prosocial behavior differed for prosocials and proselves, depending on Emotion influence. Prosocials and proselves did not contribute more in the Exogenous Shame condition compared to the Exogenous Control condition. Proselfs also did not contribute more in the Exogenous Shame condition compared to the Endogenous Control condition, $t(65) = 1.14$, *ns*.

Endogenous shame did influence prosocial behavior. Proselfs in the Endogenous Shame condition contributed more to the interaction partner than proselves in the Endogenous Control condition and proselves in the Exogenous Control condition, $t(65) = 3.72$, $p < .001$. A contrast analysis of Endogenous Shame versus Exogenous Shame, Endogenous Control, and Exogenous Control also showed that proselves acted more prosocially when experiencing endogenous shame, $t(127) = 4.73$, $p < .001$. For prosocials, there was no difference between Endogenous Shame and Endogenous Control, or between Endogenous Shame and

Exogenous Control, $t(62) = 1.53$, *ns*. A contrast analysis of Endogenous Shame versus Exogenous Shame, Endogenous Control, and Exogenous Control also showed no differences for prosocials, $t(127) = 0.44$, *ns*. Thus, while exogenous shame did not influence prosocial behavior, endogenous shame did motivate prosocial behavior for proselves.

Unexpectedly, prosocials in the Exogenous Shame condition contributed less than prosocials in the Endogenous Control condition, $t(62) = 2.70$, $p < .01$. This finding might be explained by the manipulation used. In the Shame condition, 34 % of the prosocials reported the other to be an unknown other and 34 % to be a friend or colleague. In the Control condition, 50 % of the prosocials reported the other to be a close relative or their partner. This difference was significant, $\chi^2(2, N = 107) = 6.09$, $p < .05$. Furthermore, in the Exogenous conditions, participants interacted with an unknown other. Thus, it is likely that prosocials acted less prosocially in the Exogenous Shame condition because they interacted with unknown others, while in the Endogenous Control condition they interacted with close relatives or their partner.

To summarize, the findings of Experiment 3.1 were replicated with a different shame induction. Again the data revealed that only endogenous shame motivates prosocial behavior for proselves. Even though these two previous studies employed emotion inductions that are commonly used in literature, the credibility of the findings would be much increased if shame was experimentally induced. Therefore, we conducted Experiment 3.3.

Experiment 3.3

Method

Participants and design. One hundred sixty-three undergraduate students of Tilburg University participated in this Experiment in partial fulfillment of a course requirement. After exclusion of five

participants who could not be classified as prosocial or proself, 158 participants remained (47 males and 111 females, $M_{\text{age}} = 19.88$, $SD = 3.38$). There were 89 prosocials and 69 proselfs in the sample.

Procedure and Variables. Participants entered the laboratory in groups of eight to twelve participants. They were seated in separate cubicles and informed that they would form groups with three other participants present. The participants would be connected to the other group members through their computer. The session started with two intelligence tests. Participants were told that the intelligence tests were meant to see whether group members were comparable in knowledge and academic abilities. In total, participants could earn 20 points on the two intelligence tests. In the first test, participants answered ten general knowledge questions (adopted from Van Harreveld, Van Der Pligt, Nordgren, & Claassen, in press). For every good answer, participants received one point. In the second test, English language skills were examined by ten items, where every good answer counted as one point.

Following the intelligence tests, the computer calculated the number of points earned by each group member. In the meantime participants were told that their score would give insight into their academic abilities and their chances of obtaining an academic degree. They were explained that a score below 12 points indicated (highly) insufficient abilities, between 12 and 16 points indicated normal abilities, and a score above 16 points indicated (highly) sufficient abilities. After the explanation, participants publicly received bogus feedback about their performance. In the Shame Condition, all group members saw on their computer screen that the participant earned 9 points (insufficient) while the other group members earned 19 (highly sufficient), 17 (sufficient), and 16 points (normal/sufficient). In the Control condition, the participants earned 16 points (normal/sufficient), similar to the points earned by the other group members (19, 17, and 16 points). Note that in the Control condition, although they received an

average number of 16 points, participants still had the lowest score in the group. This makes our experiment a conservative test of the effects of shame.

After the feedback, participants continued with the 10-coin give-some dilemma game with a student from another group who knew nothing about the intelligence score of the participant (Exogenous condition) or with a student from the same group who knew about the intelligence scores (Endogenous condition). As a manipulation check participants responded to the same items as in Experiment 3.2.

Results and Discussion

Manipulation Checks. The manipulation checks showed that the manipulation of shame was successful. Participants in the Shame condition scored significantly higher on all elements of shame compared to the Control condition, all $t(156) > 8.75$, all $ps < .001$. Furthermore, participants in the Shame condition felt significantly more shame ($M = 6.90$, $SD = 1.66$) than participants in the Control condition ($M = 1.25$, $SD = 1.27$), $t(156) = 23.92$, $p < .001$, and significantly more shame than any other emotion, all $t(81) > 8.08$, all $ps < .001$. There were no differences between emotion conditions on the other assessed emotions.

Prosocial behavior. Results for prosocial behavior are displayed in Table 3.1. The findings again supported our hypothesis. A 2 (Emotion condition) \times 2 (Emotion influence) \times 2 (SVO) ANOVA with prosocial behavior as dependent variable showed a main effect of SVO, $F(1, 150) = 10.80$, $p < .01$, $\eta_p^2 = .07$, no significant two-way interactions, all $F(1, 150) < 2.41$, ns , and a significant three-way interaction, $F(1, 150) = 3.78$, $p = .05$, $\eta_p^2 = .03$. The effects of shame on prosocial behavior differed for prosocials and proselfs, dependent upon Emotion influence. Prosocials and proselfs did not contribute significantly more in the Exogenous Shame condition compared to the Exogenous Control condition or compared to the Endogenous Control condition, $t(85) = 0.78$, ns ,

and $t(65) = 0.19$, *ns*, respectively.

Endogenous shame did influence prosocial behavior. Proselfs in the Endogenous Shame condition contributed more to the interaction partner than proselfs in the Endogenous Control condition and proselfs in the Exogenous Control condition, $t(65) = 1.69$, $p = .09$. A contrast analysis of Endogenous Shame versus Exogenous Shame, Endogenous Control, and Exogenous Control also showed that proselfs acted more prosocially, $t(150) = 2.54$, $p < .05$. For prosocials, there was no difference between Endogenous Shame and Endogenous Control, or between Endogenous Shame and Exogenous Control, $t(85) = 0.85$, *ns*. A contrast analysis of Endogenous Shame versus Exogenous Shame, Endogenous Control, and Exogenous Control also showed no differences for prosocials, $t(150) = 1.05$, *ns*.

The results of Experiments 3.1 and 3.2 were thus replicated using a performance situation in the lab. The data revealed that only endogenous shame motivated prosocial behavior for proselfs, while exogenous shame had no influence on prosocial behavior. In Experiments 3.1, 3.2, and 3.3 a social dilemma game was used to measure prosocial behavior. To extend these findings beyond social dilemma situations, Experiment 3.4 was conducted. In this experiment, shame was induced with the scenario used in Experiment 3.1 and prosocial tendencies were measured in everyday situations.

Experiment 3.4

Method

Participants. One hundred seventy undergraduate students at Avans University Breda and at Tilburg University volunteered to participate in this experiment. After exclusion of twenty participants who could not be classified as prosocial or proself, 150

Table 3.1

Prosocial Behavior as a Function of Emotion Condition, Emotion Influence, and SVO (Social Value Orientation) in Experiments 3.1, 3.2, and 3.3

		Experiment 3.1		Experiment 3.2		Experiment 3.3	
		Emotion condition		Emotion condition		Emotion condition	
SVO	Emotion influence	Shame <i>M (SD)</i>	Control <i>M (SD)</i>	Shame <i>M (SD)</i>	Control <i>M (SD)</i>	Shame <i>M (SD)</i>	Control <i>M (SD)</i>
Prosocial							
	Exogenous	5.86 (2.85)	= 5.93 (3.01)	5.38 (1.99)	= 5.06 (2.41)	4.96 (2.10)	= 5.60 (2.96)
	Endogenous	6.06 (2.29)	= 6.94 (2.66)	6.33 (2.32)	= 7.62 (2.90)	4.96 (2.56)	= 5.82 (2.46)
Proself							
	Exogenous	3.20 (1.82)	= 3.65 (2.21)	3.82 (2.40)	= 3.57 (2.32)	3.44 (1.82)	= 4.12 (2.29)
	Endogenous	6.21 (2.90)	> 4.47 (2.10)	6.56 (2.75)	> 2.74 (2.49)	5.41 (2.43)	> 3.59 (2.37)

Note. Prosocial behavior scores could range from 0 to 10 coins. Higher scores indicate more prosocial behavior. There are no significant differences between means separated by an “=” mark with all *ts* < 1.44, all *ps* > .13. Means separated by an “>” mark are significantly different with all *ts* > 2.22, all *ps* < .01.

participants remained (43 males and 107 females, $M_{age} = 20.03$, $SD = 3.83$). There were 71 prosocials and 79 proselves in the sample.

Design. Participants first read the scenario used in Experiment 3.1 and subsequently rated how much shame, pride, guilt, fear, and sadness they would feel in this situation (ranging from 0, not at all, to 10, very strongly). Next, participants continued with the Prosocial Tendencies Scale, the dependent measure. This 9-item scale is a measure of everyday prosocial tendencies and helping (Chapter 2). We adapted the Prosocial Tendencies Scale for the Endogenous and Exogenous condition. For each item, participants were asked to report how much they wanted to undertake that action directly after the scenario. In the Exogenous condition, the items concerned a fellow student who had not seen the presentation. In the Endogenous condition, the items concerned a fellow student who had seen the presentation. Two example items are “I would like to comfort the student when (s)he is emotionally upset” and “I would like to help the student while others are watching me”. All items were rated on 11-point scales ranging from 0 (not at all) to 10 (very much). A Confirmatory Factor Analysis on the nine items showed a clear one factor solution with an Eigenvalue of 5.08 (second and third Eigenvalues were 1.40 and 0.68). The factor explained 56% of the variance and the nine items formed a reliable scale ($\alpha = .90$).

Results and Discussion

The manipulation check showed that the emotion induction was successful. Participants in the Shame condition reported significantly more shame ($M = 8.68$, $SD = 1.44$) than participants in the Control condition ($M = 2.11$, $SD = 2.36$), $t(148) = 21.37$, $p < .001$, and reported significantly more shame than the other reported emotions, all $ts(87) > 11.15$, all $ps < .001$.

Results for prosocial behavior are displayed in Table 3.2. A 2 (Emotion condition) \times 2 (Emotion influence) \times 2 (SVO) ANOVA

with prosocial behavior as dependent variable showed a main effect of SVO, $F(1, 142) = 3.93, p = .05, \eta_p^2 = .03$, no significant two-way interactions, all $F_s(1, 142) < 3.00, ns$, and a significant three-way interaction, $F(1, 142) = 4.21, p < .05, \eta_p^2 = .03$. The effects of shame on prosocial behavior differed for prosocials and proselfs, depending on Emotion influence. Prosocials and proselfs did not score higher in the Exogenous Shame condition compared to the Exogenous Control condition or compared to the Endogenous Control condition, $t(67) = 0.63, ns$, and $t(75) = 0.07, ns$, respectively.

Endogenous shame did influence prosocial behavior. Proselfs in the Endogenous Shame condition had a higher score than proselfs in the Endogenous Control condition and proselfs in the Exogenous Control condition, $t(75) = 2.14, p < .05$. A contrast analysis of Endogenous Shame versus Exogenous Shame, Endogenous Control, and Exogenous Control also showed that proselfs had a higher score when experiencing endogenous

Table 3.2

Prosocial Behavior as a Function of Emotion Condition, Emotion Influence, and SVO (Social Value Orientation) in Experiment 3.4

SVO	Emotion influence	Emotion condition	
		Shame <i>M (SD)</i>	Control <i>M (SD)</i>
Prosocial	Exogenous	5.63 (1.64)	= 5.49 (1.89)
	Endogenous	5.25 (1.89)	= 5.28 (1.19)
Proself	Exogenous	4.33 (1.75)	= 4.78 (1.84)
	Endogenous	5.99 (1.42)	> 4.29 (2.23)

Note. Prosocial behavior reflects the mean score on the nine cooperation items, ranging from 0 (not at all) to 10 (very much). Higher scores indicate more prosocial behavior. There are no significant differences between means separated by an “=” mark with all $t_s < .80$, all $p_s > .43$. The two means separated by an “>” mark are significantly different with $t(75) = 3.07, p < .01$.

shame, $t(142) = 3.59$, $p < .001$. For prosocials, there was no difference between Endogenous Shame and Endogenous Control, or between Endogenous Shame and Exogenous Control, $t(67) = 0.40$, *ns*. The contrast analysis also showed no differences for prosocials, $t(142) = 0.47$, *ns*.

Taken together, endogenous shame also motivates prosocial tendencies in everyday situations for proselves. Exogenous shame does not motivate prosocial tendencies. These results obtained with the different measure of prosocial behavior replicate the results of Experiments 3.1, 3.2, and 3.3.

General Discussion

As ugly and negative as shame experiences can be, feeling this emotion can have clear positive consequences for interpersonal behavior. Shame can act as a commitment device, motivating people to act prosocially and thereby committing them to long-term strategies. This prosocial behavior benefits other's well-being and improves social relationships. Thus, shame does have a constructive interpersonal function.

Four experiments clearly support the notion that shame serves an interpersonal function. Using three different emotion inductions and two different dependent measures, we repeatedly found that endogenous shame motivates prosocial behavior. After imagining shame with a scenario, proself participants acted more prosocially towards the audience in a social dilemma game (Experiment 3.1). This finding was replicated when participants recalled a shame event (Experiment 3.2). Moreover, when experiencing shame after a failure on performance tasks, proself participants also acted prosocially towards audience in the lab (Experiment 3.3). Finally, Experiment 3.4 showed that this effect could be generalized beyond social dilemmas to helping tendencies in everyday situations. Therefore, it seems safe to conclude that shame can be seen as a moral emotion motivating prosocial behavior.

Given that these experiments are the first empirical evidence for prosocial effects of shame, it is only sensible to ask why these effects were not found earlier. We think that there are at least three reasons for this. First, shame research has mainly focused on the correlates of shame-proneness and not on effects of situational experiences of shame (e.g., Gilbert et al., 1994; Harder et al., 1992). Shame-proneness is generally related to a wide array of negative psychological conditions and behaviors (for an overview see Tangney & Fischer, 1995). However, while shame-proneness and situational experiences of shame are related, they do not have similar behavioral effects (e.g., Allan et al., 1994; Rüscher et al., 2007). Findings for shame-proneness can therefore not be generalized to behavioral effects of situational experiences of shame. Second, in line with the view of shame as an ugly emotion, studies on effects of situational experiences of shame have mainly focused on action tendencies like social withdrawal (e.g., Tangney et al., 1996; Wicker et al., 1983). Effects of situational experiences of shame on behaviors other than withdrawal tendencies have simply not been addressed. Third, the one exception that did focus on behavior other than withdrawal tendencies, namely the studies on prosocial behavior reported in Chapter 2, used only exogenous influences of shame and therefore found no effects. By moving beyond shame-proneness and withdrawal tendencies, and focusing on endogenous influences of shame on prosocial behavior, our experiments contribute to our understanding of the behavioral effects of shame.

