

The social psychology of being better off than others

**De sociale psychologie van het beter af zijn dan
anderen**

(met een samenvatting in het Nederlands)

Proefschrift

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CHAPTER 1

Introduction

Justice is one of the most fundamental topics in the history of humankind. More than twenty centuries ago, Greek philosophers already spent numerous years trying to understand what is right and what is wrong, what people should and should not do. Socrates is seen as the founder of ethics and the first person to mention the concept of justice (Magee, 1998). He stated that no person can do deliberate or willful harm and he thought that personal integrity was the highest goal someone could reach. Moreover, Socrates had the idea that there were eternal, timeless rules for what is right and what is wrong (Magee, 1998). Some decades later, Aristotle even wrote a whole chapter on the topic of justice in his *Ethica* (c. 329 BC/1997). He spoke of ethical virtues that taught people how they had to behave and to distinguish what is right from what is wrong. For both philosophers, issues of justice were important topics for society, on which they spent years of their lives.

Having mentioned both Socrates and Aristotle, one inevitably reaches the ideas of Plato. In his *Politeia* (c. 370 BC/1981), Plato also started out with concerns about justice and fairness, but soon he turned another way. The majority of this work deals with Plato's vision of an ideal world. In fact, one can clearly see how his utopian visions affected some of the most influential leaders of the twentieth century, like Gandhi, Mandela, Martin Luther King, and also Hitler, Stalin, and Pol Pot. Fernandez-Dols (2002) stated that the regimes of Hitler, Stalin, Mao Zhedong, The Khmer Rouge, and other contemporary tyrannies were originally the work of rulers driven by a utopian, well-minded vision of a just world, just as Plato has sketched in his *Politeia*. Unfortunately, as we all know, these turned out to be the darkest chapters in human history, but this insight might be the topic of a different Ph.D. thesis.

What I would like to emphasize in the current thesis is that justice and beliefs about what is right and what is wrong have been important topics in the course of history. However, not only the most influential leaders in the history of this world are concerned with justice issues; justice is also a present-day topic that concerns laypeople. Why do people get mad when a murderer escapes his punishment? Why do people get upset when a top manager earns more than 450 times as much as his

employees? Why do people protest when they have no say in things that concern them? Because it is unfair and wrong! People all over the world have opinions about what is unfair and wrong and how things should or should not be (Finkel, 2001). Justice is not a topic solely reserved for society's leaders, justice matters to everyone everywhere. Ideas about what is 'just', 'fair', or 'deserved' are central social judgments that lie at the heart of people's feelings, attitudes, and behaviors (Tyler & Smith, 1998) and that is exactly what makes research into the topic of justice real interesting for social psychologists and other social scientists: Justice matters to everyone, and is therefore omnipresent and hugely important.

Given the importance of justice in people's lives, it is not surprising that social justice has been widely studied by scientists from various disciplines. Political scientists, sociologists, cultural anthropologists, law professors, philosophers, economists, and psychologists have displayed great professional interest into issues of justice (for overviews, see, e.g., Beauchamp, 2001; Cohen, 1986), and in the present thesis I do this from a social psychological perspective. In order to get more acquainted with the concept of justice, I will first give a brief overview of the relevant literature and current knowledge on the psychology of justice. A full and elaborate overview is beyond the scope of this thesis, and the current overview may not reflect all the efforts that were undertaken by justice researchers over the past decades. This said, the theoretical background that I present here gives the reader a sufficient introduction to the existing knowledge on justice research, and how the present thesis may add to this knowledge.

Social Justice

It has been said that the person who has had the strongest impact on the development of social psychology is Adolf Hitler (Cartwright, 1979). In fact, both the Second World War itself and the events that precluded this war made a dramatic and lasting impression on social psychology. The war itself led people to ask questions about how individuals interpret the world and how they are influenced by others. Furthermore, the events that precipitated World War II led to the flight of many European social psychologists to North America, among others Kurt Lewin. Here

they had a major influence on the direction and development of social psychology. During and after World War II, there has been an explosion of social psychological research, in which issues of social justice have played an important role (Tyler, Boeckmann, Smith, & Huo, 1997). Since then, justice has been an important topic of research for social psychology.

One of the major contributions of social psychology to the social sciences was the research on the attitudes of U.S. troops during World War II, which led to *relative deprivation theory* (Merton & Kitt, 1950; Stouffer, Suchman, DeVinney, Star, & Williams, 1949). Stouffer et al. developed the concept of relative deprivation to explain several unexpected relationships between soldiers' objective situations and their feelings of satisfaction. In perhaps the most famous example of this theory, the researchers used feelings of relative deprivation to explain the greater dissatisfaction with the promotion system among highly promoted airmen compared to the less often promoted military policemen. The authors hypothesized that airmen compared their situation to the situation for other rapidly promoted air corps peers, whereas military policemen compared their situations with those of other slowly promoted military police peers. This research suggests that subjective satisfaction is not a simple reaction to the objective quality of a person's outcome. Instead, people evaluate the quality of their outcomes by comparing these to the outcomes received by others around them. Implicit in such comparisons is a model of what they "deserve" relative to others. People use the concept of deservingness in this way to decide how their outcomes ought to compare with those of others (Tyler et al., 1997; Tyler & Smith, 1998). Thus, relative deprivation research establishes the basic principle that satisfaction and dissatisfaction in the distribution of important outcomes and other goods and services are linked to comparisons between what people have and what they feel they deserve (Tyler et al., 1997).

Although important, theories of relative deprivation are incomplete as social justice theories, since they do not demonstrate that deprivation is necessarily linked to issues of injustice (Tyler & Smith, 1998). Important progresses in theories of social justice was made by the development of models of *distributive justice*. These models show both that justice matters and identify the principles that people use to decide that their outcomes are or are not fair (Adams, 1965; Walster, Berscheid, & Walster, 1973; Walster, Walster, & Berscheid, 1978). The most well known distributive justice

theory is equity theory (Adams, 1965; Walster et al., 1973; Walster, Walster, & Berscheid, 1978), as will be thoroughly discussed below. During the 1960s and 1970s, the primary guiding metaphor of justice research was that of the *homo economicus*: Equity theorists assumed that people's concern with justice was primarily rooted in a desire to maximize their self-interest (Walster et al., 1973). Furthermore, social interactions were conceptualized as forms of exchange and the focus was on the fairness of distributions (Skitka & Crosby, 2003).

It was during the late 1970s and the 1980s that a concern with *procedural justice* replaced the exclusive focus on distributive justice (Skitka & Crosby, 2003). Thibaut and Walker (1975), Deutsch (1979), and Leventhal (1980; Leventhal, Karuza, & Fry, 1980) were among the first to note that people care not only about the content of decisions or outcomes they receive, but they also care about how the decisions are made and how outcomes are distributed. Procedural justice theories recognize that people are concerned with the process through which outcomes are distributed (Lind & Tyler, 1988; Tyler et al., 1997; Tyler & Lind, 1992).

A fourth justice concern is that of *retributive justice*. Retributive justice deals with people's reactions to rule-breaking behavior. Issues of retributive justice include when people feel that some form of sanctioning is needed, how severe sanctions should be, and what form they should take (Tyler & Smith, 1998). Underlying these questions is a concern with why and when people feel that rule breaking should be punished, that is, the psychology of retribution (Tyler et al., 1997).

Thus, at least four bodies of research have been identified in the history of justice research: relative deprivation, distributive justice, procedural justice, and retributive justice. In the current thesis, I focus on distributive justice to examine the psychology of being better off than others, as will be explained below.

Justice and Being Better Off Than Others

There is an awful lot of injustice in this world. Billions of people still do not have access to, what we in Western cultures think are, basic needs. Still many human beings do not have enough to eat, a safe home, freedom of speech, proper medical care, good education, and an income that is fair (Novib, 2003). When reading this,

most people probably have Third World countries in mind, but even in Western societies there are less fortunate people who have to struggle everyday to live a livable life. Yet, at the same time, there are also billions of people who are better off compared to the less privileged people in our own and other societies.

As social psychologists we want to interpret and predict people's behavior and for that purpose try to understand how the minds of people work. The present thesis seeks to provide greater insight into the social psychology of people that are better off than others, meaning that they are in a more beneficial, advantageous, or satisfactory situation or position for them, have more money or, more generally, have received better outcomes (Collins, 1990). If we can understand this important issue, perhaps then there will come a time when we can urge those that are better off to a greater extent to take care of the less privileged people. To get a better understanding of the social psychology of being better off than others, I base my line of reasoning on equity theory (see, e.g., Adams, 1965), as this is probably the most developed framework for understanding how people react to being better off than others. The theoretical framework of equity theory is part of the larger domain of distributive justice research and stands as the basis for most of the research on justice behavior in social psychology (Austin, 1977). Therefore, this thesis will focus on equity theory to explain, among other things, how people that are better off than others deal with their advantages.

Equity Theory

Equity theory first sought to identify and articulate a model of outcome fairness in work settings, but subsequently developed into a general theory of justice used to explain all social interactions, ranging from the allocation of pay to romantic relationships (Buunk & Van Yperen, 1989; 1991; Tyler et al., 1997; Van Yperen & Buunk, 1990; 1991; 1994). Equity theory concerns what people think is equitable and fair and how people react to fair and unfair outcomes (Adams, 1965; Walster et al., 1973; Walster, Walster, & Berscheid, 1978). The basic justice principle underlying equity theory is a balance between contributions and rewards of two persons. Equity theory (Adams, 1965) distinguishes between situations of equity and situations of

inequity. Equity exists for people whenever they perceive that the ratio of their inputs to outcomes is equal to the input-outcome ratio of a comparable other person.

To illustrate, it is generally perceived as equitable and fair if two people who have worked equally hard (the input) receive an equal amount of money for their work (the outcome). Each person's inputs and outcomes are conceived as being the sum of such inputs and outcomes that are relevant to a particular exchange. Inputs are defined as "the participant's contributions to the exchange, which are seen as entitling him to rewards or costs" (Austin, Walster, & Utne, 1976). The inputs that a participant contributes to a relationship can be either assets (entitling the participant to rewards) or liabilities (entitling the participant to costs). In other words, inputs can be defined as everything that is perceived to be relevant for getting some return on someone's personal investment, and may include effort, education, job performance, experience, responsibility, seniority, time, and productivity (Pritchard, 1969; Werner & Ones, 2000; Wicker & Bushweiler, 1970). Outcomes are defined as "the positive and negative consequences that one perceives a participant has incurred as a consequence of his relationship with another" (Austin et al., 1976). Positive outcomes are referred to as rewards and negative outcomes as costs. In other words, outcomes can be defined as everything that is perceived as returns to someone's self, which has utility or value to someone, and may include pay, benefits, status, promotion, and intrinsic rewards (Pritchard, 1969; Werner & Ones, 2000; Wicker & Bushweiler, 1970).

Inequity exists for people whenever they perceive that the ratio of their outcomes to inputs is unequal to the input-outcome ratio of a comparable other person. Inequity results for people not only when they are, so to speak, relatively underbenefitted, but also when they are relatively overbenefitted. Thus, both disadvantageous inequity (underpayment) and advantageous inequity (overpayment) are inequitable. In this thesis, as in the bigger part of equity literature, these concepts will be labeled as underpayment and overpayment. I find "advantageous inequity" and "disadvantageous inequity" to be a bit too technical and perhaps somewhat difficult to understand. I would like to note, however, that "overpayment", as it will typically be used in this thesis, does not only connote being better off in payment, but is meant to stand for all possible advantageous inequities, as discussed earlier. At the same time, however, I would like to emphasize that the current thesis is concerned

with people that are better off than others in the sense that they are overbenefitted regarding their own outcomes, but that their inputs are kept equal to those of a comparable other person. The research presented here does *not* focus on people that are better off and owe this to themselves, for example people who earn more because they work harder or people who receive more credit because they take more responsibilities. The focus of the present thesis is solely on those people who are overpaid through no fault of their own.

I would like to argue, following Jacques (1961) and Tyler et al. (1997), that being overpaid is probably the most intriguing outcome distribution studied in equity theory, because being overpaid creates a mixed-motive situation; an issue to which I will return below. Furthermore, studying people's reactions to being overpaid is needed to explain how people deal with being better off than others. Therefore, this thesis will focus on people's reactions to overpayment distributions and will pay attention to responses to other outcome distributions (i.e., underpayment and equal payment) as well, when this is appropriate.

Equity theory has convincingly shown that insight into how people react to being overpaid plays an important role in various kinds of situations and therefore should be a key issue for social psychologists (see, e.g., Adams, 1965; Berkowitz & Walster, 1976; Walster et al., 1973). For example, in organizational settings it is easy to find examples of the importance of understanding how people deal with being overpaid (see Adams, 1965; Adams & Freedman, 1976; Greenberg, 1982). Furthermore, research on intimate relationships (Mikula, 2003; Van Yperen, & Buunk, 1990, 1991) has also revealed that being better off than your partner can play an important role in how you react to issues in your intimate relationships.

On the basis of equity theory (e.g., Adams, 1965; Austin, McGinn, & Susmilch, 1980; Austin & Walster, 1974; Buunk & Van Yperen, 1989; Van den Bos, Lind, Vermunt, & Wilke, 1997), it can be argued that, when forming judgments of outcome satisfaction, individuals who are faced with inequity will feel distress and will be less satisfied than individuals who are faced with equity. As noted by Adams (1965): "There can be little doubt that inequity results in dissatisfaction" (p. 283). A major proposition of this thesis will be that people who are confronted with being overpaid have to deal with conflicting social motives when forming judgments of outcome satisfaction. When people are confronted with overpayment there is a

conflict between what they want and what they believe to be right (Messick & Sentis, 1983). From this proposition follows that when people are overpaid, there is one source of negative affect and one source of positive affect: The negative source is the fairness-based feeling of being unjustly advantaged (e.g., Montada, 2002; Montada, Schmitt & Dalbert, 1986), whereas the positive source is the egoism-based pleasure of receiving a relatively good outcome (cf. Van den Bos, Lind, et al., 1997; Van den Bos, Wilke, Lind, & Vermunt, 1998). In several studies I will try to get support for this proposition. Below I will give an overview of the research described in this thesis. The goal of the present thesis is to contribute to our understanding of the social psychology of being better off than others. More specifically, I focus on how people deal with being better off by studying people's reactions to situations of overpayment as earlier defined following the equity framework.

The twelve studies that were conducted for this thesis can be classified into four chapters and the four chapters can be subdivided into two parts: a socially oriented part and a process-oriented part. Chapter 2 will start with a more social focus on people's reactions to being overpaid, and argues that people's ideas about their own reactions to being overpaid differ from their ideas about other people's reactions to being overpaid. Chapters 3 and 4 represent the process-oriented part of this thesis. These chapters will provide pioneering studies that examine the processes that lie at the core of people's reactions to being overpaid. In Chapter 5, I will return to the socially oriented part of the present thesis: This chapter, that investigates inequitable outcomes, is based on the idea that the fairness of received outcomes is more important to people when they interact with friends, compared to when they interact with someone they do not know.

Overview of the Present Research

The research I conducted for this thesis uses similar research methods as have been used in earlier equity studies. Following earlier equity studies (e.g., Austin et al., 1980; Van den Bos, Lind, et al., 1997; Van den Bos et al., 1998), I study people's reactions to being overpaid by exposing participants to situations in which there is another person who is comparable to participants themselves with respect to the

amount of input they have provided. The outcome that participants themselves receive is held constant across conditions. To compose arrangements of overpayment, I inform participants that their own outcome is better than the outcome of the other participant. The most widely studied dependent variable in equity studies is people's satisfaction with equitable or inequitable arrangements (e.g., Adams, 1965) and an important dependent variable in most of my studies will therefore be people's satisfaction with the above-mentioned arrangements of overpayment. Other dependent variables will be included when appropriate (see especially Studies 4.1 and 4.2). Below I will summarize the main characteristics of the chapters in this thesis.

Chapter 2

When studying how people deal with being overpaid there are several important issues that should be addressed. First of all, it should be examined how overpaid people perceive their own reactions to being overpaid. Chapter 2 focuses on this issue and compares people's ideas about their own reactions to being overpaid with their ideas about the reactions of others to being overpaid. In Studies 2.1 and 2.2, I investigate the discrepancy between people's own satisfaction and their perception of others' satisfaction with overpayment. The results of both studies support the hypothesis that people think others are more satisfied with being overpaid than they are themselves. The results are consistent with the idea that people think others are more influenced by egoism-based considerations whereas they themselves are more influenced by considerations of right and wrong. In other words, people show a moral superiority effect. In the General Discussion of Chapter 2, I argue why it is less likely to find moral superiority effects on people's reactions to being equally paid and underpaid, and I relate the findings to the literature of self-serving biases.

Chapter 3

As already mentioned, equity studies typically demonstrate that people are only moderately satisfied with being overpaid, suggesting that doing the right thing has a big impact on outcome evaluations. However, there is also some evidence that people privately feel more pleased with being overpaid than they reveal in public, suggesting that people correct their private reactions by taking into account that these arrangements are inequitable and unfair. Integrating these insights with the literature

that shows that correction requires a lot of cognitive resources, Chapter 3 predicts that people will be more satisfied with being overpaid under conditions of high as opposed to low cognitive busyness. In Studies 3.1 to 3.4, I indeed show that being cognitively busy leads people to feel more pleased with being overpaid.

Chapter 4

In Chapter 4, I further study the process of how people react to being overpaid. Equity theory has done a lot of research on the psychology of the overpaid, but it is argued in this chapter that there is confusion as to the underlying psychological process that drives people's reactions to this outcome distribution. Following the founders of equity theory, I propose here that overpaid people are in conflict between what makes them pleased and what they believe to be right, and that as a result of this conflict people experience feelings of uneasiness. This proposition is contrasted with explanations of other scientists who stated that people feel guilty when being overpaid. I challenge this latter explanation. In Studies 4.1 and 4.2, I present findings that indeed show that overpaid people experience feelings of uneasiness and do not or to a lesser extent experience feelings of guilt. Furthermore, Studies 4.3 and 4.4 provide data that reveal that overpaid people indeed experience a conflict between what makes them pleased and what they believe to be right. That is, in Study 4.3, I demonstrate that people need longer time when deciding how to respond to being overpaid as opposed to being equally paid and underpaid, and in Study 4.4, I show that this is especially true when people are overpaid relative to a friend.

Chapter 5

This chapter focuses on when justice is important, and therefore explores the social conditions under which the importance of justice may change in social interactions. More specifically, I examine how different types of relationships affect evaluations of equitable and inequitable situations. I argue that when people are confronted with friends as interaction partners, as opposed to unknown others, they are motivated to attend to the needs of their friends (Clark & Mills, 1979) and therefore, they are not only concerned with their own outcomes but also with their friends' outcomes. As predicted on the basis of this line of reasoning, Studies 5.1 and

5.2 demonstrate that when people's interaction partners are friends, people are indeed more satisfied with being underpaid and less satisfied with being overpaid compared to when their interaction partners are unknown others. In the discussion, I argue that these findings suggest that justice is in particular important to people when they are in communal relationships.

Chapter 6

Finally, in Chapter 6 the various findings reported in this thesis are considered as a whole and are thoroughly discussed. I give an overview of the findings of the twelve studies presented here, which are illustrated with a table that combines the results of the studies in this thesis. Furthermore, based on the studies conducted in the present thesis, I present a working model of the social psychological processes underlying people's reactions to being overpaid. Finally, I discuss limitations of my research and I give suggestions for future research.

I would like to note that Chapters 2, 3, 4, and 5 are each based on papers that have been published or submitted for publication. Hence, each chapter can be read independently of the other chapters. As a result of this, the reader may encounter similarities among the introductions of the different empirical chapters.

CHAPTER 2

The Moral Superiority Effect: Self Versus Other Differences in Satisfaction With Being Overpaid¹

People frequently encounter situations in which they must evaluate the outcomes that they have received. Ideally, in making these evaluations, people's interests coincide with the fairness of the situation. On many occasions, however, people may find themselves in a mixed-motive situation in which their own interests conflict with fairness. How do people evaluate their outcomes in such situations?

Numerous scientific disciplines, including psychology, economics, sociology, and political sciences, have focused on the intriguing relationship between self-interest and fairness (for overviews, see, e.g., Beauchamp, 2001; Cohen, 1986). The current chapter examines this issue from a social psychological perspective. More specifically, this chapter focuses on the conflict between egoism-based pleasure and fairness considerations that arises in situations of overpayment inequity (Adams, 1965). Therefore, this chapter focuses on two important topics: How people react to being advantaged (for an overview, see, e.g., Montada et al., 1986), and how people experience pleasure and satisfaction (see Kahneman, Diener, & Schwarz, 1999). We suggest that, when confronted with overpayment, people think their own reaction is more moral than the reaction of others; in other words, we propose a moral superiority effect. In the following sections, we review the relevant literatures that served as the basis for our predictions.

Fairness and Self-Interest

In their 1983 paper, Messick and Sentis argue that one's behavior toward others is often characterized by a conflict between what one wants and what one believes to be right. These two motives are distinct but both play an important role in

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people's evaluation with outcomes. Fairness considerations² are moral beliefs and rules about right and wrong and about what should and what should not be done. People want, according to Haidt (2000), to be moral, to do the right thing, and to be seen as ethical. Haidt (2000) argues that moral motives are even spoken of as the highest and noblest motives that people can have. Yet, at the same time, people want to live a nice life, and for this and other hedonistic reasons, they pursue their self-interest³ (Hobbes, 1651/1904). On the basis of literature about judgment and choice (e.g., Boles & Messick, 1995; Loewenstein, Thompson, & Bazerman, 1989; Messick & Sentis, 1985), we argue that at the same time that people wish to do the right thing they also wish to maximize their outcomes.

Situations exist in which there is no conflict between fairness and self-interest motives. For example, when two people work equally hard and get paid equally for their effort, there is no conflict between fairness and self-interest; both motives evoke positive reactions. In addition, when two people work equally hard but one of them gets paid less for his or her effort, there is again no conflict between fairness and self-interest for the disadvantaged person; neither self-interest nor fairness is served from the perspective of the disadvantaged person, and this person will have consistently negative reactions. However, when two people work equally hard but one of them gets paid more, there is a conflict between fairness and self-interest for the advantaged person. On the one hand, it is nice to receive a relatively good outcome, but on the other hand it is not fair to receive a better outcome than a comparable other person. People who are being overpaid are in conflict between what they want and what they believe to be right, and this creates tension (Adams, 1965). Both motives can influence people in different amounts and therefore there is more leeway in people's reactions to situations of overpayment inequity. It is fascinating to see how people deal with this conflict between self-interest and fairness and it is captivating to see how people react to being overpaid.

² In the present chapter, the term fairness includes related concepts such as justice and morality.

³ In the present chapter, the term self-interest includes related concepts such as egoism, hedonism, and self-centeredness.

How do People Evaluate Overpayment?

Earlier equity studies have examined people's reactions to equity, overpayment (or advantageous) inequity, and underpayment (or disadvantageous) inequity. Following earlier equity studies (e.g., Austin et al., 1980; Van den Bos, Lind, et al., 1997; Van den Bos et al., 1998), this chapter studies people's reactions to being overpaid by exposing participants to situations in which there is another person who is comparable to participants with respect to the amount of input they have provided. The outcome that participants receive is held constant across conditions. To compose arrangements of overpayment, participants are informed that their own outcome is better than the outcome of the other participant. The most widely studied dependent variable in equity studies is people's satisfaction with equitable or inequitable arrangements (e.g., Adams, 1965); therefore, the present research measures people's satisfaction with arrangements of overpayment.

On the basis of equity theory (e.g., Adams, 1965; Austin et al., 1980; Austin & Walster, 1974; Buunk & Van Yperen, 1989; Van den Bos, Lind et al., 1997), it can be argued that, when forming judgments of outcome satisfaction, individuals who are faced with inequity will feel distress and will be less satisfied than individuals who are faced with equity. As noted by Adams (1965): "There can be little doubt that inequity results in dissatisfaction" (p. 283). Furthermore, it can be argued that people who are confronted with being overpaid have to deal with conflicting social motives when forming judgments of outcome satisfaction. When people are confronted with overpayment there is a conflict between what one wants and what one believes to be right (Messick & Sentis, 1983). Following earlier equity studies (e.g., Adams, 1965), we propose here that when people are overpaid, there is one source of negative affect and one source of positive affect: The negative source is the fairness-based feeling of guilt of being unjustly advantaged (e.g., Montada, 2002; Montada et al., 1986), whereas the positive source is the egoism-based pleasure of receiving a relatively good outcome (cf. Van den Bos, Lind, et al., 1997; Van den Bos et al., 1998).

In other words, following Messick and Sentis' (1983) reasoning, when reacting to being overpaid, it can be argued that there is a conflict between one's preferences (high outcomes; cf. Loewenstein et al., 1989) and what one believes to be right (equal outcomes; cf. Messick, 1993) and this conflict pulls people in two opposite

directions. Therefore, the prediction that is usually made in equity studies is that one source of positive emotional experience (egoism-based pleasure) and one source of negative emotional experience (guilt from being unjustly advantaged) will lead to moderate satisfaction with an outcome. That is, people are usually less satisfied with being overpaid than with being equitably paid, but more satisfied with being overpaid than with being underpaid. This pattern of findings is precisely what is typically found in equity studies (e.g., Buunk & Van Yperen, 1989; Van den Bos, Lind, et al., 1997; Van den Bos et al., 1998). On the basis of these findings, then, we expect that people will usually be moderately satisfied with arrangements of overpayment.

The current chapter proposes a moral superiority effect. On the basis of literature on the conflict between fairness and self-interest (Messick & Sentis, 1983), and literature on self-serving biases (Epley & Dunning, 2000; Nisbett & Ross, 1980; Smith & Mackie, 1990), we argue that people think they react differently than other to being overpaid. More specifically, we will suggest that people think their own reaction is more moral than the reaction of others when confronted with overpayment. Below, we explain the derivation of this prediction.

The Moral Superiority Effect in Situations of Overpayment Inequity

When asking the question of how people think others will react to overpayment inequity, it is important to note that previous research in social psychology has revealed some tendencies for people to rate themselves as superior to others in a number of domains (for reviews, see, e.g., Epley & Dunning, 2000; Nisbett & Ross, 1980; Smith & Mackie, 1990). For example, Epley and Dunning (2000) found that people think that they contribute more to public goods than others do. This and other findings suggest that especially in a situation where there is more leeway for people's reactions, such as in an overpayment situation, there is a possibility that self-serving biases will be evident. That is, people may think that others will react more positively toward overpayment than they themselves would. Interestingly, this idea has, to our knowledge, never been tested empirically.

In related research, Messick and associates found that people tend to see their acts as producing predominantly fair outcomes and the acts of others producing relatively more unfair outcomes (Messick & Sentis, 1983; Moore & Baron, 1973). Also, Mischel, Ebbesen, and Zeiss (1976) showed a memory bias such that recall was better for feedback about one's good traits than feedback about one's faults and shortcomings. Furthermore, Jencks (1990) said: "Virtually all of us assume that when interests conflict, most of our neighbors will habitually place their own interest ahead of other people's" (p. 56).

The findings of Messick, Bloom, Boldizar, and Samuelson (1985) are particularly relevant to the present research. These authors found a tendency for people to associate other persons with unfair behaviors. That is, participants could think of more unfair behaviors of others and more fair behaviors of themselves relative to fair behaviors of others and unfair behaviors of themselves. Messick et al. (1985) concluded that people think others do unfair things more often than they do themselves and that others do fair things less often than they do themselves. These findings have been replicated by Liebrand, Messick, and Wolters (1986).

As noted by Cates and Messick (1996), however, Messick et al. (1985) assessed only frequency ratings of fair and unfair behaviors. As social psychologists, we are interested not only in the frequency with which people associate certain behaviors with themselves and others, but also –and perhaps to a greater extent– in people's reactions to equitable and inequitable arrangements for themselves and others (cf. Adams, 1965). In fact, none of the previous studies cited above have examined self-serving biases in situations of overpayment inequity. Therefore, to date, we do not know whether these effects can be found on ratings commonly measured in equity studies.

In addition to this methodological limitation, there is a conceptual reason why we chose to examine this question. As noted earlier, arrangements of overpayment are characterized by a conflict between self-interest and fairness considerations. This conflict implies that people's satisfaction judgments are typically influenced by both self-interest and fairness components, which makes these judgments susceptible to both these dimensions of human reactions. Past research, such as Messick et al. (1985), measured only frequency ratings of *fair* and *unfair* behaviors and hence focused only on one dimension (more versus less fairness)

instead of two dimensions (fairness and self-interest). In the present research, we examine the full, two-dimensional account of the conflict between self-interest and fairness, and we will do this by focusing on arrangements of overpayment.

Another highly relevant line of work is research by Miller (1999) and Miller and Ratner (1998). These authors examined the real and the assumed power of self-interest. Participants in their studies thought others were more led by their self-interest in situations that mattered to them than was really the case. Although Miller and Ratner measured more general tendencies of the influence of self-interest, their findings inform our more specific hypothesis about the influence of the self-interest component.

As mentioned earlier, we focus on arrangements of overpayment, to allow us to examine the conflict between self-interest and fairness. The influence of self-serving biases has not yet been investigated in the context of overpayment, and we think it is especially interesting to do so because of the conflict between two motives that is present in such situations.

In summary, on the basis of the literature described above, we suggest that arrangements of overpayment are characterized by a conflict between egoism-based considerations and fairness considerations (e.g., Adams, 1965), and we expect a discrepancy between one's own satisfaction and one's judgment of others' satisfaction with these arrangements (e.g., Messick et al., 1985). Thus, we predict that people will be moderately satisfied with being overpaid and will think that others are more satisfied with being overpaid than they themselves are. In other words, we expect a moral superiority effect in satisfaction with overpayment.

We tested the presence of this moral superiority effect in two studies. In addition to arrangements of overpayment, two conditions in which people were equitably paid or underpaid were included. These arrangements are commonly included in equity studies (Austin et al., 1980; Van den Bos, Lind, et al., 1997; Van den Bos et al., 1998) and were included here for exploratory purposes.

Study 2.1

Study 2.1 was constructed following the experimental paradigm developed by Van den Bos, Lind, et al. (1997, Experiment 2). Participants completed tasks together with another participant and learned that their own task performance was comparable to the other participant's task performance. The outcome that participants received for their performance was either better than the outcome received by the other participant (overpayment condition), worse than the outcome of the other participant (underpayment condition), or equal to the outcome of the other participant (equal payment condition). The outcome that participants received was held constant, while the outcome of the other participant was varied. Outcome satisfaction was the main dependent variable. Half of the participants were asked how satisfied they were with their outcome. The other half of the participants was asked how satisfied they thought the other participant would be with their outcome.

Method

Participants and design. One hundred and twenty students (50 men and 70 women) at the Free University Amsterdam participated in the study and were paid for their participation. Participants were randomly assigned to one of the conditions of the 2 (target of rating: self vs. other) x 3 (payment condition: equal payment vs. overpayment vs. underpayment) between-subjects factorial design.

Experimental procedure. Participants were invited to participate in a study on how people perform tasks. In the first part of the instructions, participants were informed that they participated in the study with another person. The experimental procedure was then outlined to the participants: After the experimental tasks were explained, participants would practice the tasks for 2 minutes, after which time they would work on the tasks for 10 minutes. Furthermore, participants were informed that, after everyone had participated, a lottery would be held. The winner of this lottery would receive 100 Dutch guilders. (Actually, after all participants had completed the experiment, the 100 Dutch guilders were randomly given to a participant; a procedure to which none of the participants objected.) Participants were told that a total of 200 lottery tickets would be divided among all participants.

Furthermore, participants were told that after the work round the experimenter would divide some lottery tickets between them and the other participant.

The tasks were then explained to the participants. Participants were asked to count the number of squares in a figure that showed a certain pattern. The practice round then began, after which the work round began. After the work round had ended, participants were told how many tasks they had completed in the work round (i.e., the number of figures that the participant had counted), and it was communicated to the participant that the other participant had completed an equivalent number of tasks. At this moment, participants were asked three questions that measured the comparability of the other participant: To assess whether participants thought of the other participant as a comparable person, they were asked to what extent the other participant worked equally hard in reference to the participants themselves (1 = *much worse*, 4 = *equally hard*, 7 = *much better*), to what extent the other participant did his or her best in reference to the participants themselves (1 = *much worse*, 4 = *equally*, 7 = *much better*), and to what extent the other participant was good in performing the tasks in reference to the participants themselves (1 = *much worse*, 4 = *equally good*, 7 = *much better*).

