CHAPTER 1

General introduction

In daily life, comparisons are common. For example, when shopping, we compare prices of products and pieces of clothing or furniture. Such comparisons guide our decisions of what to buy and not to buy. However, in social comparisons, instead of two or more objects, the self and another individual are involved in the comparison. The purpose of social comparison is, among other things, to gather information that helps to define the self in relation to others and to better interpret one’s personal situation or one’s position on a specific dimension. For example, in order to assess whether I am chaotic or not, I have to know how chaotic others are. Only if most others are less chaotic than I am, I will consider myself to be chaotic. In other words, social comparisons are necessary to anchor self-perceptions and to develop an identity (e.g., Huguet et al., 2009; Krayer, Ingledew, & Iphofen, 2008).

Social comparisons may occur on many different dimensions. According to Festinger (1954), people have a fundamental need to evaluate their opinions and abilities in search for accurate appraisals of themselves. The drive to compare oneself with others is phylogenetically very old, biologically very powerful, and recognizable in many species (Gilbert, Giesler, & Morris, 1995). Although individuals may strive for objective and non-social standards to evaluate themselves, they will evaluate themselves by comparison with others especially when such objective information is unavailable, and even if such information is available.

Up and down

In some situations, individuals may deliberately choose with whom they will compare themselves: they may compare themselves with others who are similar (lateral comparisons), with others who are better off (upward comparisons), or with others who are worse off (downward comparisons). For self-evaluative motives, it is most informative to compare oneself with someone whose performance or standing is similar to one’s own, as described in the "similarity-hypothesis" (Festinger, 1954;
Suls, & Wheeler, 2000), since it is difficult to accurately estimate one’s abilities when others’ abilities are too far removed from one’s own. Therefore, to make accurate self-evaluations, the comparison other has to be similar, or, at least, to be perceived as similar. It must be noted, however, that social comparison targets are not always chosen from a wide array of available targets. Most of the time, individuals simply compare themselves to those who are coincidentally available. Likewise, in many studies on social comparison, participants are exposed to a specific comparison target that is manipulated or established by the researcher, rather than spontaneously chosen by participants themselves (e.g., Buunk, & Gibbons, 2006; Dijkstra, & Buunk, 1998).

**Contrast and assimilation**

Individuals may handle social comparison information in different ways: they may contrast themselves with a comparison target (i.e., focus on the differences between themselves and the target) or they may assimilate to (or identify with) a comparison target (i.e., focus on the similarities between themselves and the target (Buunk, Collins, Taylor, & VanYperen, 1990; Collins, 1996; Stapel, & Suls, 2004). Thus, individuals respond with assimilation if their response is congruent with the comparison direction, whereas they respond with contrast if their response is incongruent with the comparison direction. An assimilative response to someone better off is manifested in, for example, an increase in positive mood and a more positive self-evaluation. For instance, if I compare myself to someone who is a better tennis player than I am, I can be considered to give an assimilative response when I experience more positive emotions, an uplift in mood and a more positive perception of myself as a tennis player. I may not be as good as the target, but the target may inspire me to become better and gives me hope that, one day, I may be as good as him or her. A contrast in response to a better off target can be said to occur when individuals experience a decrease in positive mood and lowered self-evaluation. In that case, when seeing a superior tennis player, I will experience more negative emotions, a more negative mood and a less positive perception of myself as a tennis player.

For downward comparison, the exact opposite applies. An assimilative
response following downward comparison consists of less positive emotions, a
decrease in mood and a more negative perception of myself as a tennis player. I may
feel worried that, although I am not as bad as the target, I may become as bad in the
future or that I will not be able to outperform even this bad player. In case of a
contrastive response to someone who is worse-off, individuals will experience an
increase in positive mood and increased self-evaluation. In that case, I may feel proud
of myself, perceiving myself to be a much better tennis player than the target. As a
result, four strategies of social comparison may be distinguished: upward
identification, upward contrast, downward contrast, and downward identification
(Buunk, Kuyper, & van der Zee, 2005; Lockwood, Jordan, & Kunda, 2002; Smith,
2000).