We hasten to say that, even though the results showed that shame is a moral emotion motivating prosocial behavior, they are not at variance with the view of shame as an ugly emotion. If anything, we believe that the two views can easily be reconciled. In line with the ugly view, experiences of shame are often unpleasant, giving rise to a wide array of negative intrapersonal thoughts and feelings (e.g., Ausubel, 1955; Tangney, 1991). The moral view additionally suggests that these negative experiences induce people to engage in prosocial behavior. Negative, self-conscious emotions act as commitment devices precisely because

they raise the costs of selfish behavior. This benefits people by committing them to long-term strategies and it benefits others by increasing their well-being (Frank, 1988). The present experiments thus lend empirical credibility to Adam Smith's claim that "moral sentiments are sufficient for the harmony of society" (p. 23).

Two alternative explanations might be given for the prosocial effects of shame. One could be that shame motivates prosocial behavior as an appeasement strategy (e.g., Tangney & Fischer, 1995). The reasoning behind this explanation would be that shame, arising after violation of a social norm, motivates appeasement behaviors in order to avoid conflicts. Another explanation is that shame motivates prosocial behavior in order to boost social esteem (Goldberg, 1991). The person would be motivated to boost the damaged self that has been caused by the shame experience. However, neither alternative is supported by the findings of Experiment 3.4. If shame motivated prosocial behavior in order to appease or to boost social esteem, stronger prosocial behavior would be expected with an audience than without an audience. However, participants in the endogenous shame condition preferred "helping the student when (s)he does not know who is helping" ($M=5.78$, $SD=2.20$) above "helping the student while I get in the spotlight as a consequence" ($M=4.51$, $SD=2.21$), $t(40)=3.24$, $p<.01$, and preferred "helping the student when (s)he does not know who is helping" ($M=5.78$, $SD=2.20$) above "helping the student while others are watching the way I do everything" ($M=4.83$, $SD=2.40$), $t(40)=2.52$, $p<.01$. In our view, the view of shame as a commitment device provides the most parsimonious explanation of the prosocial effects found in our experiments.

Importantly, we want to stress the fact that the present findings cannot be attributed to general negative affect or negative mood. It is the case that there is much research attesting to the fact that people act prosocially when they are sad or experiencing a bad mood. They may do so because acting prosocially can be a reinforcing, mood-enhancing experience. For example, people are

more willing to collect donations for a charity after a bogus aptitude test (Weyant, 1978), they help more after reminiscing about unhappy events or after reading a series of depressing statements (Cialdini, Kenrick, & Baumann, 1982), and they donated more money to all kinds of charities after the fearful events of September 11, 2001 (Penner, Dovidio, Piliavin, & Schroeder, 2005). None of the mood-management theories differentiates between endogenous and exogenous affect and much of the empirical work showed increased prosocial behavior induced by negative affect stemming from unrelated events (exogenous affect, using our terminology). In that light it is important to realize that we had strong theoretical reasons to predict only effects of endogenous shame, and not of exogenous shame, and only for proselves, not for prosocials. We are not aware of a model or theory that would be consistent with this specific pattern of results. In addition, when we computed a measure of general negative affect, by averaging all negative emotions that were assessed, we found that there were no significant differences between the endogenous shame and exogenous shame conditions. Thus, the behavioral differences that we obtained across four experimental studies could not be explained in terms of general negative affect.

Although the present experiments show that shame is a moral emotion similar to guilt, we do not mean to imply that shame and guilt are identical emotions. Shame and guilt are both moral emotions that motivate prosocial behavior. They both act as commitment devices and can have similar behavioral effects. Nonetheless, the phenomenological experiences and psychological origins of shame and guilt are clearly distinct. Shame arises after a negative evaluation of the self, reflecting the appraisal that something is wrong or defective with one's core self (Lewis, 1971). It activates a focus on others' thoughts about oneself and on being accepted by the group. In contrast, guilt arises after an evaluation of the behavior, reflecting the appraisal that one has caused harm, loss, or distress to a relationship partner (Breugelmans & Poortinga, 2006; Tangney et al., 1996).

Indeed, guilt appears to be strongest in dyadic, communal relationships, activating a focus on the hurt other and behavior to maintain and enhance the dyadic relationship (Baumeister et al., 1994). Thus, shame and guilt are clearly distinct moral emotions, although they both motivate prosocial behavior.

The distinction that we made between endogenous and exogenous emotions is important for emotion research. The distinction has been made theoretically (Zeelenberg & Pieters, 2006), but our studies are the first to simultaneously examine the endogenous and exogenous influences of an emotion. For some emotions, exogenous and endogenous influences may be similar. For example Ketelaar and Au (2003) showed that exogenous influences of guilt in one study and endogenous influences of guilt in another study both led to increased prosocial behavior. However, for other emotions such as shame the distinction can explain important differences in observed behavior. For shame, the distinction is important due to its different action tendencies. Being in a situation unrelated to the shame event already (partially) fulfills the action tendency of shame to withdraw. In contrast, being in situations related to the shame event leave the action tendencies of shame unfulfilled. Therefore, exogenous influences of shame do not have the same prosocial effects as endogenous influences of shame. In view of these results it seems safe to suggest that, for a complete understanding of the functions of emotions, studies of both exogenous and endogenous influences are necessary.

Taken together, shame has been understood as a social emotion, as an ugly emotion, and as a moral emotion. Until now empirical research has been guided primarily by the ugly view, drawing attention to a focus on the negative consequences of shame. This left students of emotion wondering whether shame had any function at all. At present, we argue that this paradox is solvable. The current findings suggest an important interpersonal function of shame: shame can act as a commitment device motivating prosocial behavior. Shame may not be so ugly after all.

Chapter 4

Restore and Protect Motivations Following Shame³

Imagine that you make a silly mistake during a ballroom dance exam, a so-called faux-pass, and you experience intense shame (you feel that you look like a fool). If you were offered a chance to redo the exam, would you take it to prove that you are indeed capable, or would you forego this opportunity to avoid further mistakes? At present, shame research cannot provide a clear answer to this question. Empirical research has produced seemingly opposing results that shame theories have not been able to explain or accommodate; both approach and withdrawal tendencies have been found to be associated with shame (Frijda, Kuipers, & Ter Schure, 1989; Scherer & Wallbott, 1994; Tangney, Miller, Flicker, & Barlow, 1996; Wicker, Payne, & Morgan, 1983). Based on a review of the shame literature one may be inclined to conclude that shame is a complex emotion that is not yet properly understood. In this article we aim to show that feelings of shame, and the way that these feelings manifest themselves in motivations and behavior, are actually quite simple as soon as one takes a pragmatic stance with respect to this emotion. The core idea is that shame reflects concerns with a threatened self and motivates behaviors to restore a positive view of the self. We present the results of a series of five experiments that are consistent with this idea and that allow for an integration of the apparently contrasting results from previous studies on shame. We think our account of shame provides a new and essential insight in how this important self-conscious emotion works.

³ This chapter is based on De Hooge, Zeelenberg & Breugelmans (2008) 71

Shame: A Complex Emotion?

Shame is perhaps the most important self-conscious emotion (M. Lewis, 2000; Lindsay-Hartz, 1984), playing a role in many personal and interpersonal aspects such as self-esteem, shyness, eating disturbances, depression, development, and self-regulation (Erikson, 1963; Harder, 1995; Harder, Cutler, & Rockart, 1992; Sanftner, Barlow, Marschall, & Tangney, 1995). It is an overwhelming emotion that is associated with feelings of worthlessness, inferiority, and of a damaged self-image (Ausubel, 1955; Tangney, Wagner, & Gramzow, 1992). Experiences of shame mainly arise after moral transgressions or incompetencies and are characterized by confusion in thought, inability to speak, and rumination (Keltner & Buswell, 1996; Miller, 1995; Orth, Berking, & Burkhardt, 2006). Even though there is a fair amount of knowledge about shame experiences, it is unclear what behaviors follow shame. What do people do when they experience shame?

There seems to be no simple answer to this question, because the few existing empirical studies on shame-induced behaviors have found contradicting results. On the one hand, studies suggest that shame promotes withdrawal and avoidance behaviors. For example, Scherer and Wallbott (1994) found that shame was characterized by stronger withdrawal tendencies compared to other emotions such as joy, anger, disgust, sadness, and fear. On the other hand, there are studies that suggest that shame can promote approach behaviors. For example, Tangney et al. (1996) showed that shame activated a higher willingness to make amends than to hide. In Chapter 3, we found that shame can activate prosocial behavior towards the audience of a shameful event. There are also studies that have reported inconclusive evidence. For example, Wicker et al. (1983) showed that shame experiences were rated neutral on an item ranging from wanting to hide to making restitutions. Frijda et al. (1989) even found that shame activated *both* a desire to disappear from view and a desire to undo the situation compared to guilt and regret.

Emotion scholars have not been able to explain how shame can activate such contrasting behaviors. Emotion theory assumes that emotions function by giving information about a specific problem to be dealt with and by prioritizing behaviors to deal with these problems (Frijda, 1986; Zeelenberg & Pieters, 2006). The idea is that emotions activate a distinct motivation, which then activates behaviors so as to solve the problem (Plutchik, 1962; Roseman, 1984, Zeelenberg, Nelissen, Breugelmans, & Pieters, 2008). Most, if not all, shame theories state that shame activates withdrawal or avoidance behaviors, but remain silent about the motivation underlying these behaviors. In addition, these theories do not consider the possible activation of approach behaviors (e.g., Fessler, 2004; Gilbert, 2003; H. B. Lewis, 1971; Tangney, 1991; Wurmser, 1987). Together, this provides a picture of shame as being a complex and possibly misunderstood emotion. Below we present a solution for understanding these complex matters by providing a more parsimonious explanation of shame.

Shame: Dealing With the Threatened Self

One of the most important fundamental human motives is the desire to have a positive self view (e.g., Alexander & Knight, 1971; Schlenker & Leary, 1982; Taylor & Brown, 1988). People compare themselves to others, make self-serving attributions, and they react defensively or act assertively to achieve and maintain such a positive view (Gibbons, 1990). When experiencing shame, it is exactly this positive view of the self that is threatened (H. B. Lewis, 1971). After a moral transgression or incompetence, the self is painfully scrutinized and negatively evaluated, and “the person in the midst of the shame reaction is concerned with the implications of negative events for the self” (Tangney & Dearing, 2002, p. 63). Taking a pragmatic stance, we suggest that all motivations and behaviors following from shame are focused on dealing with the threatened self.

More specifically, we predict that the behaviors following from

shame are first and foremost approach behaviors. Because having a positive self view is a fundamental motive, people experiencing shame will be motivated to restore that positive self view. This restore motivation will elicit approach behaviors such as entering achievement situations, performing new challenges, and undertaking reparative actions. For example, after failing the dance exam, one probably finds oneself to be eager to try again. According to Izard (1977): “The effort to repair and strengthen the self after experiencing intense shame often continues for several days or weeks...the processes can lead to a sense of adequacy and enhance self-identity” (p. 404).

An important question is, of course, how to reconcile our proposal with the observation that many studies have found that shame is associated with a tendency to withdraw or other avoidance behaviors. We think that the answer can be found in the type of data that produces such effects. Findings suggesting withdrawal or avoidance primarily stem from research studying the correlates of chronic shame or shame-proneness (e.g., Gilbert, Pehl, & Allan, 1994; Harder et al., 1992; Tangney, 1990; Thompson, Altmann, & Davidson, 2004). Because it is very hard, if not impossible, to restore a chronically threatened self, the second best alternative is to withdraw from situations that are likely to produce even more shame. Indeed, the empirical studies showing approach tendencies all report on discrete experiences of shame rather than chronic or trait related shame (e.g., Chapter 3; Tangney et al., 1996).

This reasoning leads to another, testable prediction. We expect shame to elicit behaviors to cope with the threatened self, which will initially be approach behaviors to restore the self. However, when for any reason it is impossible or too risky to restore the self, shame will motivate withdrawal behaviors instead of approach behaviors to protect the threatened self from more possible harm, similar to what happens with chronic shame. For example, if there are only competitions with top dancers to participate in, one will probably not participate in order to protect one’s sports image from

another loss. Thus, shame “can prompt behaviors to protect the self from additional scrutiny or self-threatening exposure” (Ferguson, 2005, p. 378).

To summarize, we suggest that shame activates behaviors to deal with a threatened self, which will be approach behaviors to restore the self. When these actions are not possible or too risky, shame will activate withdrawal behaviors to protect the self. In other words, shame has two motives, a restore and a protect motive, and situational factors will determine which behavior follows shame.

Five studies with different shame inductions and different measures of behavior were conducted in order to test our predictions. The first four studies tested whether shame indeed activates both a restore and a protect motive and whether these motives predict behavior. Willingness to perform (Studies 4.1 and 4.2), achievement approach and avoidance (Study 4.3), and intentions to hide and to repair (Study 4.4) were used as behavioral measures to test whether shame activates more approach than withdrawal behaviors. We expected shame to activate both restore and protect motives, and we expected these motives to mediate the effect of shame on approach behavior. Study 4.5 introduced the situational factor of local competency in order to test the hypothesized situational influence. Past research has shown that when people are highly competent, they will more easily enter approach situations than when they have low competency (Ajzen, 1991). Therefore, we expected shame to motivate approach behavior in situations where participants perceived themselves as competent, and to motivate withdrawal behavior in situations where they perceived themselves as incompetent.

Study 4.1

Method

Participants. Two hundred fourteen undergraduate students at Tilburg University (64 males and 150 females, $M_{\text{age}} = 19.24$, $SD = 1.82$) participated in a series of unrelated studies in partial fulfillment of a course requirement. Participants were randomly assigned to the Shame or the Control condition.

Procedure and variables. Participants were asked to: "Imagine you are following a course where everybody has to give a presentation in a work group. In the work group, 25 fellow students are present." In the Shame condition participants then read:

When you have to give your presentation everything goes completely wrong. You stumble over your own words, your story is muddled, and at the end it is clear that nobody understood what you were trying to tell. After your presentation has finished some people from the audience ask you questions. Then it becomes clear that you have no mastery over the subject at all.