Participants were then told that the experimenter would divide the lottery tickets between them and the other participant. It was communicated to the participants that they received 3 lottery tickets. This was followed by the manipulation of the outcome of the other participant. In the overpayment condition, participants were informed that the other participant received 1 ticket. In the equal payment condition, participants were informed that the other participant received 3 tickets. In the underpayment condition, participants were informed that the other participant received 5 tickets.

Participants were then asked questions that served as our dependent variables and manipulation checks. All ratings were made on 7-point scales and were measured anonymously. Participants in the other-target conditions responded to the dependent variables from the viewpoint of the other participant: These participants had to judge whether they thought the other participant was, for example, satisfied with his or her outcome. Participants in the self-target conditions responded to the dependent variables from their own viewpoint: These participants had to judge whether they thought they were, for example, satisfied with their own outcome.

Main dependent variables were satisfaction judgments. Participants were asked to rate target's satisfaction with the outcome. They were asked how satisfied the target was with the lottery tickets that the target received (1 = *very dissatisfied*, 7 = *very satisfied*) and how pleasant the target judged the lottery tickets that the target received (1 = *very unpleasant*, 7 = *very pleasant*). Participants' answers on these ratings were averaged to form a scale of satisfaction with outcome ($\alpha = .81$).

As a manipulation check of outcome, fairness judgments were solicited by asking questions about the fairness of the lottery tickets received. Participants were asked how fair the target judged the lottery tickets that the target received (1 = *very unfair*, 7 = *very fair*) and how just the target judged the lottery tickets that the target received (1 = *very unjust*, 7 = *very just*). These items were averaged to form a reliable scale of fairness judgments ($\alpha = .97$).

Results

Additional measures. Participants' ratings of the other participant as a comparable person were subjected to a 2 x 3 multivariate analysis of variance (MANOVA). This MANOVA did not yield significant results at either the multivariate or univariate levels. Inspection of the means indicated that participants thought that the other participant worked equally hard ($M = 4.0$), had equally done his or her best ($M = 3.9$), and was equally good in performing the task ($M = 4.0$).

Fairness judgments. Participants' outcome fairness judgments yielded only a main effect of outcome, $F(2, 114) = 49.91, p < .01$. As expected, a least significant difference test ($p < .05$) revealed that participants in the equal payment condition judged their outcome to be more fair ($M = 5.5, SD = 1.0$) than those in the overpayment ($M = 3.8, SD = 1.4$) and underpayment conditions ($M = 2.6, SD = 1.3$); the difference between the latter conditions was not significant. These findings are in accordance with previous equity studies (e.g., Van den Bos, Lind, et al., 1997; Van den Bos et al., 1998), which show that equitable outcomes are judged to be fair and inequitable outcomes to be unfair, hence providing additional evidence that the manipulation of outcome was perceived as intended.

Perceived satisfaction. Main dependent variables were participants' perceptions of outcome satisfaction. To analyze the data, we first conducted a 2 x 3 analysis of variance (ANOVA) on these ratings. The ANOVA showed a significant

main effect of target of rating, $F(1, 114) = 4.02, p < .05$, a significant main effect of outcome, $F(2, 114) = 33.27, p < .01$, and a significant interaction effect, $F(2, 114) = 3.19, p < .05$. To interpret these effects, we performed a least significant difference test for multiple comparisons between means ($p < .05$; Kirk, 1982). Table 2.1 shows the results of this test. As hypothesized, findings revealed that, within the overpayment condition, participants judged the other participant's satisfaction as higher than their own satisfaction. Thus, participants thought that others were significantly more satisfied with being overpaid than they reported themselves to be. There were no effects of target of rating within the equal payment and underpayment conditions.

Table 2.1

Means and Standard Deviations of Outcome Satisfaction of Self and Other as a Function of Payment Condition (Study 2.1)

	Payment Condition					
	Equal Payment		Overpayment		Underpayment	
	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>
Self	5.2 _b	0.9	5.0 _b	1.4	3.7 _c	1.6
Other	5.4 _b	0.7	6.1 _a	0.6	3.7 _c	1.1

Note Means are on 7-point scales, with higher values indicating higher levels of outcome satisfaction. Means with no subscripts in common differ significantly ($p < .05$), as indicated by a least significant difference test for multiple comparisons between means (Kirk, 1982).

Additionally, it can be noted that there was a tendency within the self-target conditions, for outcome satisfaction to be somewhat higher in the equal payment condition than in the overpayment condition. This pattern was reversed in the other-target conditions: Here, the outcome satisfaction was higher in the overpayment condition than in the equal payment condition. Thus, the results of this study suggest that people think that other people will be more satisfied when they are inequitably advantaged in reference to when they are equally paid, whereas this does not apply to oneself.

Discussion

Our hypothesis that people think that others are more satisfied with being overpaid than they are themselves is supported in Study 2.1. As our results show, participants evaluated the satisfaction of the other participant to be higher than their own satisfaction. In other words, people showed a moral superiority effect.

We did not completely replicate the findings of previous equity studies. Usually, it is found that people are more satisfied with equal payment than with overpayment; however, this difference was not statistically significant in Study 2.1 (see the upper row of Table 2.1). Before strong conclusions are drawn, we deemed it necessary to conduct a second study. The two main goals of Study 2.2 were to replicate the moral superiority effect and to replicate the findings of previous equity studies in the self-target conditions. Another important goal of Study 2.2 was to make the measures more solid methodologically, as explained below.

Study 2.2

It could be argued that when participants are in an experimental situation, such as in Study 2.1, they are experiencing their own situation but they have to imagine the situation of the other person. Therefore, in Study 2.2, participants responded to a manipulation of outcome that was induced by means of scenarios. When responding to the scenario, participants were asked to imagine both themselves and a comparable other person to be in a particular situation. Thus, the scenario methodology enabled us to make participants' reactions in the self- and other-target conditions more comparable, which has a methodological advantage. The scenarios used in Study 2.2 were constructed following earlier research by Van den Bos (1999, Experiment 1). The outcome that participants received in the scenario was held constant across conditions, and we varied whether the outcome was equal to the outcome of a comparable other person in the scenario (equal payment condition), better than the outcome of the other person (overpayment condition), or worse than the other person's outcome (underpayment condition). Outcome satisfaction was the main dependent variable. Half of the participants rated their own outcome

satisfaction; the other half of the participants rated the other person's outcome satisfaction.

Method

Participants and design. One hundred and twenty-two students (51 men and 71 women) at the Free University Amsterdam participated in the experiment and were paid for their participation. Participants were randomly assigned to one of the conditions of the 2 (target of rating: self vs. other) x 3 (payment condition: equal payment vs. overpayment vs. underpayment) between-subjects factorial design.

Experimental procedure. Participants read the scenario and answered the questions that constituted the dependent variables. On arrival at the laboratory, participants were led to separate cubicles, each of which contained a computer with a monitor and a keyboard. The computers were used to present the stimulus information and to measure the dependent variables.

First, participants were asked to imagine the following situation:

Last summer you had a job together with a fellow student. The two of you worked together as a pair. There were a large number of such pairs in the organization where you worked. You and your fellow student have worked equally hard and performed equally well. Because the organization has performed well last summer, it is announced on the last day of summer that a bonus of 10,000 Dutch guilders will be distributed among all employees. A certain amount of money has been allocated to you and your fellow student. It has to be decided how this amount of money will be distributed between you and your fellow student.

This was followed by the manipulation of outcome. Participants read the following sentences (manipulated information in italics):

A week after this, employees are paid. You receive a bonus of 500 Dutch guilders. Your fellow student receives a bonus of *250/500/750* Dutch guilders.

After participants had read the scenario, they were asked questions constituting the dependent variables. All ratings were made on 7-point scales and were measured anonymously. Main dependent variables were satisfaction judgments. Participants were asked how satisfied the target was with the bonus that the target

received (1 = *very dissatisfied*, 7 = *very satisfied*) and how pleasant the target judged the bonus that the target received (1 = *very unpleasant*, 7 = *very pleasant*). The satisfaction ratings were averaged to form a scale of satisfaction with outcome ($\alpha = .66$).

As in Study 2.1, fairness judgments were included as a manipulation check of outcome by asking participants how fair the target judged the bonus that the target received (1 = *very unfair*, 7 = *very fair*) and how just the target judged the bonus that the target received (1 = *very unjust*, 7 = *very just*). These items were averaged to form a scale of fairness judgments ($\alpha = .96$).

Results

Fairness judgments. Participants' outcome fairness judgments yielded only a main effect of outcome, $F(2, 117) = 143.05, p < .01$. As expected, a least significant difference test ($p < .05$) revealed that participants in the equal payment condition judged their outcome to be more fair ($M = 6.2, SD = 0.7$) than those in the overpayment ($M = 2.7, SD = 1.6$) and underpayment conditions ($M = 2.1, SD = 1.0$); the latter difference between conditions was not significant. These findings are in accordance with Study 2.1 and previous equity studies (e.g., Van den Bos, Lind, et al., 1997; Van den Bos et al., 1998) and yield evidence that the manipulation of outcome was perceived as intended.

Perceived satisfaction. The main dependent variable was perceived satisfaction with outcome. To analyze the data, we first conducted a 2 x 3 analysis of variance (ANOVA). The ANOVA showed a significant main effect of outcome, $F(2, 117) = 63.23, p < .01$, and a significant interaction effect, $F(2, 117) = 3.24, p < .05$. To interpret these effects, we performed a least significant difference test for multiple comparisons between means ($p < .05$). Table 2.2 shows the results of this test. As hypothesized, findings revealed that within the overpayment condition, participants judged the other student's satisfaction to be more positive than their own satisfaction. Thus, participants indicated that others are significantly more satisfied with being overpaid than they report themselves to be. As in Study 2.1, there were no effects of the target manipulation within the equal payment and underpayment conditions.

Additionally, it can be noted that we replicated previous equity studies in the self-target condition, which was one of our main goals. In the self-condition,

participants were the most satisfied in the equal payment condition, and they were more satisfied in the overpayment condition than in the underpayment condition.

Table 2.2

Means and Standard Deviations of Outcome Satisfaction of Self and Other as a Function of Payment Condition (Study 2.2)

	Payment Condition					
	Equal Payment		Overpayment		Underpayment	
	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>
Self	6.4 _a	0.6	5.0 _b	1.6	3.7 _c	1.2
Other	6.4 _a	0.5	5.8 _a	1.1	3.2 _c	1.1

Note Means are on 7-point scales, with higher values indicating higher levels of outcome satisfaction. Means with no subscripts in common differ significantly ($p < .05$), as indicated by a least significant difference test for multiple comparisons between means (Kirk, 1982).

Discussion

Our main hypothesis –that people think others are more satisfied with being overpaid than they are themselves– was supported. As our results show, people evaluated the other person’s satisfaction as greater than their own satisfaction in conditions of overpayment. Thus, as in Study 2.1, these findings suggest a moral superiority effect.

Additionally, within the self-conditions, we found that outcome satisfaction was higher in the equal payment condition than in the overpayment condition, and it was higher in the overpayment condition than in the underpayment condition (see upper row of Table 2.2). This pattern of means is in accordance with previous equity findings (e.g., Buunk & Van Yperen, 1989; Van den Bos, Lind, et al., 1997; Van den Bos et al., 1998). As predicted, this pattern is different within the other-condition: Outcome satisfaction in the equal payment condition and the overpayment condition were equally high (see lower row of Table 2.2). Thus, in Study 2.2, we again found the moral superiority effect revealed in Study 2.1; in addition, we replicated the findings of previous equity studies in the conditions where people rated their own satisfaction with the distributed outcomes.

General Discussion

The findings of the two studies reported here are supportive of our line of reasoning. Our findings reveal that people think others are more satisfied with being overpaid than they are themselves. In other words, the present research reveals a moral superiority effect in conditions of overpayment inequity. When people are confronted with a conflict between self-interest and fairness, they think others deal with this conflict differently than they do themselves.

In Study 2.1, participants predicted that the other person would be significantly more satisfied when the other was inequitably advantaged compared to equitably paid. In Study 2.2, this comparison was not statistically significant. This difference in the results across our studies may have been caused by differences in operationalizations. Importantly, however, in both studies we found that participants expected the other participant's satisfaction with overpayment to be significantly higher than their own satisfaction. Therefore, we have demonstrated a moral superiority effect in a somewhat artificial scenario study that allowed clear self-other comparisons to be made (Study 2.2) and in a more realistic ongoing experimental situation (Study 2.1).

Furthermore, in Study 2.2 we replicated the findings of previous equity studies in the conditions where participants rated their own satisfaction. Here participants were the most satisfied when they were equitably paid, and they were more satisfied when they were overpaid relative to underpaid.

In the present chapter, we aimed to extend the Messick et al. (1985) findings to judgments that are more commonly measured in equity studies and to reactions to equitable and inequitable arrangements that are more common in everyday life. Furthermore, we wanted to specify the influence of self-interest, as considered by Miller and Ratner (1998). To do this, we have looked at judgments that are two-dimensional in nature, in that they are susceptible to both self-interest and fairness motives (i.e., satisfaction ratings; cf. Adams, 1965; Van den Bos, Lind, et al., 1997). Both Messick et al. and Miller and Ratner examined the influence of only one dimension (more versus less fairness in Messick et al.; more versus less self-interest

in Miller & Ratner). The conflict between self-interest and fairness makes the difference between one's own and other's reactions particularly intriguing.

Interestingly, participants' fairness judgments and their satisfaction ratings diverged. In both of our studies, participants did not think they and others differed in their opinions about outcome fairness. Participants predict the same fairness judgments for themselves as for others: An equal payment was judged to be fair, and both overpayment and underpayment were thought to be unfair. In accordance with other research (e.g., Chapter 3), this suggests that when people are asked to make fairness judgments they are predominantly focused on the fairness component of the judgments they are making. Satisfaction judgments are more susceptible to the conflict between ethicality and self-interest, whereas fairness judgments are mainly focused on the ethical aspect of a reaction (Chapter 3). Researchers may want to explore this implication in future research.

Furthermore, researchers may want to investigate the possibility that a kind of pluralistic ignorance may underlie people's interpretation of others' satisfaction with overpayment. That is, perhaps people underestimate others' abilities to adapt to suboptimal circumstances and see only their own capacities for accepting and living with a somewhat unfair situation.

How do our results relate to self-serving biases? Most people rate themselves above average on a variety of characteristics (see, e.g., Smith & Mackie, 1990), and researchers have repeatedly found that people on average tend to think they are more charitable, cooperative, considerate, kind, loyal, and sincere, among other things, than the typical person but less belligerent, deceitful, gullible, lazy, impolite, and mean (for an overview see Epley & Dunning, 2000). We believe that our moral superiority effect is a self-serving bias in people's reactions to being overpaid. Thus, the results of these studies suggest that people can show a self-serving bias in reaction to overpayment.

Particularly interesting for the present chapter is the article by Epley and Dunning (2000), in which these authors suggest that in social dilemma situations people think they will behave in a better, more moral way than others will do. Clearly, the study of moral superiority in social dilemmas is important; however, social dilemmas of the kind studied by Epley and Dunning (e.g., asking how many flowers one would buy for a good cause or how much money one would donate for a

charity) do not necessarily invoke fairness motives. In contrast, we studied how people react to unfair distributions and what feelings people have concerning this unfairness. In particular, we focused on the extent to which people think they and others are led by the fairness component or by the self-interest component in the conflict concerning overpayment. Together with the Epley and Dunning study and the broader literature on self-serving biases (e.g., Smith & Mackie, 1990), our research thus demonstrates the robustness of a moral superiority effect.

A critic might want to ask why we did not find a moral superiority effect in the equity and underpayment inequity conditions, especially in the latter condition. Although we were not completely certain what to expect in these situations, we think it would be possible to find a moral superiority effect on satisfaction with underpayment. It may be possible that in our studies the manipulation was not strong enough, and that in the case of a conflict between self-interest and ethical considerations –as in arrangements of overpayment– people are more susceptible to self-other differences. When there are two opposing forces, there may be more leeway for self-centered effects (cf., Van Dijk, Wilke, Wilke, & Metman, 1999), and hence there is a higher probability for a moral superiority effect. In the equal payment and the underpayment payment conditions, the judgments of people are more uniformly positive or negative, respectively (Adams, 1965); therefore, it is more difficult for self-centered tendencies to affect people’s judgments in these two conditions. Furthermore, Loewenstein et al. (1989) argued that people’s attitude towards overpayment can be affected more easily and to a greater extent than people’s attitudes towards underpayment. We are thus not saying that moral superiority effects can never be found on satisfaction with equity and underpayment inequity; however, following Adams (1965) and others, we are noting that such effects are less likely to be found because the fairness of these two situations is more obvious to people (fair and unfair, respectively).

But, to return to the main line of reasoning presented here, it seems reasonable to conclude that when there is a conflict between self-interest and fairness, people construe their own and other’s reactions differently. Specifically, people show a moral superiority effect in which they believe others will be more satisfied with overpayment than they will themselves. We hope that this knowledge, together with

other research findings, will contribute to a better understanding of the social psychology of being better off than others.

CHAPTER 3

On Egoism-Based Pleasure and Doing the Right Thing: Satisfaction With Overpayment Under Cognitively Busy Conditions⁴

Numerous scientific disciplines, including philosophy, sociology, political sciences, economics, and psychology, had good reasons to focus on the issue of how people form evaluations of the outcomes they have received. A vital view in both classic and modern social psychology emphasizes the importance of drawing a distinction between two different reference points in the outcome evaluation process (e.g., Adams, 1965; Blau, 1964; Diekmann, Samuels, Ross, & Bazerman, 1997; Frey, Benz, & Stutzer, 2003; Loewenstein et al., 1989; Messick & Sentis, 1979, 1983; Smeesters, Warlop, Van Avermaet, Corneille, & Yzerbyt, 2003; Stouffer et al., 1949; Thibaut & Kelley, 1959). One important reference point is based on what outcome arrangements make people pleased or displeased. Another important reference point has to do with what outcome distributions are fair or unfair, equitable or inequitable, just or unjust (Van den Bos et al., 1998).

Arrangements that make people pleased can be different from those that are fair, equitable, or just (e.g., Messick & Sentis, 1983). In some cases, what makes one pleased and what one believes to be right coincide perfectly. In other instances, one's reactions to outcome distributions are characterized by a conflict between pleasure and what is right. It is this conflict that we are focusing on in this chapter. More specifically, we do this by studying what we think is one of the most intriguing issues in our discipline: people's satisfaction with arrangements in which their own outcomes are inequitable but better than the outcomes of comparable other persons.

Ever since Adams' (e.g., 1963a, 1963b, 1965; Adams & Jacobsen, 1964; Adams & Rosenbaum, 1962) first observations of the effects these and other arrangements of overpayment had on the reactions of employees of General Electric,

⁴ This chapter is based on: Van den Bos, K., Peters, S. L., Bobocel, D. R., & Ybema, J. F. (2004). *On egoism-based pleasure and doing the right thing: Satisfaction with advantageous inequity under cognitively busy conditions*. Manuscript submitted for publication.

social psychologists have been interested in people's reactions to overpayment (see, e.g., Berkowitz & Walster, 1976). As of the mid-1970s, social psychological research has contributed considerably to enhanced insights into social utility functions that capture preferences and social justice (see, e.g., Diekmann et al., 1997; Frey et al., 2003; Loewenstein & Prelec, 1993; Loewenstein et al., 1989; Messick & Sentis, 1979). In the present chapter, we would like to use and build on these literatures to study people's satisfaction with overpayment.

A striking aspect of studies that explored people's evaluations of equitable and inequitable arrangements, and the reason why Adams (1963a, 1963b, 1965; Adams & Jacobsen, 1964; Adams & Rosenbaum, 1962) was convinced that the psychology of equity and inequity should play an important role in social psychology, is the fact that most of the time research findings show that people are only moderately satisfied with overpayment, more so than with underpayment, and interestingly, less so than with equal payment. These findings are commonly taken as evidence that fairness concerns have a big impact on the outcome evaluation process.

It should be noted, however, that there are some research findings that may lead to a somewhat different conclusion. That is, participants in a bogus pipeline condition in a study by Rivera and Tedeschi (1976) were led to believe that a bogus apparatus could detect their true feelings by implicit muscle responses whereas participants in a paper-and-pencil condition were not given this impression. Furthermore, in the bogus pipeline condition, dependent variables were measured by asking participants to indicate their ratings by turning a dial moving a pointer along a meter. In the paper-and-pencil condition, dependent variables were assessed using typical paper-and-pencil procedures. Findings indicated that participants were more satisfied with overpayment in the bogus pipeline condition than in the paper-and-pencil condition. Rivera and Tedeschi's account for their findings is that when paper-and-pencil procedures are used, people's reactions are public whereas when bogus pipeline procedures are used, reactions are private. The authors further argue that, because people want to create positive impressions of themselves to others, they will be less satisfied with overpayment in public situations than they will be in private circumstances.

The Rivera and Tedeschi (1976) findings indicate that people may privately be more pleased with overpayment than they report in public. The implication that

follows from this is that when people are publicly evaluating (as is, at least to some extent, the case in most social psychological research studies) how satisfied they are with arrangements of overpayment, they may correct their ratings such that their satisfaction evaluations take into account the fact that these arrangements are inequitable, resulting in less positive satisfaction evaluations. It is on this implication that we are focusing in this chapter. To the best of our knowledge, previous research has not focused on this implication of the Rivera and Tedeschi findings and we propose here that doing so may lead to important new insights into the psychology of satisfaction with overpayment. To develop our hypotheses, we next integrate the literature on satisfaction evaluations within conditions of overpayment with the research on the effects of cognitive busyness on person evaluations and will note some interesting parallels between these two streams of work.

Satisfaction With Advantageous Inequity and Cognitive Busyness

Gilbert and others have argued convincingly that when people form evaluations of having seen another person performing a certain behavior they typically draw initial character inferences from the behavior and then correct these initial evaluations by taking into account the influences of external forces that may have affected the person's behavior (e.g., Gilbert & Osborne, 1989; Gilbert, Pelham, & Krull, 1988; Quattrone, 1982). These authors have further put forward that correction requires more cognitive resources than does the forming of initial inferences. As a result, forming person evaluations while simultaneously performing a resource-consuming task should impair the former process more than the latter process. Gilbert et al.'s studies indeed show that person evaluations are less influenced by external information under conditions of high cognitive busyness than under conditions of low cognitive busyness (e.g., Gilbert & Osborne, 1989; Gilbert et al., 1988).⁵

⁵ Because our research hypotheses and research designs were inspired by the work by Gilbert and his colleagues (e.g., Gilbert & Osborne, 1989; Gilbert et al., 1988), we will adopt their convention and use the term "cognitive busyness" in the present chapter, rather than "cognitive load."

In both Rivera and Tedeschi's (1976) study and Gilbert et al.'s (1988; Gilbert & Osborne, 1989) work, some correction is postulated to take place in the evaluation processes under investigation. Furthermore, Gilbert et al. showed persuasively that the implications of this correction process could be investigated by exploring people's evaluations under high versus low cognitive busyness. Integrating the above-mentioned implication of the Rivera and Tedeschi study on satisfaction with overpayment with Gilbert et al.'s (1988; Gilbert & Osborne, 1989) work on the effects of cognitive busyness on person evaluations leads to the following hypothesis regarding people's satisfaction with overpayment: When people react to arrangements of overpayment their evaluations of outcome satisfaction should be more positive under conditions of high cognitive busyness than under conditions of low cognitive busyness.

We investigated this hypothesis in a number of different studies using different paradigms and different manipulations. Common elements in our studies were that participants were either cognitively busy or not very busy while responding to the stimulus materials. In all studies, overpayment conditions were included in which participants received an outcome that was better than the outcome of a comparable other person and the main dependent variables assessed participants' outcome satisfaction evaluations.

In Studies 3.1 to 3.3, we also included conditions of underpayment, in which participants' own outcomes were worse than the comparable other person, and equitable conditions, in which own outcomes were equal to the other person's outcome. We incorporated these conditions because they are often -although not always (see, e.g., Rivera & Tedeschi, 1976)- included in equity studies and because we wanted to explore whether effects of the cognitive busyness manipulations would be found in these conditions as well. We will return to this issue in the General Discussion.

Study 3.1

In Study 3.1, participants responded to outcome distributions that were constructed following earlier research by Van den Bos (1999, Experiment 1). The

outcome that participants received was held constant across conditions, and we varied whether the outcome was equal to the outcome of a comparable other person (equal payment condition), better than the outcome of the other person (overpayment condition), or worse than the other person's outcome (underpayment condition). Building on the work by Gilbert and others (e.g., Gilbert et al., 1988), half of the participants rehearsed a string of 8 symbols while reading and responding to the stimulus materials (high-busyness condition) whereas the other half of the participants rehearsed 1 symbol (low-busyness condition). Following previous equity studies (e.g., Van den Bos, Lind, et al., 1997; Van den Bos et al., 1998), the dependent variable was participants' judgments of outcome satisfaction.

Method

Participants and design. One hundred and thirty-eight students (49 men and 89 women)⁶ at the Free University Amsterdam participated in the study and were paid for their participation. Participants were randomly assigned to one of the conditions of the 2 (cognitive busyness: low vs. high) x 3 (payment condition: equal payment vs. overpayment vs. underpayment) between-subjects factorial design.

Experimental procedure. Participants completed the study before and after participating in other, unrelated studies. The studies lasted a total of 1.5 hours, and participants were paid 15 Dutch guilders for their participation (1 Dutch guilder equaled approximately \$0.40 U.S. at the time the study was conducted). On arrival at the laboratory, participants were led to separate cubicles, each of which contained a computer with a monitor and a keyboard. The computers were used to present the stimulus information and to measure the dependent variables.

In the first part of the study, we manipulated cognitive busyness. Building on the work by Gilbert et al. (1988), participants in the high-busyness condition were asked to rehearse a string of 8 symbols: @ * % # ? \$ ± §. Participants in the low-busyness condition were asked to rehearse 1 symbol: @. In both conditions, participants were given 25 seconds to rehearse the symbols and they were asked to

⁶ In all studies presented here, gender was proportionally distributed among conditions. Gender had no main or interaction effects on the dependent variables of the studies reported here and hence was dropped from the analyses that are presented in this chapter.

hold the symbols in memory until the computer would later ask them to reproduce them (cf. Gilbert et al., 1988).

After this, participants were asked to imagine the following situation (cf. Van den Bos, 1999):

Last summer you had a job together with a fellow student. The two of you worked together as a pair. There were a large number of such pairs in the organization where you worked. You and your fellow student have worked equally hard and performed equally well. Because the organization has performed well last summer, it is announced on the last day of summer that a bonus of 10,000 Dutch guilders will be distributed among all employees. A certain amount of money has been allocated to you and your fellow student. It has to be decided how this amount of money will be distributed between you and your fellow student.

This was followed by the manipulation of outcome. Participants read the following sentences (manipulated information in italics):

A week after this employees are paid. You receive a bonus of 500 Dutch guilders. Your fellow student receives a bonus of *250 / 500 / 750* Dutch guilders.

After this, participants were asked questions pertaining to the dependent variable: Participants were asked how satisfied they were with the bonus they received (1 = *very dissatisfied*, 7 = *very satisfied*) and how happy they were with the bonus they received (1 = *very unhappy*, 7 = *very happy*). Because participants' answers to these two items were highly correlated ($r = .86, p < .001$), we averaged their answers to form a reliable scale of perceived outcome satisfaction ($\alpha = .93$). After completing these measures, participants were asked to write down the symbols they were supposed to rehearse. When the participants had done this, and had completed the other experiments in which they would participate, they were thoroughly debriefed and paid for their participation.

Results

Manipulation checks. As expected, the large majority of the participants were able to accurately recall the symbols they were supposed to rehearse: Ninety-nine percent of the participants in the low-busyness condition accurately recalled the

symbol they had to rehearse. Ninety-six percent of the participants in the high-busyness condition recalled at least 6 symbols accurately (19% of those accurately recalled 6 symbols, 48% accurately recalled 7 symbols, and 33% accurately recalled 8 symbols); the number of recalled symbols in this condition did not differ as a function of the outcome manipulation, $F(2, 67) = 1.27$, n.s. These results indicate that participants took the memorization task seriously and made an effort to recall the symbols while completing the experiment.

Dependent variables. A 2 x 3 analysis of variance (ANOVA) on the outcome satisfaction scale showed main effects of outcome, $F(2, 132) = 236.56$, $p < .001$, and cognitive busyness, $F(1, 132) = 4.36$, $p < .04$; effects that were qualified by the predicted interaction, $F(2, 132) = 3.38$, $p < .04$. To interpret these effects we performed a least significant difference test for multiple comparisons between means ($p < .05$), with the 6 cells of our design serving as the independent variable (Kirk, 1982). Table 3.1 shows the result of this test and the means and standard deviations of the outcome satisfaction scale. As hypothesized, results showed that within the overpayment condition, participants were more satisfied with their outcome in the high-busyness condition than in the low-busyness condition. There were no effects of cognitive busyness within the equal payment and underpayment conditions.

Additionally, it can be noted here that, within both high- and low-busyness conditions, perceived outcome satisfaction was higher in the equal payment conditions than in the overpayment conditions and was higher in the overpayment conditions than in the underpayment conditions (see Table 3.1). This pattern of means is in accordance with previous equity findings (e.g., Buunk & Van Yperen, 1989; Van den Bos, Lind, et al., 1997; Van den Bos et al., 1998). It should be noted, however, that as predicted the mean satisfaction rating within the overpayment condition was closer to the equal payment condition under conditions of high cognitive busyness than under conditions of low cognitive busyness. We will come back to this observation in Study 3.2 and 3.3 and in the General Discussion.

Table 3.1

Means and Standard Deviations of Outcome Satisfaction as a Function of Cognitive Busyness and Payment Condition (Study 3.1)

	Payment Condition					
	Equal payment		Overpayment		Underpayment	
Cognitive busyness	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>
Low	6.5 _a	0.6	3.0 _c	1.2	1.6 _d	0.6
High	6.3 _a	0.5	4.0 _b	1.7	2.0 _d	1.1

Note. Means are on 7-point scales, with higher values indicating higher levels of outcome satisfaction. Means with no subscripts in common differ significantly ($p < .05$), as indicated by a least significant difference test for multiple comparisons between means (Kirk, 1982).

Discussion

The reported findings are supportive of our line of reasoning presented earlier: As predicted, findings show that when people are reacting to arrangements of overpayment their judgments of outcome satisfaction are more positive under conditions of high cognitive busyness than under conditions of low cognitive busyness. Before strong conclusions are drawn on the basis of these findings, however, it is important to replicate them in a second study.

Study 3.2

In Study 3.2, we used an arrangement of overpayment that was constructed following Van den Bos et al. (1998, Experiment 1). As in Study 3.1 of the current chapter, the outcome that participants received in Study 3.2 was held constant, and we manipulated whether this outcome was equal to the outcome of a comparable other person (equal payment condition), better than the outcome of the other person (overpayment condition), or worse than the other person's outcome (underpayment condition). To get an indication of the robustness of the effects reported here we used a different manipulation of cognitive busyness: Building on the work by Wegner and Erber (1992, Experiment 1), half of the participants were asked to respond to the

questions following the scenarios as quickly as possible (high-busyness condition) whereas the other half of the participants were not asked this (low-busyness condition). The dependent variable was participants' judgments of outcome satisfaction.

Method

Participants and design. One hundred and fifty-four students (60 men and 94 women) at the Free University Amsterdam participated in the study and were paid for their participation. Participants were randomly assigned to one of the conditions of the 2 (cognitive busyness: low vs. high) x 3 (payment condition: equal payment vs. overpayment vs. underpayment) between-subjects factorial design.

Experimental procedure. Participants completed the experiment before and after participating in other, unrelated studies. The experiments lasted a total of 40 minutes, and participants were paid 15 Dutch guilders for their participation. On arrival at the laboratory, participants were led to separate cubicles, each of which contained a computer with a monitor and a keyboard. The computers were used to present the stimulus information and to measure the dependent variables.

At the start of the study, all participants were informed that in this study they would be asked to read about a situation and answer questions about this situation. Participants in the high-busyness condition were asked to respond to the questions as quickly as possible whereas participants in the low-busyness condition were not asked this.

After this, participants were asked to imagine the following situation (cf. Van den Bos et al., 1998):

In the near future, you are going to live in a new rented house. The rent of this house has yet to be determined. To decide on the rent, each individual tenant has to appear before a rent tribunal. The rent tribunal will decide on the monthly rent that you will have to pay. To determine this rent, your neighbor, who will rent a comparable house, also has to appear before the rent tribunal.