SOCIAL COMPARISON AND BODY IMAGE

An important dimension on which individuals, especially women, often compare
themselves with others, is their physical appearance. In this context the term "body
image" is often used. The term "body image" refers to the internal representation
individuals have of their appearance (e.g., Thompson, Heinberg, Altabe, & Tantleff-
Dunn, 1999). One aspect of the body image are evaluations of one’s own physical
attractiveness: individuals may be more or less satisfied with their appearance and
find themselves more or less attractive. Although mild levels of body dissatisfaction
are normative (almost everybody perceives his or her body to be imperfect), more
severe levels of body dissatisfaction are predictive of clinical problems, especially
symptoms of eating disorders (e.g., Thompson et al., 1999). Body image is not a
stable appraisal. There are several factors that may cause fluctuations in the
perception of one’s body satisfaction or dissatisfaction. Social comparisons are
considered to be one of the most important factors that may lead individuals to re-
appraise their body image. For instance, several studies have shown that, after
viewing unattractive same-sex individuals, levels of body satisfaction tend to increase,
whereas after viewing highly attractive same-sex, levels of body satisfaction tend to
decrease. This contrast-effect has been found when individuals are confronted with
media-portrayed beauty images (e.g., Heinberg, & Thompson, 1995; Stice, & Shaw,
1994), as well as when individuals meet same-sex individuals in vivo (Krones, Stice,
Batres, & Orjada, 2005). Thus, in general, social comparisons are seen as the most important process linking the attractiveness of same-sex individuals to self-evaluations of attractiveness (e.g., Tiggemann, & Slater, 2004).

In general, being physically attractive is a more important attribute for women than for men (Buss, 1994). According to evolutionary psychologists, physical attractiveness is such an important attribute in women primarily because it signals their fertility. Numerous studies do indeed show that especially those characteristics that are perceived as physically attractive in women, such as a low waist-to-hip ratio, are positively related to fertility (e.g., Singh, & Luis, 1995). According to social-cultural theories, individuals are strongly influenced by our society that pictures the ideal woman as physically attractive. Although physical attractiveness is perceived to be an important attribute for men as well, other characteristics are usually seen as more important for men, such as being successful or having a high social status (e.g., Townsend, & Levy, 1990). In addition to being less important, in general, cultural norms for male beauty are more flexible and more realistic than those for female beauty (e.g., Hargreaves, & Tiggemann, 2004). For instance whereas during adolescence boys develop towards the ideal male body by becoming more muscular, girls develop away from the ideal female body because of the development of adipose tissue on the hips, stomach and thighs (Levine, & Smolak, 2001). As a consequence, comparisons with the beauty ideal may be overall less “upward” for men than for women, resulting in a smaller reduction in body satisfaction among men than among women (e.g., Strahan, Wilson, Cressman, & Buote, 2006). In general, it is usually found that women’s body image is more negatively affected by appearance-related comparisons than men’s body image. Although the responses to upward comparisons may be either contrastive or assimilative, studies show that, in daily life, social comparison processes more often have adverse than positive effects on individuals’ body satisfaction (for reviews see Cafri, Yamamiya, Brannick, & Thompson, 2005; Dijkstra, Gibbons, & Buunk, in press).

Only very scarce evidence suggests that, for some individuals, images of beauty may have assimilative responses, leading to feelings of hope, inspiration and an increased motivation to invest in becoming more attractive. Joshi, Herman and Polivy (2002), for instance, found that restrained eaters reported a more favorable self-image and a higher social self-esteem after exposure to advertisements depicting
attractive and thin women than after exposure to a control advertisement. In a similar vein, Mills and colleagues (Mills et al, 2002) found that restrained eaters rated their ideal and current body sizes as smaller and dis-inhibited their food intake more after exposure to idealized body images as compared to exposure to large body images or without any exposure. In a similar vein, studies that examined pro-anorexia websites suggest that some individuals may show assimilation towards ultra-thin models (for a review see Morris, Boydell, Pinhas, & Katzman, 2006). On these sites viewers may find “inspirational” photo galleries and quotes that aim to serve as motivators for weight loss. Although aimed at inspiring individuals in general, such photo galleries seem to appeal especially, or even only, to women who suffer from an eating disorder.

SOCIAL COMPARISON ORIENTATION

Although people in general seem to anchor their self-evaluations in part in social comparisons, some individuals are more inclined to compare themselves with other people than others. Gibbons and Buunk (1999) constructed an instrument to measure individual differences in the tendency to compare oneself with others, an individual difference variable they labeled Social Comparison Orientation (SCO). To measure SCO, Gibbons and Buunk developed the INCOM, an eleven item scale. As individuals are more inclined to social compare themselves, they score higher on this scale. Although the items of this scale could be divided in two subscales - six items reflecting abilities and five items reflecting opinions - Gibbons and Buunk advise to use the items as one scale. In their original research, Gibbons and Buunk (1999) found SCO to be negatively related to personality traits reflecting certainty about the self, self-esteem and emotional stability. Furthermore, Gibbons and Buunk found those high in SCO to show a strong interest in the feelings and thoughts of others and to have a highly activated self.