In the Control condition participants read: "When you have to give your presentation everything goes normal. Your presentation is equally good as the presentations of the other students and in no way you stand out." A pretest of these materials with a different group of students ($N = 123$, $M_{\text{age}} = 22$) showed that participants in the Shame condition reported significantly more shame (on a scale ranging from 0, not at all, to 10, very strongly) ($M = 8.95$, $SD = 1.13$) than Control participants, ($M = 2.06$, $SD = 2.37$), $t(121) = 21.70$, $p < .001$. After the emotion induction, participants read:

At the end of the meeting the teacher says that the content of the next meeting group is not clear yet. Anybody who wants to can give another presentation. You consider whether you want to do this. On the one hand, this is your opportunity to give a good presentation. On the other hand, it also could go wrong. What would you do?

Participants then indicated whether or not they would give the presentation (Performance choice) and indicated the extent to which they wanted to give the presentation (Willingness to perform) on an 11-point scale (0 = not at all, 10 = very much). Next, participants answered ten items concerning the motivation underlying their choice to give the second presentation or not. These items were specifically developed to measure the restore and protect motives. A Factor Analysis with Varimax rotation on the ten items showed a clear two factor solution (see Appendix 4.1 for the items and factor loadings). The first factor, Restore (Eigenvalue = 5.22), explained 50% of the variance and formed a reliable scale ($\alpha = .96$). The second factor, Protect (Eigenvalue = 3.26), explained 31% of the variance and formed a reliable scale ($\alpha = .95$). For each item, participants were asked to indicate the extent to which this motivated their choice (1 = not at all, 7 = very strongly). After completion of all tasks participants were thanked and debriefed.

Results and Discussion

The results of Study 4.1 and of the next four studies are displayed in Table 4.1. We hypothesized shame to activate both Restore and Protect. Furthermore, we expected these two motives to mediate the effect of shame on willingness to perform.

The findings supported our hypotheses. Participants in the Shame condition scored significantly higher on Restore, $t(213) = 5.48, p < .001$, and on Protect than participants in the Control condition, $t(213) = 2.12, p < .05$. There was no difference between Restore and Protect in the Shame condition, $t(82) = 0.98, p = .33$.

More participants in the Shame condition wanted to engage in a new performance (41%) compared to participants in the Control condition (18%), $\chi^2(1, N = 216) = 12.99, p < .001$. Similarly, an independent samples t-test with Emotion condition as independent variable and Willingness to perform as dependent variable showed that participants in the Shame condition wanted to perform more

($M = 4.05$, $SD = 3.26$) than participants in the Control condition, ($M = 3.07$, $SD = 2.42$), $t(213) = 2.12$, $p < .05$.

Restore and Protect significantly predicted Performance choice and Willingness to perform. Logistic regression analysis showed significant effects of Restore and Protect on Performance choice, $Wald(1) = 42.27$, $p < .001$, and $Wald(1) = 24.39$, $p < .001$, respectively. Linear regression analysis showed that Restore and Protect had significant effects on Willingness to perform, $\beta = .63$, $p < .01$ and $\beta = -.35$, $p < .01$, respectively.

More importantly, Restore and Protect fully mediated the effects of Emotion condition on Performance choice and on Willingness to perform. The significant effect of Emotion condition on Performance choice, $Wald(1) = 12.869$, $p < .001$, became nonsignificant when Restore and Protect were added in the regression, $Wald(1) = 1.34$, $p = .25$. The effects of Restore and Protect stayed significant, $Wald(1) = 37.27$, $p < .001$, and $Wald(1) = 25.48$, $p < .001$, respectively. The effect of Emotion condition on Willingness to perform, $\beta = .18$, $p < .01$, became nonsignificant when Restore and Protect were added in the regression, $\beta = .01$, $p = .88$. The effects of Restore and Protect stayed significant, $\beta = .62$, $p < .01$ and $\beta = -.35$, $p < .01$, respectively. Sobel tests supported these findings, $Z_{\text{restore}} = 5.11$, $p < .001$ and $Z_{\text{protect}} = 2.07$, $p < .05$.

In summary, the findings of Study 4.1 provide the first support for the hypothesis that shame activates both a protect and a restore motive. In addition, the findings reveal that shame motivates performance behavior, an effect that is mediated by the restore and protect motives. We conducted Study 4.2 to replicate the findings of Study 4.1 with a different induction of shame.

Study 4.2

Method

Participants. Sixty five undergraduate students at Tilburg University (19 males and 46 females, $M_{\text{age}} = 19.63$, $SD = 2.52$) participated in a series of unrelated studies in partial fulfillment of a course requirement. Participants were randomly assigned to the Shame or Control condition.

Procedure and variables. For our emotion induction manipulation, participants were asked to complete a questionnaire that was placed next to the computer. This questionnaire was adopted from Chapter 2 and Ketelaar and Au (2003). The Dutch emotion word “schaamte” was used for the English emotion word “shame.” Cross-cultural research shows that “schaamte” refers to similar experiences as the English shame (Breugelmans & Poortinga, 2006; Fontaine et al., 2006). In the Shame condition, participants were asked to report a personal experience in which they felt very ashamed. They wrote, for example, about failing an exam, a bad performance in sports, or behaving inappropriately while being drunk. In the Control condition, participants were asked to describe a regular weekday. Participants worked for approximately 10 minutes on the emotion induction task and then continued with the following scenario:

Imagine that you participate in an experiment directly after the event that you described. In this experiment, the experimenter offers you a choice. You can either choose to do some performance tasks to test your general abilities or you can choose not to do the tasks (in which case you will do something else). You consider whether you want to do this. On the one hand, this is your opportunity to show your abilities. On the other hand, it also could go wrong. What would you do?

Participants indicated the extent to which they wanted to fulfil the performance tasks (Willingness to perform, 0 = not at all, 10 = very much). Next, participants responded to the motivation items used

in Study 4.1 ($\alpha_{\text{restore}} = .92$, and $\alpha_{\text{protect}} = .91$). As a manipulation check, participants then reread their situation description and indicated how small they felt, how alone they felt, how much they felt that all attention was drawn towards them, how much they did not want others to know about the described event, and how much they were worried about what others would think of them. These items are described in the emotion literature as basic elements of experiences of shame (Caplovitz Barrett, 1995; Roseman, Wiest, & Swartz, 1994; Tangney & Fischer, 1995). Subsequently, participants rated how much shame they felt in the situation or in the normal weekday. We also asked participants to indicate how much guilt, regret, sadness, fear, and anger they felt in the situation (0 = not at all, 10 = very strongly).

Results and Discussion

Manipulation Check. The manipulation of shame was successful: participants in the Shame condition scored significantly higher on all basic elements of shame compared to participants in the Control condition, all $t(63) > 6.69$, all $p < .001$. They also felt significantly more shame ($M = 8.90$, $SD = 1.27$) than participants in the Control condition ($M = 1.18$, $SD = 1.47$), $t(63) = 22.41$, $p < .001$, and felt significantly more shame than other emotions, all $t(31) > 3.06$, all $p < .01$. There were no differences between the conditions on the other emotions.

Motivations. As in Study 4.1, we expected shame to activate Restore and Protect motives, which mediate the effect of shame on Willingness to perform. The findings supported our hypotheses: participants in the Shame condition scored significantly higher on Restore, $t(63) = 5.37$, $p < .001$, and on Protect than participants in the Control condition, $t(63) = 4.82$, $p < .001$. Restore was significantly higher than Protect in the Shame condition, $t(31) = 4.86$, $p < .001$.

Performance. Participants in the Shame condition wanted to perform more ($M = 6.03$, $SD = 1.88$) than participants in the

Control condition, ($M = 4.97$, $SD = 2.19$), $t(63) = 2.10$, $p < .05$. This behavior was predicted by Restore and Protect: linear regression analysis showed that Restore had a positive effect, $\beta = .63$, $p < .001$, and Protect had a negative effect on Willingness to perform, $\beta = -.28$, $p < .01$. More importantly, the effect of Emotion condition on Willingness to perform was fully mediated by Restore and Protect. The effect of Emotion condition, $\beta = .26$, $p < .05$, became nonsignificant when Restore and Protect were added in the regression, $\beta = .08$, $p = .57$. The effects of Restore and Protect stayed significant, $\beta = .63$, $p < .001$ and $\beta = -.40$, $p < .01$, respectively. The Sobel tests showed that the mediation was mainly due to Restore: $Z_{\text{restore}} = 3.27$, $p < .01$ and $Z_{\text{protect}} = 1.36$, $p = .17$.

To summarize, the findings of Study 4.1 were replicated with a different induction of shame. Shame activated approach behavior, namely the intention to perform, not only to protect one's self view but mainly to restore one's self view. In Study 4.3, achievement approach and avoidance tendencies were measured to see whether protect and restore motives also predict behaviors other than choosing whether to perform or not.

Study 4.3

Method

Participants. Forty nine undergraduate students at Tilburg University (8 males and 41 females, $M_{\text{age}} = 19.12$, $SD = 1.84$) participated in a series of unrelated studies in partial fulfillment of a course requirement.

Procedure and variables. All participants read the shame scenario of Study 4.1. As manipulation check, participants rated how much shame, pride, guilt, and fear they would feel in the described situation (0 = not at all, 10 = very strongly). Next, participants indicated for each of eight activities how likely it was they would

engage in that activity directly after the shame event. This was the dependent measure. Achievement approach and Achievement avoidance were measured with eight items selected from the trait measure Mehrabian Achievement Motivation Questionnaire (Mehrabian, 1969). All items were rated on 11-point scales (0 = very unlikely, 10 = very likely). A Factor Analysis on the eight items showed a clear two factor solution (see Appendix 4.2 for the items and factor loadings). The first factor, Achievement approach (Eigenvalue = 4.52), explained 53% of the variance and formed a reliable scale ($\alpha = .81$). The second factor, Achievement avoidance (Eigenvalue = 1.34), explained 12% of the variance and formed a reliable scale ($\alpha = .92$). After the Achievement Scale, participants continued with the motivation items measuring Restore ($\alpha = .88$) and Protect ($\alpha = .83$).

Results and Discussion

We hypothesized that shame would motivate more approach than avoidance of achievement situations, and that these behaviors would be predicted by restore and protect. The induction worked: Participants reported significantly more shame ($M = 9.14$, $SD = 0.89$) than the other emotions, all $t(48) > 8.61$, all $ps < .001$. Participants scored equally high on Restore and on Protect, $t(48) = 0.35$, $p = .73$, and scored significantly higher on Achievement approach ($M = 5.81$, $SD = 1.71$) than on Achievement avoidance, ($M = 4.41$, $SD = 2.64$), $t(48) = 2.54$, $p < .05$.

Regression analyses confirmed that Restore and Protect had significant effects on Achievement approach, $\beta = .49$, $p < .001$ and $\beta = -.37$, $p < .01$, respectively, and on Achievement avoidance, $\beta = -.26$, $p < .05$ and $\beta = .68$, $p < .001$, respectively. The effects of reported shame on Achievement approach and avoidance were fully mediated by Restore and Protect. The effect of shame on Achievement approach, $\beta = .29$, $p < .05$ became nonsignificant when Restore and Protect were added to the regression, $\beta = .07$, $p = .63$. The effects of Restore and Protect on Achievement approach stayed significant, $\beta = .49$, $p < .001$ and $\beta = -.33$, $p < .05$.

.05. The effect of shame on Achievement avoidance, $\beta = .48$, $p < .001$ also became nonsignificant when Restore and Protect were added to the regression, $\beta = .06$, $p = .64$. The effects of Restore and Protect on Achievement avoidance stayed significant, $\beta = -.26$, $p < .05$ and $\beta = .64$, $p < .001$.

Taken together, Study 4.3 showed that the predictive capacity of the restore and protect motives also generalizes to approach and avoidance of achievement behaviors. Shame motivates an approach of achievement situations and this behavior is positively predicted by the restore motive and negatively by the protect motive. In Study 4.4 it was examined whether restore and protect motives also predict repair and hiding behaviors in unrelated, subsequent situations.

Study 4.4

Method

Participants. One hundred nine undergraduate students at Tilburg University (39 males and 70 females, $M_{\text{age}} = 20.17$, $SD = 1.81$) participated in a series of unrelated studies and were paid € 7.

Procedure and variables. All participants read the shame scenario of Study 4.1 and rated how much shame, pride, guilt, fear, and anger they would feel in the situation (0 = not at all, 10 = very strongly). They continued with the ten motivation items measuring Restore and Protect ($\alpha s > .90$). They then read three unrelated shame situations and indicated after every situation how much they wanted to repair the damage and how much they wanted to hide from others in that situation (1 = not at all, 7 = very strongly). Participants read the following situations: "At high school you always told everybody that university is easy. After one year at university, you find out that in spite of your dedication and hard work you receive only very low grades.", "During the service at the funeral of a family member you remember a joke. You can not

withhold yourself and you laugh in such a way that everybody can hear it and looks at you.”, and “Together with some fellow students you completed a group assignment. Every student is individually evaluated on the part (s)he made. In an earlier stage you criticized the work of others, but in the end you are the only student of your group who failed the exercise.” The dependent variables Repair damage and Hiding were measured after each scenario. The responses were averaged and labelled Repair damage and Hiding.

Results and Discussion

Participants reported significantly more shame ($M = 8.53$, $SD = 1.51$) than the other emotions, all $t(108) > 9.58$, all $ps < .001$. They scored higher on Restore than on Protect, $t(107) = 3.40$, $p < .01$, and higher on Repair damage ($M = 5.86$, $SD = 0.81$) than on Hiding ($M = 4.64$, $SD = 1.30$), $t(107) = 9.50$, $p < .001$. We hypothesized that Restore would activate repairing tendencies and Protect would activate hiding tendencies. Regression analyses showed that Repair damage was significantly predicted by Restore, $\beta = .27$, $p < .05$, and that Hiding was significantly predicted by Protect, $\beta = .26$, $p < .05$. Restore had no influence on Hiding, $\beta = -.04$, $p = .66$, and Protect had no influence on Repair damage, $\beta = .15$, $p = .14$.

To summarize, shame activates more repairing behavior than hiding behavior in unrelated situations and these behaviors are differently predicted by protect and restore motives. The restore motive predicts repair behaviors and the protect motive predicts hiding behaviors. Together, Studies 4.1 to 4.4 reveal that shame motivates approach behaviors to restore the self. However, we also hypothesized that situational factors influence which behavior follows shame (approach or avoidance). To test these mediating effects Study 4.5 was conducted, where local competency was measured as a mediating situational factor.

Study 4.5

Method

Participants. Seventy undergraduate students at Tilburg University (28 males and 42 females, $M_{\text{age}} = 21.42$, $SD = 2.19$) participated voluntarily in a series of unrelated studies and were randomly assigned to the Shame or Control condition.