This was followed by the outcome manipulation. Participants read the following sentences (manipulated information in italics):

A week after this you are informed that the rent that you will have to pay is 750 Dutch guilders. Your neighbor's rent also has been determined: The rent he will have to pay is 500 / 750 / 1000 Dutch guilders.

After this, participants were asked questions pertaining to the dependent variable: Participants were asked how satisfied they were with the rent they had to pay (1 = *very dissatisfied*, 7 = *very satisfied*) and how happy they were with the rent they had to pay (1 = *very unhappy*, 7 = *very happy*). The answers to these two questions were highly correlated ($r = .76$, $p < .001$) and were averaged to form a reliable scale of perceived outcome satisfaction ($\alpha = .92$). When participants had answered these questions, and had completed the other studies in which they would participate, they were thoroughly debriefed and paid for their participation.

Results

Manipulation checks. Participants in the high-busyness condition of Study 3.2 were asked to respond to the outcome satisfaction items as quickly as possible whereas participants in the low-busyness condition were not asked this. The time participants needed to answer the two outcome satisfaction items of Study 3.2 was measured by the computers. As expected, a 2 x 3 multivariate analysis of variance (MANOVA) on the response latencies yielded only main effects of cognitive busyness: multivariate $F(2, 147) = 7.39$, $p < .01$; for outcome satisfaction, $F(1, 148) = 4.66$, $p < .04$; for outcome happiness, $F(1, 148) = 14.02$, $p < .001$. In accordance with instructions, participants in the high-busyness condition took less time to answer both the outcome satisfaction question ($M = 2.1$ seconds, $SD = 1.8$) and the outcome happiness question ($M = 3.1$ seconds, $SD = 2.0$) than participants in the low-busyness condition ($M_s = 2.9$ and 4.9 seconds, $SD_s = 2.6$ and 3.7 , respectively). This shows that, as intended, participants in the high-busyness conditions answered the outcome satisfaction items more quickly than did participants in the low-busyness conditions.

Dependent variables. A 2 x 3 analysis of variance (ANOVA) on the outcome satisfaction scale yielded a main effect of outcome, $F(2, 148) = 55.52$, $p < .001$; an effect that was qualified by the predicted interaction, $F(2, 148) = 5.10$, $p < .01$. The main effect of cognitive busyness was not significant, $F < 1$. To interpret these effects we performed a least significant difference test for multiple comparisons between means ($p < .05$), with the 6 cells of our design serving as the independent variable

(Kirk, 1982). Table 3.2 shows the result of this test and the means and standard deviations of the outcome satisfaction scale. As hypothesized, findings showed that, within the overpayment condition, participants were more satisfied with their outcome in the high-busyness condition than in the low-busyness condition. There were no effects of cognitive busyness within the equal payment and underpayment conditions.

Table 3.2

Means and Standard Deviations of Outcome Satisfaction as a Function of Cognitive Busyness and Payment Condition (Study 3.2)

	Payment Condition					
	Equal Payment		Overpayment		Underpayment	
Cognitive busyness	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>
Low	4.7 _a	1.4	3.8 _b	1.4	2.0 _c	0.8
High	4.1 _{a,b}	1.5	4.7 _a	2.0	1.5 _c	0.8

Note. Means are on 7-point scales, with higher values indicating higher levels of outcome satisfaction. Means with no subscripts in common differ significantly ($p < .05$), as indicated by a least significant difference test for multiple comparisons between means (Kirk, 1982).

It can further be noted that within the low-busyness condition, perceived outcome satisfaction was higher in the equal payment condition than in the overpayment condition and was higher in the overpayment condition than in the underpayment condition (see Table 3.2). This pattern of means is in accordance with previous equity findings (e.g., Buunk & Van Yperen, 1989; Van den Bos, Lind, et al., 1997; Van den Bos et al., 1998). In the high-busyness condition, participants in the overpayment condition were also more strongly satisfied with their outcome than those in the underpayment condition, but they were as satisfied as those in the equal payment condition. We will return to this point in Study 3.3 and in the General Discussion.

Discussion

The findings of Study 3.2 replicate the results of Study 3.1 and provide supportive evidence for our line of reasoning: As hypothesized, findings reveal that in situations of overpayment, people's evaluations of outcome satisfaction are more positive under conditions of high cognitive busyness than under conditions of low cognitive busyness. Furthermore, these results have been found using different stimulus materials and a different manipulation of cognitive busyness than in Study 3.1. This helps to establish the robustness of the findings reported here. It should be noted, however, that in both Studies 3.1 and 3.2 participants read and responded to hypothetical situations. One might wonder whether similar results would be obtained when participants were exposed to a situation in which they directly experienced a distribution of outcomes. As a third test of our predictions, therefore, we manipulated cognitive busyness in a study in which outcome distributions were directly experienced by participants.

Study 3.3

Study 3.3 was constructed following the experimental paradigm developed by Miedema, Van den Bos, and Vermunt (2003). In this experimental situation, participants completed tasks together with another participant and learned that their own task performance was comparable to the other participant's task performance. As in Study 3.1 and 3.2, the outcome that participants received was held constant and we varied whether this outcome was equal to the outcome of the other participant (equal payment condition), better than the outcome of the other participant (overpayment condition), or worse than the other participant's outcome (underpayment condition). The cognitive busyness manipulation was the same as in Study 3.1: Half of the participants rehearsed a string of 8 symbols while responding to the distribution of outcomes and half of the participants rehearsed 1 symbol. The dependent variable was again participants' judgments of outcome satisfaction, but, to improve the reliability of participants' satisfaction with equitable and inequitable arrangements, we included two additional questions (asking participants how satisfied and happy they were with the distribution of outcomes), yielding a reliable four-item scale of participants'

evaluations of outcome satisfaction. Additionally, a similar scale of participants' outcome justice judgments was included in the study to check whether our outcome manipulation would yield the justice judgments effects commonly found in equity studies (see, e.g., Austin et al., 1980; Van den Bos, Lind, et al., 1997; Van den Bos et al., 1998).

Method

Participants and design. One hundred and sixty-eight students (68 men and 100 women) at the Free University Amsterdam participated in the experiment and were paid for their participation. Participants were randomly assigned to one of the conditions of the 2 (cognitive busyness: low vs. high) x 3 (payment condition: equal payment vs. overpayment vs. underpayment) between-subjects factorial design.

Experimental procedure. Participants completed the study before participating in other, unrelated studies. The studies lasted a total of 45 minutes, and participants were paid 10 Dutch guilders for their participation. Participants were invited to participate in a study on how people perform tasks. On arrival at the laboratory, participants were led to separate cubicles, each of which contained a computer with a monitor and a keyboard. The computers were used to present the stimulus information and to measure the manipulation checks and the dependent variables.

In the first part of the instructions, participants were informed that they would be participating in the study with another person, referred to as "Other." The experimental procedure was then outlined to the participants: After the experimental tasks were explained, participants would work on the tasks for 10 minutes. Furthermore, participants were informed that they and Other would get a bonus if they both performed well on the tasks. The bonus would be divided in units, and each unit would represent a certain amount of money at the end of the study. What exact amount of money the units would represent would become known at the end of the study. After participants had completed the 10-minute work round, the experimenter would divide the bonus between the participants and Other. Three practice questions were posed to ensure comprehension of the course of events. If participants gave a wrong answer to a question, the correct answer was disclosed, and main characteristics of the course of events were repeated.

Then the tasks were explained to the participants: Participants were asked to answer questions that measured general knowledge for 10 minutes. They were told that both they and Other had to answer the same questions. After the work round had ended, participants were told how many questions they had answered correctly, and it was communicated to the participants that Other had answered an equivalent amount of questions correctly (cf. Van den Bos, Lind, et al., 1997). To assess whether participants thought of Other as a person who was comparable in the amounts of inputs he or she provided (cf. Van den Bos, 1999; Van den Bos, Lind, et al., 1997), they were asked to what extent Other had performed well when answering the general knowledge questions relative to the performance of the participant self (1 = *much worse*, 4 = *equally*, 7 = *much better*), to what extent Other did his/her best when answering the knowledge questions relative to the participant self (1 = *much worse*; 4 = *equally*; 7 = *much better*), and to what extent Other was good in performing the knowledge questions relative to the participant self (1 = *much worse*, 4 = *equally*, 7 = *much better*).

After this, cognitive busyness was manipulated in the same way as in Study 3.1: Participants in the high-busyness condition were asked to remember a string of 8 symbols and those in the low-busyness condition were asked to remember 1 symbol.

Participants were then told that the experimenter would divide bonuses between them and Other. It was communicated to the participants that they received 3 bonuses. This was followed by the manipulation of outcome of Other. In the overpayment condition, participants were informed that Other received 1 bonus. In the equal payment condition, participants were informed that Other received 3 bonuses. In the underpayment condition, participants were informed that Other received 5 bonuses.

Participants were then asked questions pertaining to the dependent variable and manipulation checks. The primary dependent variable was assessed by asking participants how satisfied they were with their 3 bonuses (1 = *very dissatisfied*, 7 = *very satisfied*), how happy they were with their 3 bonuses (1 = *very unhappy*, 7 = *very happy*), how satisfied they were with the division of bonuses (1 = *very dissatisfied*, 7 = *very satisfied*), and how happy they were with the division of units (1 = *very unhappy*, 7 = *very happy*). These items were highly correlated ($r_s > .51$, $p_s < .001$)

and were averaged to form a reliable scale of perceived outcome satisfaction ($\alpha = .86$).

As a check on the manipulation of the three outcome conditions, participants were asked two questions for each condition. Specifically, to check the manipulation of the overpayment condition, participants were asked to what extent they agreed with the statement that they received more bonuses than the other participant (1 = *strongly disagree*, 7 = *strongly agree*) and to what extent they agreed with the statement that the other participant received less bonuses than they received (1 = *strongly disagree*, 7 = *strongly agree*). Answers to these two items were strongly correlated ($r = .95$, $p < .001$) and were averaged to form a reliable check of the overpayment condition ($\alpha = .97$). To check the manipulation of the equal payment condition, participants were asked to what extent they agreed with the statement that they received an equal number of bonuses as the other participant (1 = *strongly disagree*, 7 = *strongly agree*) and to what extent they agreed with the statement that the other participant received an equal number of bonuses as they received (1 = *strongly disagree*, 7 = *strongly agree*). Answers to these two items were strongly correlated ($r = .94$, $p < .001$) and averaged to form a reliable check of the equal payment condition ($\alpha = .97$). Finally, to check the manipulation of the underpayment condition, participants were asked to what extent they agreed with the statement that they received less bonuses than the other participant (1 = *strongly disagree*, 7 = *strongly agree*) and to what extent they agreed with the statement that the other participant received more bonuses than they received (1 = *strongly disagree*, 7 = *strongly agree*). Answers to these two items were strongly correlated ($r = .90$, $p < .001$) and averaged to form a reliable check of the underpayment condition ($\alpha = .95$).

To further check the manipulation of outcome, participants' outcome justice judgments were solicited by asking participants how just they considered the 3 bonuses they received (1 = *very unjust*, 7 = *very just*), how fair they considered the 3 bonuses they received (1 = *very unfair*, 7 = *very fair*), how just they judged the division of bonuses (1 = *very unjust*, 7 = *very just*), and how fair they judged the division of bonuses (1 = *very unfair*, 7 = *very fair*). These four items were highly correlated ($r_s > .67$, $p_s < .001$) and were averaged to form a reliable scale of outcome justice judgments ($\alpha = .91$).

As check on the manipulation of cognitive busyness, participants were asked to what extent they agreed with statements that during the study they were busy trying to remember the symbols (1 = *strongly disagree*, 6 = *strongly agree*), that it was difficult to remember the symbols (1 = *strongly disagree*, 6 = *strongly agree*), that their thoughts were kept busy remembering the symbols (1 = *strongly disagree*, 6 = *strongly agree*), and that it took much effort to remember the symbols (1 = *strongly disagree*, 6 = *strongly agree*). These items were highly correlated ($r_s > .47$, $p_s < .001$) and were averaged to form a reliable scale of cognitive busyness ($\alpha = .87$). After completing these measures, participants were asked to write down the symbols they were supposed to rehearse. When the participants had done this, and had completed the other studies in which they would participate, they were thoroughly debriefed and paid for their participation.

Results

Manipulation checks. A 2 x 3 multivariate analysis of variance (MANOVA) on the three manipulation checks of outcome yielded only a main effect of outcome at both the multivariate level and the univariate levels, multivariate $F(6, 320) = 585.77$, $p < .001$; for the overpayment check, $F(2, 162) = 826.38$, $p < .001$; for the equal payment check, $F(2, 162) = 589.09$, $p < .001$; for the underpayment check, $F(2, 162) = 943.93$, $p < .001$. To interpret these effects, we performed a least significant difference test for multiple comparisons between means ($p < .05$) for each manipulation check, with the 3 conditions of the outcome manipulation serving as the independent variable (Kirk, 1982). This showed that participants in the overpayment condition agreed more with the statements that they received an outcome that was better than the other participant's outcome ($M = 6.6$, $SD = 1.2$) than participants in the equal payment ($M = 1.2$, $SD = 0.5$) and underpayment conditions ($M = 1.2$, $SD = 0.6$) and that no other differences between conditions were significant. Participants in the equal payment condition agreed more with the statements that their outcome was equal to the outcome of the other participant ($M = 6.8$, $SD = 0.7$) than participants in the overpayment ($M = 1.3$, $SD = 1.1$) and underpayment conditions ($M = 1.3$, $SD = 1.0$); no other differences between conditions were significant. Participants in the underpayment condition agreed more with the statements that their outcome was worse than the other participant's outcome ($M = 6.7$, $SD = 1.0$) than participants in the

equal payment ($M = 1.2$, $SD = 0.7$) and overpayment conditions ($M = 1.2$, $SD = 0.5$); no other differences between conditions were significant. These findings suggest that outcome was successfully operationalized.

Participants' outcome justice judgments yielded only a main effect of outcome, $F(2, 162) = 99.57$, $p < .001$. As expected, a least significant difference test ($p < .05$) with the 3 conditions of the outcome manipulation serving as the independent variable revealed that participants in the equal payment condition judged their outcome to be more just ($M = 5.7$, $SD = 0.8$) than those in the overpayment ($M = 3.2$, $SD = 1.1$) and underpayment conditions ($M = 3.1$, $SD = 1.3$) and that no other differences between conditions were significant. These findings are in accordance with previous equity studies (e.g., Van den Bos, Lind, et al., 1997; Van den Bos et al., 1998) and yield additional evidence that the manipulation of outcome was perceived as intended.

As expected, the large majority of the participants were able to accurately recall the symbols they were supposed to rehearse: All participants in the low-busyness condition accurately recalled the symbol they had to rehearse. Ninety-three percent of the participants in the high-busyness condition recalled at least 6 symbols accurately (28% of those accurately recalled 6 symbols, 41% accurately recalled 7 symbols, and 31% accurately recalled 8 symbols); the number of recalled symbols in this condition did not differ as a function of the outcome manipulation, $F < 1$. These results indicate that participants took the memorization task seriously and made an effort to recall the symbols while completing the study.

A 2 x 3 analysis of variance (ANOVA) on the manipulation check of cognitive busyness yielded only a main effect of busyness, $F(1, 162) = 201.20$, $p < .001$. Inspection of the means indicated that participants in the high-busyness condition were cognitively busier with remembering the symbols ($M = 3.1$, $SD = 1.0$) than participants in the low-busyness condition ($M = 1.4$, $SD = 1.0$). This shows that the manipulation of cognitive busyness was successful in affecting the relative strength of cognitive busyness in ways that were intended with this manipulation.

Comparability measures. The answers that participants gave on the questions that assessed whether participants thought of the other participant as a comparable person did not yield any significant results at either the multivariate level or the univariate levels. Inspection of the means indicated that participants thought that the

other participant had performed equally well when answering the general knowledge questions ($M = 4.0$, $SD = 0.4$), had done equally his/her best when answering the questions ($M = 4.0$, $SD = 0.2$), and was equally good in answering the questions ($M = 4.0$, $SD = 0.3$). It can be concluded that participants thought of the other person as a comparable person with respect to the tasks they completed in the experiment.

Dependent variables. A 2 x 3 ANOVA on the outcome satisfaction scale, yielded a main effect of outcome, $F(1, 162) = 34.45$, $p < .001$, and a significant interaction effect, $F(2, 162) = 3.40$, $p < .04$. The main effect of cognitive busyness was not significant, $F < 1$. To interpret these effects we performed a least significant difference test for multiple comparisons between means ($p < .05$), with the 6 cells of our design serving as the independent variable (Kirk, 1982). Table 3.3 shows the result of this test and the means and standard deviations of the outcome satisfaction scale. As hypothesized, findings revealed that within the overpayment condition, participants were more satisfied with their outcome in the high-busyness condition than in the low-busyness condition. There were no effects of cognitive busyness within the equal payment and underpayment conditions.

Table 3.3

Means and Standard Deviations of Outcome Satisfaction as a Function of Cognitive Busyness and Payment Condition (Study 3.3)

	Payment Condition					
	Equal Payment		Overpayment		Underpayment	
Cognitive busyness	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>
Low	5.3 _a	1.0	4.6 _b	0.8	3.9 _c	1.0
High	5.0 _{a,b}	0.8	5.1 _a	0.9	3.7 _c	1.0

Note. Means are on 7-point scales, with higher values indicating higher levels of outcome satisfaction. Means with no subscripts in common differ significantly ($p < .05$), as indicated by a least significant difference test for multiple comparisons between means (Kirk, 1982).

Additionally, it can be noted here that within the low-busyness conditions, outcome satisfaction was higher in the equal payment conditions than in the overpayment condition and was higher in the overpayment condition than in the

underpayment condition (see Table 3.3). This pattern of means is in accordance with previous equity findings (e.g., Buunk & Van Yperen, 1989; Van den Bos, Lind, et al., 1997; Van den Bos et al., 1998). In the high-busyness condition, participants in the overpayment condition were also more strongly satisfied than those in the underpayment condition, but they were as satisfied as those in the equal payment condition. We will come back to this point in the General Discussion.

Discussion

The findings of Study 3.3 replicate and extend the results of Study 3.1 and 3.2 and are supportive of our line of reasoning: As hypothesized, findings reveal that people are more satisfied with arrangements of overpayment under conditions of high cognitive busyness than under conditions of low cognitive busyness. Furthermore, results of Study 3.3 have been obtained using an experimental paradigm in which participants directly experienced the distribution of outcomes. Thus, the predicted effects of cognitive busyness on reactions to overpayment can be found using different scenario studies (Studies 3.1 and 3.2), using a study in which people directly experience the outcome distribution (Study 3.3), and using different manipulations of cognitive busyness (Studies 3.1 and 3.3 versus Study 3.2). It can now be concluded that all three studies reported here show that people are more satisfied with overpayment under conditions of high cognitive busyness than under conditions of low cognitive busyness.

A critic, however, might note two objections toward the findings presented thus far. First, a close inspection of the findings of Study 3.3 shows that, in the overpayment conditions, our dependent variable of outcome satisfaction was affected by the cognitive busyness manipulation whereas the manipulation check of outcome justice judgments was not. As noted earlier in the research literature (e.g., Messick & Sentis, 1983; Van den Bos, Lind, et al., 1997; Van den Bos et al., 1998), this dissociation is not surprising: Theoretically, one would expect that satisfaction evaluations are more susceptible to the conflict between egoism-based pleasure and what is right, the conflict of interest in the present research. Moreover, the dissociation is consistent with other research demonstrating that satisfaction evaluations and justice judgments are quite different variables to which people can react quite differently (e.g., Austin et al., 1980; Blau, 1964). More specifically, research has shown that people often judge overpayment to be unfair (indeed as unfair

as underpayment) although simultaneously they are moderately satisfied with overpayment (relative to underpayment) (see, e.g., Van den Bos, Lind, et al., 1997; Van den Bos et al., 1998).

Although the results of Study 3.3 are in line with our expectations, we conducted an additional study to rule out the alternative hypothesis that our primary result was an artifact of the order in which the satisfaction and justice measures were taken. To assess whether the manipulation of cognitive busyness would have affected evaluations of outcome justice had the justice items been administered prior to the measurement of participants' satisfaction, participants in this study reacted to the arrangements of overpayment used in Study 3.1 under conditions of either high or low cognitive busyness (using the busyness manipulation of Study 3.1), and we varied the order in which ratings of outcome satisfaction and judgments of outcome justice were assessed.

In correspondence with what could be expected on the basis of Studies 3.1 to 3.3, participants' evaluations of outcome *satisfaction* yielded only a main effect of cognitive busyness, $F(1, 91) = 4.23, p < .05$. The main effect of order of measurement, $F(1, 91) = 0.48, p > .48$, and the interaction effect between cognitive busyness and order, $F(1, 91) = 0.00, p > .97$, were not significant. As expected, participants were more satisfied with their outcome in the high-busyness condition ($M = 3.5, SD = 1.4$) than in the low-busyness condition ($M = 2.9, SD = 1.7$).

In accordance with what could be expected on the basis of Study 3.3, participants' judgments of outcome *justice* yielded no significant effects: The main effect of cognitive busyness, $F(1, 91) = 0.79, p > .37$, the main effect of order of measurement, $F(1, 91) = 0.07, p > .79$, and the interaction effect between cognitive busyness and order, $F(1, 91) = 0.07, p > .79$, were all nonsignificant ($M = 2.9, SD = 1.6$). As expected, these results show that varying the order in which participants rated outcome fairness and outcome satisfaction did not affect their reactions to overpayment under conditions of high or low cognitive busyness.

A second objection that might be raised against our series of studies is that one can wonder whether the predicted effects of cognitive busyness on satisfaction with overpayment would also show up in situations that are more similar to those faced by people in real interactions. To this end, we conducted yet another study in which we used an experimental paradigm that was very different from the paradigms

used earlier. In this study, participants actually socially interacted with a real experimenter and a real comparable other participant. The experimenter's behavior was used to induce arrangements of overpayment that more closely resembled those encountered outside of the lab. The manipulation of cognitive busyness was different from those used in the earlier studies and was induced in a way that could happen more easily in real life.

Study 3.4

Method

Participants and design. Forty students (11 men and 29 women) at Utrecht University participated in the experiment and were paid for their participation. Participants were randomly assigned to one of the conditions of cognitive busyness manipulation (low vs. high).

Experimental procedure. Participants of Study 3.4 were invited by means of flyers on different spots at the campus of Utrecht University to participate in a marketing study, ostensibly conducted by a marketing company called "TestMe-Research[®]" to assess people's evaluations of different brands of chocolate. On the flyers, participants were informed that the study would take about 20 minutes of their time and that they would be paid 3 Euros for their participation (about \$3 U.S. at the time the experiment was conducted).

When a participant arrived at the rooms where the marketing research would be conducted, the participant was asked to wait in the waiting room. After 1 minute a same-sex other student walked into the waiting room. In reality, this student was not a real participant but was a confederate that we used to create an arrangement of overpayment in a real-life way. One minute later, the experimenter came into the waiting room and informed the real participant and the bogus participant that they would participate together in the marketing study. The experimenter then led the two participants to a small room of 3 x 3 meters where the marketing study would be conducted. In this room, the participants were seated 1 meter apart from each other in such a way that the real participant could easily see the bogus participant.

The experimenter then explained that the research was conducted in commission of a marketing company called "TestMe-Research[®]." Participants were told that this marketing company conducted many studies and that the particular study in which they would participate today would assess people's evaluations of different brands of chocolate. To this end, the experimenter explained, the participants would be asked to taste 10 different pieces of chocolate and to evaluate these pieces on different dimensions. Participants were informed that each piece of chocolate would be handed over to them while the experimenter would mention the particular brand of that piece. After carefully having tasted a piece, participants would be asked to evaluate the piece in terms of sweetness, structure, whether it tasted good or not, and what grade they would give to the piece's flavor. Participants would then drink some water and would taste and evaluate the next piece of chocolate.

In the high-busyness condition, participants were asked to recall all 10 brand names that the experimenter would mention to them while handing over the pieces of chocolate. In the low-busyness condition, participants were asked to recall only the first brand name. In both conditions, participants were asked to recall the brand names until they would be asked to reproduce them.

Participants were told that after having tasted the 10 pieces they would be paid for their participation. As part of standard practice at "TestMe-Research[®]", participants then would be asked to evaluate the particular study they participated in. Participants were informed that the results of this evaluation would be used to improve future studies by "TestMe-Research[®]."

After it was made sure that participants understood the course of events, participants tasted and evaluated the 10 pieces of chocolate. After this, the experimenter paid participants for their participation. The experimenter's behavior was then used to create an arrangement of overpayment: The experimenter took 6 Euro coins and laid down 4 Euros in front of the real participant and 2 Euros in front of the bogus participant. The experimenter laid down the Euros in such a way that the real participants clearly saw the amount of Euros they and the bogus participants received.

The experimenter then handed over the evaluation forms to the participants. In these forms, participants were asked several questions that pilot testing had revealed could well be part of a general marketing questionnaire. Embedded in these

questions were our dependent variables and manipulation checks: The main dependent variable was assessed by asking participants how satisfied (1 = *very dissatisfied*, 7 = *very satisfied*) and happy (1 = *very unhappy*, 7 = *very happy*) they were with their payment. Participants' answers to these two items were highly correlated ($r = .63, p < .001$) and were averaged to form a reliable scale of perceived outcome satisfaction ($\alpha = .77$).

Participants' outcome justice judgments were solicited by asking participants how just (1 = *very unjust*, 7 = *very just*) and fair (1 = *very unfair*, 7 = *very fair*) they judged their payment to be. These items were highly correlated ($r = .78, p < .001$) and were averaged to form a reliable scale of outcome justice judgments ($\alpha = .87$). As check on the manipulation of cognitive busyness, participants were asked to what extent it was difficult to remember the brands of chocolate they were asked to remember (1 = *strongly disagree*, 7 = *strongly agree*) and that it took much effort to remember the brands (1 = *strongly disagree*, 7 = *strongly agree*). These items were highly correlated ($r = .82, p < .001$) and were averaged to form a reliable scale of cognitive busyness ($\alpha = .90$). Finally, participants were asked to write down the brand names they were supposed to rehearse. When the participants had done this, they were thoroughly debriefed and thanked for their participation.

Results

Manipulation checks. As in the previous studies, the majority of the participants were able to accurately recall the brand names they were supposed to rehearse: All participants in the low-busyness condition accurately recalled the brand name they had to rehearse. Seventy-five percent of the participants in the high-busyness condition recalled at least 6 brand names accurately (27% of those accurately recalled 6 brands, 20% recalled 7 brands, 27% recalled 8 brands, 20% recalled 9 brands, and 7% recalled 10 brands). These results indicate that participants took the memorization task seriously and made an effort to recall the symbols while completing the study.

As expected, the cognitive busyness scale (excluding one participant with missing values on one of the items of the scale) yielded a significant effect of the cognitive busyness manipulation, $F(1, 37) = 8.22, p < .01$. Inspection of the means indicated that participants in the high-busyness condition were cognitively busier with

remembering the brand names ($M = 4.8$, $SD = 1.7$) than participants in the low-busyness condition ($M = 3.2$, $SD = 1.9$). This shows that the manipulation of cognitive busyness was successful in affecting the relative strength of cognitive busyness in ways that were intended with this manipulation.

Participants' outcome justice judgments yielded no effect of the cognitive busyness manipulation, $F(1, 38) = 0.00$, $p > .96$, thus revealing that perceived justice of the payment participants received did not differ as a function of being in the high-busyness condition ($M = 5.2$, $SD = 1.6$) or the low-busyness condition ($M = 5.2$, $SD = 2.0$). These findings are in accordance with our justice judgment data presented earlier.

Dependent variables. As predicted, the outcome satisfaction scale showed a significant effect of the manipulation of cognitive busyness, $F(1, 38) = 5.38$, $p < .03$. Inspection of the means revealed that, as hypothesized, participants were more satisfied with their payment in the high-busyness condition ($M = 5.5$, $SD = 1.0$) than in the low-busyness condition ($M = 4.8$, $SD = 0.7$).

General Discussion

The question of how people deal with conflicts between egoism-based and fairness-based concerns has fascinated and puzzled philosophers and social theorists for centuries (see, e.g., Beauchamp, 2001; Cohen, 1986; Diekmann et al., 1997; Frey et al., 2003; Loewenstein et al., 1989; Messick & Sentis, 1979; Smeesters et al., 2003). The experimental findings that have been presented here may shed new light on how to answer this question and are supportive of our line of reasoning: As hypothesized, findings reveal that people are more satisfied with being overpaid under conditions of high cognitive busyness than under conditions of low cognitive busyness. The fact that we found converging findings in different experimental paradigms using different experimental manipulations is compelling and underscores the reliability of the finding revealed here that people are more satisfied with overpayment under conditions of high cognitive busyness.

In Study 3.4 we tried to speak to the importance of cognitive busyness effects on satisfaction with an advantageous unfair situation in real life. Because it rightfully

has been argued that social interactions often require considerable attention of people to monitor all the things that are going around (see, e.g., Bargh, 1994; Bargh & Thein, 1985; Gilbert & Osborne, 1989), the findings of the studies that were presented here may well indicate that when people have a lot on their minds, they may react in a more self-centered way to unfair arrangements that are to their own advantage than when they have the capacity to ponder about these things more deeply.

In previous equity studies (e.g., Buunk & Van Yperen, 1989; Van den Bos, Lind, et al., 1997; Van den Bos et al., 1998) it has usually been found that people are more satisfied with equal payment than with overpayment and that they are more satisfied with overpayment than with underpayment. In the present chapter, we have replicated these effects in the low busyness conditions in Studies 3.1 to 3.3. More interesting, however, in all three studies, we found that in conditions of high cognitive busyness people's evaluations of outcome satisfaction when reacting to overpayment were closer to the evaluations of people reacting to equitable arrangements. In fact, findings of Study 3.2 and 3.3 even show that, under conditions of high cognitive busyness, people's satisfaction with overpayment may not be statistically different from their satisfaction with equitable arrangements. The (small) differences in the results across our studies may have been caused by differences in operationalizations, but it is noteworthy that in all of our studies we found that cognitive busyness exerts a reliable effect on people's satisfaction with being overpaid.

In Studies 3.1 to 3.3, we also included conditions of equal payment and underpayment to determine whether effects of the cognitive busyness manipulations would be found in these conditions as well. Our results indicate that, although we found consistent effects of cognitive busyness in the overpayment conditions, in none of the three studies did we find any effects of cognitive busyness in the other conditions (even when we tested the effects with one-tailed t-tests). These may be important findings because they indicate that it is especially when people are reacting toward overpayment that their reactions are likely to be influenced by being cognitively busy or not.

The absence of reliable cognitive busyness effects within the underpayment conditions is especially interesting in this respect. After all, one could argue that when people experience underpayment there are two sources of negative affect: (a) the displeasing feeling caused by the relative deprivation of lacking what the other person

has received, and (b) the unfairness of the outcome distribution (cf. Van den Bos, Lind, et al., 1997; Van den Bos et al., 1998). Furthermore, because one could propose that people generally have more immediate access to or knowledge of their preferences than to what is fair (e.g., Messick & Sentis, 1983, p. 88), one might reason that when people are evaluating underpayment while their cognitive resources are simultaneously being depleted, their satisfaction evaluations would only or primarily be influenced by the displeasing aspects of the outcome distribution. In the absence of cognitive busyness, however, the individual's satisfaction should be affected not only by the displeasing aspects of the arrangements but be corrected for the unfairness of the distribution as well.

Thus, one could argue that because some correction may be assumed to take place in the underpayment conditions, it should be possible to find effects of cognitive busyness in these conditions. It should be noted here, however, that it certainly is conceivable that correcting one's initial impression in an opposite direction (as we suggest may be the case when reacting to overpayment) takes up more cognitive resources than correcting in the same direction as one's initial impression. In short, it is much more cognitively demanding to decide one's reactions to overpayment than to decide one's reactions to underpayment. This would make it more likely to find cognitive busyness effects in the overpayment condition than in the underpayment condition.

This latter account explains why consistent busyness effects were found within the overpayment conditions and unreliable effects within the underpayment conditions. Related to this, people have a very strong negative reaction to underpayment under virtually all circumstances (e.g., whether they are dealing with an absolute stranger or a friend). The same is not true of feelings toward overpayment, which depend in complex ways on the exact situation (Chapter 4; see also Adams, 1963a, 1963b, 1965; Messick & Sentis, 1983). Furthermore, it is noteworthy that the consistent pattern of findings reported here discounts a more general explanation of our data, specifically, that the results are merely due to general attentional demands (cf. Messick & Sentis, 1983). Such an explanation would state that egoistic evaluations (benefits to self) might be thought of as requiring few attentional resources and that these evaluations may be conceived of as involving automatic processes that begin early in life and that are observable across species. On the other hand, concern for the welfare of others

(ethical judgments) require deliberative, reflective appraisal processes that make greater attentional demands (Messick & Sentis, 1983).