As noted before, social comparisons are viewed as the linking mechanism between images of beauty and self-evaluations of attractiveness. It is therefore highly likely that individual differences in SCO will affect or moderate self-evaluations of attractiveness in response to other people’s appearance. Before the present
research, no studies had experimentally examined this issue. Indeed, all studies on SCO and body image had been correlational in nature. More specifically, four correlational studies examined the relationship between SCO and body comparisons. Three of these four studies showed that SCO was positively related to weight and body concerns: as individuals were higher in SCO, they were more concerned about their weight and their body. In addition, Morrison et al. (2003) and Gilbert and Meyer (2003) found SCO to be positively related to bulimic tendencies, whereas Corning, Krumm and Smitham (2006) found SCO to be related to general eating disorder symptoms. The fourth study examined the potentially mediating role of SCO between media consumption and body perception (Miller, & Halberstadt, 2005), but found no evidence for such a role. In sum, these correlational studies show an important association between SCO and body image concerns, including pathology in the domain of eating disorders. Given the correlational nature of previous research, an important aim of the present research was to experimentally examine the moderating role of SCO with respect to the effect of social comparisons of attractiveness on self-evaluations of attractiveness.

A review of research on SCO in other areas

In the following section, I will provide a review of studies that have examined SCO in relationship to other variables than those related to body image. The goal is to develop a description of the typical high comparer, showing what characteristics characterize those high in SCO. By doing so, I hope to shed light on what can be expected to happen to those high in SCO when confronted with media images of beauty, and how they will respond to such images. For this purpose, I will first discuss studies that found evidence for an assimilative response to social comparison information among those high in SCO, followed by studies that found evidence for a contrastive response among those high in SCO. Next, I will discuss some discrepant findings, followed by studies on SCO and individual differences in preferences and responses to specific situations (Self, Health, Social orientation). Finally, I will summarize the research on SCO.
SCO and assimilative responses to social comparison information

A number of studies have shown that individuals high in SCO respond with relatively strong assimilation to social comparisons. These studies were conducted in different domains and with different methods. In order to examine whether SCO could predict comparison choice and mood, Van der Zee, Oldersma, Buunk, and Bos (1998) instructed cancer patients to read as many fictitious interview fragments as they liked. These fragments were presented as coming from fellow patients who were either doing worse or doing better than the typical cancer patient. After participants had read these interview fragments, positive and negative affect was measured. The results showed that selecting fragments of upward comparison targets evoked less negative affect, but only among individuals high in SCO. This finding suggests an assimilative response to upward comparisons among those high in SCO: cancer patient high in SCO felt better when they had read about cancer patients who were coping quite well.

An assimilative response was also found in two studies on the effects of social comparisons on depression. Bäzner et al. (2006) instructed participants, varying in levels of depression, to imagine a friend or acquaintance of the same age and gender “who attains nearly always what he/she wants in his/her job or his/her studies” (upward comparison target). Buunk and Brenninkmeyer (2001) exposed both depressed and non-depressed participants to information about someone overcoming a depression, either without or with effort. Bäzner and Kuiper (2006) found participants low in depression but high in SCO to feel less depressed after comparison with a successful other, whereas Buunk and Brenninkmeyer (2001) found these same individuals to respond with more positive affect when the target put high effort in the recovery from the depression. Although the manipulation in these studies differed, both studies found an assimilative response only in individuals high in SCO. Interesting to note is that in the study of Buunk and Brenninkmeyer (2001), non-depressed individuals who were high in SCO perceived depressed others overcoming a depression with high effort as a useful comparison other, whereas non-depressed individuals low in SCO perceived the situation of the depressed not relevant enough to compare themselves. Thus, even in the absence of depression, individuals high in SCO seem to view depressed others as useful comparison targets.
Chapter 1

It seems that individuals high in SCO do not only compare more often, but also to more diverse comparison targets, i.e. also to those who are unlike themselves. Finally, in a study among nurses, Buunk, Van der Zee en Van Yperen (2001) also found an assimilation effect. These authors found nurses high in SCO, independent of their level of neuroticism, to respond with more negative affect to a bogus interview with a nurse who was not functioning well (downward target).

An example of an assimilative responses among those high in SCO has also been found in research on intimate relationships. More specifically, Buunk (2006) exposed participants to a happily married couple that described their relationship as either effortless or effortful. Results showed that comparisons with the happily married couple that had an effortful relationship evoked more positive mood and higher levels of identification, but only among those high in SCO who were themselves happy in their relationship. This finding implies that individuals high in SCO appreciate the idea that effort leads to positive effects and that one is able to control one’s situation or relationship. Again, it shows that individuals high in SCO do not only compare themselves more often with others, but also with more diverse comparison targets than those low in SCO. A possible explanation is that, in line with findings from Gibbons and Buunk (1999), those high in SCO in general show a relatively strong interest in the feelings and thoughts of others, and, as a consequence, identify more easily with others. This automatically broadens the range of comparison targets that are considered relevant enough for comparisons. Another explanation is based on findings by Michinov and Michinov (2001). According to these authors, individuals high in SCO are attracted to both similar and dissimilar others, because of uncertainty and confusion about their self-knowledge. As a consequence, they may be inclined to compare themselves both to others who are like themselves and to others who are unlike themselves.