Procedure and variables. Participants were asked to: "Together with some fellow students you completed a group assignment. Every student is individually evaluated on the part (s)he made." In the Shame condition, participants then read: "In an earlier stage you criticized the work of others, but in the end you are the only student of your group who failed the exercise." In the Control condition, participants read: "In the end every student of your group has passed the exercise." As a manipulation check, participants subsequently rated how much shame, pride, guilt, and fear they would feel in the described situation (0 = not at all, 10 = very strongly). After the emotion induction, participants answered the restore and protect scales ($\alpha_{\text{restore}} = .94$ and $\alpha_{\text{protect}} = .89$) and subsequently read:

After the announcement of the grades, the teacher tells about the opportunity to do another exercise. If you decide to do this exercise, you will also be evaluated with a grade. You consider whether you want to do this. On the one hand, this is your opportunity to perform well. On the other hand, it also could go wrong.

As a measure of Competency, participants responded to four items derived from Ajzen and Driver (1992) (1 = completely disagree, 7 = completely agree, $\alpha = .74$): "I have confidence that I would complete that exercise well", "I have control over the outcome of that exercise", "I have no influence on the outcome of that exercise", and "I have the abilities to complete that exercise successfully". As the dependent measure of Performance choice, participants indicated whether they would make the exercise.

Results and Discussion

Participants in the Shame condition reported significantly more shame ($M = 6.37$, $SD = 2.68$) than participants in the Control condition ($M = 0.54$, $SD = 1.35$), $t(68) = 10.61$, $p < .001$, and reported significantly more shame than the other emotions, all $t(40) > 3.47$, all $ps < .01$. Participants in the Shame condition scored significantly higher on Restore, $t(68) = 7.60$, $p < .001$, and on Protect than participants in the Control condition, $t(68) = 4.81$, $p < .001$. Restore was significantly higher than Protect in the Shame condition, $t(40) = 3.51$, $p < .01$.

Performance. More participants in the Shame condition (90%) wanted to engage in a new performance compared to participants in the Control condition (62%), $\chi^2(1, N = 70) = 8.01$, $p < .01$. Furthermore, Restore and Protect had significant effects on Performance choice, $Wald(1) = 10.67$, $p < .01$, and $Wald(1) = 8.46$, $p < .01$, respectively. The effect of Emotion condition on Performance choice was fully mediated by Restore and Protect: the significant effect of Emotion condition, $Wald(1) = 7.09$, $p < .01$, became nonsignificant when Restore and Protect were added to the regression, $Wald(1) = 0.31$, $p = .58$.

Competency. Participants in the Shame condition ($M = 5.48$, $SD = 0.91$) and in the Control condition ($M = 5.53$, $SD = 0.91$) did not differ in Competency, $t(68) = 0.27$, $p = .79$. Competency had a significant influence on Performance choice, $Wald(1) = 3.29$, $p = .07$. We hypothesized that the effects of Restore and Protect on Performance choice would be mediated by Competency. Indeed, the effects of Restore and Protect became nonsignificant when Competency was added to the regression, $Wald(1) = 2.22$, $p = .14$, and $Wald(1) = 1.55$, $p = .21$, respectively. The effect of Competency remained significant, $Wald(1) = 5.91$, $p < .05$. To summarize, the effects of restore and protect motives on behavior are mediated by a relevant situational factor. Study 4.5 showed that local competency mediated the effects of restore and protect motivations on performance.

Table 4.1

Motivation Means (and Standard Deviations) as a Function of Emotion Condition in Studies 4.1 to 4.5

Study	Shame		Control	
	Restore	Protect	Restore	Protect
4.1	3.78 (1.89) ^a	4.16 (1.99) ^a	2.51 (1.50) ^b	3.61 (1.81) ^c
4.2	5.14 (1.23) ^a	3.59 (1.52) ^b	3.48 (1.26) ^b	2.08 (0.96) ^c
4.3	6.26 (1.88) ^a	6.40 (1.87) ^a		
4.4	4.75 (1.70) ^a	3.85 (1.66) ^b		
4.5	5.34 (0.96) ^a	4.88 (1.05) ^b	3.07 (1.55) ^c	3.37 (1.58) ^c

Note. Motivation scores could range from 1 (not at all) to 7 (very strongly). Means with a different superscript differ significantly from each other within each study with all t s > 2.12, all p s < .05. There was no Control condition in Studies 4.3 and 4.4.

General Discussion

What do people do when they experience shame? This question is difficult to answer on the basis of previous research on shame, which suggested both approach and withdrawal behaviors. From the present studies it appears that the answer is actually quite simple. After a shame experience, people want to cope with their threatened self. Because their fundamental motive is to have a positive self-image, they initially undertake actions to repair the self. When this is not possible or too risky, they revert to withdraw strategies to protect themselves from more possible damage.

Five experiments clearly support the notion that shame activates both restore and protect motives, which produce approach or avoidance behaviors depending on situational factors. Protect and restore motives were activated after reading a shame scenario (Study 4.1) and after describing an experienced shame event (Study 4.2) and predicted the higher willingness to enter new performance situations. Moreover, these motivations predicted the higher approach and lower avoidance tendencies (Study 4.3) and the higher repair and lower hiding tendencies (Study 4.4) after a

shame event. Finally, the influences of restore and protect motives on approach behaviors were mediated by local competency (Study 4.5). Thus, shame initially induces approach behaviors to restore one's self view, but, when this is not possible too risky, it induces withdrawal behaviors to protect one's self view.

These findings constitute an important contribution to the understanding of the nature and functions of shame. Empirical studies on the behaviors following shame have found mixed results, showing that shame can sometimes promote withdrawal behavior and sometimes approach behavior. Shame theories have not been able to explain these mixed findings because they only focus on withdrawal behaviors following shame and remain silent about motivations that are activated by shame. By taking a pragmatic position (Zeelenberg & Pieters, 2006), we have provided a simple answer to these complex matters. Our explanation includes shame theories' emphasis on withdrawal behaviors, but adds motivations and approach behaviors, making the picture of shame complete.

One of the implications of our findings is that the general image of shame in emotion literature should at least be partly changed. Shame is often perceived as an "ugly emotion", involving a preoccupation with oneself and short-circuiting any behaviors other than social avoidance (Tangney, 1991). For example, shame is frequently equalized to social anxiety, an anxiety arising from the prospect or presence of interpersonal evaluations, because both are marked by escape behaviors (Gilbert & Andrews, 1998; Leary & Kowalski, 1995). The present findings show that this rather negative, ugly image of shame is only partially right, and that shame mainly activates approach behaviors to restore one's self. Thus, shame can have positive effects and therefore may not be as ugly as is sometimes assumed.

Even though our studies show that shame can promote approach behaviors that are very similar to those promoted by the emotion guilt, we think that there is little reason to doubt the view of shame

and guilt as two distinct emotions. However, we do think that our data show that they should not be distinguished on basis of the behavioral tendencies that they activate. In most of the emotion literature, shame and guilt are differentiated on the basis of their association with behavior: shame is associated with avoidance behaviors and guilt is associated with approach behaviors or “outward movement, aimed at reparation for a wrongdoing” (Caplovitz Barrett, 1995, p. 26). We found that shame primarily activates approach behaviors, cancelling out behavior as a criterion for distinguishing both emotions. Even so, the psychological origins and motivations of shame and guilt are clearly distinct. Guilt arises after an evaluation of the behavior, signaling that one has caused harm, loss, or distress to a relationship partner (Breugelmans & Poortinga, 2006; Tangney et al., 1996). Indeed, guilt activates a focus on the hurt other and motivates approach behavior to maintain and enhance the dyadic relationship (Baumeister, Stillwell, & Heatherton, 1994). In contrast, shame arises after a negative evaluation of the self, signaling that something is wrong with one’s core self (H. B. Lewis, 1971). The following approach behavior is undertaken with a focus on restoring one’s core self. Both processes can motivate approach behavior, but do so for quite different reasons. This also means that shame and guilt can have different behavioral effects depending upon the extent to which a situation allows for fulfillment of the motivations underlying both emotions (see Chapter 2, Chapter 3, and Chapter 5).

In closing, let us return to the question that was central in our research: what do people do when they experience shame? The answer seemed a complex one, being answered with “withdrawal or approach” by empirical research, and with “withdrawal, but we don’t know how” by shame theories. It appears that the answer is actually quite simple. Shame stimulates regaining the positive image one had lost, but when this is impossible, it reverts to avoiding further losses. With this knowledge, we may finally be able to predict and understand what people do after making a faux-pass.

Appendix 4.1

Items and Factor Loadings of the Motivations Measure

Item	Factor loading Restore	Factor loading Protect
1. improve my self image	.85	-.07
2. show myself I can present	.95	-.16
3. show myself I am good	.95	-.12
4. come better out into the open	.85	-.12
5. ensure myself I am competent	.92	-.09
6. avoid more damage to my self image	.01	.91
7. protect myself	-.05	.90
8. avoid another bad presentation	-.22	.85
9. avoid making a fool of myself again	-.22	.89
10. did not want to get a worse image of myself	-.08	.83

Note. Items were complements to the sentence “I chose (not) to give the presentation because I wanted to...” and could be answered at 7-point scales with end points labelled 1 (not at all) and 7 (very strongly). Item 4 consisted of a Dutch proverb, in Dutch “beter uit de verf komen”, which could not be translated literally into English.

Appendix 4.2

Items and Factor Loadings of the Achievement Scale

Item	Factor loadings Achievement approach	Factor loadings Achievement avoidance
1. Try challenging activities	.59	-.32
2. Learn new things	.70	.08
3. Join in competitive activities	.73	-.10
4. Do my best to show others my capacities	.67	.03
5. Avoid activities I am not good at	.07	.89
6. Evade situations where my capacities are tested	-.02	.83
7. Stay clear of situations where you have to perform	.03	.94
8. Keep clear of competitive situations	-.16	.74

Note. Items were complements to the sentence “After that presentation I would...” and could be answered at 11-point scales with end points labelled 0 (very unlikely) and 10 (very likely).

Chapter 5

The Dark Side of Guilt: Acting ‘Prosocially’ At the Expense of Others⁴

Guilt may be among the most important emotions in society, playing a role in socialization practices and ensuring survival of individuals in groups (Ausubel, 1955; Frank, 1988; Smith, 1759). Although guilt is an unpleasant emotion, it has been argued to have beneficial consequences for people’s social surroundings. Ample empirical research has demonstrated many positive effects of guilt for interpersonal relationships and society (e.g., Baumeister, Stillwell, & Heatherton, 1994; Freedman, Wallington, & Bless, 1967; Ketelaar & Au, 2003). All in all, guilt is portrayed as the “good emotion” (Leith & Baumeister, 1998; Tangney, 1999; Wong & Tsai, 2007). In this article, however, we reveal that there is a dark side to guilt as well. Five experiments demonstrate that guilt motivates compensatory behaviors towards the people to whom we feel guilty, but that this occurs at the expense of others in our social environment. We argue that this dark side of guilt is a logical consequence of the experience and function associated with this emotion. As such, the present studies contribute to a more complete understanding of the way that moral emotions motivate interpersonal behavior.

The Bright Side of Guilt

Almost fifty years of research has resulted in an image of guilt as an “adaptive emotion, benefiting individuals and their relationships in a variety of ways” (Tangney, Stuewig, & Mashek, 2007b, p. 26). By now, the emotion literature provides a coherent picture of the antecedents, experiential content, and consequences of this

⁴This chapter is based on De Hooge, Nelissen, Breugelmans & Zeelenberg (2008) 93

emotion. The function of guilt is to protect and enhance social relationships by punishing interpersonal wrongdoings and restoring inequities (Baumeister et al., 1994; Leith & Baumeister, 1998). Thus, it most often arises from a moral transgression in which the actor appraises the situation as having violated an important norm and having hurt another person (Ortony, Clore, & Collins, 1988; Tangney & Dearing, 2002). This appraisal elicits feelings of tension and remorse and, important to the present study, a preoccupation with the transgression (Lewis, 1987; Tangney, 1999). Experiences of guilt motivate reparative actions such as confessions, apologies, and attempts to undo the harm done (Caplovitz Barrett, 1995; Lewis, 1971, 1987; Lindsay-Hartz, 1984). In the words of Izard (1977, p. 422, italics added): “the experience of guilt *binds the person to the source of guilt* and does not subside without reconciliation that tends to restore social harmony”.

Even economists, who usually tend to adhere to a strictly self-interested view of man, acknowledge that guilt may inhibit selfish tendencies to choose for immediate personal gain at the expense of others (e.g., Frank, 1988). Instead, guilt spurs prosocial action that also benefits one’s social environment, which eventually yields an even more profitable long-term strategy. Therefore, guilt is often characterized as a moral emotion, one that is linked to the welfare of society and that stimulates people to think of how one’s own behavior influences the well-being of other people (Haidt, 2003; Smith, 1759).

There is much empirical evidence for the notion of guilt as a moral and adaptive emotion. For example, guilt has been found to motivate a heightened sense of personal responsibility, compliance, and forgiveness, and to generate more constructive strategies to cope with anger (Freedman et al., 1967; Izard, 1977; McCullough, Worthington, & Rachal, 1997; Strelan, 2007; Stuewig, Tangney, Heigel, & Harty, 2008; Tangney, Wagner, Fletcher, & Gramzow, 1992). Several studies have also shown that guilt is strongly related to reparative intentions (Schmader & Lickel, 2006;

Tangney, 1993). For example, Tangney, Miller, Flicker, and Barlow (1996) found that people reported a higher desire to make amends after describing a guilt experience than after describing a shame or embarrassment experience. When studying the phenomenology, action tendencies, and emotivational goals of 10 different emotions, Roseman, Wiest, and Swartz (1994) found that participants who recalled a guilt experience felt like undoing their actions, punishing themselves, apologizing, and wanting to make up for their transgression and to be forgiven. Importantly, cross-cultural studies have shown that these characteristics of guilt are quite similar across a wide array of cultures (Breugelmans & Poortinga, 2006; Fontaine et al., 2006), which is testimony to the universal moral character of guilt.

Perhaps the most direct evidence for moral effects of guilt has been given by a recent series of studies on the effect of emotions on prosocial behavior in dyadic relationships. Ketelaar and Au (2003) showed that people acted more prosocially in social dilemma games after an autobiographical recall procedure inducing feelings of guilt or after making an unfair offer in an earlier round of the game. These findings were replicated by Nelissen, Dijksterhuis, and De Vries (2007), who found that an induction of guilt increased prosocial behavior while an induction of fear did not. Chapter 2 found similar results, reporting prosocial effects for guilt in a social dilemma as well as on a measure of everyday cooperation.

To summarize, guilt appears to be a good, moral emotion, having a bright side that produces beneficial consequences for people in one's social surrounding. However, we suggest that in its prosocial trail, guilt has a dark side on the interpersonal level as well, one that is particularly relevant with respect to the current moral and prosocial take on guilt. Importantly, we propose that this dark side of guilt goes hand in hand with the bright side, that is, it is a direct consequence of the focus on repairing the relationship with people one feels guilty towards.