Had this more general attentional demands explanation been true, cognitive busyness effects would have been likely to be found in underpayment conditions as well. Instead, the current findings suggest that a more specific explanation that incorporates the direction in which evaluations are corrected, explains the psychology of satisfaction evaluations with outcome distributions better. This does not rule out the possibility that with stronger manipulations of cognitive busyness (e.g., asking participants to recall 16 as opposed to 8 symbols) it will be possible to find reliable busyness effects on evaluations of underpayment; nevertheless, on the basis of the findings reported here, we would feel confident to predict that even under these conditions of very high cognitive busyness the biggest busyness effects will be found when people are reacting to overpayment⁷. All in all, it seems reasonable to conclude that the findings reported here are in line with what was predicted on the basis of integrating the work by Rivera and Tedeschi (1976) with the research by Gilbert and others (e.g., Gilbert & Osborne, 1989; Gilbert et al., 1988), and the research reveals consistently that people are more satisfied with overpayment under conditions of high versus low cognitive busyness. Future research may want to explore the implications of the findings presented here.

It should be noted that the current chapter confirms patterns of important effects that have been predicted by the Rivera and Tedeschi (1976) and Gilbert and others (e.g., Gilbert & Osborne, 1989; Gilbert et al., 1988) studies, but the patterns reported here have implications for whether or not the processes implicated by these frameworks hold up in the long run. Indeed, future researchers might productively investigate the psychological processes suggested by our research findings. We hope that our findings may stimulate further interest in the captivating interplay between egoism- and fairness-based factors of outcome evaluations. In conducting future research, it would not surprise us if the intriguing research on social utility functions regarding preferences and fairness concerns (see, e.g., Bazerman, Tenbrunsel, & Wade-Benzoni,

⁷ Indeed, in Study 3.1 there was some tendency for participants to be more satisfied with underpayment under conditions of high as opposed to low cognitive busyness. However, this effect was not statistically significant, $t(41) = 1.27, p < .11$ (one-tailed), was not replicated in the other studies, and -as would be predicted by our account- was weaker than the cognitive busyness effect within the overpayment condition.

1998; Bazerman, Blount White, & Loewenstein, 1995; Blount, 1995; Diekmann et al., 1997; Frey et al., 2003; Imazi & Ohbuchi, 1998; Loewenstein & Prelec, 1993; Loewenstein et al., 1989; Messick & Sentis, 1979; Ordóñez, Mellers, Chang, & Roberts, 1995) would be profitable to gain deeper insight into people's reactions to mixed-motive arrangements such as overpayment.

The findings of both Study 3.3 and 3.4, and the findings that were discussed in the Discussion of Study 3.3, suggest that cognitive busyness influenced evaluations of outcome *satisfaction* but it did not affect ratings of outcome *justice*. Thus, in various studies judgments of outcome justice were not influenced by the manipulation of cognitive busyness whereas evaluations of outcome satisfaction were. In our opinion, these differential findings highlight the importance of distinguishing between judgments of justice and perceived satisfaction (cf. Austin et al., 1980; Blau, 1964; Messick & Sentis, 1983; Van den Bos, Lind, et al., 1997; Van den Bos et al., 1998) and may imply that satisfaction evaluations are more susceptible to the conflict between egoism-based pleasure and doing the right thing, the conflict of interest in the present research. Although we are convinced that the patterns of our findings are generalizable to other social contexts and experimental manipulations, researchers may wish to explore the boundary conditions of the effects reported here in the future. However, for now, our research demonstrates that particular effects can occur. This may stimulate future research into other conditions in which such effects are or are not found.

It should be emphasized here that there have been several criticisms raised against the Rivera and Tedeschi (1976) findings. For example, only female students participated in the study, and there was a confound between the bogus pipeline procedure (present vs. absent) and the way in which dependent variables were assessed (dial equipment vs. paper and pencil). Moreover, it is not clear whether participants indeed perceived the paper-and-pencil conditions to be more public. In addition, Roese and Jamieson (1993) noted in their thorough review of the bogus pipeline research, that when researchers wish to import the bogus pipeline procedure to their research domain in an effort to reduce impression management and social desirability effects, they should first demonstrate that some form of impression management bias indeed influences reactions in the domain of interest. Roese and Jamieson suggest that an obvious way to accomplish this would be to associate

reactions in the domain of interest with responses on impression management or social desirability scales. To the best of our knowledge, there have been no equity studies that have incorporated one of these scales.

This suggests that more research is needed to investigate all the implications of the Rivera and Tedeschi (1976) study. We hope that by exploring some of the implications of the Rivera and Tedeschi work, the present study may spur such empirical endeavors. More specifically, one of the things that our work suggests is that if future research findings would indeed support Rivera and Tedeschi's account of the difference between public and private reactions to overpayment, it may be especially the combination of private circumstances and high cognitive busyness that may yield the highest levels of satisfaction with overpayment. This is one concrete suggestion that follows from the present chapter and that future research may want to pursue.

To return to the present research, we contrasted two dimensions of evaluations of outcome satisfaction by studying people's satisfaction with being overpaid under conditions of high versus low cognitive busyness. Integrating previous work on equity theory with the literature on cognitive busyness we predicted and found in various experiments that in circumstances of high versus low cognitive busyness, people's evaluations of outcome satisfaction with overpayment are more positive. We therefore hope that the present research may help scientists move forward in their understanding of the fascinating relationship between egoism-based pleasure and doing the right thing.

CHAPTER 4

On The Psychology of the Advantaged: How People React to Being Overpaid⁸

The institutions of society favor certain starting places over others. These are especially deep inequalities. Not only are they pervasive, but they affect men's initial chances in life; yet they cannot possibly be justified by an appeal to the notions of merit or desert. It is these inequalities, presumably inevitable in the basic structure of any society, to which the principles of social justice must in the first instance apply.

Rawls (1971/1999, p. 7)

As Rawls rightfully noted, societies favor certain people over others. In the current chapter we try to understand the social psychology of people that are better off than others. More specifically, we will explore how people react to being overpaid relative to another person who is comparable to the amount of inputs provided. To this end, we will base our line of reasoning on equity theory (see, e.g., Adams, 1965), as this is probably the most developed framework for understanding how people react to being overpaid.

Equity theory has convincingly shown that how people react to being overpaid plays an important role in various kinds of situations and therefore should be a key issue for social psychologists (see, e.g., Adams, 1965; Berkowitz & Walster, 1976; Montada et al., 1986; Walster et al., 1973). For example, in organizational settings it is easy to find examples of the importance of understanding how people deal with being overpaid (see, e.g., Adams, 1965; Adams & Freedman, 1976; Greenberg, 1982). Furthermore, research on intimate relationships has revealed that being better off than your partner can play an important role in how people react to issues in their intimate relationships (see, e.g., Mikula, 2003; Van Yperen & Buunk, 1990, 1991).

⁸ This chapter is based on: Peters, S. L., Van den Bos, K., & Karremans, J. C. (2004). *On the psychology of the advantaged: How people react to being overpaid*. Manuscript submitted for publication.

Equity theory states that inequity exists whenever a person perceives that the ratio of his or her own inputs and outcomes do not match the ratio of another person's inputs and outcomes (e.g., Adams, 1965; Walster et al., 1973; Walster, Walster, & Berscheid, 1978). Thus, both disadvantageous inequity (underpayment) and advantageous inequity (overpayment) are inequitable payments. We would like to stress, following Jacques (1961), that being overpaid is the most intriguing payment distribution in equity research because being overpaid creates a mixed-motive situation. Below we will elaborate on this issue. Building on and extending Adams and others' work (Adams, 1965; Walster et al., 1973; Walster, Walster, & Berscheid, 1978) we will focus in this chapter on overpayment distributions and in addition we will pay attention to other outcome distributions (i.e., underpayment and equal payment) when this is appropriate.

Because of the important role that overpayment plays in people's lives, a lot of social psychological studies have been conducted to try to understand how people react to being overpaid. For example, in the 1960s, Jacques (1961) and Adams (1965) already started the inquiry into this fascinating topic, and since then many researchers have further studied this frequently occurring instance of injustice. Researchers have shown that overpaid people will try to restore equity (Adams, 1965; Walster et al., 1973; Walster, Walster, & Berscheid, 1978), feel moderately satisfied with their outcome (Adams, 1965; Buunk & Van Yperen, 1991; Van Yperen & Buunk, 1990; Walster et al., 1973; Walster, Walster, & Berscheid, 1978), and try to justify their advantage, for example, by adjusting the types of comparisons they make (for an overview see Austin, 1977; see also Kluwer & Mikula, 2002; Mikula, 2003).

We argue here that although lots of research has been done on the psychology of the overpaid, there is confusion as to the underlying psychological process that drives people's reactions to these outcome distributions. More than three decades ago, Pritchard (1969) argued that equity theory needed further specification, and we will argue here that this is still desirable. In the present chapter, therefore, we would like to further insights into the process of how people react to being overpaid. Below we will develop our line of reasoning.

Reactions to Being Overpaid

Equity theory predicts and typically finds that people are only moderately satisfied with being overpaid (e.g., Adams, 1965; Buunk & Van Yperen, 1991; Van Yperen & Buunk, 1990; Walster et al., 1973; Walster, Walster, & Berscheid, 1978). In fact, it is usually found that people are more satisfied with being overpaid than with being underpaid, and interestingly it also tends to be shown that people are less satisfied with being overpaid than with being equally paid (Adams, 1965; Buunk & Van Yperen, 1991; Van Yperen & Buunk, 1990; Walster et al., 1973; Walster, Walster, & Berscheid, 1978).

Furthermore, Jacques (1961) was one of the first to propose that when people are overpaid they experience “*feelings of unease*” (p. 26). Feelings that occur, according to Jacques, because overpaid people are influenced by two conflicting sources, namely, experiencing something that is nice (i.e., a high outcome) that at the same time is unfair (i.e., the advantage is inequitable). As Jacques put it, when describing human reactions to overpayment: “There are two powerful and opposing sets of forces inside each of us which determine our behavior” (p. 143). Thus, when people are being overpaid they are assumed to be in conflict between what makes them pleased and what they believe to be right. This mixed-motive quality of reactions to overpayment has also been recognized by more contemporary social psychologists (see, e.g., Loewenstein et al., 1989; Messick, 1993; Messick & Sentis, 1983; Van den Bos, Lind, et al., 1997; Van den Bos et al., 1998; Chapter 3). We argue however that, according to our knowledge, there have not yet been empirical tests that indeed show that overpaid people experience feelings of unease and are in conflict when reacting to being overpaid relative to a comparable other person. Therefore, we would like to provide data regarding this suggestion. We will empirically test this proposition in four experiments.

The Current Research

Following the founders of equity theory (Jacques, 1961; Adams, 1963, 1965; Austin et al., 1980), we propose here that people who are being overpaid experience a

conflict between what they want and what they believe to be right, and we predict that feelings of uneasiness are crucial for understanding the psychology of overpayment.

We think it is interesting to test this prediction because it can be contrasted with a different explanation that has been formulated frequently in the literature concerning overpayment. That is, researchers who adopted this alternative prediction argued that people are only moderately satisfied with being overpaid because they feel guilty (see, e.g., Hassebrauck, 1986; Homans, 1974; Van Yperen & Buunk, 1990; Walster, Walster, & Berscheid, 1978). As Van Yperen and Buunk (1990) put it: “the overbenefitted ...feel guilty because they receive more” (p. 288). Thus, two different explanations for people's reactions to being overpaid have been formulated: Jacques and Adams (Adams, 1963, 1965; Adams & Freedman, 1976; Jacques, 1961; see also Austin et al., 1980) proposed that people experience feelings of uneasiness when being overpaid, whereas others (e.g., Hassebrauck, 1986; Homans, 1974; Van Yperen & Buunk, 1990; Walster, Walster, & Berscheid, 1978) argued that people feel guilty when being overpaid. In the current chapter we base our line of reasoning on that of the founders of equity theory and challenge the latter explanation. Below we will argue why we think the concept of guilt is not needed to explain people's reactions to being overpaid.

In real life, people often have little influence on being overpaid. For example, they are born in a country or family that has better access to certain resources. Furthermore, in a typical equity study, participants also do not often have influence on their outcomes: They simply receive outcomes from an experimenter. We argue that this observation is important, because it makes it less likely that people will indeed experience guilt when being overpaid. After all, in order to experience guilt people should make internal attributions regarding the cause of being overpaid (see, e.g., Frijda, 1986; Roseman, Spindel, & Jose, 1990; Roseman, Wiest, Swartz, 1994; Tangney, 1991; Tangney, Miller, Flicker, & Barlow, 1996). Typically, the reason people are overpaid in overpayment studies is not due to themselves but due to the experimenter who simply gives them better outcomes than a comparable other person. The conclusion that guilt is the most direct relevant response for people who are being overpaid is therefore questionable, we think. Consistent with this reasoning, Adams and Freedman (1976) argued that guilt did not necessarily explain reactions to being overpaid. These authors argued that people experience feelings of uneasiness

and that these feelings are sufficient to explain their reactions to being overpaid. We think their analysis of reactions to being overpaid is important and should be tested empirically.

Thus, building on Jacques (1961), we argue that when people are being overpaid they experience a conflict between what they want and what they believe to be right, and therefore experience feelings of uneasiness. We will present findings of empirical studies (Studies 4.1 and 4.2) that provide supportive evidence for this hypothesis and that indeed suggest that overpaid people experience feelings of uneasiness, rather than guilt. Our studies suggest that guilt may be a concept that is not needed to explain people's reactions to being overpaid. Related to this, we argue that if people are indeed influenced by two conflicting sources, they should have difficulty combining these opposite sources of information (e.g., Fiske & Taylor, 1991). Therefore, we propose here that it will take people longer to respond to being overpaid, compared to reactions to outcome distributions in which the above-mentioned conflict is not experienced (i.e., underpayment and equal payment). This hypothesis is investigated in Studies 4.3 and 4.4.

Study 4.1

The purpose of this study is to examine whether people feel guilt or uneasiness when overpaid, and which feeling predominates. Whereas no research has apparently demonstrated that people experience high levels of uneasiness, researchers have frequently stated that people experience high levels of guilt. However, we argue that the results of these studies are less clear than is often assumed. Thus, it has been frequently proposed that people indicated feeling guilty when they were overpaid (see, e.g., Hassebrauck, 1986; Homans, 1974; Montada, 2002; Van Yperen & Buunk, 1990; Walster, Walster, & Berscheid, 1978). However, closer examination of the literature shows that only a few studies actually measure people's feelings of guilt when being overpaid (Austin et al., 1980; Hassebrauck, 1986; Michaels, Edwards, & Acock, 1984; Sprecher, 1986; Walster, Walster, & Traupmann, 1978). Moreover, most of these studies did not even show that overpaid people experience feelings of guilt, but showed different effects. For example, Sprecher (1986) demonstrated that

men experienced only a moderate level of guilt when being overpaid, but to a lesser extent than they experienced anger, while for women guilt was not even one of the negative emotions strongly related to overpayment. Also, Michaels et al. (1984) could not support the hypothesis that overbenefitted people experience feelings of guilt. Furthermore, most studies (Austin et al., 1980; Hassebrauck, 1986; Walster, Walster, & Traupmann, 1978) that supported the hypothesis that overpaid people felt more guilty than underpaid people did not show that overpaid people actually felt guilty. In fact, in most studies overpaid people indicated guilt feelings below the midpoint of the scale (see Austin et al., 1980; Hassebrauck, 1986; Walster, Walster, & Traupmann, 1978). That is, in most studies people did not indicate feeling guilty. Thus, although the idea that overpaid people experience feelings of guilt has become accepted as a fact in the literature, a close inspection of the findings reported suggest that this effect is less strong than is commonly assumed.

On the other hand, it is not surprising that the general opinion is that overpaid people feel guilty. We note that Greenberg (1990) suggested that people think one *should* feel guilty for being overpaid, but that this could be more the result of a desire to appear socially acceptable than the desire to express their true feelings (Rivera & Tedeschi, 1976). Therefore, one purpose of Study 4.1 is to investigate whether or not people experience feelings of guilt. Thus, to summarize, Study 4.1 investigates on a unipolar scale whether overpaid participants experience guilt or not, on a unipolar scale whether overpaid participants experience feelings of uneasiness or not, and on a bipolar scale whether overpaid participants more strongly experience feelings of guilt versus uneasiness.

In the few earlier equity studies that measured guilt, guilt was assessed on multiple option scales such as 7-point scales (Austin et al., 1980; Hassebrauck, 1986; Michaels et al., 1984; Sprecher, 1986; Walster, Walster, & Traupmann, 1978) and we will include these 7-point scales in Study 4.1 as well. Furthermore, we will extend the existing literature on overpayment by using different measurement methods. We argue that by using multiple option scales to measure people's reactions to being overpaid, there is more room for the above-mentioned socially desirable responding: When choosing among seven options, as in the case where participants respond on a 7-point scale, people can slightly adjust their answers toward a more desirable answer. However, these socially desirable responses can be constrained by giving

people a forced choice, such as asking them to give their answers on a dichotomous measure (Stoeber, Dette, & Musch, 2002; Wright, Newman, McCormick, & Harding, 1994). Following this line of reasoning, people who do not feel guilty are probably less reluctant to slightly adjust their response in saying, for example, they feel somewhat guilty, than to say they feel guilty as opposed to not guilty. Therefore, we have used dichotomous questions in addition to the 7-point scales that were in line with earlier equity studies (Austin et al., 1980; Hassebrauck, 1986; Michaels et al., 1984; Sprecher, 1986; Walster, Walster, & Traupmann, 1978).

In Study 4.1, participants were asked to imagine that they had worked together with another student on a paper and they both had worked equally hard, but they received a higher grade for the paper than the other student. In this way, all participants of Study 4.1 were exposed to a situation in which they were overpaid and we assessed how they reacted to this outcome distribution.

Method

Participants and design. Sixteen students (3 men and 13 women) at Utrecht University participated in the study and were paid for their participation.

Experimental procedure. Participants worked on the experimental tasks and answered the questions that constituted the dependent variables after participating in other, unrelated studies. The studies lasted a total of 40 minutes, and participants were paid 5 Euros (about \$5 U.S. at the time the experiment was conducted) for their participation. On arrival at the laboratory, participants were led to separate cubicles, each of which contained a computer with a monitor and a keyboard. The computers were used to present the stimulus information and to measure the dependent variables.

First, participants were asked to imagine the following situation:

Together with another student you have completed an assignment and you both worked equally hard. You both turned in the same report, but it appears that the other student has received a lower grade.

After participants had read the scenario, they were asked questions pertaining to the dependent variables. They first rated to what extent they felt guilty (1 = *not at all guilty*, 7 = *very guilty*) about their grade. This question was asked to show that people might say they feel guilty when it is asked in this way, thereby replicating findings reported in equity research. After this, participants were asked whether they felt guilty

or not about their grade in a dichotomous manner (1 = *not guilty*, 2 = *guilty*), to test our hypothesis that dichotomous measures raise less social desirable influences and hence less strong guilt findings. Then, participants were asked whether they felt more uneasy than guilty about their grade or the other way around (1 = *more uneasy than guilty*, 4 = *equally uneasy and guilty*, 7 = *more guilty than uneasy*) and dichotomously whether they felt uneasy or guilty (1 = *uneasy*, 2 = *guilty*). Finally, participants were asked whether they felt uneasy (1 = *not at all uneasy*, 7 = *very uneasy*) about their grade and dichotomously whether they felt uneasy or not (1 = *not uneasy*, 2 = *uneasy*).

Results

Guilty or not guilty. Participants were asked whether they felt guilty or not about their overpayment. To analyze the data of the 7-point scale, we looked at the mean scores of the answers to this question. The results showed that participants generally did feel somewhat guilty about their overpayment ($M = 4.8$). Interestingly, participants of Study 4.1 were so strongly influenced by our overpayment stimulus materials that on this unipolar guilt measure their mean answers were above the midpoint of the scale, $F(1, 15) = 4.60, p < .05$. This suggests that the experience of overpayment induced in Study 4.1 was so strong that considerable guilt feelings could be found on a unipolar 7-point scale. Indeed, as hypothesized in the introduction, when no other psychological concepts (i.e., uneasiness) are offered, people indicate to feel fairly guilty when a 7-point scale is used. We will return to this issue in the Discussion.

Although the findings on the unipolar 7-point scale seemingly supports theoretical statements made in equity literature in that the experience of overpayment should lead to feelings of guilt (e.g., Hassebrauck, 1986; Homans, 1974; Montada, 2002; Van Yperen & Buunk, 1990; Walster, Walster, & Berscheid, 1978), as predicted a different picture emerges when using a dichotomous measure. That is, in correspondence with our line of reasoning, the results of a binomial test (Siegel & Castellan, 1988) on the answers to the unipolar dichotomous question showed that more participants felt not guilty (70 %) about being overpaid than felt guilty (30 %), and this distribution (70-30) was significantly different from chance, $p = .0384$ (see Siegel & Castellan, 1988). Apparently, in accordance with our prediction, in what

way feelings of guilt are assessed makes a difference in how people respond to being overpaid. Whereas findings obtained by means of a 7-point scale revealed that overpaid people felt somewhat guilty, results of a dichotomous question showed that a majority of overpaid people did not feel guilty.

Uneasy or guilty. Participants were asked whether they felt more uneasy or more guilty about their overpayment. To analyze the data of the 7-point scale, we looked at the mean scores of the answers to this question. The results showed that participants generally felt more uneasy than guilty about their overpayment ($M = 2.3$). Participants felt significantly more uneasy than the midpoint of the scale, $F(1, 15) = 56.54$, $p < .001$. Results of the bipolar dichotomous question showed the same pattern: All participants (100 %) indicated that they did feel uneasy instead of guilty. Not surprisingly, the distribution of this question (100-0) was significantly different from chance, $p = .0000$. Thus, in correspondence with our line of reasoning, on both dichotomous and 7-point measures participants indicated feeling uneasy rather than feeling guilty.

Uneasy or not uneasy. Participants were asked whether they felt uneasy or not uneasy about their overpayment. To analyze the data of the 7-point scale, we looked at the mean scores of the answers to this question. The results showed that participants generally did feel uneasy about their overpayment ($M = 5.3$). Participants felt significantly more uneasy than the midpoint of the scale, $F(1, 15) = 43.81$, $p < .001$. Results of a binomial test on the unipolar dichotomous question showed the same pattern: More participants felt uneasy (80 %) about being overpaid than felt not uneasy (20 %), and this distribution (80-20) was significantly different from chance, $p = .0106$. Thus, when participants were asked whether they felt uneasy or not when being overpaid, they reported feeling uneasy.

Discussion

The results of Study 4.1 provide evidence for our hypothesis: People can report feeling guilty about being overpaid, but only when it is measured by means of multiple-option unipolar guilt measures (cf. Austin et al., 1980; Hassebrauck, 1986; Michaels et al., 1984; Sprecher, 1986; Walster, Walster, & Traupmann, 1978), such as the 7-point measure in our study (1 = *not at all guilty*, 7 = *very guilty*). In addition, in further correspondence with our predictions, when we measured feelings of guilt

by means of dichotomous questions, socially desirable responses may have been more constrained (Stoeber et al., 2002; Wright et al., 1994), the result was that most people indicated not feeling guilty. Furthermore, when we gave people the possibility to choose between feeling guilty or uneasy, by asking them to complete bipolar rating scales, they indicated feeling more uneasy than guilty on both dichotomous and 7-point scales. And finally, when we asked people whether they felt uneasy or not about being overpaid, most participants reported feeling uneasy on both dichotomous and 7-point scales. Together these findings suggest that earlier reports of people feeling guilty about being overpaid might have been caused by the way responses were measured. In correspondence with our line of reasoning these findings may suggest that in earlier research people perhaps did not feel guilty when they were overpaid, but that they reported this because experimenters did not give an alternative to feelings of guilt or because they wanted to portray a more desirable image of themselves (cf. Rivera & Tedeschi, 1976). The results of Study 4.1 suggest that generally people do not feel guilty when confronted with being overpaid, but that they do feel uneasy in this situation. Before strong conclusions are drawn however, it is important to replicate these findings in a second study.

In Study 4.2, we wanted to exclude the possibility that the findings of Study 4.1 were caused by the order in which the dependent variables were measured. That is, we wanted to exclude the possibility that the order of questions, whether the uneasy-question preceded the guilt-question or whether the uneasy-question succeeded the guilt-question, was responsible for the findings in Study 4.1. Furthermore, we wanted to replicate the findings of Study 4.1 in a study in which participants really experienced being overpaid. In Study 4.2 we will use dichotomous questions because these measures might be less susceptible to socially desirable responses, compared to 7-point scale measures, and therefore might tap people's true responses in a more accurate way (Stoeber et al., 2002; Wright et al., 1994).

Study 4.2 was constructed following the experimental paradigm developed by Van den Bos, Lind, et al. (1997, Experiment 2). In this experimental situation, participants completed tasks together with another participant and learned that their own task performance was comparable to the other participant's task performance. The outcome that participants received for their performance was better than the outcome received by the other participant as all participants were told that they would

receive more money for their participation in the study than the comparable other participant. Feelings of guilt and uneasiness were the main dependent variables. We varied the order in which the guilt and uneasiness questions were measured.

Study 4.2

Method

Participants and design. Eighty-three students (19 men and 64 women) at Utrecht University participated in the study and were paid for their participation. Participants were randomly assigned to one of two (order of questions) conditions.

Experimental procedure. Participants worked on the experimental tasks and answered the questions that constituted the dependent variables before participating in other, unrelated studies. Participants were told that the studies would last a total of 40 minutes, and that they would be paid 5 Euros for their participation. Participants were invited to participate in a study on how people perform tasks. On arrival at the laboratory, participants were led to separate cubicles, each of which contained a computer with a monitor and a keyboard. The computers were used to present the stimulus information and to measure the manipulation checks and the dependent variables.

In the first part of the instructions, participants were informed that they participated in the experiment with another person. The experimental procedure was then outlined to the participants: After the experimental tasks were explained, participants would work on the tasks until they would have completed 30 tasks. Furthermore, participants were informed that they could earn more money for their participation in the study, dependent on how well they performed on the tasks (actually, every participant was given 6 Euros for his or her participation). A practice question was posed to ensure comprehension of this experimental procedure. If participants gave a wrong answer to a question, the correct answer was disclosed, and main characteristics of the experimental procedure were repeated.

The tasks were then explained to the participants. Figures would be presented at the center of the computer screen. Each figure consisted of 180 squares. Each square was either white or black and was presented on the screen for five seconds.

Participants had to estimate the number of black squares in the figure presented on the screen. It was explained to them that their answers would be correct whenever they deviated no more than five squares from the real number of black squares present in the figure. When participants had indicated their estimate, another figure with different numbers of white and black squares would be presented on the screen. The number of tasks that the participant had completed (i.e. the number of black squares in figures that the participant had estimated) was presented on the lower left side of the screen.

After participants had completed 30 tasks, they were told they made 19 correct estimates and that the other participant had estimated an equivalent number of figures correctly. At this moment participants were asked three questions that measured the comparability of the other participant: To assess whether participants thought of the other participant as a comparable person, they were asked to what extent the other participant worked equally hard in reference to the participants themselves (1 = *much worse*, 4 = *equally hard*, 7 = *much better*), to what extent the other participant did his or her best in reference to the participants themselves (1 = *much worse*, 4 = *equally*, 7 = *much better*), and to what extent the other participant was good in performing the tasks in reference to the participants themselves (1 = *much worse*, 4 = *equally good*, 7 = *much better*).

Participants were then told that the experimenter would decide whether they would receive more money for their participation. It was communicated to the participants that the other participant would receive 5 Euros for participating in the experiment, but that they themselves would receive 6 Euros. After this, participants were asked questions pertaining to the dependent variables. Half of the participants were first asked the unipolar question whether they felt guilty or not (1 = *not guilty*, 2 = *guilty*) about their payment and then the bipolar question whether they felt guilty or uneasy (1 = *uneasy*, 2 = *guilty*). The other half of the participants completed these questions in reverse order. Because these dependent variables were sufficient for answering our research questions, we constrained ourselves in this study to these two dependent variables.

Results

Guilty or not guilty. Participants were asked whether they felt guilty or not about their payment. To analyze the data, we looked at the percentages of the answers to this unipolar question. The results showed that more participants did not feel guilty about their overpayment (80 %) than did feel guilty (20 %), this distribution (80-20) is significantly different from chance, $p = .0000$. There was no statistically significant difference between the participants who answered this question as the first question (30 % indicated that they felt guilty) or as the second question (10 % indicated that they felt guilty), $\chi^2(1) = 3.42$, $p < .07$. However, the difference was marginally significant, so there was a tendency for the participants who answered the guilt question first to report more feelings of guilt than the participants who answered the guilt question after they had answered the uneasy versus guilt question. This finding was not inconsistent with our general prediction as will be discussed in the Discussion of Study 4.2.

Uneasy or guilty. Participants were asked whether they felt uneasy or guilty about their payment. To analyze the data, we looked at the percentages of the answers to this bipolar question. The results showed that almost all participants felt uneasy about their overpayment (95 %) instead of guilty (5 %), and this distribution (95-5) was significantly different from chance, $p = .0000$. There was no difference between the participants who answered this question as the first question (95 % indicated that they felt uneasy instead of guilty) or as the second question (95 % indicated that they felt uneasy instead of guilty), $\chi^2(1) = 0.00$, ns.

Discussion

The results of Study 4.2 replicate the results we found in Study 4.1, suggesting that people do not feel guilty about being overpaid, but instead experience feelings of uneasiness about their overpayment. Furthermore, we ruled out the alternative explanation of an order effect, as we found no significantly different effects of the order in which the bipolar questions of uneasy versus guilt were assessed. People indicated feeling uneasy, independent of the order of the questions. We did find marginally significant differences in the results concerning the unipolar question of guilty versus not guilty. People showed a tendency to feel somewhat more guilty when the guilt question preceded the uneasy-guilt questions compared to when

the guilt question succeeded the uneasy-guilt questions. Thus, in line with our reasoning, when an alternative for feeling guilty (i.e., experiencing feelings of uneasiness) is provided first, people indicate they do not feel guilty about being overpaid.

In equity research, it is usually assumed that people feel guilty about being overpaid (see, e.g., Hassebrauck, 1986; Homans, 1974; Van Yperen & Buunk, 1990; Walster et al., 1973; Walster, Walster, & Berscheid, 1978). However, we have argued that research that supports this hypothesis has been scarce. Furthermore, we have demonstrated in Studies 4.1 and 4.2 that these measures could have been obtained by researchers who do not offer an important alternative for feeling guilty, and that these kinds of restraints may well have affected participants' responses to this question. In our first two studies we have demonstrated that people do not indicate feeling guilty when being overpaid, but that they do feel uneasy when being overpaid. When people actually have a choice between indicating feeling guilty or uneasy about being overpaid, people indicate feeling uneasy rather than feeling guilty. Therefore, the concept of guilt may not be needed to explain people's reactions to being overpaid. A more accurate and perhaps sufficient explanation could be that people who are overpaid experience feelings of uneasiness.

In line with Jacques (1961), we argue that people experience feelings of uneasiness because they are influenced by two conflicting sources. On the one hand, overpaid people receive a relatively high outcome, which makes them pleased, but on the other hand, overpaid people may realize that the outcome is unfair (Messick & Sentis, 1983). In Study 4.3 we would like to support the idea that people are in conflict when reacting to being overpaid in another way than was done in Studies 4.1 and 4.2. We argue that when people are indeed influenced by these two conflicting sources, it should be relatively difficult for them to combine opposing pieces of information (e.g., Fiske & Taylor, 1991). Therefore, we propose that it will take people more time to respond to being overpaid, compared to reactions to outcome distributions in which the above-mentioned conflict is not experienced. In Study 4.4 we will continue this line of reasoning and we will make it more difficult for people to respond to being overpaid.

In Study 4.3, participants responded to a manipulation of outcome distributions. The study was constructed following earlier research by Van den Bos et

al. (1998, Experiment 1). The outcome that participants received was held constant across conditions, and we varied whether the outcome was equal to the outcome of a comparable other person (equal payment condition), better than the outcome of the other person (overpayment condition), or worse than the outcome of the other person (underpayment condition). Main dependent variable was the time that participants needed to make outcome satisfaction judgments. Our hypothesis was that people would need more time to respond to being overpaid compared to being equally paid or underpaid.