SCO and contrastive responses to upward and downward comparison

In addition to assimilative responses to social comparison among those high in SCO, several studies have also found evidence for contrastive responses among those high in SCO. In the domain of intimate relationships, three studies have found such responses. In one of these studies, the moderating role of SCO on the effect of
downward comparison information on relationship satisfaction was examined. In this study of Buunk, Oldersma and De Dreu, (2001) among individuals who were currently involved in a romantic relationship, the participants were instructed to write as many reasons as possible either why their relationship was better than that of most others (downward comparison condition) or why their relationship was good (no-comparison condition). This study showed that among those high in relational discontent engaging in downward comparison resulted in a higher relationship satisfaction, but only for those high in SCO. Apparently, reflecting about a positive aspect of the relationship compared to that of others, leads individuals high in SCO to feel better about their relationship.

In the two other studies in the domain of intimate relationships, differences in responses to rival characteristics among homo- and heterosexuals were studied for different levels of SCO. In these studies, participants read a scenario in which their partner was flirting with someone else (Dijkstra, & Buunk, 2002). In the first study, participants had to report how jealous they would feel in response to each of 56 rival characteristics; in the second study, a photograph and a personality description were added to the scenario after which participants had to rate how jealous they would feel if their partner would flirt with this person. In both studies, among heterosexuals individuals high in SCO felt more jealous in response to rival characteristics than individuals low in SCO. When viewing jealousy as a negative emotional experience, high levels of jealousy in response to rivals with superior qualities may be seen as a contrastive response. It must be noted, however, that in the homosexual sample, individuals high in SCO, responded with more jealousy than individuals low in SCO to a less attractive rival (downward comparison), showing an assimilative response.

Thus, research on intimate relationships suggests that individuals high in SCO who are unhappy with their relationship feel more satisfied with their relationship following downward comparison, and that heterosexuals high in SCO experience relatively high levels of jealousy in response to positive characteristics of a rival. Although these findings are rather complex, one may conclude that, at least in the domain of intimate relationships, individuals high in SCO are more affected by other people and circumstances than those low in SCO.

Other studies suggest that this conclusion may also apply to other domains. A study by Buunk and colleagues (Buunk, Zurriaga, Peiro, Nauta, & Gosalvez, 2005)
among general physicians, for instance, found that physicians high in SCO reported more positive mood following downward comparison (thinking of someone doing worse) and more negative mood following upward comparison (thinking of someone doing better) than those low in SCO. In a similar vein, Zhou and Soman (2003) found that individuals high in SCO were more affected by the number of people who were waiting behind them in a queue than individuals low in SCO. Participants in this study read one of three scenarios in which the number of waiting people behind them in a queue in a copy center (0, 5 or 10) was manipulated, after which positive and negative affect were assessed. Results showed that the more people were waiting behind, the more positive affect and the less negative affect participants high in SCO reported. The amount of waiting people behind seemed to constitute a downward comparison situation, that made those high in SCO feel better about their own situation – suggesting a contrastive response.

Discrepant findings

In most studies, downward and upward comparison conditions tend to evoke different patterns of responses in individuals low in SCO compared to individuals high in SCO, usually in terms of contrastive and assimilative responses. In general, the largest differences were found among those high in SCO. However, in one study, those low in SCO responded differently to upward than to downward comparison, whereas among those high in SCO no significant difference was found (Buunk, Ybema, Gibbons, & Ipenburg, 2001). Buunk and colleagues examined the effect of SCO and levels of burn-out on affect in response to a comparison target – either an upward or downward comparison target. They found that individuals low in SCO and high in burn-out responded more assimilatively, that is with more negative affect to the downward comparison target than to the upward comparison target, whereas those high in SCO did neither respond assimilatively nor contrastively.

Two other studies showed individuals high in SCO to respond more intensively to social comparisons than those low in SCO, regardless of the direction of comparison. Buunk, Peiro and Griffioen (2007) asked participants to read an interview with a new graduate who was either unsuccessful or successful in the job market. Individuals high in SCO reported more identification and more proactive
career behavior than individuals low in SCO did, regardless of the comparison target (successful or not). In individuals high in SCO, both comparison with the upward target and the downward target increased proactive career behavior and feelings of identification. Thus, in this study, the comparison direction did not guide the response of individuals high in SCO in terms of assimilation or contrast. It did, however, affect the degree of identification with the target.