The Dark Side of Guilt

We are not the first to state that guilt has a dark side. At the beginning of the twentieth century, guilt was mostly understood from an intrapersonal perspective and thought to be the result of a conflict between the superego and the id. In Freud's view, guilt feelings would have negative intrapersonal effects such as melancholia, obsessional neuroses, and masochism (Freud, 1917/1957, 1923/1961). Later, the focus of theories and empirical research shifted towards an interpersonal view of guilt, resulting in a more positive evaluation. In the present article we suggest that guilt has a dark side on the interpersonal level as well.

When experiencing guilt, people are focused on what they have done wrong and on the person that has been hurt by their actions (Lewis, 1971). So, guilt focuses people on the impact of their actions on the relationship with a specific other. This means that the action tendencies ensuing from guilt are mainly aimed at restoring this dyadic relationship. In the words of Baumeister et al. (1994): "After doing something bad to another person, people are motivated *to help that person* or comply with that person's wishes, apparently to rectify any inequity and to repair any damage to the relationship" (p. 260, italics added). The role of guilt as a moral emotion is obvious in dyadic relationships, because any compensatory behavior directly benefits the victim (and hence improves that specific social relationship). However, in daily life people typically interact with multiple people.

When we take a broader perspective on moral behavior, looking beyond dyadic relationships, it becomes clear that guilt can also have negative interpersonal consequences. More specifically, we argue that the dyadic preoccupation that is central to experiences of guilt can lead to behavior that is negative for the outcomes of third parties. This is because people will generally compensate at the expense of the resources allocated to other people rather than those allocated to themselves. Guilt motivates a preoccupation with the hurt other, implying that less attention will be paid to other

social partners. If we think of moral behavior in terms of resources, the benefits extended to one individual can only be made at the expense of another, be it oneself or other people. In other words, guilt may lead to an extra investment in the relationship with the victim but someone else will have to pay the bill. This is what we call the dark side of guilt.

The hypothesis that guilty people compensate a victim of their actions at the expense of other people and not at the expense of themselves is based on the analysis of this emotion from an equity-perspective. According to Interdependence theory (Kelly & Thibaut, 1978) and Social Value Orientation theory (Messick & McClintock, 1968; Van Lange, Otten, De Bruin, & Joireman, 1997), people are naturally concerned with their personal outcomes, but also with how their outcomes relate to those of other people. When experiencing guilt, people momentarily experience elevated concern for the outcome of the other person, at the expense of their personal outcome. At least, this is what happens in dyadic situations. We think that when a third party is present, the usual concern for one's personal outcomes can be maintained along with a heightened concern for the outcome to the hurt other that is evoked by guilt. According to Walster, Berscheid, and Walster (1970), in such instances "the harm doer is not only motivated by a desire for equity restoration, but also will act in such a way as to achieve the highest possible profit and satisfaction from his relationship with the victim" (p. 190). In terms of outcomes, the only way in which one can restore relationships in dyadic situations is by acting prosocially at the expense of oneself. However, at the level of multiple relationships, one can restore the hurt relationship and still gain the highest possible profit by acting 'prosocially' at the expense of other people around and not at the expense of oneself. This notion is best summarized by Freedman (1970), according to whom people who experience guilt "just do not like to suffer if they can possibly avoid it" (p. 159). This does not mean that people intentionally harm a third party, but rather that their focus on the dyadic relationship may simply lead them to fail to notice the consequences of their behavior for others.

There are at least two reasons why researchers may have overlooked the dark side of guilt. First, studies that do specify an object have typically investigated effects of guilt in dyadic situations and not in three- or multiple-person situations (Chapter 2; Ketelaar & Au, 2003; Nelissen et al., 2007). Second, most research showing positive effects of guilt have measured behavior or intentions in general terms without specifying an object, for example with rating scales such as “I wanted to make amends” or “I wanted to be forgiven” (Roseman et al., 1994; Tangney et al., 1996). Such studies find positive effects for guilt because behavior towards the hurt other is captured in general measures without an object. However, without specifying objects it is not possible to show that the positive effects only apply to the relationship with the hurt person and may damage relationships with third parties. Thus, we can conclude that studies of guilt so far have not yet addressed the possibility that guilt may hurt relationships other than the guilt-focused relationship.

To recapitulate, the bright side of guilt (i.e., the focus on restoring the relationship with the hurt other) brings along the dark side such that the benefits for the hurt other will occur not at the expense of oneself, but at the expense of others. This dark side has, to our best knowledge, never been empirically investigated, because studies so far have focused on general measures of intentions or on dyadic relationships. It follows that for a complete understanding of the interpersonal consequences of guilt, it is necessary to study the effects of guilt in multiple-person situations. In the present article, five studies are presented that address the interpersonal consequences of guilt in such multiple-person situations, using different types of guilt inductions and different measures for prosocial behavior. The data clearly reveals the dark side of this otherwise good emotion.

Experiment 5.1

The central purpose of Experiment 5.1 was to replicate the finding that guilt motivates prosocial behavior in dyadic situations. This finding has been shown in previous research, but by means of slightly different research methods than those used in our experiments (Chapter 2; Ketelaar & Au, 2003; Nelissen et al., 2007). A replication of the dyadic effects of guilt in Experiment 5.1 provides us with a baseline with which to compare the results of Experiments 5.2 to 5.5 that study guilt in multiple-person interactions.

Method

Participants and design. Sixty-two undergraduate students from Tilburg University (10 males and 52 females, $M_{\text{age}} = 20.11$, $SD = 4.32$) participated in partial fulfillment of a course requirement. Participants were randomly assigned to the Guilt or Control condition.

Procedure and variables. Participants were asked to: “Imagine that you follow a course in which you have to take an exam and write a paper. You have already passed the exam. You write the paper together with a fellow student, Robert.” In the Guilt condition, participants then read:

Because you already passed your exam and because you do not feel like writing the paper, you hardly put any effort into it and Robert does almost all the work. After handing in the paper it turns out that you both failed because your own part was insufficient. Due to this low mark Robert does not pass the course and has to retake the subject next year.

In the Control condition, participants read: “After handing in the paper it turns out that you both passed because both your parts were sufficient”. As a manipulation check, participants subsequently indicated on 11-point scales (0 = not at all, 10 = very

strongly) how much guilt, pride, shame, regret, and fear they would feel in the described situation. After the scenario and the emotion manipulation check, participants read:

A day after the event you participate together with Robert in a study. The researcher gives you 50 euros and explains that you can decide what you want to do with this money. You can keep everything, or you can offer (a part) to Robert.

As dependent variable for prosocial behavior, a dictator game was used in which participants indicated how they would divide the 50 euros (Kahneman, Knetsch, & Thaler, 1986). After completion of all tasks, participants were thanked and debriefed.

Results and Discussion

Emotion Manipulation Check. The manipulation checks showed that the manipulation of the emotion guilt was successful. Participants in the Guilt condition ($M = 9.09$, $SD = 1.06$) reported significantly more guilt than participants in the Control condition ($M = 0.48$, $SD = 1.06$), $t(60) = 32.25$, $p < .001$, and significantly more guilt than other emotions, all $t(31) > 3.37$, $ps < .01$. There were no differences between conditions on the other assessed emotions.

Monetary divisions. Results for the monetary division are displayed in Table 5.1. We hypothesized that guilt would motivate higher offers to the hurt other and that this would (inevitably) be at the expense of oneself in two-person situations. We found that participants in the Guilt condition offered more money to Robert (and by definition, less money to themselves) than participants in the Control condition, $t(60) = 3.95$, $p < .001$. So, Experiment 5.1 replicated previous findings with a different method showing that guilt motivates prosocial behavior at the expense of oneself in two-person situations. Experiment 5.2 was conducted to test whether this finding still holds when there are multiple persons present.

Experiment 5.2

Method

Participants and procedure. Fifty-two people from the surroundings of Tilburg (14 males and 38 females, $M_{\text{age}} = 23.73$, $SD = 8.39$) participated voluntarily in this experiment. They were randomly assigned to the Guilt or Control condition and were presented with the following scenario:

Imagine you are in a hurry because you want to get a special offer at a shop just before closing time. You do not have a means of transportation but you know that your friend Hans has a bicycle. This bicycle is very special to him because it is the last present given to him by his grandmother before she died. Nevertheless, he lets you use the bicycle. You cycle to the shop and get the special offer.

In the Guilt condition, participants read: "When you leave the shop you find out that the bicycle is stolen; you forgot to lock it. You inform Hans about this and he is very sad." In the Control condition, participants read: "When you leave the shop you take the bicycle and bring it back to Hans." As an emotion manipulation check, participants subsequently indicated (0 = not at all, 10 = very strongly) how much guilt, pride, shame, regret, and fear they would feel in the described situation.

Next, they read: "A week after the event are the birthdays of your friend Hans and of another friend, Jan. You have 50 euros that you can spend." As dependent measures, participants indicated how they would spend the 50 euros between Hans and Jan, and how much money they would keep for themselves.

Results and Discussion

Emotion Manipulation Check. The manipulation checks showed that the manipulation of guilt was successful. Participants in the

Table 5.1*Prosocial Behavior as a Function of Emotion Condition in Experiments 5.1, 5.2, and 5.4*

	Experiment 5.1		Experiment 5.2		Experiment 5.4	
	Emotion condition		Emotion condition		Emotion condition	
Monetary division	Guilt <i>M (SD)</i>	Control <i>M (SD)</i>	Guilt <i>M (SD)</i>	Control <i>M (SD)</i>	Guilt <i>M (SD)</i>	Control <i>M (SD)</i>
Hurt other	31.56 (10.43)	> 23.83 (2.52)	29.58 (11.20)	> 20.00 (6.88)	29.06 (8.41)	> 21.76 (10.45)
Third person			11.52 (5.20)	< 16.50 (5.64)	9.38 (6.55)	< 14.71 (8.56)
Self	18.44 (10.43)	< 26.17 (2.52)	8.59 (10.49)	= 13.50 (11.25)	11.56 (10.76)	= 13.53 (12.96)

Note. Prosocial behavior scores could range from 0 to 50 euros. Higher scores indicate more prosocial behavior. Because Experiment 5.1 was a two-person situation, there was no third person present. There are no significant differences between means separated by an “=” mark with both $t_s < 1.60$, $p_s > .12$. Means separated by an “>” or “<” mark are significantly different with all $t_s > 2.00$, $p_s < .05$.

Guilt condition ($M = 9.16$, $SD = 1.37$) reported significantly more guilt than those in the Control condition ($M = 4.35$, $SD = 3.22$), $t(50) = 7.47$, $p < .001$, and significantly more guilt than other emotions, all $t(31) > 3.52$, $ps < .001$. There were no differences between conditions on the other assessed emotions.

Monetary division. Results for the monetary division are displayed in Table 5.1. We hypothesized that guilt would motivate higher offers to the hurt other at the expense of third parties and not at the expense of oneself. The results supported our hypotheses: participants in the Guilt condition offered more money to Hans than participants in the Control condition, $t(50) = 3.43$, $p < .01$. This higher offer was at the expense of the third person Jan and not at the expense of oneself: participants in the Guilt condition offered less money to Jan than participants in the Control condition, $t(50) = 3.25$, $p < .01$. Participants in the Guilt condition did not differ from participants in the Control condition in the amount of money kept to themselves, $t(50) = 1.60$, *ns*.

To summarize, the view that guilt induces general prosocial behavior is challenged in a three-person situation. The data of Experiment 5.2 revealed that guilt does motivate prosocial behavior towards the person hurt by the guilt event, but that this is at the expense of third parties and not at the expense of oneself. Experiment 5.3 tested whether this effect would still hold even when people were explicitly confronted with a choice between unequal outcomes and equal outcomes for the two interaction partners (i.e., the hurt other and the third person). If in the face of such an explicit choice, people would prefer the unequal division of outcomes, this would provide particularly strong support for our hypotheses. Because the contrast between the unequal division and the equal division is stated very explicitly, we expected that guilt would sway preferences towards the unequal divisions, but that most people would nevertheless choose the equal division.

Experiment 5.3

Method

Participants and procedure. Forty-eight undergraduate students (12 males and 36 females, $M_{age} = 19.77$, $SD = 2.72$) participated in partial fulfillment of a course requirement and were randomly assigned to the Guilt or Control condition. Participants read the same scenario as in Experiment 5.2 and subsequently answered the emotion questions. Participants then read:

A day after the event you participate in a lab-study together with that same friend Hans and another friend, Andre. In this study, the three of you will make choices between options A, B, and C. Your choices yield points for yourself and for Hans and Andre. The choices of Hans and Andre yield points for themselves and for you. Imagine that every point is valuable: the more you get, the better. You now read nine situations in which you have to choose between three options.

These questions comprised an adjusted version of the Dominance Measure of Social Value Orientations (SVO measure, Van Lange et al., 1997). In the SVO measure, participants answer nine items that consist of different point divisions between the participant and an unknown other. The original measure encompasses both prosocial (equality) and proself (maximizing and individualistic) choices. In our adjusted version, the nine items consisted of point divisions between three instead of two people: the participant, Hans, and Andre. The divisions encompassed an equality choice (all three persons receive an equal amount of points), an individualistic choice (the participant receives more than both Hans and Andre) and a compensation choice (Hans receives more and Andre less, with the participant slightly less than Hans). For example, Choice A: 480 for you, 480 for Hans and 480 for Andre (the equality option); Choice B: 540 for you, 280 for Hans, 280 for Andre (the individualistic option); Choice C: 480 for you, 540 for Hans, 280 for Andre (the compensation option).

Because participants can choose only one option in every situation, compensation will be at the expense of oneself (that is, participants will choose the compensation option more often and the individualistic option less often) or at the expense of the third party (that is, participants will choose the compensation option more often and the equality option less often). In line with our reasoning and with the results of the previous study, we expected in the Guilt condition increased frequencies of choice for the compensation option to be made at the expense of the equality option (hurting the other) rather than at the expense of the individualistic option. The number of equality options, individualistic options, and compensation options chosen formed the dependent variables.

Results and Discussion

Emotion Manipulation Check. The manipulation of guilt was successful: Participants in the Guilt condition ($M = 9.33$, $SD = 0.96$) reported significantly more guilt than participants in the Control condition ($M = 2.63$, $SD = 2.68$), $t(46) = 11.53$, $p < .001$, and significantly more guilt than other emotions (all $t(23) > 2.23$, $ps < .05$). There were no differences between emotion conditions on the other assessed emotions.

Point division. Results for the point division are displayed in Table 5.2. We first computed a difference score: the number of times the compensation option was chosen minus the number of times the equality option was chosen. The results showed that participants in the Guilt condition scored higher than participants in the Control condition, $t(46) = 2.25$, $p < .05$. Participants in the Guilt condition chose more often for compensation compared to participants in the Control condition, at the expense of equality.