Study 4.3

Method

Participants and design. Seventy-four female students at Utrecht University participated in the study and were paid for their participation. Participants were randomly assigned to one of the three outcome conditions (equal payment vs. overpayment vs. underpayment).

Experimental procedure. Participants read the scenario and answered the questions that constituted the dependent variables after participating in other, unrelated studies. The experiments lasted a total of 30 minutes, and participants were paid 4 Euros for their participation. On arrival at the laboratory, participants were led to separate cubicles, each of which contained a computer with a monitor and a keyboard. The computers were used to present the stimulus information and to measure the dependent variables.

First, participants were asked to imagine the following situation:

In the dorm where a friend of yours lives a room is vacant, for which you are going to apply. You know your friend pays 200 Euros for a comparable room.

This was followed by the outcome manipulation. Participants read the following sentences (manipulated information in italics):

You are informed that the rent that you will have to pay is *150/200/250* Euros.

After this, participants were asked how satisfied they were with the rent they had to pay (1 = *dissatisfied*, 2 = *satisfied*). The time that participants needed to answer this question served as the main dependent variable. When participants had answered this question, they were thoroughly debriefed and paid for their participation.

Results

Satisfaction judgments. Participants' satisfaction judgments showed a significant effect of outcome, $\chi^2(2) = 48.55, p < .01$. As expected, these results showed that satisfaction judgments about being underpaid and overpaid differed significantly from each other, $\chi^2(1) = 20.22, p < .01$; that satisfaction with equal payment and underpayment differed significantly from each other, $\chi^2(1) = 45.91, p < .01$; and that satisfaction with overpayment and equal payment differed significantly from each other, $\chi^2(1) = 6.41, p < .03$. When equally paid, more participants were satisfied with their outcome (100 %) than when overpaid (70 %), and when overpaid there were more participants satisfied with their outcome than when underpaid (0 %). This shows that we have successfully replicated the usual findings on satisfaction ratings in equity studies (Adams, 1965; Buunk & Van Yperen, 1991; Van Yperen & Buunk, 1990; Walster et al., 1973; Walster, Walster, & Berscheid, 1978).

Response latencies. Our main dependent variable was the time participants needed to indicate their outcome satisfaction judgments. To minimize the impact of long response latencies we followed procedures by Fazio (1990) and excluded one participant from our analyses that deviated more than three standard deviations from the mean. We then conducted an analysis of variance (ANOVA) which showed a significant main effect of the outcome manipulation, $F(2, 70) = 4.22, p < .02$. To interpret this effect we conducted a contrast-analysis (Kirk, 1982), to see if the response latencies in the overpayment condition indeed differed from those in the other two conditions. This analysis showed that in the overpayment condition, participants took significantly longer to give their satisfaction judgments than participants in the other two outcome conditions, $F(1, 71) = 7.22, p < .01$. Overpaid participants took significantly longer ($M = 1.6, SD = 0.9$) to give their satisfaction judgments, compared to participants who were underpaid ($M = 1.3, SD = 0.6$) and equally paid ($M = 1.1, SD = 0.40$). Underpaid and equally paid participants did not differ significantly in the time needed to make satisfaction judgments, $F(1, 71) =$

1.83, $p = .18$ (note that this latter contrast was orthogonal to the contrast of overpayment versus equal payment and underpayment we used in the first contrast analysis).

Discussion

The results of this study provided support for our hypothesis. People need more time to make satisfaction judgments about being overpaid, compared to being underpaid or equally paid. These findings suggest that when people are being overpaid, they indeed are more in conflict about how to respond, whereas they are less in conflict when they are underpaid or equally paid.

In Study 4.4 we wanted to extend and complement these findings. By making the conflict about how to respond more difficult, people should take more time to respond when being overpaid. One way to strengthen the conflict people experience would be to have them overpaid relative to a person with whom they have a close relationship. Clark and Mills (1979) described close relationships as relationships in which the partners are each motivated to act for the needs of the other, regardless of the expected reciprocal outcome for the self. Based on this research and other research concerning closeness (cf. Aron, Aron, Tudor, & Nelson, 1991; Batson, Early, & Salvarani, 1997), we reasoned that when people are overpaid in reference to a friend (as compared to being overpaid in reference to an unknown other), they may be more motivated to consider the outcomes of the other person in the situation, and therefore be less interested in solely their own outcomes. Therefore, we argued, it would be more difficult for people how to respond to being overpaid relative to a friend than relative to an unknown other. Based on this assumption, we expected people to need more time to respond to being overpaid in reference to a friend than when they are overpaid in reference to an unknown other.

Study 4.4 was constructed following the experimental paradigm developed by Van den Bos, Lind, et al. (1997, Experiment 2) in which participants completed tasks together with another participant and learned that their own task performance was comparable to the other participant's task performance. In the current study, we focus on the outcome distribution of greatest interest for this chapter: The outcome that participants received for their performance was better than the outcome received by the other participant. We varied whether the other participant was a friend of the

participant with whom the participant came to the study or an unknown other whom they had not met before and would not meet afterwards. Our main dependent variable was the time that participants needed to make outcome satisfaction judgments. These judgments were measured on 7-point scales in order to replicate the findings of Study 4.3 on more commonly used measures.

Study 4.4

Method

Participants and design. Forty-six students (5 men and 41 women) at Utrecht University participated in the study and were paid for their participation. Participants were randomly assigned to one of the two conditions (opponent: friend vs. unknown other)⁹.

Experimental procedure. Participants worked on the experimental tasks and answered the questions that constituted the dependent variables before participating in other, unrelated studies. The studies lasted a total of 30 minutes, and participants were paid 4 Euros for their participation. Participants were invited to participate in a study on how people perform tasks. On arrival at the laboratory, participants were led to separate cubicles, each of which contained a computer with a monitor and a keyboard. The computers were used to present the stimulus information and to measure the manipulation checks and the dependent variables.

In the first part of the instructions, participants were informed that they participated in the study with another person. For half of the participants this other person was a friend with whom they arrived at the laboratory, for the other half of the participants this was an unknown other whom they had not met before. The experimental procedure was then outlined to the participants: After the experimental tasks were explained, participants would work on the tasks for 10 minutes. Furthermore, participants were informed that, after all participants had participated, a lottery would be held among all participants. The winner of this lottery would receive 50 Euros. (Actually, after all participants had completed the experiment, the 50 Euros

⁹ These data were part of a broader dataset. In the present chapter, we will only use the data that are relevant here.

were randomly given to a participant; a procedure to which none of the participants objected.) Participants were told that a total of 200 lottery tickets would be divided among all participants. Furthermore, participants were told that after they completed the tasks the experimenter would divide some lottery tickets between them and the other participant. Six practice questions were posed to ensure comprehension of the lottery. If participants gave a wrong answer to a question, the correct answer was disclosed, and the main characteristics of the lottery were repeated.

Then the tasks were explained to the participants: Participants were asked to answer questions that measured general knowledge for 10 minutes. They were told that both they and the other participant (friend or unknown other) had to answer the same questions. After these tasks had ended, participants were told how many questions they had answered correctly, and it was communicated to the participants that the other participant had answered an equivalent number of questions correctly (cf. Van den Bos, Lind, et al., 1997). To assess whether participants thought of the other participant as a person who was comparable in the amount of inputs he or she provided (cf. Van den Bos, 1999; Van den Bos, Lind, et al., 1997), they were asked to what extent the other participant had performed well when answering the general knowledge questions relative to the performance of the participant themselves (1 = *much worse*, 4 = *equally*, 7 = *much better*), to what extent the other participant did his/her best when answering the knowledge questions relative to the participant themselves (1 = *much worse*; 4 = *equally*; 7 = *much better*), and to what extent the other participant was good in performing the knowledge questions relative to the participant themselves (1 = *much worse*, 4 = *equally*, 7 = *much better*).

Participants were then told that the experimenter would divide the lottery tickets between them and the other participant. It was communicated to the participants that they received 3 lottery tickets and that the other participant received 1 lottery ticket.

Participants were then asked questions pertaining to the dependent variables and manipulation checks. Satisfaction judgments were measured by asking participants whether they were satisfied with their outcome (1 = *very dissatisfied*, 7 = *very satisfied*) and whether they were content with their outcome (1 = *very discontent*, 7 = *very content*). Because participants' answers to these two items were highly correlated ($r = .83, p < .001$), we averaged their answers to form a reliable scale of

satisfaction judgments ($\alpha = .89$). The response latencies of these satisfaction judgments were the main dependent variables. When participants had answered these questions, and had completed the other studies in which they would participate, they were thoroughly debriefed and paid for their participation.

Results

Satisfaction judgments. Participants' outcome satisfaction judgments yielded a significant effect of opponent, $F(1, 44) = 10.09, p < .01$. As expected, the results showed that participants were less satisfied with being overpaid when their opponent was a friend ($M = 4.5, SD = 0.3$) than when their opponent was an unknown other ($M = 5.3, SD = 0.3$).

Response latencies. Our main dependent variable was the time participants needed to indicate their outcome satisfaction judgments. In Study 4.4, no participant deviated more than three standard deviations from the mean, so no participants had to be excluded from the data set (Fazio, 1990). As hypothesized, an ANOVA showed a main effect of opponent, $F(1, 44) = 4.63, p < .05$. Participant needed more time to judge their overpayment when their opponent was a friend ($M = 6.7, SD = 0.6$) than when their opponent was an unknown other ($M = 4.8, SD = 0.6$).

Discussion

The findings of Study 4.4 provided support for our hypothesis: People who are being overpaid in reference to a friend, compared to participants who are overpaid in reference to an unknown other, need longer to decide whether they are satisfied with this outcome. By introducing a friend, people became more motivated to act for the needs of the other, regardless of the expected reciprocal outcome for the self (Clark & Mills, 1979). Therefore, we argue, when a friend was involved, it was more difficult for people to respond to the conflict caused by being overpaid, resulting in slower responses.

General Discussion

In the current chapter we have tried to understand the social psychology of being better off than others. More specifically, we have explored how people react to being overpaid relative to another person who is comparable in the amount of inputs provided. We have investigated what the psychological consequences of being overpaid are. To this end, we have based our line of reasoning on equity theory (see, e.g., Adams, 1965), as this is probably the most developed framework for understanding how people react to being overpaid. Equity studies have shown that people who are being overpaid are moderately satisfied with this overpayment and have given different explanations for this finding: The founders of equity theory have ascribed this to feelings of uneasiness (Adams, 1963a, 1965; Austin et al., 1980; Jacques, 1961), whereas subsequent researchers have ascribed this to feelings of guilt (Hassebrauck, 1986; Homans, 1974; Montada, 2002; Van Yperen & Buunk, 1990; Walster, Walster, & Berscheid, 1978). In the current chapter we have argued, in line with early equity researchers, that overpaid people are in conflict between what they want and what they believe to be right, and that therefore overpaid people experience feelings of uneasiness rather than guilt. In four studies we have investigated the underlying psychological process that drives people's reactions to being overpaid.

In the first two studies presented here, we investigated different reactions that people display as a consequence of being overpaid. We have examined whether people feel guilty when confronted with being overpaid or whether they portray a more general feeling of uneasiness. These studies revealed that people indicate feeling guilty with being overpaid, but only when this was measured on a 7-point scale and no alternative psychological concepts (i.e., uneasiness) were offered. Furthermore, when people are given a choice between stating they experienced feelings of guilt or feelings of uneasiness, they indicate not feeling guilty when being overpaid, but they report feelings of uneasiness. We reasoned that earlier guilt findings are perhaps caused by not offering people an alternative explanation to guilt for their feelings and by the way in which guilt has been measured. Perhaps overpaid people report feeling guilty because of the label that is handed to them by the experimenter and their impression that they should feel guilty (Greenberg, 1990). Our

results give support for the idea that overpaid people do not experience feelings of guilt, but do experience feelings of uneasiness.

In Study 4.3 we examined whether people who are overpaid need longer to make outcome satisfaction judgments compared to people who are underpaid or equally paid. The results of this study demonstrated that people indeed need longer to decide on their satisfaction when they are overpaid, suggesting that they have to combine sources of information that are opposite to each other: On the one hand, overpaid people receive a relatively high outcome, which makes them pleased, but on the other hand, overpaid people may realize that the outcome is unfair (Messick & Sentis, 1983). Overpaid people are pulled in two opposite directions and this might cause the feelings of uneasiness these people have. Thus, in line with our predictions, the results of Study 4.3 suggest that people who are being overpaid indeed might be influenced by two conflicting sources.

Furthermore, Study 4.4 gives additional support for this idea. In this study we tested whether people reacted differently when they were overpaid in reference to a friend compared to being overpaid in reference to an unknown other. By introducing a friend, people become more motivated to act for the needs of the other, regardless of the expected reciprocal outcome for the self (Clark & Mills, 1979). Study 4.4 shows that when a friend is present people need longer to respond, suggesting that when being overpaid in reference to a friend the conflict between what makes them pleased and what they believe to be right indeed becomes more difficult.

Here we would like to take the opportunity to go somewhat deeper into the importance of the findings in this chapter. Why is it so important to make a distinction between feelings of guilt and feelings of uneasiness? We would like to emphasize that it is important to know what kind of emotions people are experiencing, to describe what *specific* emotions people feel (see, e.g., Roseman et al., 1994). Different emotions can have different consequences and therefore, it is important to be accurate in the description of emotions. By ascribing the emotion of guilt to people's reactions to being overpaid, one can expect different behavioral consequences than by ascribing the emotion of uneasiness to people's reactions to being overpaid. For example, the emotion of guilt in general creates a situation in which people want to compensate the disadvantaged (Baumeister, Stillwell, & Heatherton, 1994; Niedenthal, Tangney, & Gavanski, 1994; Tangney et al., 1996), but

the emotion of uneasiness might not at all create a desire for compensation but perhaps has other significant consequences such as feeling uncertain about oneself (see, e.g., Van den Bos & Lind, 2002). If one wants to predict accurately what people's behavior will be and describe correctly the psychology of people that are better off than others, then one has to be very specific in describing what people experience or feel. A small difference in emotions and feelings, such as guilt versus uneasiness, can have major consequences for predicting people's behavior (see, e.g., Frijda, 1986). Future research may want to investigate possible consequences of experiencing feelings of uneasiness.

Furthermore, we argue here that this difference in emotions is also important for social psychologists' insights into the concept of overpayment and related issues. That is, guilt is a moral emotion (Tangney, 1991; Tangney et al., 1996); therefore, if people feel guilty about being overpaid this implies that they experience overpayment as being immoral. Describing feelings of guilt to overpayment implies that one should think of the concept of overpayment as being morally driven. However, our findings suggest that people do not feel guilty but that they feel uneasy. Because the feeling of uneasiness is not a moral emotion, experiencing feelings of uneasiness implies that overpayment has less of a moral connotation than previously thought. Describing feelings of uneasiness to overpayment makes the concept of overpayment inequity-driven, as suggested by Jacques (1961) and Adams (1965), and not so much morally driven. Thus, describing different emotions to the experience of being overpaid tells different stories about how people experience the concept of overpayment.

Related to this is an implication that taps into the application of our findings. When people that are better off than others in our society have their advantages pointed out, it is often assumed that they should and will feel guilty about their advantages. However, we have demonstrated that people that are better off than others do not necessarily feel guilty about their advantages. Therefore, when pointing out their advantages to advantaged people one should focus on the uneasiness they feel about being better off and not on guilt. Calling attention to people's uneasiness about being better off may work much better than calling attention to something they do not really feel. As a result, to get people that are better off than others to comply with something, for example donating money for disadvantaged people in society, one should use the right interventions and appeal to the right emotions.

We would like to emphasize here that we do not argue that people will never feel guilty when they are better off than others. In most real-life situations of being better off and in the specific situations we have examined, people do not have influence on the outcomes they receive. Thus, in our studies people cannot help being better off, they can do nothing about it. This is an important fact. Whenever people can exert influence on the outcomes they receive, it is possible for people to feel guilty about their outcomes (see, e.g., Frijda, 1986; Roseman et al., 1990; Roseman et al., 1994; Tangney, 1991; Tangney et al., 1996), as demonstrated by Montada et al. (1986). These authors have shown that to feel existential guilt about being overpaid, one's advantage must be seen to result from controllable distributions. Thus, with the studies presented here we show that when people do not have control over the outcomes they receive, they do not necessarily feel guilty about their advantages. Guilt might be an unnecessary explanation and might not always be the most accurate explanation. Moreover, we have demonstrated that people do experience feelings of uneasiness about being better off than others in such circumstances.

Future research might also examine whether individual difference variables are of interest to people's reactions to being overpaid. For example, a possible individual difference variable that could influence people's reactions is their social value orientation. Individuals value not only their own outcomes but also the outcomes of others, or the manner in which their own outcomes relate to others' outcomes (Van Lange, 1999). A common distinction that is made in this regard is the distinction between people with prosocial preferences and people with individualistic and competitive preferences. One might easily imagine that the latter group of people will show higher satisfaction and will feel less uneasy with being overpaid than the former group of people. Another possible individual difference variable that could be of interest is, for example, adherence to strict religious beliefs. We did not incorporate these measures in our research, but we will definitely encourage future research that might want to look into those or other individual differences.

In the current chapter we have tried to get a better understanding of the social psychology of being better off than others. We think we have made a good start by conducting the research in the present chapter; however, it is difficult to look into people's minds. In this regard there are still some interesting issues that can be investigated. For example, future research may want to further examine the conflict

between what makes people pleased and what they believe to be right, and researchers might develop measures that can tap people's immediate feelings or thoughts regarding this issue. Furthermore, research into the reactions of people that are better off than others can direct researchers to more applied forms of research. For example, how one can encourage advantaged people to take care of the less privileged people in this world could be interesting. Thus, we think the current research has instigated a whole area of research into how people deal with being better off than others.

Although it is difficult to look into people's minds, we hope to have made an important contribution. By means of the studies presented here we got a closer look at how people that are better off than others think. In doing so, the present studies have made a contribution to the existing literature about people's reactions to being overpaid and we have expanded the ideas of equity theory. That is, in correspondence with the line of reasoning presented here, the current findings show that overpaid people experience a conflict and feelings of uneasiness rather than guilt. With these studies we have shown how important it is to take a step back and reconsider things that up to now were assumed to be facts, such as the importance of guilt in the psychology of the overpaid. With the current research we hope to have enlarged the understanding of how people react to being overpaid in particular, and to have contributed more generally to insights into the social psychology of being better off than others in this world.

CHAPTER 5

When Fairness is Important: Reactions to Being Inequitably Paid in Communal Relationships¹⁰

The concern for justice is a universal human characteristic as people are intrinsically motivated to behave fairly and believe that justice exists in the world (e.g., Lerner, 1980, 1981). This said, however, there are important situational variations in the importance and meaning of justice across social situations (see, e.g., Tyler & Smith, 1998). In the present chapter, we focus on the question of when justice is important to people. We will explore the social conditions under which the importance of justice may change in social interactions. More specifically, we will examine how different types of relationships affect people's reactions to equitable and inequitable situations. That is, we will argue that having a communal relationship with interaction partners, as opposed to having an exchange relationship, plays an important role in evaluating outcome distributions and more specifically inequitable outcome distributions. With the current research, we attempt to integrate the literature on equity theory with the literature on communal and exchange relationships.

Equity Theory

Equity theory concerns what people think is equitable and fair and how people react to equitable and inequitable outcomes (see, e.g., Adams, 1965; Walster et al., 1973; Walster, Walster, & Berscheid, 1978). The basic principle underlying equity theory is that there should be a balance between inputs and outcomes of two persons. Equity theory distinguishes between equitable and inequitable outcome distributions. Equity exists for people whenever they perceive that the ratio of their inputs to outcomes is equal to the input-outcome ratio of a comparable other person. To illustrate, it is generally perceived as equitable and fair if two people who have

¹⁰ This chapter is based on: Peters, S. L. & Van den Bos, K. (2004b). *When fairness is important: Reactions to being inequitably paid in communal relationships*. Manuscript submitted for publication.

worked equally hard receive an equal amount of money for their work. Inequity, on the other hand, exists for people whenever they perceive that the ratio of their outcomes to inputs is unequal to the ratio of another person's outcomes to inputs. Inequity results for people not only when they are relatively underbenefitted, but also when they are relatively overbenefitted. Inequitable outcome distributions (i.e., being underpaid and being overpaid) are studied in this chapter, together with equitable outcome distributions.

On the basis of equity theory (e.g., Adams, 1965; Austin et al., 1980; Austin & Walster, 1974; Buunk & Van Yperen, 1989; Van den Bos, Lind, et al., 1997), it can be argued that, when forming judgments of outcome satisfaction, individuals who are faced with inequity will experience distress and will be less satisfied than individuals who are faced with equity. As noted by Adams (1965): "There can be little doubt that inequity results in dissatisfaction" (p. 283). Thus, receiving equitable outcomes results in satisfaction, suggesting that fairness concerns have a big impact on outcome evaluations. Related findings show that people are only moderately satisfied with overpayment, more so than with underpayment, and interestingly, less so than with equitable payment. These findings are generally viewed to suggest that fairness concerns have a big impact on outcome evaluations (Montada, 2002; Chapter 3).

At the same time, however, Walster and colleagues (1973) have argued that equity theory rests on the assumption that people are selfish. According to this line of reasoning, people want to live a nice life, and for these and other hedonistic reasons pursue their self-interest (see, e.g., Hobbes, 1651/1904). There are numerous situations that motivate people to pursue their self-interest (for overviews, see, e.g., Komorita & Chertkoff, 1973; Schwartz, 1986). In other words, it is generally assumed that self-interest is also important to people. Thus, support has been found both for the notion that fairness is important to people (Montada, 2002; Chapter 3) and for the idea that people pursue their self-interest (see Komorita & Chertkoff, 1973; Schwartz, 1986). On the basis of research on judgment and choice (e.g., Boles & Messick, 1995; Loewenstein et al., 1989; Messick & Sentis, 1985), we will argue here that both motives (fairness and self-interest) may affect people's reactions to the overpayment and underpayment outcome distributions outlined earlier.

The present chapter investigates the social conditions that determine when fairness is important to people. For this purpose, we focus on the effects that different

types of social interactions may have on how people react to equitable and inequitable outcome distributions. It is important to note here that in equity experiments, participants usually interact with other participants who they have not met before. Interestingly, however, it is much more common for people in their daily lives to interact with people they know than to interact with unknown others. More specifically, we think, for reasons to be specified below, that it would be especially interesting to see what happens when people would evaluate outcome distributions with regard to others who are close to them instead of unknown others. Surprisingly, this has, to our knowledge, not been investigated before. We think that the type of relationship people have with their interaction partner might have a large influence on how they react to inequitable outcomes, and therefore, building on the literature on close relationships, we will focus on people's reactions to equitable and inequitable outcome distributions in both communal and in exchange relationships.

Communal and Exchange Relationships

Clark and Mills (1979, 1993; Mills & Clark, 1982) have made an important distinction between different types of relationships people have with interaction partners. In most of their work, these authors make a distinction between communal relationships and exchange relationships. In communal relationships people feel a mutual responsibility for one another's needs. Communal relationships are often exemplified by relationships between friends, romantic partners, and family members. In exchange relationships, on the other hand, people are not motivated to act for the needs of the other. Exchange relationships are often typified by relationships between strangers, acquaintances, and business associates. The distinction between communal and exchange relationships is based upon implicit rules governing the distribution of benefits in relationships (Clark & Mills, 1979, 1993; Mills & Clark, 1982). This focus on distributions in relationships makes it even more surprising, in our opinion, that the link between, on the one hand, communal and exchange relationships, and on the other hand, how people react to outcome distributions has not been studied before. Here, we integrate the literature on equity evaluations with the literature on communal and exchange relationships.

The most common way of manipulating communal versus exchange relationships is having people interact with friends versus unknown others (see, e.g., Clark & Mills, 1979; 1993; Clark, Mills, & Corcoran, 1989; Mills & Clark, 1982). In this chapter, we extend on this research tradition by comparing how satisfied people are with equitable and inequitable outcome distributions when they interact with friends versus when they interact with unknown others. One of the reasons why we think it is interesting to study the impact of communal and exchange relationships on evaluations of outcome satisfaction is because this can be related to the literature on the closeness of an interaction partner. For example, Kelley and Thibaut (1978) have shown that members of a close relationship each have a pattern of perceived interdependence of outcomes in which partners and joint benefits are expected in the long run to benefit the self. Similarly, Aron and Aron (1986; Aron, Aron, et al., 1991) have suggested that in close relationships the other is included in the self. In other words, in close relationships the other in a way merges with the self and the two persons can be considered to form a team. This is illustrated, for example, by the fact that in close relationships people act as if some or all aspects of the partner are partially the person's own (Aron et al., 1991) and people in close relationships experience a sense of "we-ness" (see, e.g., Hatfield, 1982; McDonald, 1981).

Communal and Exchange Relationships in Inequitable Situations

Research on the effects of interacting with friends versus unknown others has shown that people who interact with friends, compared to those who interact with unknown others, attend more to the other's needs (Clark et al., 1989), help the other more (Clark, Ouellette, Powell, & Milberg, 1987), and do not keep track of individual inputs into the relationship (Clark, 1984; Clark et al., 1989). In line with this research tradition, we argue that when people are confronted with friends as interaction partners, both their own and their friends' outcomes matter to them. When interacting with friends people are motivated to attend to the needs of their friends (Clark & Mills, 1979), and therefore they are concerned not only with their own outcomes, but also with their friends' outcomes. When we apply this reasoning to research based on

equity theory, we come to the following predictions regarding the three above-identified outcome distributions.

From earlier equity research we know that people feel dissatisfied with being *underpaid* when interacting with unknown others (see, e.g., Adams, 1965; Austin et al., 1980; Van den Bos, Lind, et al., 1997). It is neither fair nor nice to receive a relatively bad outcome, and underpaid persons therefore will typically show negative reactions to this outcome distribution. However, as noted earlier, Clark and Mills (1979) have argued that people who interact with friends are motivated to attend to the needs of the other (see also Clark, 1984; Clark et al., 1987; 1989). It can thus be expected that being underpaid is less dissatisfying when this is done relative to friends as opposed to unknown others. We therefore predict here that underpaid people will be less dissatisfied when they are underpaid compared to friends than when they are underpaid compared to unknown others.

From earlier equity research we also know that people feel only moderately satisfied with being *overpaid* when interacting with unknown others (see, e.g., Adams, 1965; Austin et al., 1980; Van den Bos, Lind, et al., 1997). On the one hand it is nice to receive a relatively good outcome, but on the other hand it is not fair to receive a better outcome than a comparable other person. However, we would like to build our line of reasoning on Clark and Mills (1979), who have argued, as noted above, that people who interact with friends are motivated to act for the needs of the other (see also Clark, 1984; Clark et al., 1987; 1989). It can therefore be expected that being overpaid is less satisfying when this is done relative to friends as opposed to unknown others. Hence, we predict here that overpaid people will be less satisfied when they are overpaid compared to friends than when they are overpaid compared to unknown others.

Finally, equity research has shown that people feel satisfied with being *equitably paid* when interacting with unknown others (e.g., Adams, 1965; Austin et al., 1980; Van den Bos, Lind, et al., 1997) as it is both fair and nice to receive an equitable outcome compared to someone who has worked equally hard (see, e.g., Chapter 3). Again, we base our line of reasoning on Clark and Mills (1979), who have argued that people who interact with friends are motivated to attend to the needs of the other (Clark et al., 1989; cf., Clark et al., 1987; Clark, 1984). One prediction therefore could be that people will be even more satisfied with being equitably paid

when they interact with friends than when they interact with unknown others, because it could be even more satisfying when not only you but also your friend has received equitable outcomes (cf. Clark & Mills, 1979; Clark et al., 1989; cf., Clark et al., 1987; Clark, 1984). On the other hand, it should be noted that it could also be predicted that in general people already react in such a positive way when being equitably paid in the presence of unknown others (see, e.g., Adams, 1965; Austin et al., 1980; Van den Bos, Lind, et al., 1997), that the kind of relationship people have with their interaction partner may not make much of a difference, as receiving fair and equitable outcomes has such strong positive effects on evaluations of outcome satisfaction (see, e.g., Adams, 1965; Austin et al., 1980; Messick, 1993; Van den Bos, Lind, et al., 1997). Because both these predictions seem to have some logical value, we assess for exploratory purposes whether relationship type will or will not moderate people's reactions to being equitably paid.

Study 5.1

In Study 5.1, participants responded to outcome distributions that were constructed following earlier research by Van den Bos (1999, Experiment 1). In line with earlier research, participants in this study were exposed to situations in which there is another person who is comparable to participants with respect to the amount of input they have provided (e.g., Austin et al., 1980; Van den Bos, Lind, et al., 1997; Van den Bos et al., 1998). The outcome that participants received was held constant across conditions, and we varied whether the outcome was worse than the other person's outcome (underpayment condition), better than the outcome of the other person (overpayment condition), or equal to the outcome of a comparable other person (equal payment condition). We manipulated that the comparable other person was either a friend or an unknown other. The latter control condition was a replication of earlier equity studies. The dependent variables assessed how satisfied participants were with the outcomes they received (see, e.g., Van den Bos, Lind, et al., 1997; Van den Bos et al., 1998).

Method

Participants and design. A mixed-gender sample of one hundred and twenty-six students at the Free University Amsterdam participated in the experiment and were paid for their participation.¹¹ Participants were randomly assigned to one of the conditions of the 2 (relationship type: friend vs. unknown other) x 3 (payment condition: equal payment vs. overpayment vs. underpayment) between-subjects factorial design.

Experimental procedure. Participants completed the study after participating in other, unrelated studies. The studies lasted a total of one hour, and participants were paid 7 Euros for their participation. On arrival at the laboratory, participants were led to separate cubicles, each of which contained an envelope and a pencil. Inside the envelopes, participants found the stimulus information and the questions that assessed the dependent variables.

Participants were asked to imagine the following situation (manipulated information in italics):

Last summer you had a job together with *a friend/another student*. The two of you worked together as a pair. There were a large number of such pairs in the organization where you worked. You and *your friend/the other student* have worked equally hard and performed equally well. Because the organization has performed well last summer, it is announced on the last day of summer that a bonus of 5,000 Euros will be distributed among all employees. A certain amount of money has been allocated to you and *your friend/the other student*. It has to be decided how this amount of money will be distributed between you and *your friend/the other student*.

This was followed by the manipulation of outcome. Participants read the following sentences (manipulated information in italics):

A week after this employees are paid. You receive a bonus of 200 Euros. *Your friend/the other student* receives a bonus of 100 / 200 /300 Euros.

¹¹ The precise gender distribution of the participants in this experiment was unknown to the experimenters. Usually we do not find gender differences in our equity studies (see, e.g., Chapter 2; Chapter 3; Chapter 4; Van den Bos & Van Prooijen, 2001); an issue to which we come back in Study 5.2 (see Footnote 3).

After this, participants were asked questions pertaining to the dependent variable: Participants were asked how satisfied they were with the bonus they received (1 = *very dissatisfied*, 7 = *very satisfied*). After completing this question, participants were thoroughly debriefed and paid for their participation.

Results and Discussion

Perceived satisfaction. As predicted, a 2 x 3 analysis of variance (ANOVA) on participants' outcome satisfaction showed a main effect of outcome, $F(2, 120) = 26.53, p < .01$, and a significant interaction effect, $F(2, 120) = 4.55, p < .02$. To interpret these effects we performed a least significant difference test for multiple comparisons between means ($p < .05$; see Kirk, 1982), with the 6 cells of our design serving as the independent variable. Table 5.1 shows the results of this test as well as the means and standard deviations of participants' outcome satisfaction evaluations. As predicted, results showed that within the overpayment condition, participants were less satisfied with their outcome when their interaction partner was a friend than when their interaction partner was an unknown other student. The underpayment condition, unfortunately, did not show the predicted effects. When participants were being underpaid, they were equally satisfied when their interaction partner was either a friend or an unknown other. We will come back to this issue in Study 5.2 and in the General Discussion. Finally, findings revealed that in the equal payment condition, our second prediction was supported to a greater extent. That is, relationship type did not significantly moderate people's reactions to being equally paid. People already reacted in such a positive way when being equitably paid, that the kind of relationship they had with their interaction partner did not make much of a difference. We will return to this finding in Study 5.2 and in the General Discussion.