In a similar vein, Ouelette and colleagues (Ouellette, Hessling, Gibbons, Reis-Bergan, & Gerrard, 2005) found individuals high in SCO to respond more strongly than those low in SCO. In this study, participants had to think of the prototypical non-exerciser or prototypical exerciser. Results showed that comparison with both the good and the bad exerciser evoked an increase in exercise intention and behavior, but only among those high in SCO. These studies suggest that, regardless of the exact nature of the circumstances, those high in SCO are simply more affected by other people and the situation in which these people find themselves.

**SCO and individual differences: characteristics and preferences**

In order to provide an image of the typical high comparer and what can be expected of this type of person with regard to social comparisons in the domain of body image, we now discuss a number of studies that have focused on the relationship between SCO and various individual difference variables. Some of the variables that have been found to be related to SCO, seem, at first sight, rather surprising. That is, one might not expect relations between these variables and SCO. Other variables have already been associated with SCO in the pioneering study of Gibbons and Buunk (1999) and the study of Buunk and Gibbons (2006).

*The Self.* An important cluster of individual variables that have been related to SCO is the cluster of characteristics that refer to feelings about the self. Gibbons and Buunk (1999) found positive correlations between SCO and public and private self-consciousness, neuroticism, depression, anxiety and low-self-esteem, suggesting that SCO is related to uncertainty about the self. Theoretically, a link between uncertainty about the self and SCO can be expected. Uncertainty can be regarded as a strong motive to compare oneself with others (Stapel, & Tesser, 2001). Butzer and Kuiper (2006) explicitly tested the unique contribution of four uncertainty related
constructs to SCO (Self-Concept Clarity, Intolerance of Uncertainty, Anxiety and Depression). They found especially Intolerance of Uncertainty to be related positively and Self-Concept Clarity to be related negatively to SCO. That is, as individuals were more intolerant of uncertainty and had lower self-concept clarity, they reported higher levels of SCO.

These studies on SCO and the self indicate that those high in SCO perceive higher levels of uncertainty about the self, suggesting that SCO is, at least partially, driven by feelings of uncertainty and a lack of self-clarity. A lack of self-clarity may motivate individuals high in SCO to compare themselves with others in order to answer questions such as: "who am I?" and: "what should I do?" in an attempt to strengthen their identity and feelings of self-esteem.

The relatively high uncertainty of individuals high in SCO seems to have several consequences. According to uncertainty management theory, because of their greater inner uncertainty, individuals high in SCO will be more sensitive to being treated unjust. Thau, Aquino and Wittek (2007) indeed found that perceptions of being treated unfairly in the work environment were more strongly related to anti-social behavior among those high in SCO than among other people.

Other consequences are reflected in the association between SCO and regret, that has been examined in two studies. According to Zeelenberg and Pieters (2006) regret implies a comparison between a current situation and the situation that would have been the result if one had behaved differently in the past, or if, some other way, things had turned out differently. These authors found individuals high in SCO to compare their current situation more often with hypothetical situations that might have been if things had turned out differently. In a similar vein, Van Dijk and Zeelenberg (2005) found individuals high in SCO tend to experience more regret. In this study, participants had to identify with someone who bought one of the two last scratch cards in a lottery with a guaranteed prize and who won € 15 in a book or liquor token. Then they found out that the prize of the other card was € 50 either in a book or liquor token and their level of regret was assessed. Results showed that participants felt less regret when the missed prize was in a different token, but this was only true for those low in SCO. In contrast, those high in SCO felt regret independent of the type of the token. These studies on regret and SCO seem to indicate that individuals high in SCO tend to doubt more about their past choices and
tend to think more often that they made the wrong choices. These findings can be easily understood from the perspective that individuals high in SCO engage more in self-doubt and think more negatively about themselves.

**Health.** In the health domain, three correlational studies have been conducted that examined SCO as related to the functioning of patients, their comparison choice, comparison frequency and comparison content. In a study among patients with traumatic brain injury, Arenth, Corrigan and Smidt (2006) compared levels of SCO of patients shortly after leaving acute care (within a month) with those of patients who had left acute care for over six months. The latter group reported higher levels of SCO and lower levels of mental health. These findings suggest that illness and the stress that may result from it may trigger people to compare themselves with others. However, when individuals with health problems have high self-management abilities, high levels of SCO are associated with higher life satisfaction. More specifically, Frieswijk et al. (2007) found that, for elderly with high levels of frailty and high levels of self-management ability, SCO was positively related to life satisfaction. A study with a focus on comparison content and comparison frequency and choice was performed by Buunk, Zurriaga, Gonzalez, Terol, and Roig (2006). Patients with chronic disease reported their content of comparison and their choice of comparison others. Individuals high in SCO compared their symptoms and their physical activities not only more frequently with others but also with more different other targets groups people with (no health problems, different or the same health problems) than individuals low in SCO, even when controlling for levels of neuroticism. With regard to health-promoting behaviors, Luszczynska, Gibbons, Piko and Tekozel (2005) examined whether the association between SCO and health-promoting behaviors (e.g., eating healthy, regular exercise) varied across countries (Hungary, Poland, Turkey, US). Their study showed that SCO predicted nutrition behavior and physical activity in all countries. Furthermore, individuals high in SCO showed a stronger intention to adopt a healthy life-style than individuals low in SCO.