Following the procedures of the SVO measure, participants could be classified as compensators, equalizers, and individualists when they had chosen one option for six or more times. There were more compensators (32 %) and less equalizers (59 %) in the Guilt

condition than in the Control condition (4 % and 82 %, respectively), but there was no difference in the number of individualists (9 % for Guilt condition and 14 % for Control condition), $\chi^2(2, N = 48) = 5.51, p = .06$.

Taken together, when the choice between equal and unequal outcomes is explicitly stated, people mostly opt for an equal division of outcomes. Still, guilt more strongly motivates a preference for situations in which the hurt other receives more and a third person receives less and decreases a preference for equality situations. This finding is in line with our hypothesis and with the findings of Experiment 5.2 that guilt motivates prosocial behavior towards the hurt person at the expense of third parties and not at the expense of oneself.

One could imagine that it is one thing to act prosocially at the expense of others when those others can afford to receive less. However, acting prosocially at the expense of others who need everything they can get, such as charities, is something else. To test how far the dark effects of guilt will go, we conducted Experiment 5.4. In this experiment, guilt was induced with an autobiographical recall manipulation and a charity was used as the third party.

Table 5.2

Chosen Division Means (and Standard Deviations) as a Function of Emotion Condition in Experiment 5.3

Chosen Division	Emotion condition	
	Guilt <i>M (SD)</i>	Control <i>M (SD)</i>
Compensation	2.79 (3.83)	> 0.71 (2.12)
Equality	5.29 (4.03)	< 7.25 (3.12)
Individualism	0.92 (2.62)	= 1.04 (2.46)

Note. Division scores could range from 0 to 9 chosen situations. There are no significant differences between means separated by an “=” mark. Means separated by an “>” or “<” mark are significantly different with $t(46) = 2.25, p < .05$.

Experiment 5.4

Method

Thirty-three inhabitants of Tilburg (11 males and 22 females, $M_{age} = 23.70$, $SD = 5.19$) participated voluntarily in this study and were randomly assigned to the Guilt or Control condition. Participants in the Guilt condition were asked to report a personal experience in which they felt very guilty (cf., Chapter 2, Ketelaar and Au, 2003). For example, they wrote about cheating their partner, forgetting a friend's birthday or breaking valuable things of others. In the Control condition, participants were asked to describe a regular weekday. Participants worked approximately 10 minutes on the emotion induction task.

Subsequently, participants were asked to think of the person they hurt or offended in the described guilt experience or of a person they had met in the described weekday. This person was labeled Person A. Participants then read: "A week after the described experience is the birthday of Person A and a big collection for the victims of a flood in Africa. You have 50 euros you can spend." and subsequently indicated how they would divide the 50 euros. After the monetary division, participants were asked to reread their situation description and to indicate how much guilt they felt in the situation or in the normal weekday. They also indicated (0 = not at all, 10 = very strongly) how much shame, regret, disappointment, sadness, fear, anger at self, anger at others, and dissatisfaction they felt in the situation.

Results and Discussion

Emotion Manipulation Check. The manipulation of guilt was successful: participants in the Guilt condition ($M = 8.13$, $SD = 1.59$) reported significantly more guilt than participants in the Control condition ($M = 1.65$, $SD = 2.29$), $t(31) = 9.39$, $p < .001$ and significantly more guilt than other emotions (all $t_s(15) > 2.12$, $ps < .05$). There were no differences between emotion conditions on

the other assessed emotions.

Monetary division. Results for the monetary division are displayed in Table 5.1. We expected and found that participants in the Guilt condition offered more money to Person A than participants in the Control condition, $t(31) = 2.20$, $p < .05$. This higher offer was at the expense of the charity and not at the expense of oneself. Participants in the Guilt condition offered less money to charity than participants in the Control condition, $t(31) = 2.00$, $p = .05$. Participants in the Guilt condition did not differ in the amount of money kept for themselves from participants in the Control condition, $t(31) = 0.47$, *ns*.

These results extend the findings of Experiments 5.2 and 5.3: Guilt not only motivates prosocial behavior at the expense of another person, but also at the expense of good causes for those who are in need for financial help. The experiments so far have clearly shown that the dark side of guilt can be demonstrated by means of standard and well-accepted emotion induction procedures. However, the credibility of the findings would be much increased if guilt was experimentally induced and actually experienced, rather than recalled or imagined. Therefore, Experiment 5.5 was conducted.

Experiment 5.5

In Experiment 5.5 we aimed to reveal that the dark effects of guilt are a result of a preoccupation with the hurt other. According to our proposition, people act prosocially at the expense of third others because they are intensely focused on the hurt other, and then neglect the well-being of third parties. This would thus occur only in situations where the hurt other is present. In situations where the hurt other is not present, we would only expect the generic spill-over effects of guilt also found in previous research, motivating prosocial behaviors towards all others present (Chapter 2; Ketelaar & Au, 2003; Nelissen et al., 2007). This was explicitly

tested in Experiment 5.5, where participants interacted with the hurt other and a third party, or with two unrelated persons.

An additional benefit of this design was that we could control for a potential alternative explanation of the findings, namely order effects. In the previous studies, participants first indicated the money given to the hurt other, then the money given to the third party and lastly indicated the amount of money they would keep. It is possible that we found dark effects of guilt simply because participants distract the money from the second source, which is the third party. If this would be the case, we would find the same results in the condition where the hurt other is not present.

Method

Participants and design. One hundred forty-three students at Tilburg University (23 males and 120 females, $M_{age} = 20.12$, $SD = 4.14$) participated in partial fulfillment of a course requirement. They were randomly assigned to the conditions of a 2 (Emotion condition: Guilt vs. Control) \times 2 (Presence hurt other: Present vs. Not-present) between-subjects design with Lottery ticket division as dependent variable.

Procedure and variables. Participants entered the laboratory in groups of nine to twelve participants. They were seated in separate cubicles and informed that they would be connected to other participants with their computer throughout the hour. They were explained that they could earn lottery tickets in different tasks. At the end of the hour, the lottery would take place and one of the participants would win 10 euros.

The session started with a reaction task. Participants were told that they played two rounds of a so-called letter task, ostensibly with another participant (adopted from Reitsma-Van Rooijen, Semin, & Van Leeuwen, 2008). In the task, letters would rapidly appear on the screen in a red or green color. To earn points, the participant had to react on green letters before they disappeared

by pressing the corresponding letter on the keyboard. If the appearing letter was red, the other player had to react on time to earn one point. After three minutes, their total scores would be calculated and feedback would be given. Participants were explained that they would play two rounds. In the first round they could earn a bonus of 8 lottery tickets for themselves, in the second round they could earn a bonus of 8 lottery tickets for the other player. Importantly, both players needed to do well in order to reach the minimum level of 100 points to get the bonus.

After playing the first round of the letter task, all participants received bogus feedback that they earned the bonus due to well performance of both the participant and the other player. Participants subsequently played the second round of the letter task and received bogus feedback about other player's bonus. In the Guilt condition, the other player did not receive the bonus due to the participant's bad performance. In the Control condition, the other player received the bonus due to good performance of both the participant and the other player.

Following this, participants continued with a three person-dictator game with the player from the letter task (Present condition) or with a participant who knew nothing about the letter task (Not-present condition). Because this person differed between Not-present and Present conditions, we labeled this person Person A. In all conditions the third player was a participant who knew nothing about the letter task. It was explained that one of them would be given either nine or twelve lottery tickets, which that person could divide among the three players as he or she wished. The participant was ostensibly selected at random to divide the tickets and was given twelve tickets to divide, but was told that the other two participants did not know whether there were nine or twelve tickets to divide (adopted from Van Dijk & Vermunt, 2000). The lack of knowledge of the two other participants about the exact amount of tickets to divide offered the participant the opportunity to unequally divide the tickets without consequences. The number of tickets offered to Person A, to the third player and

the number of tickets kept for oneself formed our dependent measures.

As a manipulation check participants subsequently indicated (0 = not at all, 10 = very strongly) how responsible they felt, how much they felt that what they had done was wrong, how much they thought about what they had done to the other person, how much they wanted to repair what had happened, and how much they wanted to be forgiven. These are described in the emotion literature as basic elements of guilt (Caplovitz Barrett, 1995; Roseman et al., 1994; Tangney & Fischer, 1995; Tangney et al., 1996). In addition, participants answered the emotion questions of Experiment 5.4. After completion participants were thanked and thoroughly debriefed.

Results and Discussion

Emotion Manipulation Check. The guilt manipulation was successful: participants in the Guilt condition scored significantly higher on all guilt elements than participants in the Control conditions (all $t(141) > 7.13$, $ps < .001$) with the exception of felt responsibility, $t(141) = 0.37$, *ns*. Participants in the Guilt condition also reported significantly more guilt ($M = 7.46$, $SD = 1.99$) than participants in the Control condition ($M = 0.23$, $SD = 0.76$), $t(141) = 28.92$, $p < .001$ and significantly more guilt than other emotions (all $t(69) > 3.94$, $ps < .001$). There were no differences between emotion conditions on the other assessed emotions.

Ticket division. Results for the ticket division are displayed in Table 5.3. We hypothesized that guilt would motivate higher offers to the hurt other at the expense of third parties. We expected and found that participants in the Present Guilt condition offered more tickets to Person A and fewer tickets to the third player than in the Present Control and in the Not-present Guilt condition. A 2 (Emotion condition) \times 2 (Presence hurt other) ANOVA with tickets offered to Person A as dependent variable showed significant main effects of Emotion condition, $F(1, 139) = 15.49$, $p < .001$, η_p^2

= .10, and of Presence hurt other, $F(1, 139) = 11.94, p < .001, \eta_p^2 = .08$. More importantly, there was a significant two-way interaction, $F(1, 139) = 3.72, p = .05, \eta_p^2 = .03$. Participants in the Present Guilt condition offered significantly more to Person A than participants in the Present Control condition, $t(139) = 4.12, p < .001$, and than participants in the Not-present Guilt condition, $t(139) = 3.77, p < .001$. There was no difference between the Not-present Guilt condition and Not-present Control condition, $t(139) = 1.42, ns$.

The higher amount for Person A was at the expense of the third player. A 2 (Emotion condition) \times 2 (Presence hurt other) ANOVA with tickets offered to the third player as dependent variable showed no significant main effects, but a significant two-way interaction, $F(1, 139) = 9.19, p < .01, \eta_p^2 = .06$. Participants in the Present Guilt condition offered significantly less to the third player

Table 5.3

Ticket Division Means (and Standard Deviations) as a Function of Emotion condition and Presence of the hurt other in Experiment 5.5

		Emotion condition		
Presence hurt other	Division	Guilt <i>M (SD)</i>		Control <i>M (SD)</i>
Present				
	Person A	4.85 (1.89)	>	3.63 (1.13)
	Third party	2.82 (1.33)	<	3.50 (1.27)
	Self	4.33 (2.06)	=	4.87 (2.34)
Not-present				
	Person A	3.73 (0.77)	=	3.31 (0.96)
	Third party	3.73 (0.77)	=	3.29 (0.99)
	Self	4.54 (1.54)	= / <	5.40 (1.93)

Note. Ticket scores could range from 0 to 12 tickets. There are no significant differences between means separated by an “=” mark with all t s $< 1.51, p$ s $> .14$. Means separated by an “= / <” mark are marginally significant different with $t = 1.83, p = .07$, and means separated by an “>” or “<” mark are significantly different with both t s $> 2.21, p$ s $< .05$.

than participants in the Present Control condition, $t(139) = 2.59$, $p < .05$, and than participants in the Not-present Guilt condition, $t(139) = 3.43$, $p < .01$. There was no difference between the Not-present Guilt condition and Not-present Control condition, $t(139) = 1.70$, *ns*.

The higher amount for Person A was not at the expense of oneself. A 2 (Emotion condition) \times 2 (Presence hurt other) ANOVA with tickets kept for oneself as dependent variable showed no significant main effects and no significant two-way interaction, $F(1, 139) = 0.23$, *ns*. Participants in the Present Guilt condition kept the same number of tickets as participants in the Present Control condition, $t(139) = 1.13$, *ns*, and as participants in the Not-present Guilt condition, $t(139) = 0.44$, *ns*. Convergent with previous research (Chapter 2; Ketelaar & Au, 2003; Nelissen et al., 2007), there was a (marginally significant) difference between the Not-present Guilt condition and Not-present Control condition, $t(139) = 1.83$, $p = .07$, such that when the hurt other was not present, the experience of guilt promoted general prosocial behavior.

Taken together, the results of Experiments 5.2 to 5.4 were replicated in Experiment 5.5 by means of an emotion induction in the lab. Data revealed that guilt motivates prosocial behavior towards the hurt person at the expense of others but not at the expense of oneself. The absence of neglect of the well-being of others when the hurt other is not present supports the hypothesis that the dark effects are the result of a preoccupation with repairing the hurt caused, and do not follow from an order effect in assigning payoffs. In addition, when the hurt other is not present, people keep less money for themselves, showing a generic spillover effect of prosocial behavior, corresponding with previous research (Chapter 2; Ketelaar & Au, 2003; Nelissen et al., 2007).

General Discussion

Are consequences of guilt roses all the way, or does guilt have a

dark side as well? We believe that our studies clearly show that it does. Guilt has a bright side in the sense that it benefits the person who was hurt by the guilt-inducing event. However, it is precisely this bright side that can also give rise to a dark side of guilt. When experiencing guilt, people are preoccupied with repairing the hurt that they caused in such a way that they may overlook the well-being and outcomes of third parties. This can result in repairing one relationship at the expense of another.

Five experiments support the notion that guilt has a dark side. Using different inductions and different dependent measures, we repeatedly found that guilt repairs the hurt relationship at the expense of others and not at the expense of oneself. We first established that people offered more money to the hurt other at the expense of oneself in dyadic situations (Experiment 5.1). When extending this situation to a three-person interaction, people offered more money to the hurt other at the expense of third parties present and not at the expense of oneself (Experiment 5.2). In addition, they tended to prefer situations where the hurt other receives more and a third other receives less over situations with equal divisions even if the two were explicitly contrasted (Experiment 5.3). People also offered more money to the hurt other and less money to a third person if the latter actually needed the money (i.e., charity; Experiment 5.4). Finally, Experiment 5.5 showed that, after experiencing guilt in the lab, participants neglected the well-being of third persons only in situations where it was possible to repair the damage. Thus, it seems safe to conclude that there is ample evidence in favor of the view that guilt does have a dark side as well.