Additionally, it can be noted here that within the condition with an unknown other as interaction partner, participants were as satisfied in the equal payment condition as in the overpayment condition, and participants were more satisfied in the equal payment and overpayment conditions than in the underpayment condition (see Table 5.1). Usually, equity findings show that equal payment leads people to be more satisfied than overpayment. However, Van Yperen and Buunk (1991) note that this pattern of means is not always found in equity studies. These authors note that sometimes a pattern similar to ours is described in the literature and that it is

demonstrated that equal payment and overpayment can show equally high satisfaction judgments. Also Hegtvedt (1990) argued that there is some evidence that sometimes overrewarded individuals are just as satisfied with their relationship as equitably rewarded individuals. We will come back to this in the General Discussion.

Table 5.1

Means and Standard Deviations of Outcome Satisfaction as a Function of Payment Condition and Relationship Type (Study 5.1)

	Payment condition					
	Equal Payment		Overpayment		Underpayment	
	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>
Unknown Other	6.0 _{a,b}	1.5	5.6 _b	1.5	3.7 _c	1.6
Friend	6.6 _a	0.8	4.3 _c	1.9	4.0 _c	1.7

Note Means are on 7-point scales, with higher values indicating higher levels of outcome satisfaction. Means with no subscripts in common differ significantly ($p < .05$), as indicated by a least significant difference test for multiple comparisons between means (Kirk, 1982).

One might wonder whether similar results would be obtained when participants are exposed to a situation in which they actually have to complete tasks, and in which they directly experience the distribution of outcomes and the presence of an interaction partner. In Study 5.2, therefore, we wanted to replicate the findings concerning the overpayment condition in a study in which participants really experienced being overpaid with regard to a friend or an unknown other. Furthermore, we wanted to find support for our prediction concerning the underpayment condition and further explore the effects relationship type may have on outcome satisfaction evaluations in the equal payment condition. An additional goal of Study 5.2 was to add one item to the dependent variables, so that the reliability of our dependent variables could be assessed.

Study 5.2

Study 5.2 was constructed following the experimental paradigm developed by Van den Bos, Lind, et al. (1997, Experiment 2). The participants either participated in the study with a friend or with someone they did not know: Half of the participants interacted in the study with a friend they brought with them to the laboratory and the other half of the participants interacted in the study with a person they had not met before and would not meet afterwards. Participants completed tasks together with the other participant (friend or unknown other) and learned that their own task performance was comparable to the other participant's task performance. The outcome that participants received for their performance was either equal to the outcome of the other participant (equal payment condition), better than the outcome of the other participant (overpayment condition), or worse than the outcome of the other participant (underpayment condition). The outcome that participants received was held constant, while the outcome of the other participant was varied. Outcome satisfaction was the main dependent variable.

Method

Participants and design. One hundred and thirty-six students (30 men and 106 women) at Utrecht University participated in the study and were paid for their participation. Participants were randomly assigned to one of the conditions of the 2 (relationship type: friend vs. unknown other) x 3 (payment condition: equal payment vs. overpayment vs. underpayment) between-subjects factorial design.¹²

Experimental procedure. Participants worked on the experimental tasks and answered the questions that constituted the dependent variables before participating in other, unrelated studies. The studies lasted a total of 30 minutes, and participants were paid 4 Euros for their participation. Participants were invited to participate in a study on how people make judgments. On arrival at the laboratory, participants were led to separate cubicles, each of which contained a computer with a monitor and a keyboard.

¹² As expected (see Footnote 2), gender did not alter any of the results of Study 5.2, and hence was dropped from the analyses presented here.

The computers were used to present the stimulus information and to measure the manipulation checks and the dependent variables.

In the first part of the instructions, participants were informed that they participated in the study with another person. For half of the participants, this other person was a friend with whom they arrived at the laboratory. These participants were asked to type the name and sex of their friend into the computer to make sure they understood that they were interacting with their friend. In addition, this information was used in the study, so that every time the interaction partner was addressed, his or her real name was used. To the other half of the participants it was communicated that they would be interacting with another participant, who was unknown to them. The experimental procedure was then outlined to the participants: After the experimental tasks were explained, participants would work on the tasks for 10 minutes. Furthermore, participants were informed that, after all participants had participated, a lottery would be held among all participants. The winner of this lottery would receive 50 Euros. (Actually, after all participants had completed the experiment, the 50 Euros were randomly given to a participant; a procedure to which none of the participants objected.) Participants were told that a total of 200 lottery tickets would be divided among all participants. Furthermore, participants were told that after the tasks had been completed the experimenter would divide some lottery tickets between them and the other participant. Six practice questions were posed to ensure comprehension of the experimental procedure. If participants gave a wrong answer to a question, the correct answer was disclosed, and main characteristics of the experimental procedure were repeated.

The tasks were then explained to the participants: Participants were asked to answer questions that measured general knowledge for 10 minutes. They were told that both they and the other participant had to answer the same questions. After the tasks had ended, participants were informed about the number of questions that they had answered correctly, and it was communicated to the participants that the other participant had answered an equivalent amount of questions correctly (cf. Van den Bos, Lind, et al., 1997).

Participants were then told that the experimenter would divide the lottery tickets between them and the other participant. It was communicated to the participants that they received 3 lottery tickets. This was followed by the

manipulation of the outcome of the other participant. In the underpayment condition, participants were informed that the other participant received 5 tickets. In the overpayment condition, participants were informed that the other participant received 1 ticket. In the equal payment condition, participants were informed that the other participant received 3 tickets.

Participants were then asked questions pertaining to the dependent variables and manipulation checks. All ratings were made on 7-point scales. Main dependent variables were participants' satisfaction judgments. Participants were asked how satisfied they were with the 3 lottery tickets they received (1 = *very dissatisfied*, 7 = *very satisfied*) and how content they were with the 3 lottery tickets they received (1 = *very discontent*, 7 = *very content*). The satisfaction ratings were averaged to form a reliable scale of participants' outcome satisfaction (alpha = .78).

Fairness judgments were solicited by asking questions about the fairness of the lottery tickets received. Participants were asked how fair they judged the 3 lottery tickets they received (1 = *very unfair*, 7 = *very fair*) and how just they judged the 3 lottery tickets they received (1 = *very unjust*, 7 = *very just*). These items were averaged to form a reliable scale of participants' outcome fairness judgments (alpha = .94).

As check on the manipulation of the three outcome conditions, participants were asked two questions for each condition. As check on the manipulation of the overpayment condition, participants were asked to what extent they agreed with the statement that they received more lottery tickets than the other participant (1 = *strongly disagree*, 7 = *strongly agree*) and to what extent they agreed with the statement that the other participant received less lottery tickets than they received (1 = *strongly disagree*, 7 = *strongly agree*). Answers to these two items were averaged to form a reliable check of the overpayment condition (alpha = .98). As check on the manipulation of the equal payment condition, participants were asked to what extent they agreed with the statement that they received an equal number of lottery tickets as the other participant (1 = *strongly disagree*, 7 = *strongly agree*) and to what extent they agreed with the statement that the other participant received an equal number of lottery tickets as they received (1 = *strongly disagree*, 7 = *strongly agree*). Answers to these two items were averaged to form a reliable check of the equal payment condition (alpha = .98). As check on the manipulation of the underpayment condition,

participants were asked to what extent they agreed with the statement that they received less lottery tickets than the other participant (1 = *strongly disagree*, 7 = *strongly agree*) and to what extent they agreed with the statement that the other participant received more lottery tickets than they received (1 = *strongly disagree*, 7 = *strongly agree*). Answers to these two items were averaged to form a reliable check of the underpayment condition ($\alpha = .96$).

As check on the manipulation of relationship type (friend vs. unknown other), participants were asked how close they felt to the other participant. Participants were asked to what extent they felt committed to the other participant (1 = *not at all*, 7 = *very much*), to what extent they felt connected with the other participant (1 = *not at all*, 7 = *very much*), how close their relationship with the other participant was (1 = *not at all close*, 7 = *very close*), and participants were asked to respond to the Inclusion of Other in the Self (IOS) scale (Aron et al., 1991). The latter scale is a single-item, pictorial measure of closeness (see Aron et al., 1991). Because all four items were highly correlated with each other (r 's > .70), answers to these four items were averaged to form a reliable check of the relationship orientation manipulation ($\alpha = .93$).

To assess whether participants thought of the other participant as a comparable person *with respect to task performance*, they were asked to what extent the other participant worked equally hard in reference to the participants themselves (1 = *much worse*, 4 = *equally hard*, 7 = *much better*), to what extent the other participant did his or her best in reference to the participants themselves (1 = *much worse*, 4 = *equally*, 7 = *much better*), and to what extent the other participant was good in performing the task in reference to the participants themselves (1 = *much worse*, 4 = *equally good*, 7 = *much better*).

Results and Discussion

Outcome manipulation check. A 2 x 3 multivariate analysis of variance (MANOVA) on the three manipulation checks of outcome yielded only a main effect of outcome at both the multivariate level and the univariate levels, multivariate $F(6, 256) = 1336.44, p < .01$; for the overpayment check, $F(2, 130) = 2131.26, p < .01$; for the equal payment check, $F(2, 130) = 1351.88, p < .01$; for the underpayment check, $F(2, 130) = 929.70, p < .01$. To interpret these effects, we performed for each

manipulation check a least significant difference test for multiple comparisons between means ($p < .05$; see Kirk, 1982), with the three conditions of the outcome manipulation serving as the independent variable. This showed that participants in the overpayment condition agreed more with the statements that they received an outcome that was better than the other participant's outcome ($M = 6.8$, $SD = 0.6$) than participants in the equal payment ($M = 1.2$, $SD = 0.4$) and underpayment conditions ($M = 1.3$, $SD = 0.8$) and that no other differences between conditions were significant. Participants in the equal payment condition agreed more with the statements that their outcome was equal to the outcome of the other participant ($M = 6.6$, $SD = 1.0$) than participants in the overpayment ($M = 1.2$, $SD = 0.5$) and underpayment conditions ($M = 1.2$, $SD = 0.7$) and no other differences between conditions were significant. Participants in the underpayment condition agreed more with the statements that their outcome was worse than the other participant's outcome ($M = 6.9$, $SD = 0.3$) than participants in the equal payment ($M = 1.2$, $SD = 0.5$) and overpayment conditions ($M = 1.1$, $SD = 0.3$) and no other differences between conditions were significant. These findings suggest that the outcome manipulation was successfully operationalized.

Relationship type check. The answers that participants gave to the questions that assessed whether participants felt close to their interaction partner were subjected to a 2 x 3 ANOVA. This ANOVA yielded only a main effect of relationship type (unknown other or friend), $F(1, 130) = 201.92$, $p < .01$. Inspection of the means indicated that participants felt closer to the other participant when the other was a friend ($M = 4.9$, $SD = 1.1$) than when the other was unknown to them ($M = 2.2$, $SD = 1.0$).

Additional measures. The answers that participants gave to the questions that assessed whether participants perceived the interaction partner to be a comparable person *with respect to task performance* were subjected to a 2 x 3 MANOVA. This MANOVA did not yield significant results at either the multivariate level or the univariate levels. Inspection of the means indicated that participant's perceived the other participant to be working equally hard ($M = 4.0$), to be doing equally his or her best ($M = 4.0$), and to be equally good in performing the tasks ($M = 4.0$). Thus, these findings showed that participants' interaction partner was seen as a comparable person.

Fairness judgments. Participants' outcome fairness judgments yielded only a main effect of outcome, $F(2, 130) = 77.58, p < .01$. As expected, a least significant difference test ($p < .05$), with the 3 conditions of the outcome manipulation serving as the independent variable, revealed that participants in the equal payment condition judged their outcome to be more fair ($M = 5.6, SD = 0.9$) than those in the overpayment ($M = 3.1, SD = 1.2$) and underpayment conditions ($M = 3.2, SD = 1.2$) and that no other differences between conditions were significant. These findings are in accordance with previous equity studies (see, e.g., Van den Bos, Lind, et al., 1997; Van den Bos et al., 1998), showing that equal outcomes were judged to be fair and unequal outcomes to be unfair, and hence yield additional evidence that the outcome manipulation was perceived as intended.

Perceived satisfaction. Main dependent variables were participants' perceptions of outcome satisfaction. To analyze the data, we first conducted a 2 x 3 ANOVA. As predicted, this ANOVA showed a significant main effect of outcome, $F(2, 130) = 16.04, p < .01$, and a significant interaction effect, $F(2, 130) = 4.46, p < .02$. To interpret these effects we performed a least significant difference test for multiple comparisons between means ($p < .05$), with the 6 cells of our design serving as the independent variable. Table 5.2 shows the results of this test as well as the means and standard deviations of the outcome satisfaction scale. As predicted, findings revealed that participants were more satisfied with their overpayment when the other participant was an unknown other rather than a friend. Furthermore, in accordance with our predictions, findings revealed that participants were more satisfied with their underpayment when the other participant was a friend rather than an unknown other. Finally, regarding the equal payment condition, relationship type did not significantly moderate people's reactions to being equally paid. People reacted in such a positive way when being equitably paid, that the kind of relationship they have with their interaction partner did not make much of a difference. The results of Study 5.2 thus support our second prediction regarding the equal payment condition to a greater extent. We will come back to this issue in the General Discussion.

Table 5.2

Means and Standard Deviations of Outcome Satisfaction as a Function of Payment Condition and Relationship Type (Study 5.2)

	Payment condition					
	Equal Payment		Overpayment		Underpayment	
	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>
Unknown Other	5.4 _a	1.1	5.3 _a	0.8	3.5 _d	1.3
Friend	5.1 _{a,b}	1.1	4.5 _{b,c}	1.6	4.2 _c	1.1

Note Means are on 7-point scales, with higher values indicating higher levels of outcome satisfaction. Means with no subscripts in common differ significantly ($p < .05$), as indicated by a least significant difference test for multiple comparisons between means (Kirk, 1982).

To conclude, in Study 5.2 we replicated the findings of Study 5.1 concerning our prediction regarding the overpayment condition in a real experiment. Moreover, we found support for our prediction regarding the underpayment condition. And finally, our second expectation regarding people's reactions in the equal payment condition was again supported. Thus, when participants really experience being equitably or inequitably paid, our hypotheses are supported. Furthermore, in Study 5.2, we again found the pattern that participants in the control (unknown other) condition were equally satisfied with being overpaid as with being equally paid (cf. Buunk & Van Yperen, 1989; Hegtvedt, 1990). We will provide an explanation for this finding in the General Discussion.

General Discussion

The current chapter has examined people's reactions to being equitably and inequitably paid when they interact with friends versus unknown others. Two studies generally provide evidence in support of our hypotheses. As predicted, relationship

type affects people's satisfaction judgments when they are being overpaid. The results of both studies show that people were less satisfied with being overpaid when their interaction partners are friends rather than when their interaction partners are unknown others. Furthermore, as predicted, relationship type also affects people's satisfaction judgments when they are being underpaid. That is, the results of Study 5.2 show that people were more satisfied with being underpaid when their interaction partners are friends rather than when their interaction partners are unknown others. Finally, we examined the effects of relationship type on satisfaction judgments when being equitably paid for exploratory purposes. Both studies demonstrated that relationship type did not have statistically significant effects when people were equitably paid, suggesting that relationship type did not moderate satisfaction with equitable outcomes and thus providing support for our second hypothesis. Apparently, in general people already react in such a positive way when being equitably paid (Adams, 1965; Austin et al., 1980; Messick, 1993; Van den Bos, Lind, et al., 1997), that the kind of relationship they have with their interaction partner does not make much of a difference. Participants are highly satisfied with being equitably paid, both when their interaction partners are friend and when their interaction partners are unknown others.

Thus, the results of our two studies demonstrate that relationship type affects people's reactions to being *inequitably* paid. Although equity theory has stressed the importance of the amount of inputs that are provided and outcomes that are received by both partners in an interaction (Adams, 1965; Walster et al., 1973; Walster, Walster, & Berscheid, 1978), we would like to stress that characteristics of the relationship itself also have an important influence on people's reactions to inequitable outcomes. An important implication of the current findings may be that how people respond to injustice is more susceptible to characteristics of the situation than one might think (for a related line of reasoning, see Mikula & Wenzel, 2000). With the studies presented here we have demonstrated that interacting with friends can be a crucial variable in people's reactions to being overpaid and being underpaid. When interacting with friends, people are motivated to attend to the needs of their friends and they are not only concerned with their own outcomes, but also with their friends' outcomes.

The results of the current chapter fit in a research tradition that examines equity in close relationships. For instance, although Wicker and Bushweiler (1970) focused on experiences of pleasantness with experiments, and not on satisfaction with equitable and inequitable outcome distributions, their work is interesting for the current purposes as they suggest that the closeness between respondents and their interaction partners may be an important determinant of experienced pleasantness with social interactions. Other studies, that resemble the current research to a greater extent, are the studies conducted by Van Yperen and Buunk (1994; see also Buunk & Van Yperen, 1991; Van Yperen & Buunk, 1990; 1991), as well as by Kuijer, Buunk, and Ybema (2001). These authors have also examined equity in close relationships, although they mainly applied equity research to marital relationships. Van Yperen and Buunk (1994) have argued that when someone feels overbenefitted in his or her marriage, this person feels moderately satisfied with his or her marriage and that when someone feels underbenefitted in his or her marriage, this person feels dissatisfied with his or her marriage. We would like to note, however, that the research these authors conducted is cross-sectional. Despite their interesting correlational findings, therefore, no conclusions can be drawn regarding the causal relation between relationship type and satisfaction with outcomes. With the studies conducted in the present chapter, we have extended the intriguing line of reasoning by Van Yperen and Buunk, and by manipulating type of relationship we have created the possibility to confidently study causal relations.

Furthermore, Van Yperen and Buunk (1994) did not measure people's direct reactions to being inequitably paid, but they measured people's satisfaction with a marriage in which they were overbenefitted or underbenefitted. Being overbenefitted or underbenefitted in a marital relationship implies that the relationship itself is inequitable. This has more extensive consequences for a relationship than being in a friendship relation in which one of the two persons accidentally receives more credit or better outcomes. However, as the results of the current chapter show, even when the other person in a payment situation is not a spouse but merely a friend, which can be seen as a weaker manipulation of a communal relationship, the effects of satisfaction judgments with inequitable outcomes can still be found. The current research, therefore, provided support for the strength and robustness of equity findings obtained in close relationships. Our studies have extended the research conducted in a research tradition of equity in close relationships, and have hopefully

made a unique contribution to the integration of the literature on equity evaluations and the literature on communal and exchange relationships.

We would also like to discuss the fact that our hypothesis regarding the overpayment condition was supported in both Studies 5.1 and 5.2, whereas our hypothesis regarding the underpayment condition yielded only supportive evidence in Study 5.2. Because Study 5.2 used strong manipulations in which people actually received an outcome in reference to another participant that was present at the same time, whereas Study 5.1 renders a scenario study with arguably weaker manipulations. This suggests our hypothesis regarding the underpayment condition is more likely to be supported when strong relationship manipulations are used. Furthermore, this suggests that the hypothesis regarding the overpayment condition could more easily be supported than the hypothesis regarding the underpayment condition. A possible explanation for this finding is provided by Loewenstein et al. (1989). These authors have argued that people's attitude towards overpayment can be affected more easily and to a greater extent than people's attitudes towards underpayment, because of the greater ambiguity in people's reactions to being overpaid (see also Chapter 2). This might be a reason why the hypothesis regarding underpayment yielded somewhat weaker support and probably needs stronger manipulations to obtain the effects predicted by this hypothesis. The most important thing, in our opinion, seems to be the conclusion that both hypotheses are supported when a strong enough manipulation is used.

We would like to take the opportunity here to go somewhat deeper into the results in the equitable payment condition. That is, we note here that, although our second prediction was supported twice and relationship type did not moderate the effects of people's reactions to being equitably paid, the findings of Study 5.1 suggest that people do show a tendency to be somewhat more satisfied with equitable outcomes when interacting with friends, as opposed to unknown others, as can be seen in Table 5.1. In fact, the non-significance of this effect could be caused by a ceiling effect. Please note, however, that findings of Study 5.2 clearly do not show this tendency, and even more importantly, there is no indication of a ceiling effect there (see Table 5.2). A possible explanation for the findings that show that relationship type did not significantly moderate the effects of people's reactions to being equitably paid in both our studies will be provided below.

That is, we would like to integrate the present findings with a large and diverse body of research that argues that negative information influences people's evaluations more strongly than positive information (see, e.g., Ito, Larsen, Smith, & Cacioppo, 1998; Skowronski & Carlston, 1989). In general, there has been a tendency for negative events to have more impact than positive events (Taylor, 1991). In other words, many researchers have demonstrated a negativity bias. In the justice literature, this has led to the idea that unjust events affect lay people's cognitions and reactions more strongly than just events (Brockner & Wiesenfeld, 1996; Van den Bos, Vermunt, & Wilke, 1997), suggesting that injustice plays a more prominent role and that it might be better to talk about the psychology of injustice as opposed to justice (Folger, 1984; Folger & Cropanzano, 1998; Van den Bos & Van Prooijen, 2001). In other words, many effects reported in justice research are based on effects of *injustice* and not so much of effects on justice. Extending on this reasoning, it might also be the case that our prediction that people are concerned with their friends' outcomes is more relevant in inequitable situations (i.e., being under- and overpaid) than in equitable situations. This would suggest that an explanation for the lack of effect of relationship type in our equitable payment conditions might be that our predicted effects are in particular relevant for the two inequitable outcome distributions, and only to a lesser extent for equitable outcome distributions (for related lines of reasoning, see also Folger, 1984; Folger & Cropanzano, 1998; Van den Bos & Van Prooijen, 2001).

The discussion of the present findings can, in our opinion, not be complete without discussing research instigated by Deutsch (1975) who makes a distinction between different justice principles. Deutsch noted that equity is only one of the many possible principles of distributive justice, and that people could also use, for example, the principles of equality or need (see also, Lamm & Schwinger, 1980; Leventhal, 1976). Furthermore, Deutsch argued that the principles of equality and need are more important justice principles in close relationships than the principle of equity. We note, however, that these different principles of justice are used in proactive types of justice research, whereas the research we conduct is more reactive in nature (see Greenberg, 1990). That is, in our experiments people have to react to outcome evaluations, instead of allocating resources themselves. Although one could argue that justice principles used for (proactively) distributing resources may also refer to

(reactively) reacting to outcome distributions, we emphasize that, to our knowledge, this has not yet been demonstrated. Future research therefore may want to examine whether these different justice principles could also be applied to more reactive types of justice (cf. Greenberg, 1990), like we investigated in the current chapter. More importantly, in our research there can not be made a distinction between principles of equity and principles of equality, because people's inputs do not differ. When only inputs or only outcomes are examined, the issue of equity turns into the issue of equality (Van Yperen & Buunk, 1994). Therefore, on the basis of these data it is difficult to tell which justice principle causes the effects. Future research might want to disentangle the effects different justice principles have on evaluations of outcome distributions.

With the studies presented here we have focused on the question of when justice is important to people. We have explored the social conditions under which the importance of justice may change in social interactions. More specifically, we have examined how different types of relationships affect evaluations of just and unjust situations. We have provided support for the idea that being in a communal relationship, as opposed to being in an exchange relationship, makes people react differently to inequitable outcomes distributions, because they are motivated to attend to the needs of the other. Therefore, justice is in particular important to people when they are in communal relationships.

CHAPTER 6

General Discussion

The purpose of the present thesis was to examine the social psychology of being better off than others. In this final chapter, the various findings reported in this thesis are considered as a whole. This discussion emphasizes the convergent evidence obtained in my research on equity processes and the psychology of being better off than others, reported in Chapters 2 to 5. In addition, the findings are discussed in terms of the implications they can have. The major contributions and shortcomings of the present research are considered and directions for future research are suggested. But first, I will briefly summarize the major findings of each chapter.

The Moral Superiority Effect

As was argued in the introduction of Chapter 2, people frequently encounter situations in which they have to evaluate the outcomes that they have received. Ideally, in making these evaluations, people's own interests coincide with the fairness of the situation. On many occasions, however, people may find themselves in a mixed-motive situation in which their own interests conflict with fairness issues. The question that I put forward in Chapter 2 was how people evaluate their outcomes in such situations.

To answer this question, I focused in Chapter 2 on the conflict between egoism-based pleasure and fairness considerations that arise in situations of overpayment inequity (Adams, 1965). Chapter 2 presented research that investigated people's reactions to being overpaid, and furthermore, people's ideas about their own reactions to being overpaid were compared with their ideas about the reactions of others to being overpaid. The results of Studies 2.1 and 2.2 showed a discrepancy between people's own reactions to being overpaid and their perception of other people's reactions to being overpaid: People think others are more satisfied with being overpaid than they are themselves. These results are consistent with the idea that people think others are more influenced by egoism-based considerations whereas

they themselves are more influenced by considerations of right and wrong. In other words, Chapter 2 reveals a moral superiority effect in conditions of overpayment inequity. When people are confronted with a conflict between self-interest and fairness, they think others deal with this conflict differently than they do themselves. These results correspond with the idea that people have a tendency to rate themselves as superior to others in a number of domains (for reviews, see, e.g., Epley & Dunning, 2000; Nisbett & Ross, 1980; Smith & Mackie, 1990). Therefore, I think this moral superiority effect can be seen as a self-serving bias in people's reactions to being overpaid: People think their own reactions to being overpaid are more moral than the reactions of others.

Being Overpaid While Cognitively Busy

Rivera and Tedeschi (1976) have presented research that demonstrates that people are more satisfied with being overpaid when they were led to believe that a bogus apparatus could detect their true feelings by implicit muscle responses than when they were not given this impression in a paper-and-pencil condition. These authors suggested that when paper-and-pencil procedures are used, reactions are public whereas when bogus pipeline procedures are used, reactions are private. They furthermore suggested that people will try to create positive impressions of themselves in public affairs, and that, therefore, people will indicate to feel less satisfied with being overpaid, compared to private reactions. The implication that follows from this, as was argued in Chapter 3, is that when people are publicly evaluating how satisfied they are with being overpaid, they may correct their ratings such that their satisfaction evaluations take into account the fact that these arrangements are inequitable, resulting in less positive satisfaction evaluations.

The same kind of correction process has been put forward by Gilbert and others regarding the process of person evaluation (see, e.g., Gilbert & Osborne, 1989; Gilbert et al., 1988; Quattrone, 1982). Furthermore, it has been proposed by these authors that correction requires more cognitive resources than does the forming of initial inferences. Integrating above-mentioned research areas, I hypothesized in Chapter 3 the following regarding people's satisfaction with being overpaid: When people react to

arrangements of overpayment their evaluations of outcome satisfaction will be more positive under conditions of high cognitive busyness than under conditions of low cognitive busyness. In Studies 3.1 to 3.4, using different paradigms and manipulations, this hypothesis was supported. When people have a lot on their minds, they may react in a more self-centered way to unfair arrangements that are to their own advantage than when they have the capacity to ponder about these things more deeply. But importantly, at the same time, when people have enough cognitive resources, they react in a more positive and presumably more fairness-based manner to these kinds of arrangements. A conclusion from this chapter therefore seems to be that concern for the welfare of others may require deliberative, reflective appraisal processes that make greater attentional demands, but people do show concern for others when they are able to.

The Psychology of Overpayment

Importantly, Chapter 4 provided additional insights into the process of how people react to being overpaid. As I reasoned in the introduction of Chapter 4, much research has been conducted using equity theory to study the psychology of overpayment. However, as I argued in Chapter 4, there is confusion as to the underlying psychological process that drives people's reactions to this outcome distribution. Following the founders of equity theory, I proposed that overpaid people are in conflict between what makes them pleased and what they believe to be right, and that as a result of this conflict people experience feelings of uneasiness. I contrasted this proposition with other explanations that state that people feel guilty when being overpaid. In accordance with these predictions, the findings presented in Studies 4.1 and 4.2 showed that overpaid people indeed experience feelings of uneasiness and do not or to a lesser extent experience feelings of guilt, in contrast with what is often assumed. Furthermore, Chapter 4 provided data that reveal that overpaid people indeed experience a conflict between what makes them pleased and what they believe to be right: In Studies 4.3 and 4.4, I demonstrated that people need longer time when deciding how to respond to being overpaid as opposed to being

equally paid and underpaid and that this is especially true when people are overpaid relative to a friend, compared to being overpaid relative to an unknown other.

In the General Discussion of Chapter 4, I emphasized that it is important to make a distinction between feelings of guilt and uneasiness in people's reactions to being overpaid. As I argued there, it is essential to be accurate in the description of emotions, because emotions can have different behavioral consequences. For example, the emotion of guilt generally creates a situation in which people want to compensate the disadvantaged, while the emotion of uneasiness might not at all create a desire for compensation but perhaps has other significant consequences such as feeling uncertain about oneself (see, e.g., Van den Bos & Lind, 2002). Thus, one thing I highlighted in Chapter 4 is that if one wants to predict accurately what people's behavior will be, and describe correctly the social psychology of people that are better off than others, then one has to be very specific in describing what people experience or feel.

Inequitable Payment in Communal Relationships

Chapter 5 focuses on when justice is important, and therefore explores the social conditions under which the importance of justice may change in social interactions. More specifically, in Chapter 5, I examined how different types of relationships affect evaluations of equitable and inequitable outcome distributions. In equity experiments people usually interact with other participants who they have never met before. Interestingly, however, it is much more common for people in their daily lives to interact with people they know than to interact with unknown others. In Chapter 5 I proposed that it would be especially interesting to see what happens when people would be evaluating their outcome distributions in communal relationships, as opposed to evaluating their outcome distributions in exchange relationships. Here, I argued that when people are confronted with friends as interaction partners, as opposed to unknown others, they are motivated to attend to the needs of their friends (Clark & Mills, 1979) and therefore, they are not only concerned with their own outcomes but also with their friends' outcomes. Following this line of reasoning, I hypothesized that relationship type affects people's reactions to especially inequitable

outcome distributions. As predicted, Studies 5.1 and 5.2 demonstrate that when people's interaction partners are friends, people are indeed more satisfied with being underpaid and less satisfied with being overpaid compared to when their interaction partners are unknown others. On the basis of these findings, I suggested that justice is in particular important to people when they are in communal relationships.

The Social Psychology of Being Better Off Than Others

Taken together, these chapters helped to understand the social psychology of those that are better off than others and they have contributed to the knowledge of equity processes and the social conditions under which these processes may operate. It is fascinating to examine people's reactions to being overpaid, because these reactions are not as clear-cut as one might think. As I have shown in this thesis, being underpaid obviously leads people to feel dissatisfied and being equitably paid leads people to feel satisfied. The most interesting situation, however, is the one in which people respond to being overpaid. When people are confronted with overpayment they are moderately satisfied. In general, overpaid people are more satisfied than underpaid people, but less satisfied than equally paid people. This thesis has given support for the idea that overpaid people have to deal with conflicting social motives and that this makes them feel uneasy (see, e.g., Chapter 4). On the one hand people experience the egoism-based pleasure of receiving a relatively good outcome, but on the other hand they experience the fairness-based feeling of being unjustly advantaged. In Table 6.1, I have given an overview of all the studies described in the present thesis that measured satisfaction judgments as a function of being either overpaid, underpaid, or equally paid. Here you can see that all manipulations that were used in this thesis influenced people's reactions to being overpaid, but not or less frequently people's reactions to being underpaid or equitably paid. This suggests that people's reactions to being overpaid are more malleable than reactions to being underpaid or equitably paid. The studies are strikingly similar in these findings, and the small differences in findings (see, e.g., Chapter 5) may have been caused by, among other things, the difference in psychological impact of the various procedures

Table 6.1

Means of Outcome Satisfaction as a Function of Payment Condition and Other Used Manipulations in Studies 2.1 to 3.4 and Studies 4.3 to 5.2.

	Manipulations	Payment condition		
		Equal Payment	Overpayment	Underpayment
Study 2.1	Self (control)	5.2 _b	5.0 _b	3.7 _c
	Other	5.4 _b	6.1 _a	3.7 _c
Study 2.2	Self (control)	6.4 _a	5.0 _b	3.7 _c
	Other	6.4 _a	5.8 _a	3.2 _c
Study 3.1	Low load (control)	6.5 _a	3.0 _c	1.6 _d
	High load	6.3 _a	4.0 _b	2.0 _d
Study 3.2	Low load (control)	4.7 _a	3.8 _b	2.0 _c
	High load	4.1 _{a,b}	4.7 _a	1.5 _c
Study 3.3	Low load (control)	5.3 _a	4.6 _b	3.9 _c
	High load	5.0 _{a,b}	5.1 _a	3.7 _c
Study 3.4	Low load (control)		4.8 _b	
	High load		5.5 _a	
Study 4.3		100 %	70 %	0 %
Study 4.4	Unknown other (control)		5.3 _a	
	Friend		4.5 _b	
Study 5.1	Unknown other (control)	6.0 _{a,b}	5.6 _b	3.7 _c
	Friend	6.6 _a	4.3 _c	4.0 _c
Study 5.2	Unknown other (control)	5.4 _a	5.3 _a	3.5 _d
	Friend	5.1 _{a,b}	4.5 _{b,c}	4.2 _c

Note Except for Study 4.3, means are on 7-point scales, with higher values indicating higher levels of outcome satisfaction. For each study, except Study 4.3, means with no subscripts in common differ significantly ($p < .05$), as indicated by a least significant difference test for multiple comparisons between means (Kirk, 1982). Study 4.3 represents the percentage of people that indicated to be satisfied with their payment.

and manipulations in the studies presented here. In order to spur future research and conceptualizations of the social psychology of overpayment, I suggest here a working model of people's reactions to being overpaid; a model based and extending on the studies conducted in the present thesis.