Taken together, these studies seem to suggest that social comparisons in the domain of health may be related negatively to mental health, at least when individuals do not have high levels of self-management abilities. A possible explanation is that, when individuals perceive no possibilities to improve their health, social comparisons may increase rather than decrease stress. Furthermore, these studies suggest again
that individuals high in SCO employ a broader range of comparison targets than other people. This may be due to the fact that those high in SCO show a relatively strong interest in the feelings and thoughts of others and tend to identify themselves with others with a wider variety of characteristics. Finally, although frequent health-related social comparisons may be negatively related to mental health, they do seem to stimulate healthy behaviors that may lead to improved physical health.

Social orientation. Four studies examined the relationship between SCO and individuals’ attitudes with regard to relationships. The first study to focus on the relationship with others and SCO was the pioneering study by Gibbons and Buunk (1999). These authors found that individuals high in SCO had a stronger interpersonal orientation, i.e. were more interested in the feelings and thoughts of others. Results of an experiment by Michinov and Michinov (2001) point in the same direction. They found that, in general, most liking was reported for other individuals with similar attitudes. However, among those high in SCO, the level of attitude similarity did not affect the level of liking; individuals high in SCO liked others with dissimilar attitudes as much as they liked others with similar attitudes.

The role of SCO in moderating the effect of affiliation orientation, i.e., the preference for doing things together and in groups versus a preference for doing things alone, was studied by Buunk, Nauta and Molleman (2005). These authors found that the higher individuals were in affiliation orientation, the higher their level of group satisfaction was, but only for those low in SCO. For those high in SCO, group satisfaction was low, regardless of their affiliation orientation. Among those high in SCO, affiliation orientation was even negatively associated, although not very strongly, with group satisfaction. Buunk et al. (2005) conclude that the typical “group animal” is someone who has a strong preference for affiliation, combined with a low tendency to compare him- or herself with others. This study implies that frequent comparisons in work groups may decrease group satisfaction and that, due to these comparisons, individuals high in SCO will often experience lower group satisfaction. Finally, Buunk (2005) found gender differences in the preferences for autonomy versus commitment in intimate relationship to be related to SCO. Results showed that women high in SCO preferred high levels of commitment in their relationship rather than high levels of autonomy. For men high in SCO the opposite was true: they preferred high levels of autonomy.
Again, an important conclusion from these studies seems that individuals high in SCO are more oriented towards others, regardless of whether these others are similar or not.

**Summary of findings of research on SCO**

Although the studies in this review are very different in method and research domain, and the findings are often discrepant, it is possible to extract a number of characteristics of those high in SCO. Knowledge about the characteristics of high SCO is helpful in understanding how individuals high in SCO may respond to images of unattractive respectively attractive others, the main focus of the present thesis. Probably most typical for those high in SCO is their sensitivity to cues from outside, either being other people or circumstances, and their tendency to respond more vigilantly to these cues. Second, individuals high in SCO seem to focus relatively more on the possibilities of change and control. Those high in SCO appreciate effort, possibly because, for them, effort is associated with potentially positive outcomes. Their self-views seem to be flexible: their own effort or different circumstances may change their future resulting in changes in their self-views. Thirdly, individuals high in SCO seem to perceive similarity with others differently than those low in SCO do: they seem to feel similar with others that are objectively not similar, and tend more easily to identify themselves with others. Finally, individuals high in SCO seem, more than others, to suffer from low levels of self-esteem and high uncertainty. In sum, those high in SCO seem to be relatively sensitive to circumstances, to be more uncertain about the self, to have more flexible self-images, and to be more inclined to identify with others.

**OVERVIEW OF THE PRESENT RESEARCH**

A central aim of the present thesis is to experimentally examine the moderating role of SCO with respect to social comparisons of attractiveness. More specifically, the present research aimed to examine three topics, i.e.:

- the moderating role of social comparison orientation with respect to the effects of social comparisons on self-perceived attractiveness. That is, the
Chapter 1

present research examined self-evaluations of attractiveness of individuals high and low in SCO following exposure to an upward (attractive) and downward (less attractive) comparison other.