We think that the dark side of guilt is not limited to our studies, but that it can be regularly found in daily life as well. We found dark effects of guilt in situations where a limited set of resources had to be divided among various persons. In daily life, people regularly encounter situations where decisions have to be made about the division of limited resources, such as time, energy, attention, or money. If people experience guilt in such situations, they will be

likely to act prosocially towards the hurt other at the expense of third persons. For example, after having forgotten your grandmother's birthday, you may want to make up for this by paying her a visit the next day even though had you already made an appointment for that time with a friend. The present studies also suggest the boundary conditions for the dark side of guilt to emerge. Only when resources are limited in a situation of multiple interdependencies and the hurt other is present in an interaction may guilt have detrimental effects for third parties. When interacting in dyadic situations (Experiment 5.1; Chapter 2) or when the hurt other is not present (bottom half of Table 5.3; Experiment 5.5), guilt can be expected to display only its bright, prosocial side.

It is important to stress that our notion of the dark side of guilt is consistent with common models and theories of this emotion, including the notion of guilt as a moral emotion. Guilt theories generally state that guilt arises after a moral transgression in which the actor has hurt another person (e.g., Baumeister et al., 1994; Tangney & Dearing, 2002). This leads to the experience of a preoccupation with the transgression and a motivation to undertake reparative actions (Caplovitz Barrett, 1995; Lewis, 1971). We indeed found in each and every experiment that guilt motivated prosocial behavior towards the hurt other. However, we add to these guilt theories that it is exactly the preoccupation with the hurt other that may also cause people to take decisions that are not so positive for third others in their social environment. All in all, we believe that the extension of the effects of guilt to multiple-person interactions broadens our view on the way that moral emotions can affect social behavior.

There are at least two features of our studies that have a relevance that goes beyond the specific emotion of guilt. The first is the study of the behavioral effects of emotions beyond dyadic situations. Most, if not all, research concerning the behavioral effects of specific emotions makes use of situations in which the person is alone or together with one other person (e.g., Lerner &

Keltner, 2001; Van Kleef, De Dreu, & Manstead, 2004). This research has provided a rich and detailed picture of how emotions function, but it may not capture the full picture. We showed that guilt emerges as a prosocial emotion in dyadic situations, but that it does not emerge as unequivocally positive in three-person situations. Similarly, it is possible that the behavioral effects of other emotions may differ between dyadic and multiple-person situations.

The second feature is our understanding of emotion relevance in studying the behavioral effects of emotions. Experiment 5.5 showed that the dark effects of guilt only occur when the hurt other is present. Earlier research has made a distinction between emotion influences that are related or unrelated to the goal-striving process of the emotion (Chapter 3; Zeelenberg & Pieters, 2006). Some emotion influences, so-called endogenous influences, are relevant for goal pursuit and occur when they concern behaviors in situations that are related to the emotion-causing event. Other emotion influences, so-called exogenous influences, are irrelevant for goal pursuit and occur in situations that are unrelated to the emotion-causing event. Such a distinction between exogenous and endogenous influences can give different insights in the understanding of an emotion. Endogenous influences, being relevant for the goal process of the emotion, show something about the function and process of an emotion, while exogenous influences show carry-over effects of emotions that are unrelated to the goal of the emotion. Most scholars are unaware of this distinction when studying emotion effects empirically, and almost no studies have simultaneously examined endogenous and exogenous influences of an emotion (with the exception of Chapter 3). It thus appears that, for a complete understanding of emotions, one should take into account the distinction and consequences of exogenous and endogenous influences of emotions.

Having demonstrated the dark side of guilt, how should we now evaluate its status as a moral emotion? In our view, the findings

that guilt is not always positive for people in one's social environment do not imply that we should abandon the view of guilt as a moral emotion. On the contrary, our studies reinforce the view of guilt as a commitment device that inhibits selfish tendencies in favor of behaviors that benefit people who have been wronged by one's actions (Frank, 1988). However, we do show that moral emotions should not be seen as processes that indiscriminately generate positive outcomes, but rather that a thorough understanding of the experiential and motivational features of these emotions is necessary in order to fully appreciate how they function in interpersonal relationships. Thus, it should not come as a surprise that even the most exemplary of moral emotions comes with a dark side.

Chapter 6

Discussion

Emotions play an important role in our daily lives. They can influence for example whether we will take risks, whether we will buy those expensive jeans, or whether we will act harshly towards another person. But what do people do when they experience shame or guilt? Different theories offered diverse predictions, ranging from prosocial behavior to reparative and withdrawal behaviors, and there was hardly any empirical research on behavioral effects of shame and guilt (e.g., Baumeister et al., 1994; Frank, 1988; Haidt, 2003; Ketelaar & Au, 2003; Tangney, 1999). The present dissertation aims to fill this gap. Four chapters presented studies on motivations and behaviors following from shame and guilt, in order to develop a better understanding of these two emotions and of (moral) emotions in general. What did these chapters show?

Summary of the Empirical Findings

Chapter 2 set out to get more knowledge about exogenous influences of shame and guilt on prosocial behavior. It often happens that after experiences of shame or guilt, one finds oneself in situations that are unrelated to the shame or guilt experience. Do shame and guilt then motivate you to act prosocially? On the basis of previous findings, it was predicted that guilt would motivate prosocial behavior for proselves towards people unrelated to the guilt experience (Ketelaar & Au, 2003; Nelissen et al., 2007). In contrast, on the basis of the assumption that shame motivates behavior to deal with a threatened self, it was predicted that shame would have no influence on prosocial behavior. Consistent with these predictions, two experiments showed that guilt motivated prosocial behavior for proselves, but that shame did

not influence prosocial behavior. In Experiment 2.1, proselves acted more prosocially towards an unknown other in a one-shot dilemma game after remembering a guilt experience, but not after remembering a shame experience or a normal weekday. Experiment 2.2 replicated these results, showing that, compared to shame and to a control condition, guilt motivated proselves to score higher on helping tendencies in everyday situations. These findings seem to suggest that, although shame is a moral emotion, it does not motivate prosocial behavior like the moral emotion guilt. Does this mean that shame is not a moral emotion and can better be seen as a bad emotion? This question was addressed in Chapter 3.

Chapter 3 focused on exogenous and endogenous influences of shame on prosocial behavior in order to study whether people do act prosocially in situations related to the shame experience. Based on the assumption that shame motivates behavior to deal with a threatened self, and on the assumption that people can deal in different ways with a threatened self, it was hypothesized that shame would motivate prosocial behavior for proselves in situations that are related to the shame experience (i.e., endogenously) but not in situations that are unrelated to the shame experience (i.e., exogenously). In accordance with the hypotheses and with the findings of Chapter 2, four experiments showed that endogenous shame motivates prosocial behavior for proselves, while exogenous shame has no influence on prosocial behavior. In Experiment 3.1, proselves imagining shame acted more prosocially towards a person who had seen the imagined shame experience than towards a person who had not seen the imagined shame experience, and more prosocially than participants who did not imagine shame. Experiment 3.2 replicated these findings when participants remembered a shame experience. In addition, Experiment 3.3 showed that after a shame experience in the lab, proselves acted more prosocially towards a person who knew about the shame event than towards a person who knew nothing about the shame event, and more compared to participants did not have a shame experience. Finally, Experiment 3.4 showed that this

effect could be generalized beyond social dilemmas to helping tendencies in everyday situations. In other words, Chapter 3 showed that shame does motivate prosocial behavior in situations or towards people who are related to the shame experience, but not in situations or towards people who are unrelated to the shame experience. These findings imply that shame can motivate both withdrawal behaviors and approach behaviors. How can shame motivate such contrasting behaviors? The purpose of Chapter 4 was to answer this question.

In Chapter 4 the attention was laid upon the motives and approach and avoidance behaviors following from shame. One of the fundamental human motives is to have a positive self view, but when a person experiences shame, this self view is threatened. As a consequence, it was hypothesized that shame first and foremost motivates approach behaviors in order to restore this threatened self view, and when this is not possible or too risky, that shame would motivate withdrawal or avoidance behaviors to protect the threatened self from more possible harm. Five studies indeed showed that shame activates mostly approach behaviors, and that the behaviors following from shame are predicted by a restore and a protect motive. Experiments 4.1 and 4.2 showed that participants had a higher restore and protect motive and were more willing to engage in a new performance after a shame experience compared to participants who did not have a shame experience. Experiments 4.3 and 4.4 showed that these heightened restore and protect motives also predicted approach and avoidance of achievements, and repair and hiding tendencies. Finally, Experiment 4.5 showed that the influences of protect and restore motives on behavior can be mediated by situational factors such as local competency. Together with the findings of Chapters 2 and 3, these results clearly show that shame does motivate prosocial and approach behaviors, and that this is because shame has a restore and a protect motive.

In Chapter 5, the focus shifted back to guilt. Now that we knew that the moral emotions shame and guilt motivate prosocial

behavior, the following question was: how far does this effect reach? Do moral emotions motivate prosocial behavior towards everybody? Guilt theories state that guilt motivates a preoccupation with the hurt other, stimulating reparative behavior aimed at the hurt person (Baumeister et al., 1994; H. B. Lewis, 1987). This led to the hypothesis that in multiple-person situations with the hurt person present, guilt would motivate prosocial behavior towards the hurt other, but at the expense of third parties and not at the expense of oneself. In line with the hypothesis, Chapter 5 showed that guilt does motivate prosocial behavior towards others at the expense of oneself in dyadic situations, but that guilt motivates prosocial behavior towards the hurt person at the expense of others in multiple-person situations. After a guilt experience, participants acted prosocially towards the hurt person at the expense of oneself compared to participants without a guilt experience. But this only happened in dyadic situations (Experiment 5.1). In multiple-person situations, guilt motivated participants to act prosocially towards the hurt person at the expense of a third party present and not at the expense of themselves (Experiment 5.2). This finding was replicated when possible outcomes were explicitly contrasted (Experiment 5.3), and when the third party was a charity (Experiment 5.4). Finally, Experiment 5.5 showed that, after having hurt another person in the lab, participants neglected the well-being of third persons only in situations where the hurt other was present. These findings suggest that the prosocial effects of the moral emotion guilt are limited to dyadic situations and to situations where it is not possible to repair the damage (i.e., exogenously). What are the implications and contributions of the findings reported in these four chapters?

Implications and Contributions

The present dissertation reports the first systematic empirical investigations of the behavioral effects of the moral emotions shame and guilt. Together, these investigations contribute to the

understanding of shame and guilt in particular and of moral emotions in general. In addition, they have implications for research on impact of emotions on decision making and behavior.

Insights in shame, guilt, and moral emotions

The findings constitute a first step toward an understanding of the ways in which shame influences motivations and behavior. Due to different theories with contrasting predictions, shame seemed to be a very complicated emotion. According to theories on moral emotions, shame would motivate a focus on the well-being of others and of society, and would therefore motivate prosocial behavior (Frank, 1988; Haidt, 2003; Smith, 1759). In contrast, emotion theories on shame stated that shame would motivate a focus on the self and would therefore motivate hiding and withdrawal behaviors (M. Lewis, 2003; Tangney, 1991, 1999). The present dissertation clearly shows when and why shame motivates seemingly contrasting behaviors, and with the results it appears that shame is not such a complicated emotion at all. Shame arises after a moral transgression or incompetence, and instigates a negative evaluation about the whole self. As a consequence, people want to restore their positive self. They do this by approaching performance and achievement opportunities, and when they interact with audience from the shame event, they act prosocially towards those people. Only when it is too risky or not possible to restore their self, people revert to withdrawal or avoidance behaviors in order to protect themselves from further possible damage. This view shows that shame is indeed a moral emotion that can motivate prosocial behavior, and should not be viewed as an ugly emotion with only negative consequences.

The current findings are also an important addition to what is known about the effects of guilt. Just like shame, guilt was perceived as a moral emotion benefiting the well-being of others and of society (Frank, 1988; Haidt, 2003; Smith, 1759). In support of these theories, Ketelaar and Au (2003) and Nelissen et al. (2007) showed that guilt motivates prosocial behavior towards

unknown others in dyadic situations. But emotion theories on guilt stated that guilt would motivate a preoccupation with the transgression, resulting in reparative behaviors towards the hurt person (Baumeister et al., 1994; H. B. Lewis, 1987). The chapters in this dissertation show what happens after a guilt experience, and how guilt can motivate prosocial behavior towards society and reparative behavior towards the hurt person. When people experience guilt, they have hurt another person and are motivated to repair this hurt. If they find themselves subsequently in situations where the hurt other is not present, they act prosocially towards every person they encounter. But if they find themselves in situations together with that hurt person, they act prosocially towards the hurt person at the expense of others they encounter, and avoid as much as possible costs for themselves. This view shows that guilt indeed is a moral emotion motivating prosocial behavior and reparative behavior, but that there is a limit to its positive and adaptive effects.

Considering the present findings, what can be said about the status of shame and guilt as moral emotions? Theories on moral emotions seem to suggest that moral emotions motivate prosocial or cooperative behaviors in every situation towards every person in one's surrounding (Smith, 1759). The results of Chapters 2 and 3 show that shame does motivate prosocial behaviors towards audience of the shame event or in situations related to the shame event, but not towards people in situations unrelated to the shame event. Similarly, the results of Chapter 2 and 5 show that guilt does motivate prosocial behavior towards everybody when the hurt person is not present, but only prosocial behavior towards the hurt person at the expense of third others when the hurt person is present. In my view, this does not mean that shame and guilt can no longer be seen as moral emotions. After all, both shame and guilt are shown to inhibit selfish tendencies in favor of behaviors that benefit people who have been wronged or who have seen one's actions. In that sense, the studies in this dissertation underline the view of shame and guilt as commitment devices. However, the results do show that moral emotions should not be

seen as processes that generate positive outcomes for every person in one's surrounding and in every situation. If anything, the present dissertation shows that a thorough understanding of the experiential and motivational elements of moral emotions is necessary to fully grasp how they function in interpersonal relationships. This dissertation is the first step towards such a more complete understanding of moral emotions.

Consequences for emotion research

This dissertation not only provides information about shame, guilt and moral emotions that is essential for a better understanding of these phenomena, it also gives valuable information and directions for research on emotions in general. First of all, the findings show that a focus on the experiential contents of discrete emotions is necessary for a complete understanding of how emotions influence decision making and behavior. As discussed in Chapter 1, most emotion research is based on the valence approach, studying differences between effects of positive and negative emotions. The valence approach can give insights in how for example the effects of happiness and anger may differ (Van Kleef, De Dreu, & Manstead, 2004). But the current research clearly shows that this approach is not the best way to gain a complete understanding of behavioral effects of emotions. Different negative emotions can have different effects on decision making and behavior, even when they are such resembling negative emotions as shame and guilt. For example, guilt is shown to motivate a person to act prosocially towards unknown others, but shame does not have such an effect. Only when one makes a distinction between distinct emotions and takes a close look at the experiential elements of a specific emotion, it is possible to fully understand how emotions work and to predict how people will act.