Working Model of People's Reactions to Being Overpaid

Here, I would like to go somewhat deeper into the implications of the current findings, and in particular, I would like to present a working model of people's reactions to being overpaid. Before doing so, I want to emphasize explicitly that the statements concerning this model have to be interpreted as research propositions for future studies, as most of them are not directly supported by the data reported in the present thesis. Nevertheless, I think it is important in the general discussion of the present thesis to explain and describe the social psychology of being better off than others by presenting the following working model of people's reactions to being overpaid.

The results of the studies in the current thesis may suggest a two-phase model of reactions to being overpaid. This two-phase model is illustrated in Figure 6.1. When being overpaid, people's first reaction is one that is egoism-based. People's very first reaction when confronted with an overpayment is one of pleasure: "Wow, I get more than someone else, that's great!" I would like to suggest here that this egoism-based, gut reaction might happen in a more or less automatic manner. The idea that egocentric evaluations happen automatically was also recently put forward by Epley and Caruso (2004). Furthermore, I propose that it is only after this first automatic reaction of pleasure that people consider the fairness of the situation: "Hey, but that's not fair!" This correction process can only take place, however, when people have enough cognitive resources available, as Chapter 3 has demonstrated. Therefore, this latter fairness-based reaction is not as automatic and fast as the first egoism-based reaction. People need just a little bit of time (e.g., several seconds) to discover, understand, and respond to the unfairness of a situation in which they are better off than others.

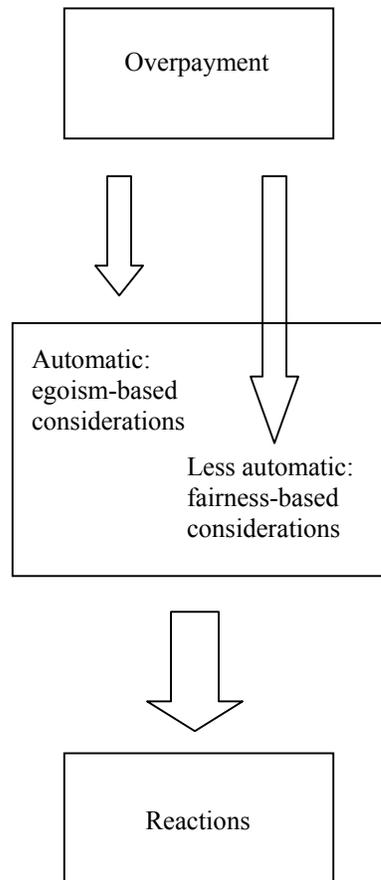


Figure 6.1

The Proposed Process of People's Reactions to Being Overpaid Over Time.

Support for this working model can be found in a recently published article by Moore and Loewenstein (2004). These authors propose a two-phase model that suggests that self-interest operates in an automatic way and ethical judgments often involve a more thoughtful process. Also recently, Epley, Morewedge and Keysar (2004) provided support for the working model presented here. These authors noted when discussing a related model: "The automatic default occurs quickly and rapidly whereas the corrective process must be activated by motivation and sustained by

attention” (p. 761). Furthermore, the working model of people’s reactions to being overpaid is in line with a proposal Messick and Sentis have put forward in 1983. These authors recently suggested that people know whether their outcome gives them pleasure before they know whether this outcome is ethical or not. They claimed that people generally have more access to or knowledge of their preferences in a situation than to what is fair. Therefore, Messick and Sentis suggested a two-phase process in which self-interested preferences are primary and fairness is relevant in a later phase (possibly almost immediately after preferences have been formed). Finally, the working model presented here can possibly also be related to a more specific suggestion by Strack and Deutsch (2004). These authors recently proposed that processes such as the two processes identified here can operate in parallel instead of being consecutively invoked such that the egoism-based process may always be engaged while the fairness-based process may or may not be engaged. In other words, although the egoism-based process may happen somewhat faster than the fairness-based process, this does not mean that the latter process replaces the former as both processes might operate in parallel.

I think that the present thesis demonstrates that the models of Epley and Caruso (2004), Moore and Loewenstein (2004), Epley et al. (2004), Messick and Sentis (1983), and Strack and Deutsch (2004) are also relevant for exploring and understanding people’s reactions to being overpaid and I suggest that people’s reactions to being overpaid take place in two subsequent phases: First people will react in an egoism-based manner and then they will consider the fairness of the situation. Again, I would like to note that the second phase does not necessarily replace the former, but that both processes may operate in parallel (Strack & Deutsch, 2004).

Interestingly, this idea is in line with evolutionary-based ideas first proposed by Darwin (1859/1999). When people want to pass on their genes, they have to create enough resources for themselves to do so. Getting better outcomes than someone else ensures that one is better off than another person and increases his or her chances of reproduction. The human brain has an innate mechanism, a survival instinct, which preserves the own genes, and ensures their survival (Darwin, 1859/1999). I suggest here, that this innate mechanism also operates in the situation described in this thesis: People’s first reaction to being overpaid is to be glad to notice that their self-interest

is being served. Only after this need is fulfilled they are able to look around them and consider the fairness of the situation. Thus, I suggest here that in people's reactions to being overpaid an innate mechanism is present, in which people's concern with self-interest comes before their concern with others. Importantly, however, I would like to note that I do not intend to say that people are naturally self-interested in advantageous situations. I suggest here, that people have an innate mechanism that protects their self-interest, and that this mechanism operates in an automatic way. However, possibly almost immediately after this automatic, gut reaction, people take the fairness of a situation into account, as is suggested by the studies in the present thesis.

Thus, here I provide a working model that suggests a two-phase model of people's reactions to being overpaid in the sense that people first show a self-interested, automatic reaction and subsequently consider the fairness of the situation. I hasten to say, however, that more research on this intriguing topic is needed before strong conclusions regarding all components of this working model can be drawn. Here, I have only provided a working model that has been inspired by some of the research conducted in this thesis. I have outlined my current thoughts as to this model and its implications in the hope that this may instigate more research into the social psychology of being better off than others. Future research exploring this two-phase model of people's reactions to being overpaid may yield even more thorough insights into the psychology of being better off than others.

The present thesis contributed to social psychology in the way that we now have a better understanding of people that are better off than others. By means of these studies, I was able to get a closer look at how these people think and what process underlies their reactions to being overpaid. In doing so, the present thesis has not only made a contribution to the existing literature about people's reactions to being overpaid, but it has also expanded the ideas of equity theory. Besides this contribution to social psychology, however, this thesis may also have important implications for society.

Societal Implications

Before I discuss the societal implications, I want to note here again that the present thesis is concerned with people that are better off than others in the sense that they are overbenefitted regarding their outcomes, while their inputs are kept equal to those of a comparable other person. The research presented here does *not* focus on people that are better off and owe this to themselves, for example people who earn more because they work harder or people who receive more credit because they take more responsibilities. The focus of the present thesis is solely on those people that are better off than others through no fault of their own.

This said, I would like to take the opportunity to go somewhat deeper into the importance this thesis may have for our society. As already mentioned in Chapter 4, Rawls (1971/1999) rightfully noted that societies favor certain people over others. Just as there are billions of people in this world who are less privileged, there are also billions of people that are better off than others. These advantaged people have the important task of taking care of the less privileged people in this world. Therefore, it is intriguing to try to understand people that are better off. For example, an interesting implication of the moral superiority effect, as examined in Chapter 2, is that it can create real care for the less privileged in our society. If people think they are more moral and less self-interested than others, they might reason that *they* should be the ones that look out for the less privileged. After all, if they will not do it, nobody will.

Another intriguing example of the importance this thesis can have for society is the following illustration derived from Chapter 4: In general, advantaged people do not see themselves as members of a privileged group as advantages are often taken for granted (McIntosh, 1992). Thus, the fact that they are better off than others should be brought to their attention. While it is often assumed that people that are better off than others should and will feel guilty about their advantages, this thesis has demonstrated that they in fact do not feel guilty, but merely uneasy. Therefore, when pointing out to privileged people that they are better off than others, one should focus on the uneasiness they feel about being better off than others and not on guilt. Calling attention to people's uneasiness about being better off than others may work much better than calling attention to something they do not really feel. As a result, to get people that are better off than others to comply with something, for example donating

money for disadvantaged people in society, one should use the right interventions and appeal to the right emotions.

In the research conducted in the present thesis, I have tried to study the process of people's reactions to being overpaid (Chapters 3 and 4) as well as the social influences on their reactions (Chapters 2 and 5). The former helped to understand to a greater extent the social psychology of being better off than others, while the latter joins in with psychologists' claims about the importance of society in social psychological research. For example, Blascovich (2003) convincingly reasoned that social psychology should be concerned with important "big picture" issues, for instance, those pertinent to war, politics, religion, or social justice. As social psychologists we should not only try to explain and predict people's thoughts, feelings, and behaviors, but we should try to contribute something to society. The importance of answering questions that reflect a greater concern than experimental social psychologists often deal with has been emphasized by Greenberg, Koole, and Pyszczynski (2004) as well. Also Kurt Lewin, a major founder of social psychology, and Mel Lerner, a major founder of the study of justice in psychology, underlined that psychologists can and should conduct research on issues of critical social significance (Miller & Ross, 2002). I strongly support these ideas and I think that social psychological research should be concerned with issues that are important to people and that really matter. The research I have conducted in the past four years has, in my opinion, significance for social psychology as well as for our society, and therefore has been important.

Underpayment Effects

In my studies, I have always found effects on people's reactions to being *overpaid*, but, except for my results in Study 5.2, I have not found effects on people's reactions to being *underpaid*. Often people ask me why I do not hypothesize and find effects of my manipulations on the condition in which people are being underpaid. For example, people wonder why a manipulation of cognitive load influences people's satisfaction with being overpaid, but not people's satisfaction with being

underpaid. Although I have explained this in the General Discussions of several chapters, I would like to take the opportunity here to explain it once more.

First, I have argued and will argue here that most of the effects we hypothesized and found in our studies should concern overpayment in the sense that they concern the conflict between what people want and what people believe to be right. For instance, Chapter 4 focuses on people's feelings of uneasiness because they experience a conflict between what they want and what they believe to be right. This conflict has taken a central place in the effects we have found. Most of the effects we have hypothesized are predicted *because* of the expected conflict. Being underpaid does not lead people to experience such a conflict and therefore it would not be rational to expect the same effects to take place in this situation. In other words, the characteristics of being overpaid leads us to expect certain effects, that would logically not occur when people are being underpaid (or equally paid).

Second, to provide an answer to the question of whether underpaid people would show the same effects as overpaid people do, I build on research by Loewenstein et al. (1989). These authors have argued that people's attitude towards overpayment can be affected more easily and to a greater extent than people's attitudes towards underpayment. Because of the greater ambiguity in people's reactions to being overpaid, they can be influenced to a greater extent (cf. Van den Bos & Lind, 2002). I argue here, that because the unfairness of the arrangement of being underpaid is more obvious to people, such effects are less likely to be found. In fact, I have reported only one study in this thesis in which I did find an effect in conditions of underpayment. In Table 6.1 one can see that about all studies reported in this thesis are strikingly similar in their findings. Except for one study, all studies show an effect on overpaid people but not on underpaid people. As this table demonstrates, Study 5.2 is the only study that shows an effect in the underpayment condition. Taken together, the findings of the current thesis suggest that it is still less likely to find the same effects on people's reactions to being underpaid as are found on people's reactions to being overpaid, even if the characteristics of being underpaid would allow one to expect these effects (cf. Study 5.2).

Justice Judgments

The studies that were conducted in the present thesis all show that evaluations of outcome satisfaction are influenced by the manipulations we used, but that evaluations of outcome justice are not influenced by the manipulations we induced. In my opinion, this difference highlights the importance of distinguishing between judgments of justice and perceived satisfaction (cf. Austin et al., 1980; Blau, 1964; Messick & Sentis, 1983; Van den Bos, Lind, et al., 1997; Van den Bos et al., 1998). When people are asked to make justice judgments they are predominantly focused on the justice component of the judgments they are making. Satisfaction judgments, on the other hand, may not be so much a *judgment* of inequity as a *feeling* of inequity (Campbell, 1978). Satisfaction judgments are more susceptible to the conflict between what people want and what people believe to be right, whereas justice judgments are mainly focused on the ethical aspect of a reaction (see Chapter 3). Because of my focus on the conflict between what people want and what they consider to be right, satisfaction judgments fitted the purposes of this thesis better.

Individual Differences

In this final chapter, I would like to take the opportunity to discuss topics that have only received little attention throughout this thesis, but may even so constitute important directions for future research. Although this thesis has paid considerable attention to equity processes and the psychology of being better off than others, little attention has been paid to individual differences of people that are better off than others. Below, I will discuss several individual difference variables that can possibly affect people's reactions to being better off than others.

One obvious individual difference that can affect people's reactions to being better off than others is someone's gender: Do women react differently to being better off compared to men? Although Van Yperen and Buunk (1994) have cited research that shows that gender differences can be found in equity research (i.e., in general women feel deprived in their relationship more often than do men), these differences all concern equity *perceptions* that are situated in *marital relationships*, variables and

situations that were not the topic of this thesis. Gender differences can also be found in equity research concerning allocation decisions. That is, Bierhoff, Buck, and Klein (1986) have shown that in general men prefer to allocate goods according to equity rules, while women prefer to allocate goods according to equality rules. Again, however, this kind of research is not analogous to the equity research that was conducted in this thesis. To my knowledge, there have not been found gender differences in reactions to equitable and inequitable outcomes, so I can only rely on my own research in answering this question: I found no gender differences in the twelve studies reported here that assessed people's reactions to different outcome conditions. This suggests that there is no support for the idea that women and men tend to differ in their reactions to being better off than others.

Another well-known individual difference that could influence people's reactions to different outcome conditions is their social value orientation (McClintock, 1978; see also Van Lange, 1999). The concept of social value orientation refers to preferences for particular patterns of outcomes for the self and others (Van Lange, 1999). Often, a distinction is made between people who are prosocial (cooperatives; i.e., these people want to maximize outcomes for the self and others) and people who are proself (competitives and individualists; i.e., these people either want to maximize their own outcomes or want to maximize the relative advantage over other's outcomes). Although the concept of social value orientation is mostly used in social decision-making research, logically, one could argue that preferences for particular patterns of outcomes may influence people's reactions to equitable and inequitable outcomes as well. I have conducted research that demonstrates that especially overpaid people react differently as a consequence of their social value orientation (Peters & Van den Bos, 2004a). That is, people who adopt a proself orientation tend to be more satisfied with being overpaid than people who adopt a prosocial orientation. No such effect can be seen in underpaid or equally paid conditions. To my knowledge, no other studies have focused on this specific link between equity research and social value orientation. Future research might want to examine the effect this individual difference variable can have on reactions to being equitably and inequitably paid.

A final individual difference that I would like to discuss here is one that has only received attention during the last decade, namely justice sensitivity. Schmitt

(1996; Schmitt et al., 1994) has convincingly argued that people consistently differ in their sensitivity to befallen injustice and their need for justice. Recently, Schmitt, Gollwitzer, Maes, and Arbach (2004) have expanded this idea and developed scales for justice sensitivity from three perspectives (victim, observer, and perpetrator). In their research they showed that, although all three perspectives are highly correlated, the correlation between observer and perpetrator sensitivity is much higher than the correlation between either observer or perpetrator sensitivity and victim sensitivity. Moreover, Schmitt and colleagues demonstrated that self-related concerns correlated more highly with victim sensitivity, whereas other-related concerns correlated more highly with observer and perpetrator sensitivity. Future research may want to examine how these different perspectives of justice sensitivity are related to our equity findings. It can, for example, easily be argued that people who score high on observer and perpetrator sensitivity are more affected by the suffering of others. That is, that people scoring high on observer and perpetrator sensitivity, compared to victim sensitivity, might feel less content with being overpaid, because at the same time someone else is being underpaid. But, of course, these are only speculations. Future research may shed light on this interesting possibility.

Concluding Remarks

The message I would like to convey with this thesis is a positive one. Montada (2002) noted that the fact that people are only moderately satisfied with being overpaid indicates that people are genuinely concerned with justice. I agree with this proposition and I think the studies conducted in this thesis even demonstrate to a greater extent that people are genuinely concerned with justice. This thesis shows that people feel uncomfortable when they are better off than others and that people do not have immediate reactions ready but need some time to respond to being overpaid. Although human beings might be motivated to maximize their own gain (see e.g., Rusbult & Van Lange, 1996), I truly think that they are motivated to take other persons into account as well. As my studies have demonstrated, people do not feel at ease when they are better off than others. They are in conflict how to react and this illustrates the fact that people do think about others when reacting to being better off

than others. Furthermore, Chapter 3 has demonstrated that people do take others into account when they have enough cognitive resources available. This thesis supports the notion of Montada that justice is an ought, a moral imperative for social life and that justice is not a means for attaining personal aims, but an end in itself.

To end on a broader note, I would like to quote one of the greatest political leaders this world has ever seen:

“Man’s goodness is a flame that can be hidden but never extinguished”

Nelson Mandela (1994)

References

- Adams, J. S. (1963a). Toward an understanding of inequity. *Journal of Abnormal Social Psychology, 67*, 422-436.
- Adams, J. S. (1963b). Wage inequities, productivity, and work quality. *Industrial Relations, 3*, 9-16.
- Adams, J. S. (1965). Inequity in social exchange. In L. Berkowitz (Ed.), *Advances in experimental social psychology* (Vol.2, pp. 267-299). New York: Academic Press.
- Adams, J. S., & Freedman, S. (1976). Equity theory revisited: Comments and annotated bibliography. In L. Berkowitz & E. Walster (Eds.), *Advances in experimental social psychology: Equity theory, toward a general theory of social interaction* (Vol. 9, pp. 43-90). New York: Academic Press.
- Adams, J. S., & Jacobsen, P. R. (1964). Effects of wage inequities on work quality. *Journal of Abnormal Social Psychology, 69*, 19-25.
- Adams, J. S., & Rosenbaum, W. B. (1962). The relationship of worker productivity to cognitive dissonance about wage inequities. *Journal of Applied Psychology, 46*, 161-164.
- Aristotle (c. 329 BC/1997). *Ethica nicomachea* (C. Pannier & J. Verhaeghe, Translation). Groningen: Historische Uitgeverij.
- Aron, A., & Aron, E. N. (1986). *Love as the expansion of self: Understanding attraction and satisfaction*. New York: Hemisphere.
- Aron, A., Aron, E. N., Tudor, M., & Nelson, G. (1991). Close relationships as including other in self. *Journal of Personality and Social Psychology, 60*, 241-253.
- Austin, W. (1977). Equity theory and social comparison processes. In J. Suls & R. Miller (Eds.), *Social comparison theory: Theoretical and empirical perspectives* (pp. 279-305). Washington, DC: Hemisphere Publisher.
- Austin, W., McGinn, N. C., & Susmilch, C. (1980). Internal standards revisited: Effects of social comparisons and expectancies on judgments of fairness and satisfaction. *Journal of Experimental Social Psychology, 16*, 426-441.

- Austin, W., & Walster, E. (1974). Reactions to confirmations and disconfirmations of expectancies of equity and inequity. *Journal of Personality and Social Psychology, 30*, 208-216.
- Austin, W., Walster, E., & Utne, M. K. (1976). Equity and the law: The effect of a harmdoer's "suffering in the act" on liking and assigned punishment. In L. Berkowitz & E. Walster (Eds.), *Advances in experimental social psychology: Equity theory, toward a general theory of social interaction* (Vol. 9, pp. 163-190). New York: Academic Press.
- Bargh, J. A. (1994). The four horsemen of automaticity: Awareness, efficiency, intention, and control in social cognition. In R. S. Wyer, Jr., & T. K. Srull (Eds.), *Handbook of social cognition* (2nd. ed., pp. 1-40). Hillsdale, NJ: Erlbaum.
- Bargh, J. A., & Thein, R. D. (1985). Individual construct accessibility, person memory, and the recall-judgment link: The case of information overload. *Journal of Personality and Social Psychology, 49*, 1129-1146.
- Batson, C. D., Early, S., & Salvarani, G. (1997). Perspective taking: Imagining how another feels versus imagining how you would feel. *Personality and Social Psychology Bulletin, 23*, 751-758.
- Baumeister, R. F., Stillwell, A. M., & Heatherton, T. F. (1994). Guilt: An interpersonal approach. *Psychological Bulletin, 115*, 243-267.
- Bazerman, M. H., Tenbrunsel, A. E., & Wade-Benzoni, K. (1998). Negotiating with yourself and losing: Making decisions with competing internal preferences. *Academy of Management Review, 23*, 225-241.
- Bazerman, M. H., Blount White, S., & Loewenstein, G. F. (1995). Perceptions of fairness in interpersonal and individual choice situations. *Current Directions in Psychological Science, 4*, 39-43.
- Beauchamp, T. L. (2001). *Philosophical ethics: An introduction to moral philosophy* (3rd ed.). Boston: McGraw-Hill.
- Berkowitz, L., & Walster, E. (Eds.). (1976). *Advances in experimental social psychology: Equity theory, toward a general theory of social interaction* (Vol. 9). New York: Academic Press.

- Bierhoff, H. W., Buck, E., & Klein, R. (1986). Social context and perceived justice. In H. W. Bierhoff, R. L. Cohen & J. Greenberg (Eds.), *Justice in social relations* (pp. 165-185). New York: Plenum Press.
- Blascovich, J. (2003). Rumors on the demise of personality and social psychology greatly exaggerated? *Dialogue, 18*, 9.
- Blau, P. M. (1964). *Exchange and power in social life*. New York: Wiley.
- Blount, S. (1995). When social outcomes aren't fair: The effect of causal attributions on preferences. *Organizational Behavior and Human Decision Processes, 63*, 131-144.
- Boles, T. L., & Messick, D. M. (1995). A reverse outcome bias: The influence of multiple reference points on the evaluation of outcomes and decisions. *Organizational Behavior and Human Decision Processes, 61*, 262-275.
- Brockner, J., & Wiesenfeld, B. M. (1996). An integrative framework for explaining reactions to decisions: Interactive effects of outcomes and procedures. *Psychological Bulletin, 120*, 189-208.
- Buunk, B. P., & Van Yperen, N. W. (1989). Social comparison, equality, and relationship satisfaction: Gender differences over a ten-year period. *Social Justice Research, 3*, 157-180.
- Buunk, B. P., & Van Yperen, N. W. (1991). Referential comparisons, relational comparisons, and exchange orientation: Their relation to marital satisfaction. *Personality and Social Psychology Bulletin, 17*, 709-717.
- Campbell, D. J. (1978). The effects of psychological closeness and type of exchange situation on perceived inequity. *Academy of Management Journal, 21*, 307-312.
- Cartwright, D. (1979). Contemporary social psychology in historical perspective. *Social Psychology Quarterly, 42*, 82-93.
- Cates, K. L., & Messick, D. M. (1996). Frequentistic adverbs as measures of egocentric biases. *European Journal of Social Psychology, 26*, 155-161.
- Clark, M. S. (1984). Record keeping in two types of relationships. *Journal of Personality and Social Psychology, 47*, 549-557.
- Clark, M. S., & Mills, J. (1979). Interpersonal attraction in exchange and communal relationships. *Journal of Personality and Social Psychology, 37*, 12-24.

- Clark, M. S., & Mills, J. (1993). The difference between communal and exchange relationships: What it is and is not. *Personality and Social Psychology Bulletin, 19*, 684-691.
- Clark, M. S., Mills, J., & Corcoran, D. M. (1989). Keeping track of needs and inputs of friends and strangers. *Personality and Social Psychology Bulletin, 15*, 533-542.
- Clark, M. S., Ouellette, R., Powell, M. C., & Milberg, S. (1987). Recipient's mood, relationship type, and helping. *Journal of Personality and Social Psychology, 53*, 94-103.
- Cohen, R. L. (1986). *Justice: Views from the social sciences*. New York: Plenum Press.
- Collins, W. (1990). *Collins Cobuild English Language Dictionary*. Glasgow: William Collins Sons.
- Darwin, C. (1859/1999). *The origin of species by means of natural selection*. New York: Bantam Books.
- Deutsch, M. (1975). Equity, equality, or need? What determines which value will be used as the basis of distributive justice? *Journal of Social Issues, 31*, 137-149.
- Deutsch, M. (1979). Education and distributive justice: Some reflections on grading systems. *American Psychologist, 34*, 391-401.
- Diekmann, K. A., Samuels, S. M., Ross, L., & Bazerman, M. H. (1997). Self-interest and fairness in problems of resource allocation: Allocators versus recipients. *Journal of Personality and Social Psychology, 72*, 1061-1074.
- Epley, N., & Caruso, E. M. (2004). Egocentric ethics. *Social Justice Research, 17*, 171-187.
- Epley, N., & Dunning, D. (2000). Feeling "holier than thou": Are self-serving assessments produced by errors in self- or social prediction? *Journal of Personality and Social Psychology, 79*, 861-875.
- Epley, N., Morewedge, C. K., & Keysar, B. (2004). Perspective taking in children and adults: Equivalent egocentrism but differential correction. *Journal of Experimental Social Psychology, 40*, 760-768.
- Fazio, R. H. (1990). A practical guide to the use of response latency in social psychological research. In C. Hendrick & M. S. Clark (Eds.), *Research*

- methods in personality and social psychology. Review of personality and social psychology, Vol. 11 (pp. 74-97)*. Thousand Oaks, CA: Sage Publications, Inc.
- Fernandez-Dols, J. M. (2002). Perverse justice and perverse norms: Another turn of the screw. In M. Ross & D. T. Miller (Eds.), *The justice motive in everyday life* (pp. 79-90). Cambridge: University Press.
- Finkel, N. J. (2001). *Not fair! The typology of commonsense unfairness*. Washington, DC: American Psychological Association.
- Fiske, S. T., & Taylor, S. E. (1991). *Social cognition* (2nd ed.). New York: McGraw-Hill.
- Folger, R. (1984). *The sense of injustice: Social psychological perspectives*. New York: Plenum Press.
- Folger, R., & Cropanzano, R. (1998). *Organizational justice and human resource management*. Thousand Oaks, CA: Sage.
- Frey, B. S., Benz, M., & Stutzer, A. (2003). *Introducing procedural utility: Not only what, but also how matters*. Unpublished manuscript.
- Frijda, N. H. (1986). *The emotions*. Cambridge: Cambridge University Press.
- Gilbert, D. T., & Osborne, R. E. (1989). Thinking backward: Some curable and incurable consequences of cognitive busyness. *Journal of Personality and Social Psychology, 57*, 940-949.
- Gilbert, D. T., Pelham, B. W., & Krull, D. S. (1988). On cognitive busyness: When person perceivers meet persons perceived. *Journal of Personality and Social Psychology, 54*, 733-740.
- Greenberg, J. (1982). Approaching equity and avoiding inequity in groups and organizations. In J. Greenberg & R. L. Cohen (Eds.), *Equity and justice in social behavior* (pp. 389-435). New York: Academic Press.
- Greenberg, J. (1990). Looking fair vs. being fair: Managing impressions of organizational justice. In L. L. Cummings & B. M. Staw (Eds.), *Research in organizational behavior* (Vol. 12, pp. 111-157). Greenwich, CT: JAI Press.
- Greenberg, J., Koole, S. L., & Pyszczynski, T. (Eds.). (2004). *Handbook of experimental existential psychology*. New York, NY: Guilford Press.
- Haidt, J. (2000). The moral emotions. In R. J. Davidson, K. Scherer, & H. H. Goldsmith (Eds.), *Handbook of affective sciences* (pp. 852-870). Oxford: Oxford Press.

- Hassebrauck, M. (1986). Ratings of distress as a function of degree and kind of inequity. *Journal of Social Psychology, 126*, 269-270.
- Hatfield, E. (1982). Passionate love, companionate love, and intimacy. In M. Fisher & G. Stricker (Eds.), *Intimacy* (pp. 267-292). New York: Plenum Press.
- Hegtvedt, K. A. (1990). The effects of relationship structure on emotional responses to inequity. *Social Psychology Quarterly, 53*, 214-228.
- Hobbes, T. (1651/1904). *Leviathan, or matter, forme and power of a commonwealth ecclesiasticall and civill*. Cambridge: Cambridge University Press.
- Homans, G. C. (1974). *Social behavior: Its elementary forms*. New York: Harcourt, Brace, & Jovanovich.
- Imazi, K., & Ohbuchi, K. (1998). Utility and fairness concerns in policy evaluation among Japanese people. *Japanese Psychological Research, 40*, 186-197.
- Ito, T. A., Larsen, J. T., Smith, N. K., & Cacioppo, J. T. (1998). Negative information weighs more heavily on the brain: The negativity bias in evaluative categorizations. *Journal of Personality and Social Psychology, 75*, 887-900.
- Jacques, E. (1961). *Equitable payment*. London: Heinemann Educational Books.
- Jencks, C. (1990). Varieties of altruism. In J. J. Mansbridge (Ed), *Beyond self-interest* (pp. 54-70). Chicago: The University of Chicago Press.
- Kahneman, D., Diener, E., & Schwarz, N. (1999). *Well-being: The foundations of hedonic psychology*. New York, NY: Russell Sage Foundation.
- Kelley, H. H., & Thibaut, J. W. (1978). *Interpersonal relations: A theory of interdependence*. New York: John Wiley & Sons.
- Kirk, R. E. (1982). *Experimental design: Procedures for the behavioral sciences* (2nd ed.). Belmont, CA: Brooks/Cole.
- Kluwer, E. S., & Mikula, G. (2002). Gender-related inequalities in the division of family work in close relationships: A social psychological perspective. In W. Stroebe & M. Hewstone (Eds.), *European Review of Social Psychology* (Vol. 13, pp. 185-216). East Sussex: Psychology Press.
- Komorita, S. S., & Chertkoff, J. M. (1973). A bargaining theory of coalition formation. *Psychological Review, 80*, 149-162.
- Kuijjer, R. G., Buunk, B.P., & Ybema, J. F. (2001). Justice of give-and-take in the intimate relationship: When one partner of a couple is diagnosed with cancer. *Personal Relationships, 8*, 75-92.

- Lamm, H., & Schwinger, T. (1980). Norms concerning distributive justice: Are needs taken into consideration in allocation decisions? *Social Psychology Quarterly*, *43*, 425-429.
- Lerner, M. J. (1980). *The belief in a just world*. New York: Plenum Press.
- Lerner, M. J. (1981). The justice motive in human relations: Some thoughts on what we know and need to know about justice. In M. J. Lerner & S. C. Lerner (Eds.), *The justice motive in social behavior: Adapting to times of scarcity and change* (pp. 47-70). New York: Plenum Press.
- Leventhal, G. S. (1976). The distribution of rewards and resources in groups and organizations. In L. Berkowitz & E. Walster (Eds.), *Advances in experimental social psychology: Equity theory, toward a general theory of social interaction* (Vol. 9, pp. 91-131). New York: Academic Press.
- Leventhal, G. S. (1980). What should be done with equity theory? In K. J. Gergen, M. S. Greenberg, & R. H. Willis (Eds.), *Social exchange: Advances in theory and research* (pp. 27-55). New York: Plenum Press.
- Leventhal, G. S., Karuza, J., & Fry, W. R. (1980). Beyond fairness: A theory of allocation preferences. In G. Mikula (Ed.), *Justice and social interaction* (pp. 167-218). New York: Springer-Verlag.
- Liebrand, W. B. G., Messick, D. M., & Wolters, F. J. M. (1986). Why are we fairer than others: A cross-cultural replication and extension. *Journal of Experimental Social Psychology*, *22*, 590-604.
- Lind, E. A., & Tyler, T. R. (1988). *The social psychology of procedural justice*. New York: Plenum Press.
- Loewenstein, G. F., & Prelec, D. (1993). Preferences for sequences of outcomes. *Psychological Review*, *100*, 91-108.
- Loewenstein G. F., Thompson, L., & Bazerman, M. H. (1989). Social utility and decision making in interpersonal contexts. *Journal of Personality and Social Psychology*, *57*, 426-441.
- Magee, B. (1998). *The story of philosophy*. London: Dorling Kinderlsey Limited.
- Mandela, N. (1994). *Long walk to freedom: The autobiography of Nelson Mandela*. Boston: Little, Brown.