• the relationship between SCO and the range of self-evaluations of attractiveness.

• the relationship between SCO and perceptions of similarity to others.

Effects of social comparison

Based on the literature review, I expected those high in SCO to respond more assimilatively when they are exposed to attractive as well as unattractive comparison others. The existing literature suggests that those high in SCO tend to respond with assimilation when they are exposed to comparison others. In general, those high in SCO seem to identify more easily with others, resulting in stronger tendency to show assimilative responses to social comparisons. It was therefore expected that exposure to a less attractive same sex target will decrease self-evaluations of attractiveness among those high in SCO, whereas it will increase self-evaluations of attractiveness among those low in SCO. In contrast, I expected exposure to an upward comparison target to increase self-evaluations of attractiveness among individuals high in SCO, whereas I expected this type of exposure to decrease self-evaluations of attractiveness among individuals low in SCO.

More specifically, in Chapter 2, in three studies the moderating role of SCO with respect to women’s responses to attractiveness comparisons was examined. In addition, it was examined if women high in SCO tend to perceive more similarity between two objects. In Study 2.1 participants were presented with two drawings, after which similarity rating between the two drawing was made. In Study 2.2 and 2.3, the assimilative response of women high in SCO following upward and downward attractiveness comparison was examined. In Study 2.2, female participants were exposed to a bogus interview combined with a photograph of either an attractive or a less attractive female, after which self-evaluations of attractiveness were assessed. In Study 2.3, female participants were exposed to a set of five photographs of, either a very attractive of or a less attractive woman, after which self-evaluations of attractiveness were assessed. I hypothesized that women high in SCO will report
more similarity between two pictures than women low in SCO (Study 2.1). In addition, I expected women high in SCO to respond more assimilatively to the comparison with either the attractive or the less attractive targets. That is, women high in SCO will report higher self-evaluations of attractiveness following comparison with an attractive target than women low in SCO. Likewise, following comparison with a less attractive target, I expected women high in SCO to report lower self-evaluations of attractiveness than women low in SCO (Study 2.2 and Study 2.3).

**Range of self-evaluation**

The second aim of the present research was to relate SCO to the range of self-evaluations of attractiveness. In general, self-evaluations at time 1 may differ from self-evaluations at time 2, and may be more or less unstable (Melnyk, Cash, & Janda, 2004). I expected this to be true especially for those high in SCO. Illustrative are the higher expectations of future self-evaluations of attractiveness among those high in SCO that I discussed in the review above (Haddock, 2006). It is reasonable to assume that fluctuations in self-evaluations have boundaries, i.e. fluctuate between a certain range. More specifically, it is possible to determine individuals’ most positive and most negative self-evaluations of attractiveness and thus, to calculate a personal range in which self-evaluations of attractiveness fluctuate. The studies in the present chapter’s review suggest that individuals high in SCO have more flexible self-evaluations than those high in SCO and therefore have a wider range of possible self-evaluations.

In Chapter 3, in four studies differences in range in momentary self-evaluations were examined for women high and low in SCO. As discussed before, these fluctuations are assumed to take place between a personal lower and upper boundary. I therefore expected women high in SCO to have a wider range in momentary self-evaluations of attractiveness than women low in SCO. In Study 3.1, participants were asked to estimate their maximum and minimum attractiveness level without further instruction. In Study 3.2, ratings of the lowest and highest self-evaluations of attractiveness were related to a real life situation. Participants were asked to rate their highest and lowest attractiveness levels, imagining themselves in a shop window. In Study 3.3, participants were asked to estimate their lowest and
highest self-evaluations of attractiveness on an anchored scale that uses two photographs as anchors. In Study 3.4, lowest and highest self-evaluations were assessed separately and self-esteem was assessed to control for effects of self-esteem on the range in momentary self-evaluations.