Second, the present dissertation shows that a distinction between exogenous and endogenous influences of emotions is essential in emotion research. Previous research has made this distinction theoretically (Zeelenberg & Pieters, 2006), but most scholars do

not take this distinction into account when empirically studying the effects of emotions. Indeed, the previous chapters are the first systematic study on exogenous and endogenous influences of specific emotions. As a consequence, scholars may find different or even contrasting results depending on the used methods, and subsequently may draw incorrect conclusions about the effects, goal or function of an emotion. For example, if I had only measured behaviors following shame in events unrelated to the shame experience, I would have wrongly concluded that shame has no effect on behavior. And if I had measured prosocial behavior following guilt only in situations where the hurt person is not present, I would at this moment still think that guilt is an emotion with only adaptive and positive consequences. It thus appears essential that in all areas of research where emotions are studied, the distinction and consequences of exogenous and endogenous influences of emotions are taken into account.

A third and last implication of this dissertation for emotion research is the extension of focus towards multiple-person situations. In the last couple of years, more and more scholars have focused on interpersonal effects of emotions. Because many decisions and behaviors take place in situations with other people present, this is an important development in emotion research. However, most, if not all, of these studies have concentrated on situations in which the person is alone or together with one other person (e.g., Lerner & Keltner, 2001; Van Kleef et al., 2004), while in daily life we often interact with multiple persons at the same time. The present research has shown that the study of dyadic situations may give only a limited perspective on effects of emotions and may not capture the full picture. For example, using dyadic situations to study prosocial effects of guilt led to the conclusion that guilt has only adaptive consequences. This conclusion was only changed when I started studying prosocial effects of guilt in three-person situations, revealing that guilt has a dark side as well. So the role of emotions in decision making and behavior cannot be fully understood merely by focusing on effects of emotions in dyadic situations, and a broader approach using multiple-person

situations is needed.

Conclusion

What do people do after having fallen over in a dance competition? What will you do when you have made your friend fall over and have made him end last in his competition? These questions seemed hard to answer at the beginning of our journey. Shame looked like an ugly and complicated emotion, and it seemed impossible to predict what people do after such an experience. Guilt appeared as a much simpler emotion, motivating prosocial behavior towards everybody. But these impressions have changed along the way. By concentrating on the experiential elements of shame and guilt, and by taking a close look at the situations in which these emotions influence behavior, this dissertation has taken a step towards a more complete understanding of these two important emotions. We now know that you will probably act prosocially towards the top dancers who have seen your fall, and will try again in a next dance competition to show that you are a good Latin dancer. And this dissertation has shown us that after having made your friend fall down, you will probably take him to dinner and cinema at your mother's expenses, even though you have an appointment that evening with your grandfather. Perhaps this knowledge not only helps research, but also helps us to understand why we and our relatives act the way we do.

Samenvatting

(Summary in Dutch)

Emoties spelen een belangrijke rol in het dagelijks leven. Ze beïnvloeden wat we voelen en denken, hoe we ons gedragen en welke beslissingen we nemen. Een gebied waar emoties mogelijk een grote rol spelen is sociaal gedrag. Wetenschappers hebben zich vaak afgevraagd waarom mensen zich prosociaal gedragen en coöpereren in dagelijkse situaties. De huidige dissertatie probeert inzicht te krijgen in waarom en wanneer mensen zich prosociaal gedragen door te kijken naar twee zeer interpersoonlijke emoties: schaamte en schuld. Er bestaan vele theorieën over wat schaamte en schuld zijn en in welke situaties ze gevoeld worden (bv. Gilbert & Andrews, 1998; H. B. Lewis, 1971; M. Lewis, 1992; Tangney & Fischer, 1995) maar het is tot op heden onduidelijk hoe deze emoties gedrag beïnvloeden.

Voornamelijk economische theorieën zien schaamte en schuld als behorende tot de groep van morele emoties, emoties die verbonden zijn met het welzijn van anderen en met de samenleving als geheel (Haidt, 2003). Wanneer mensen zich in situaties bevinden waarin onmiddellijke zelfbelangen en lange termijn coöperatie met elkaar conflicteren, bieden morele emoties een oplossing door de zelfzuchtige optie minder aantrekkelijk te maken (Frank, 1988). Met andere woorden, volgens deze redenering zouden schaamte en schuld prosociaal gedrag stimuleren.

In de emotieliteratuur worden schaamte en schuld meer als aparte emoties met verschillende gedragseffecten gezien. Schaamte is een zeer pijnlijke en destructieve emotie die ontstaat na een morele transgressie of incompetentie (Gilbert, 1997; Fessler, 2004). Mensen hebben een sociale of morele norm geschonden en dit gedrag generaliseert zich naar het gehele zelfbeeld (Izard, 1997; Tangney & Dearing, 2002). Schaamte zou negatieve invloeden op gedrag hebben: de emotie zou sociaal ontwijkgedrag

en terugtrekking motiveren en interpersoonlijke relaties beschadigen (Dickerson & Gruenewald, 2004; Tangney, 1999). Schuld wordt in de emotieliteratuur meer positief gezien. Deze emotie ontstaat na een morele transgressie waarin een ander persoon pijn is gedaan (Izard, 1977). Als gevolg hiervan zijn mensen gericht op het leed dat ze de ander hebben aangedaan (Baumeister et al., 1994). Schuld zou verontschuldigen en acties gericht op het goedmaken motiveren (Caplovitz Barrett, 1995; Lindsay-Hartz, 1984).

Samengevat, verschillende theorieën leiden tot verschillende voorspellingen over gedragingen die schaamte en schuld motiveren. Empirisch onderzoek kan ook geen antwoord geven op de vraag welke gedragingen volgen op schaamte en schuld aangezien er nauwelijks studies bestaan die gedrag na schaamte of schuld hebben gemeten. In deze dissertatie maak ik gebruik van een pragmatische aanpak om een beter begrip te krijgen van schaamte en schuld en laat ik meerdere empirische studies naar de gedragseffecten van schaamte en schuld zien. Ik ga uit van de feeling-is-for-doing approach (Zeelenberg & Pieters, 2006), waarin negatieve emoties worden gezien als signalen dat doelen niet bereikt worden en als motivatoren voor gedrag dat helpt doelen te bereiken. De feeling-is-for-doing approach maakt ook onderscheid tussen endogene en exogene invloeden van emoties. Endogene invloeden van emoties zijn een integraal deel van inspanningen om doelen te bereiken en zijn relevant voor beslissingen die gemaakt worden. Exogene invloeden van emoties zijn extern aan inspanningen om doelen te bereiken en zijn niet gerelateerd aan huidige beslissingen. Dit onderscheid tussen exogene en endogene invloeden speelt een belangrijke rol bij de studie van gedragseffecten van schaamte en schuld.

Wanneer schaamte op deze pragmatische manier bekeken wordt, blijkt dat schaamte het probleem van een beschadigd zelfbeeld signaleert. Omdat mensen een fundamentele behoefte hebben om een positief zelfbeeld te hebben, is het doel van schaamte met dit beschadigd zelfbeeld om te gaan. Ik stel voor dat schaamte

voornamelijk toenaderingsgedrag motiveert om het zelfbeeld te herstellen, en wanneer dit niet mogelijk of te risicovol is, schaamte ontwijkgedrag motiveert om het zelfbeeld te beschermen voor nog meer gevaar. Omdat dit toenaderingsgedrag de functie van schaamte reflecteert, stel ik voor dat toenaderingsgedrag en sociaal gedrag verschijnen wanneer endogene invloeden van schaamte bestudeerd worden. Echter, wanneer exogene invloeden van schaamte bestudeerd worden, zullen geen gedragseffecten gevonden worden. De persoon heeft namelijk al op de schaamte gereageerd door de dreigende schaamtesituatie te verlaten.

Wanneer schuld door ogen van de feeling-is-for-doing approach bekeken wordt, blijkt dat schuld het probleem van een beschadigde relatie signaleert. Het doel van schuld is dan de beschadigde relatie te verbeteren. Wanneer de pijnigedane ander aanwezig is (dat wil zeggen endogene invloeden van schuld) is de verwachting dat schuld sociaal gedrag richting de pijnigedane ander motiveert ten koste van andere aanwezigen. Echter, wanneer de pijnigedane ander niet aanwezig is (dat wil zeggen exogene invloeden van schuld), is het niet mogelijk de schade te herstellen. Ik stel voor dat in deze situaties schuld generaliseert naar een algemene motivatie om relaties te verbeteren en sociaal gedrag richting anderen motiveert.

In Hoofdstuk 2 wordt eerst gekeken naar exogene invloeden van schaamte en schuld op sociaal gedrag. Motiveren schaamte en schuld je sociaal te gedragen in situaties die ongerelateerd zijn aan de schaamte- of schuldsituatie? De verwachting was dat schuld sociaal gedrag zou motiveren richting derden omdat de pijnigedane ander niet aanwezig was. Voor schaamte was de verwachting dat er geen effecten op sociaal gedrag zouden zijn omdat de dreigende situatie al verlaten was. Inderdaad, twee experimenten laten zien dat exogene schuld sociaal gedrag motiveert voor prozelvers, maar dat exogene schaamte geen invloed op sociaal gedrag heeft. Proefpersonen die schuld ervoeren gedroegen zich sociaal richting mensen die niets van

de schuldsituatie afwisten, maar proefpersonen die schaamte ervoeren gedroegen zich niet prosociaal richting mensen die niets van de schaamtesituatie afwisten. Deze bevindingen suggereren dat schaamte geen sociaal gedrag motiveert terwijl het wel als een morele emotie gezien wordt. Betekent dit dat schaamte geen morele emotie is?

Deze vraag wordt in Hoofdstuk 3 beantwoord, waarin exogene en endogene effecten van schaamte op sociaal gedrag bestudeerd worden. Heeft schaamte wel effect op gedrag in situaties die gerelateerd zijn aan de schaamtesituatie en waarin dus de dreiging van een beschadigd zelfbeeld nog steeds actief is? Vijf experimenten laten zien dat endogene schaamte sociaal gedrag motiveert voor prozelvers, maar dat exogene schaamte geen effect op sociaal gedrag heeft. Proefpersonen die schaamte ervoeren gedroegen zich prosociaal richting mensen die de schaamtesituatie gezien hadden dan richting mensen die niets van de schaamtesituatie afwisten en dan proefpersonen die geen schaamte ervoeren. Deze bevindingen suggereren dat schaamte naast ontwijkgedrag ook toenaderingsgedrag kan motiveren. Hoe kan schaamte zulk tegengesteld gedrag motiveren?

In Hoofdstuk 4 wordt aandacht geschonken aan de motivaties van schaamte om de vraag te beantwoorden hoe schaamte ontwijkgedrag en toenaderingsgedrag kan motiveren. De hypothese was dat mensen die schaamte ervaren voornamelijk toenaderingsgedrag vertonen om het beschadigd zelfbeeld te herstellen, maar dat wanneer dit niet mogelijk of te risicovol is, ontwijkgedrag vertonen om het beschadigd zelfbeeld te beschermen voor nog meer schade. Vijf studies laten inderdaad zien dat schaamte een herstellmotivatie en een beschermmotivatie heeft en dat deze motivaties het toenaderingsgedrag voorspellen dat op schaamte volgt.

In Hoofdstuk 5 schuift de aandacht terug naar schuld. Nu we weten dat de morele emoties schaamte en schuld beiden

prosociaal gedrag motiveren, rijst de vraag: tot hoever reikt dit effect? Motiveert schuld sociaal gedrag richting iedereen in elke situatie? De voorspelling was dat door de eenzijdige aandacht voor het goedmaken met de pijnigedane ander, schuld in situaties met meerdere anderen enkel sociaal gedrag richting de pijnigedane ander zou motiveren ten koste van derden. Overeenkomstig de hypothese laten vijf experimenten zien dat schuld sociaal gedrag motiveert ten koste van anderen en niet ten koste van zichzelf. Proefpersonen die zich schuldig voelden gedroegen zich sociaal richting de pijnigedane ander en minder sociaal richting derden dan proefpersonen die geen schuld ervoeren en dan proefpersonen die in situaties waren waar de pijnigedane ander niet aanwezig was.

De huidige dissertatie is de eerste stap richting een beter begrip van schaamte en schuld. Voor schaamte is nu duidelijk dat deze emotie sociaal gedrag richting publiek van de schaamtesituatie motiveert en dat het twee motivaties heeft die ontwijkgedrag en toenaderingsgedrag voorspellen. Voor schuld is nu duidelijk dat de emotie sociaal gedrag richting anderen motiveert wanneer de pijnigedane ander niet aanwezig is, maar derden beschadigt wanneer de pijnigedane ander wel aanwezig is. Deze resultaten laten zien dat schaamte en schuld wel als morele emoties gezien kunnen worden omdat ze sociaal gedrag kunnen motiveren, maar dat een nuancering van gedragseffecten van morele emoties noodzakelijk is. Door een duidelijk begrip van de experiëntiële en motivationele aspecten van schaamte en schuld is het mogelijk volledig te begrijpen hoe morele emoties functioneren in interpersoonlijke relaties.

Deze dissertatie geeft niet alleen informatie over schaamte, schuld en morele emoties, maar geeft ook waardevolle informatie en richting aan emotieonderzoek in het algemeen. Het huidige onderzoek laat zien dat gedragseffecten van emoties enkel volledig begrepen kunnen worden wanneer alle experiëntiële en motivationele aspecten van een specifieke emotie bekeken worden. Daarnaast laat deze dissertatie zien dat een onderscheid

Samenvatting

tussen exogene en endogene invloeden van emoties essentieel is in emotieonderzoek. Exogene en endogene invloeden hebben verschillende effecten op gedrag en wanneer slechts één van deze invloeden bestudeerd wordt is het mogelijk een incompleet beeld van een emotie te krijgen. Tenslotte blijkt dat een studie van enkel dyadische situaties een gelimiteerd perspectief kan geven op emoties. In het dagelijks leven interacteren we vaak tegelijkertijd met verschillende mensen, dus een uitbreiding naar meerdere-persoonssituaties zal een waardevolle toevoeging aan de huidige kennis over emoties geven. En inderdaad, enkel door toevoeging van al deze elementen is het nu mogelijk het gedrag van vrienden en familie te begrijpen wanneer ze schaamte of schuld ervaren.

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*Ilona E. de Hooge
Vrijdag 25 april 2008*

Curriculum Vitae

Ilona Eleonora de Hooge was born on June 28, 1982 in Rotterdam. In 2000, she received her VWO Diploma at De Lage Waard in Papendrecht. That same year, she started studying Psychology at Tilburg University. After a research internship at the Royal Netherlands Army in The Hague she graduated *cum laude* in June 2004, specializing in Work & Organizational Psychology, Social Psychology, and Methodology. One week later, in July 2004, she started working as a Ph.D. student in the group Social Psychology at Tilburg University. During the following years she performed several studies in order to determine the influences of shame and guilt on motivations and on behavior. The research project culminated in the present dissertation, which she finished in March 2008. After enjoying another five months at Tilburg University, she will be working from August 2008 onwards as an Assistant Professor at the Marketing Management department at RSM Erasmus University in Rotterdam.

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