- McClintock, C. G. (1978). Social values: Their definition, measurement, and development. *Journal of Research and Development in Education*, *12*, 121-137.
- McDonald, G. W. (1981). Structural exchange and marital interaction. *Journal of Marriage and the Family*, *43*, 825-839.
- McIntosh, P. (1992). White privilege and male privilege: A personal account of coming to see correspondences through work in women's studies. In M. L. Anderson & P. Hill Collins (Eds.), *Race, class, and gender: An anthology*, (pp. 70-81). Belmont: Wadsworth.
- Merton, R. K., & Kitt, A. S. (1950). Contributions to the theory of reference group behavior. In R. K. Merton & P. E. Lazarsfeld (Eds.), *Continuities in social research: Studies in the scope and method of "The American Soldier"* (pp. 40-105). Grenceoe, IL: Free Press.
- Messick, D. M. (1993). Equality as a decision heuristic. In B. A. Mellers & J. Baron (Eds.), *Psychological perspectives on justice: Theory and applications* (pp. 11-31). New York: Cambridge University Press.
- Messick, D. M., Bloom, S., Boldizar, J. P., & Samuelson, C. D. (1985). Why we are fairer than others. *Journal of Experimental Social Psychology*, *21*, 480-500.
- Messick, D. M., & Sentis, K. (1979). Fairness and preference. *Journal of Experimental Social Psychology*, *15*, 418-434.
- Messick, D. M., & Sentis, K. P. (1983). Fairness, preference, and fairness biases. In D. M. Messick & K. S. Cook (Eds.), *Equity theory: Psychological and sociological perspectives* (pp. 61-94). New York: Praeger.
- Messick, D. M., & Sentis, K. P. (1985). Estimating social and nonsocial utility functions from ordinal data. *European Journal of Social Psychology*, *15*, 389-399.
- Michaels, J. W., Edwards, J. N., & Acock, A. C. (1984). Satisfaction in intimate relationships as a function of inequality, inequity, and outcomes. *Social Psychology Quarterly*, *47*, 347-357.
- Miedema, J., Van den Bos, K., & Vermunt, R. (2003). *The influence of ego-threat on reactions to perceived fairness*. Manuscript submitted for publication.
- Mikula, G. (2003). Testing an attribution-of-blame model of judgments of injustice. *European Journal of Social Psychology*, *33*, 793-811.

- Mikula, G., & Wenzel, M. (2000). Justice and social conflict. *International Journal of Psychology, 35*, 126-135.
- Miller, D. T. (1999). The norm of self-interest. *American Psychologist, 54*, 1053-1060.
- Miller, D. T. & Ratner, R. K. (1998). The disparity between the actual and assumed power of self-interest. *Journal of Personality and Social Psychology, 74*, 53-62.
- Miller, D. T. & Ross, R. K. (1975). Self-serving biases in the attribution of causality: Fact or fiction? *Psychological Bulletin, 82*, 213-225.
- Mills, J., & Clark, M. S. (1982). Communal and exchange relationships. In L. Wheeler (Ed.), *Review of personality and social psychology* (Vol. 3, pp. 121-144). Beverly Hills, CA: Sage.
- Mischel, W., Ebbesen, E. B., & Zeiss, A. M. (1976). Determinants of selective memory about the self. *Journal of Consulting and Clinical Psychology, 44*, 92-103.
- Montada, L. (2002). Doing justice to the justice motive. In M. Ross & D. T. Miller (Eds.), *The justice motive in everyday life* (pp. 41-62). New York: Cambridge University Press.
- Montada, L., Schmitt, M., & Dalbert, C. (1986). Thinking about justice and dealing with one's own privileges. In H. W. Bierhoff, R. L. Cohen & J. Greenberg (Eds.), *Justice in social relations* (pp. 125-143). New York: Plenum Press.
- Moore, L. M., & Baron, R. M. (1973). Effects of wage inequities on work attitudes and performance. *Journal of Experimental Social Psychology, 9*, 1-16.
- Moore, L. M., & Loewenstein, G. (2004). Self-interest, automaticity, and the psychology of conflict of interest. *Social Justice Research, 17*, 189-202.
- Niedenthal, P. M., Tangney, J. P., & Gavanski, I. (1994). "If only I weren't" versus "if only I hadn't": Distinguishing shame and guilt in counterfactual thinking. *Journal of Personality and Social Psychology, 67*, 585-595.
- Nisbett, R., & Ross, L. (1980). *Human inference: Strategies and shortcomings of social judgment*. Englewood Cliffs, NJ: Prentice-Hall.
- Novib. (2003, Retrieved September 01, 2003, from <http://www.novib.nl/>). *Hoe groot is jouw wereld?*
- Ordóñez, L. D., Mellers, B. A., Chang, S. J., & Roberts, J. (1995). Are preference reversals reduced when made explicit? *Journal of Behavioral Decision Making, 8*, 265-277.

- Peters, S. L., & Van den Bos, K. (2004a). *Social value orientation and overpayment*. Unpublished data.
- Peters, S. L., & Van den Bos, K. (2004b). *When fairness is important: Reactions to being inequitably paid in communal relationships*. Manuscript submitted for publication.
- Peters, S. L., Van den Bos, K., & Bobocel, D. R. (2004). The moral superiority effect: Self versus other differences in satisfaction with being overpaid. *Social Justice Research, 17*, 257-273.
- Peters, S. L., Van den Bos, K., & Karremans, J. C. (2004). *On the psychology of the advantaged: How people react to being overpaid*. Manuscript submitted for publication.
- Plato (c. 370 BC/1981). *Politeia* (G. Koolschijn, Translation). Amsterdam: Athenaeum-Polak en Van Gennip.
- Pritchard, R. D. (1969). Equity theory: A review and critique. *Organizational Behavior and Human Performance, 4*, 176-211.
- Quattrone, G. A. (1982). Overattribution and unit formation: When behavior engulfs the field. *Journal of Personality and Social Psychology, 42*, 593-607.
- Rawls, J. (1971/1999). *A theory of justice*. Cambridge: Harvard University Press.
- Rivera, A. N., & Tedeschi, J. T. (1976). Public versus private reactions to positive inequity. *Journal of Personality and Social Psychology, 34*, 895-900.
- Roese, N. J., & Jamieson, D. W. (1993). Twenty years of bogus pipeline research: A critical review and meta-analysis. *Psychological Bulletin, 114*, 363-375.
- Roseman, I. J., Spindel, M. S., & Jose, P. E. (1990). Appraisals of emotion-eliciting events: Testing a theory of discrete emotions. *Journal of Personality and Social Psychology, 59*, 899-915.
- Roseman, I. J., Wiest, C., & Swartz, T. S. (1994). Phenomenology, behaviors, and goals differentiate discrete emotions. *Journal of Personality and Social Psychology, 67*, 206-221.
- Rusbult, C. E., & Van Lange, P. A. M. (1996). Interdependence processes. In E. T. Higgins & A. W. Kruglanski (Eds.), *Social psychology: Handbook of basic principles* (pp. 564-596). New York, NY: Guilford Press.
- Schmitt, M. (1996). Individual differences in sensitivity to befallen injustice (SBI). *Personality and Individual Differences, 21*, 3-20.

- Schmitt, M., Barbacsy, R., Binz, S., Buttgereit, C., Heinz, J., Hesse, J., Kraft, S., Kuhlmann, N., Lischetzke, T., Nisslmüller, K., & Wunsch, U. (1994). *Distributive justice research from an interactionist perspective*. (Berichte aus der Arbeitsgruppe "Verantwortung, Gerechtigkeit, Moral" Nr. 77). Trier: Universität Trier, Fachbereich I - Psychologie.
- Schmitt, M., Gollwitzer, M., Maes, J., & Arbach, D. (2004). *Justice sensitivity: Assessment and location in the personality space*. Manuscript submitted for publication.
- Schwartz, B. (1986). *The battle for human nature*. New York: Norton.
- Siegel, S., & Castellan, N. J. J. (1988). *Nonparametric statistics*. Singapore: McGraw-Hill.
- Skitka, L. J., & Crosby, F. J. (2003). Trends in the social psychological study of justice. *Personality and Social Psychology Review, 7*, 282-285.
- Skowronski, J. J., & Carlston, D. E. (1989). Negativity and extremity biases in impression formation: A review of explanations. *Psychological Bulletin, 105*, 131-142.
- Smeesters, D., Warlop, L., Van Avermaet, E., Corneille, O., & Yzerbyt, V. (2003). Do not prime hawks with doves: The interplay of construct activation and consistency of social value orientation on cooperative behavior. *Journal of Personality and Social Psychology, 84*, 972-987.
- Smith, E. R., & Mackie, D. M. (1990). *Social psychology*. New York: Worth Publishers.
- Sprecher, S. (1986). The relation between inequity and emotions in close relationships. *Social Psychology Quarterly, 49*, 309-321.
- Stoeber, J., Dette, D., & Musch, J. (2002). Comparing continuous and dichotomous scoring of the Balanced Inventory of Desirable Responding. *Journal of Personality Assessment, 78*, 370-389.
- Stouffer, S. A., Suchman, E. A., DeVinney, L. C., Star, S. A., & Williams, R. M. (1949). *The American soldier: Adjustment during Army life* (Vol. 1). Princeton: Princeton University Press.
- Strack, F., & Deutsch, R. (2004). Reflective and impulsive determinants of social behavior. *Personality and Social Psychology Review, 8*, 220-247.

- Tangney, J. P. (1991). Moral affect: The good, the bad, and the ugly. *Journal of Personality and Social Psychology, 61*, 598-607.
- Tangney, J. P., Miller, R. S., Flicker, L., & Barlow, D. H. (1996). Are shame, guilt, and embarrassment distinct emotions? *Journal of Personality and Social Psychology, 70*, 1256-1269.
- Taylor, S. E. (1991). Asymmetrical effects of positive and negative events: The mobilization-minimization hypothesis. *Psychological Bulletin, 110*, 67-85.
- Thibaut, J. W., & Kelley, H. H. (1959). *The social psychology of groups*. New York: Wiley.
- Thibaut, J. W., & Walker, L. (1975). *Procedural justice: A psychological analysis*. Hillsdale, NJ: Lawrence Erlbaum Associates, Inc.
- Tyler, T. R., Boeckmann, R. J., Smith, H. J., & Huo, Y. J. (1997). *Social justice in a diverse society*. Boulder, CO: Westview Press.
- Tyler, T. R., & Lind, E. A. (1992). A relational model of authority in groups. In M. P. Zanna (Ed.), *Advances in experimental social psychology* (Vol. 25, pp. 115-191). San Diego, CA: Academic Press.
- Tyler, T. R., & Smith, H. J. (1998). Social justice and social movements. In D. T. Gilbert & S. T. Fiske (Eds.), *The handbook of social psychology*, (Vol. 2, 4th ed.) (pp. 595-629). New York, NY: McGraw-Hill.
- Van den Bos, K. (1999). What are we talking about when we talk about no-voice procedures? On the psychology of the fair outcome effect. *Journal of Experimental Social Psychology, 35*, 560-577.
- Van den Bos, K., & Lind, E. A. (2002). Uncertainty management by means of fairness judgments. In M. P. Zanna (Ed.), *Advances in experimental social psychology*, (Vol. 34, pp. 1-60). San Diego, CA: Academic Press, Inc.
- Van den Bos, K., Lind, E. A., Vermunt, R., & Wilke, H. A. M. (1997). How do I judge my outcome when I do not know the outcome of others? The psychology of the fair process effect. *Journal of Personality and Social Psychology, 72*, 1034-1046.
- Van den Bos, K., Peters, S. L., Bobocel, D. R., & Ybema, J. F. (2004). *On ethical considerations and egoism-based pleasure: Reactions to advantageous inequity under cognitively busy conditions*. Manuscript submitted for publication.

- Van den Bos, K., & Van Prooijen, J. W. (2001). Referent cognitions theory: The role of closeness of reference points in the psychology of voice. *Journal of Personality and Social Psychology, 81*, 616-626.
- Van den Bos, K., Vermunt, R., & Wilke, H. A. M. (1997). Procedural and distributive justice: What is fair depends more on what comes first than on what comes next. *Journal of Personality and Social Psychology, 72*, 95-104.
- Van den Bos, K., Wilke, H. A. M., Lind E. A., & Vermunt, R. (1998). Evaluating outcomes by means of the fair process effect: Evidence for different processes in fairness and satisfaction judgments. *Journal of Personality and Social Psychology, 74*, 1493-1503.
- Van Dijk, E., Wilke, H., Wilke, M., & Metman, L. (1999). What information do we use in social dilemmas? Environmental uncertainty and the employment of coordination rules. *Journal of Experimental Social Psychology, 35*, 109-135.
- Van Lange, P. A. M. (1999). The pursuit of joint outcomes and equality in outcomes: An integrative model of social value orientation. *Journal of Personality and Social Psychology, 77*, 337-349.
- Van Yperen, N. W., & Buunk, B. P. (1990). A longitudinal study of equity and satisfaction in intimate relationships. *European Journal of Social Psychology, 20*, 287-309.
- Van Yperen, N. W., & Buunk, B. P. (1991). Equity theory and exchange and communal orientation from a cross-national perspective. *Journal of Social Psychology, 131*, 5-20.
- Van Yperen, N. W., & Buunk, B. P. (1994). Social comparison and social exchange in marital relationships. In M. J. Lerner & G. Mikula (Eds.), *Entitlement and the affectional bond: Justice in close relationships* (pp. 89-115). New York: Plenum Press.
- Walster, E., Berscheid, E., & Walster, G. W. (1973). New directions in equity research. *Journal of Personality and Social Psychology, 25*, 151-176.
- Walster, E., Walster, G. W., & Berscheid, E. (1978). *Equity: Theory and research*. Boston: Allyn & Bacon.
- Walster, E., Walster, G. W., & Traupmann, J. (1978). Equity and premarital sex. *Journal of Personality and Social Psychology, 36*, 82-92.

- Wegner, D. M., & Erber, R. (1992). The hyperaccessibility of suppressed thoughts. *Journal of Personality and Social Psychology, 63*, 903-912.
- Werner, S., & Ones, D. S. (2000). Determinants of perceived pay inequities: The effects of comparison other characteristics and pay-system communication. *Journal of Applied Social Psychology, 30*, 1281-1309.
- Wicker, A. W., & Bushweiler, G. (1970). Perceived fairness and pleasantness of social exchange situations: Two factorial studies of inequity. *Journal of Personality and Social Psychology, 15*, 63-75.
- Wright, L., Newman, R. A., McCormick, D., & Harding, C. (1994). A more bias-proof measure for the Type A subcomponent of exaggerated interpersonal control. *Educational and Psychological Measurement, 54*, 146-154.

Summary

Why do people get mad when a murderer escapes his punishment? Why do people get upset when a top manager earns more than 450 times as much as his employees? Why do people protest when they have no say in things that concern them? Because it is unfair and wrong! People all over the world have opinions about what is unjust and what is just. Justice is one of the most fundamental topics in the history of humankind. More than twenty centuries ago, Greek philosophers like Socrates, Plato, and Aristotle already spent numerous years understanding the subject of justice and injustice, and still justice is a present-day topic that is important to many people. Justice concerns everyone, and is therefore omnipresent and hugely important. Justice is in fact the central topic of this thesis.

Chapter 1 sketches the theoretical background against which the present thesis is written and provides the reader with an overview of the justice research that has been conducted until now. After the introduction of several topics in justice research -relative deprivation, distributive justice, procedural justice, and retributive justice- it is explained that this thesis deals with research in the area of distributive justice to provide greater insight into the social psychology of being better off than others. In particular, the present thesis uses equity theory, first formulated by Adams (1965), to explain people's reactions to their advantages. In doing so, this thesis focuses on how people deal with being better off than others by studying people's reactions to being overpaid as defined in equity theory.

Equity theory has examined what people think is equitable and fair and how people react to equitable and inequitable outcomes. The basic justice principle underlying equity theory is a balance between contributions and rewards of two persons. Equity theory distinguishes between equitable and inequitable outcome distributions. Equity exists for people whenever they perceive that the ratio of their inputs to outcomes is equal to the input-outcome ratio of another person. To illustrate, it is generally perceived as equitable and fair if two people who have worked equally hard (the input) receive an equal amount of money for their work (the outcome). Inequity results for people not only when they are relatively underpaid (receiving less and/or contributing more than a comparable other), but also when they are relatively overpaid (receiving more and/or contributing less than a comparable other).

On the basis of equity theory, it can be argued that, when forming judgments of outcome satisfaction, individuals who are faced with equity will be satisfied and individuals who are faced with underpayment will be dissatisfied. Interestingly, overpayment leads people to feel moderately satisfied. Overpaid people are less satisfied than equitably paid people but more satisfied than underpaid people. A major proposition of this thesis is that people who are confronted with being overpaid have to deal with conflicting social motives when forming judgments of outcome satisfaction. On the one hand it is nice to receive a relatively high outcome, but on the other hand the situation is unfair and inequitable. This thesis proposes that overpaid people are in conflict between their egoism-based pleasure of receiving a relatively high outcome and their fairness-based feeling of being unjustly advantaged. In twelve studies I have tried to get support for this proposition and the implications that may follow from it. These twelve studies can be classified in four chapters and the four chapters can be subdivided into two parts: a socially oriented part (Chapters 2 and 5) and a process-oriented part (Chapters 3 and 4).

Chapter 2 examines how overpaid people perceive their own reactions to being overpaid and compares this with people's ideas about the reactions of others to being overpaid. Results show that people think others are more satisfied with being overpaid than they are themselves. These results are consistent with the idea that people think others are more influenced by egoism-based considerations whereas they themselves are more influenced by considerations of right and wrong. In other words, people show a "moral superiority effect". In the General Discussion of this chapter, I argue why it is less likely to find moral superiority effects on people's reactions to being equally paid and underpaid, and I relate the findings to the literature of self-serving biases.

In Chapter 3 it is investigated how people deal with being overpaid when they are cognitively busy (i.e., when they have to memorize a lot of information or have to respond quickly). Results show that cognitively busy people are more satisfied with being overpaid than people who are cognitively less busy. It is suggested that people first respond in an egoism-based manner ("Wow, I receive more") and subsequently respond in a justice-based manner ("but this isn't fair"). However, this justice correction can only take place when people are cognitively less busy.

Chapter 4 furthers the insights into the process of how people react to being overpaid. Equity theory has done a lot of research on the psychology of the overpaid, but it is argued in this chapter that there is confusion as to the underlying psychological process that drives people's reactions to this outcome distribution. Following the founders of equity theory, it is suggested that overpaid people are in conflict between what they want and what they think is fair, and that as a result of this conflict people experience feelings of uneasiness. This proposition is contrasted with explanations of other scientists who stated that people feel guilty when being overpaid. Chapter 4 challenges this latter explanation. Results show that overpaid people indeed experience feelings of uneasiness and do not or to a lesser extent experience feelings of guilt. Furthermore, data are provided that reveal that overpaid people experience a conflict between what makes them pleased and what they believe to be right. It is demonstrated that people need longer time when deciding how to respond to being overpaid as opposed to being equally paid and underpaid, and that this is especially true when people are overpaid relative to a friend.

Chapter 5 is a direct extension of Chapter 4. It examines when justice is important to people, and therefore explores the social conditions under which the importance of justice may change in social interactions. More specifically, in this chapter, I examine how different types of relationships affect evaluations of equitable and inequitable situations. It is argued that when people are confronted with friends as interaction partners, as opposed to unknown others, they are motivated to attend to the needs of their friends, and therefore they are not only concerned with their own outcomes but also with their friends' outcomes. Following this line of reasoning, two studies demonstrate that when people's interaction partners are friends, people are indeed more satisfied with being underpaid and less satisfied with being overpaid compared to when their interaction partners are unknown others. In the discussion, I argue why these findings suggest that justice is in particular important to people when they are in communal relationships.

Finally, in Chapter 6, I consider the various findings reported in this dissertation as a whole and I discuss them thoroughly. I give an overview of the findings of the twelve studies presented here, which is illustrated by a table that combines all the studies in this thesis that measure satisfaction judgments. I present a working model of people's reactions to being overpaid that represents a two-phase

model. In this model I argue that, when being overpaid, people's first reaction is one that is egoism-based. I suggest that this egoism-based, gut reaction happens in a more or less automatic manner. Furthermore, I argue that it is only after this first automatic reaction of pleasure that people consider the fairness of the situation. I propose that this latter fairness-based reaction is not as automatic and fast as the first egoism-based reaction. People need just a little bit of time (e.g., several seconds) to discover, understand, and respond to the unfairness of a situation in which they are better off than others. I propose that this two-phase working model of people's reactions to being overpaid may be an important implication of the studies conducted in this thesis, and can be supported by several other articles that have recently been published. Furthermore, I discuss limitations of the research conducted in this thesis and I give suggestions for future research.

Samenvatting (Summary in Dutch)

Waarom worden mensen boos als een moordenaar zijn straf ontloopt? Waarom raken mensen overstuur als een top manager meer dan 450 keer zoveel verdient als zijn werknemers? Waarom protesteren mensen als zij geen zeggenschap hebben over zaken die hen aangaan? Omdat dat onrechtvaardig is en fout! Mensen over de hele wereld hebben meningen over wat rechtvaardig en wat onrechtvaardig is. Rechtvaardigheid is één van de meest fundamentele onderwerpen in de geschiedenis van de mensheid. Meer dan twintig eeuwen geleden besteedden Griekse filosofen zoals Socrates, Plato en Aristoteles al vele jaren van hun leven aan het begrijpen van rechtvaardigheid en onrechtvaardigheid, en nog steeds is het een hedendaags onderwerp dat voor vele mensen van belang is. Rechtvaardigheid is dan ook het centrale onderwerp van dit proefschrift.

Hoofdstuk 1 schetst de theoretische achtergrond waartegen het huidige proefschrift is geschreven en geeft de lezer een overzicht van het rechtvaardigheidsonderzoek dat tot nu toe is uitgevoerd. Na de introductie van verscheidene onderwerpen in rechtvaardigheidsonderzoek -relatieve deprivatie, distributieve rechtvaardigheid, procedurele rechtvaardigheid en retributieve rechtvaardigheid-, wordt uitgelegd dat dit proefschrift onderzoek rapporteert dat is uitgevoerd op het gebied van de distributieve rechtvaardigheid om een beter inzicht te krijgen in de psychologie van de mensen die beter af zijn dan anderen. Het huidige proefschrift gebruikt in het bijzonder de billijkheidstheorie, als eerste geformuleerd door Adams (1965), om de reacties van mensen op hun voordelen te verklaren. Dit proefschrift richt zich op de vraag hoe mensen omgaan met hun voordelen en probeert deze vraag te beantwoorden door middel van het bestuderen van reacties van mensen op overbetalingen zoals gedefinieerd in de billijkheidstheorie.

De billijkheidstheorie heeft onderzocht wat mensen billijk en eerlijk vinden en hoe ze reageren op billijke en onbillijke uitkomsten. Het rechtvaardigheidsprincipe, dat aan de basis ligt van de billijkheidstheorie, is een balans tussen de bijdragen van en uitkomsten van twee personen. De billijkheidstheorie maakt onderscheid tussen billijke en onbillijke uitkomstverdelingen. Billijkheid ervaren mensen als zij waarnemen dat de ratio van

hun inbreng en uitkomsten gelijk is aan de ratio van de inbreng en uitkomsten van een ander. Over het algemeen wordt het bijvoorbeeld als billijk en eerlijk ervaren als twee mensen die even hard hebben gewerkt (de inbreng) ook evenveel betaald krijgen voor hun werk (de uitkomst). Onbillijkheid ervaren mensen niet alleen wanneer zij relatief onderbetaald worden (minder ontvangen en/of meer contribueren dan een vergelijkbare ander), maar ook wanneer zij relatief overbetaald worden (meer ontvangen en/of minder contribueren dan een vergelijkbare ander).

Op basis van de billijkheidstheorie kan het beargumenteerd worden dat wanneer mensen oordelen vormen over uitkomsttevredenheid, die mensen die geconfronteerd worden met een gelijke betaling tevreden zullen zijn en die mensen die geconfronteerd worden met een onderbetaling ontevreden zullen zijn. Interessant is dat een overbetaling mensen gematigd tevreden maakt. Overbetaalde mensen zijn minder tevreden dan gelijk betaalde mensen, maar meer tevreden dan onderbetaalde mensen. Een belangrijke stelling van dit proefschrift is dat mensen die overbetaald worden te maken hebben met conflicterende sociale motieven wanneer zij een oordeel moeten vormen over uitkomsttevredenheid. Aan de ene kant is het prettig om een relatief hoge uitkomst te ontvangen, maar aan de andere kant is de situatie onrechtvaardig en onbillijk. Dit proefschrift stelt dat overbetaalde mensen een conflict ervaren tussen hun op egoïsme gebaseerde gevoel van plezier -het ontvangen van een relatief hoge uitkomst- en hun op rechtvaardigheid gebaseerde gevoel van onjuist beoordeeld zijn. In twaalf studies is geprobeerd ondersteuning te vinden voor deze stelling en voor de implicaties die hieruit kunnen volgen. De twaalf studies in dit proefschrift kunnen ondergebracht worden in vier hoofdstukken en deze vier hoofdstukken kunnen weer opgedeeld worden in twee delen: een sociaal georiënteerd deel (Hoofdstukken 2 en 5) en een proces-georiënteerd deel (Hoofdstukken 3 en 4).

Hoofdstuk 2 onderzoekt hoe overbetaalde mensen hun eigen reacties waarnemen op het overbetaald zijn en vergelijkt dit met ideeën die mensen hebben over de reacties van anderen op het overbetaald zijn. De resultaten laten zien dat mensen denken dat anderen meer tevreden zijn met een overbetaling dan zij zelf denken te zijn. Deze resultaten zijn in overeenstemming met het idee dat mensen denken dat anderen meer beïnvloed worden door op egoïsme gebaseerde overwegingen, terwijl zij zelf denken meer beïnvloed te worden door overwegingen van rechtvaardigheid. Met andere woorden: mensen laten een 'moreel superioriteits

effect' zien. In de algemene discussie van dit hoofdstuk wordt beargumenteerd waarom het minder voor de hand ligt om een moreel superioriteitseffect te vinden bij reacties op onderbetaling of gelijke betaling. De bevindingen van dit hoofdstuk worden gerelateerd aan de literatuur over zelfdienende vertekeningen.

In Hoofdstuk 3 wordt onderzocht hoe mensen omgaan met een overbetaling wanneer zij cognitief druk zijn (d.w.z. wanneer ze snel moeten reageren of veel informatie moeten onthouden). De resultaten laten zien dat cognitief drukke mensen meer tevreden zijn met een overbetaling dan cognitief minder drukke mensen. Gesuggereerd wordt dat mensen eerst reageren op een op egoïsme gebaseerde manier ("wauw, ik krijg meer") en pas daarna reageren op een manier die op rechtvaardigheid is gebaseerd ("maar dit is niet eerlijk"). Deze correctie voor rechtvaardigheid kan echter alleen plaatsvinden als mensen cognitief niet druk zijn.

Hoofdstuk 4 geeft inzicht in het proces van hoe mensen reageren op een overbetaling. De billijkheidstheorie heeft veel onderzoek gedaan naar de psychologie van de overbetaalden, maar in dit hoofdstuk wordt beargumenteerd dat er verwarring is over het psychologische proces dat ten grondslag ligt aan reacties op deze overbetaling. In navolging van de billijkheidstheorie wordt gesuggereerd dat overbetaalde mensen in conflict staan tussen wat zij willen en wat zij denken dat eerlijk is en dat mensen, als resultaat van dit conflict, een gevoel van ongemak ervaren. Daartegenover staan verklaringen van andere wetenschappers die hebben gezegd dat mensen zich schuldig voelen als zij overbetaald zijn. Hoofdstuk 4 daagt deze laatste verklaring uit. De resultaten laten zien dat overbetaalde mensen inderdaad ongemak voelen en niet, of in mindere mate, schuld. Daarnaast bleek uit de data dat overbetaalde mensen een conflict ervaren tussen wat hen tevreden maakt en wat zij denken dat eerlijk is. Duidelijk werd ook dat mensen meer tijd nodig hebben om te beslissen hoe ze reageren op een overbetaling dan om te beslissen hoe ze reageren op een gelijke betaling of een onderbetaling. Dit is met name het geval wanneer mensen overbetaald worden ten opzichte van een vriend.

Hoofdstuk 5 is een directe uitbreiding van Hoofdstuk 4. Dit hoofdstuk onderzoekt wanneer rechtvaardigheid belangrijk is voor mensen en onderzoekt daarom de sociale condities waaronder het belang van rechtvaardigheid kan veranderen in sociale interacties. In het bijzonder geeft dit hoofdstuk weer hoe verschillende typen relaties evaluaties van billijke en onbillijke situaties beïnvloeden.

Beargumenteed wordt dat mensen meer gemotiveerd zijn rekening te houden met de behoefte van hun interactiepartner wanneer deze interactiepartner een vriend is, dan wanneer deze interactiepartner een willekeurig ander is en dat daarom niet alleen hun eigen uitkomsten voor hen van belang zijn, maar ook die van hun vrienden. Op basis van deze redenering, demonstreren twee studies dat wanneer interactiepartners vrienden zijn, mensen inderdaad meer tevreden zijn met een onderbetaling en minder tevreden met een overbetaling, dit in vergelijking met onbekende interactiepartners. In de discussie wordt beargumenteerd waarom deze bevindingen suggereren dat rechtvaardigheid met name belangrijk is voor mensen in vriendschapsrelaties.

Tenslotte worden de verschillende bevindingen in dit proefschrift in Hoofdstuk 6 als een geheel beschouwd en grondig bediscussieerd. Er wordt een overzicht gegeven van de bevindingen van de twaalf gerapporteerde studies, geïllustreerd door een tabel waarin alle studies in dit proefschrift die tevredenheidsoordelen hebben gemeten worden gecombineerd. Een werkmodel van reacties op een overbetaling wordt gepresenteerd dat een twee-fase model representeert. In dit model wordt beargumenteerd dat overbetaling mensen in eerste instantie doet reageren vanuit egoïsme. Ook wordt gesuggereerd dat deze instinctieve reactie op een automatische manier plaatsvindt. Verder wordt beargumenteerd dat alleen na deze eerste automatische reactie van plezier de rechtvaardigheid van de situatie in ogenschouw wordt genomen. Gesuggereerd wordt dat deze latere op rechtvaardigheid gebaseerde reactie niet zo automatisch en snel is als de eerste op egoïsme gebaseerde reactie. Mensen hebben slechts luttele secondes nodig om te ontdekken dat er onrechtvaardigheid schuilt in een situatie waarin ze worden bevoordeeld, dit te begrijpen en daarop te reageren. In dit hoofdstuk wordt verder gesuggereerd dat dit twee-fase werkmodel van reacties op een overbetaling een belangrijke implicatie kan zijn van zowel de studies die zijn uitgevoerd in dit proefschrift als van verscheidene andere artikelen die recentelijk gepubliceerd zijn. Verder worden grenzen van het onderzoek in het huidige proefschrift besproken en suggesties voor toekomstig onderzoek gedaan.

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Susanne Peters,
Februari 2005

Curriculum Vitae

Susanne Lidewij Peters werd op 14 juli 1977 geboren te Uithoorn. Na haar eerste 8 levensjaren verhuisde zij naar Apeldoorn, alwaar zij in 1995 haar Gymnasium diploma behaalde aan het Stedelijk Gymnasium. Na een bijzonder jaar doorgebracht te hebben op de Vrije Hogeschool in Driebergen besloot zij in 1996 psychologie te gaan studeren aan de Vrije Universiteit te Amsterdam. Deze studie werd in 2000 afgerond met een specialisatie in de sociale psychologie. Vrijwel direct aansluitend begon zij als assistent in opleiding op de Afdeling Sociale Psychologie aan dezelfde universiteit. Na 1 jaar zette zij haar project voort aan de Capaciteitsgroep Sociale- en Organisationspsychologie aan de Universiteit Utrecht. Het onderzoek dat zij aan de Vrije Universiteit en de Universiteit Utrecht verrichtte heeft geresulteerd in het proefschrift dat u nu voor zich heeft.

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