**Perceived similarity with comparison targets**

The third aim of the present research was to examine perceptions of similarity between the self and the comparison target in individuals low and high in SCO. Generally, it is assumed that perceptions of similarity are important determinants of comparison choice (Alicke, LoSchiavo, Zerbst, & Zhang, 1997). For instance, individuals generally prefer to compare themselves with same-sex rather than with opposite sex targets, and with targets of approximately the same age (e.g., for a review see Dijkstra, Kuyper, Van der Werf, Buunk, & Van der Zee, 2008). As a result, perceptions of similarity or psychological closeness with the target are likely to affect responses to social comparisons (e.g., Brown, Novick, Lord, & Richards, 1992). Even small similarities, such as sharing the same date of birthday, may impact responses to social comparison information. One of my conclusions from the review of research on SCO was that individuals high in SCO seem to be more likely to identify with others. Illustrative is a study by Michinov and Michinov (2001) who found that individuals high in SCO did not perceive others with different attitudes as less likeable, as individuals low in SCO are inclined to do. A possible explanation is that individuals high in SCO are more empathic and are, more than others, able to imagine how others feel and live, and, consequently, may perceive others not as dissimilar as people low in SCO. This explanation is supported by the positive relation between SCO and interpersonal orientation reported by Gibbons and Buunk (1999). Although to date no research has explicitly examined differences in perceptions of similarity between the self and others as a function of SCO, it can be expected that individuals high in SCO will perceive others as more similar to the self than individuals low in SCO. In the present research I therefore expected individuals high in SCO to perceive themselves as more similar to both attractive and unattractive same-sex targets.
In Chapter 4 three studies are described that examine potential differences in the perception of similarity with the comparison target among women high and low in SCO. In this chapter, two types of similarity were distinguished: similarity in terms of one’s standing in the domain of attractiveness (dimensional closeness) and psychological closeness. In Study 4.1, the extent to which individuals compared themselves with each of seven targets, varying in their levels of attractiveness, was assessed. I expected women high in SCO to compare themselves more often with these targets than women low in SCO. Furthermore, perceptions of similarity of attractiveness were assessed. Participants were presented with the same set of targets of varying levels of attractiveness after which perceptions of similarity in standing (dimensional closeness on the dimension under comparison, i.e. attractiveness) was assessed. Participants were asked to what extent they feel they look like the women in the seven photographs. In Study 4.2, I examined differences in perception of psychological closeness between women low and high in SCO. Finally, in Study 4.3, participants compared six pairs of targets, after which they rated the similarity between those sets of targets.

Based on present chapter’s review (Buunk, & Gibbons., 2006; Gibbons, & Buunk, 1999; Stapel et al., 2001), I expected women high in SCO to compare themselves more often with all targets, i.e. regardless of their level of attractiveness, than women low in SCO. Furthermore, I expected women high in SCO to perceive themselves to be more similar in attractiveness to these seven targets than women low in SCO. Based on studies that have shown individuals high in SCO to have a relatively strong interpersonal orientation and self-activation, I also expected women high in SCO to respond differently to comparisons between the self and others and comparisons between two others. In comparisons in which the self is involved, individuals high in SCO will be more likely to actively search for similarity between themselves and others and, consequently, to perceive themselves as more similar to the other than individuals low in SCO. However, when they just compare others, and the self is not involved, I expected individuals high in SCO not to actively search for similarity and, consequently, not to differ from individuals low in SCO in their perception of similarity of these two other targets.

Finally, it must be noted that, for several reasons, the present research focused on women. As noted before, having a physically attractive appearance is
more important for women than for men, and, as a result, comparing one-self to others in the attractiveness domain is of more importance to women than to men. In addition, social comparisons in the attractiveness domain have been found to have a much larger, usually more negative, impact on women’s self-evaluations of attractiveness than on men’s (for a review see Dijkstra, Gibbons, & Buunk, in press).

**Relevance of the present research**

The present research focuses upon women, and aims to clarify the role of individual differences in SCO with regard to social comparisons of attractiveness. This is an important issue. First, from a theoretical point of view, to date no studies have yet experimentally examined the moderating role of SCO with respect to the effect of upward and downward comparisons on self-evaluations of attractiveness. Finding that individual differences in SCO matter, may support the assumption that social comparisons are indeed the linking mechanism between other people’s appearance and self-evaluations of attractiveness. In addition, the present research may clarify documented effects of social comparison, especially with respect to discrepant findings in the domain of body image. Although most research on the responses to very attractive others has reported negative effects on mood and self-evaluation, more recently, positive effects on body satisfaction have been found (for reviews see Cafri, Yamamiya, Brannick, & Thompson, 2005; Dijkstra, Gibbons, & Buunk, in press; Joshi, Herman and Polivy, 2002; Mills et al, 2002; Morris, Boydell, Pinhas, & Katzman, 2006). Furthermore, the present research may offer insight in the processes that may underlie social comparison, including perceptions of similarity between oneself and others and the stability of self-views. Finally, the present research may clarify if specific effects of social comparison are limited to individuals high or low in SCO.

The present research is also relevant from a more practical point of view. Numerous studies have shown body dissatisfaction due to exposure to media images of beauty to be a risk factor in the development of clinical problems, such as eating disorders (e.g., Thompson et al., 1999). If indeed, as I expected, individuals high in SCO tend to respond more vigilantly to comparisons with other women, they may be more vulnerable to develop negative self-evaluations of attractiveness and body dissatisfaction. Knowledge about this issue may help identify individuals who are
vulnerable to the negative effects of media images of beauty and may help design programs aimed at maintaining a healthy body image and preventing body dissatisfaction and eating disorders.