Chapter 6
General discussion
Being confronted with a person who is in a similar situation but who is either better or worse off may evoke strong reactions in a person. People may respond to such a confrontation both affectively, and by changing their evaluation of themselves and their own situation. In the present dissertation, these responses to forced social comparisons were examined using a dual-process framework (Epstein & Pacini, 1999; Epstein, 2003). A social comparison process was distinguished that was assumed to operate according to the rules of a cognitive system, and an identification process was distinguished that was assumed to operate according to the rules of an experiential system. We predicted that the social comparison process, in which both similarities and differences between the self and the other were assumed to be systematically assessed, would lead to contrastive self-evaluative responses. That is, we expected that, after comparison with an upward other, people would evaluate themselves less positively and after comparison with a downward other, people would evaluate themselves more positively. Furthermore, we predicted that the identification process, in which, as we assumed, one perceives the other holistically and feels a bond with the other person, would lead to an assimilative affective response. That is, we expected that, identification with an upward other would evoke primarily positive affect and identification with a downward other would evoke primarily negative affect. Social comparison and identification were thus considered to be two fundamentally different kinds of processes that may occur simultaneously when people are exposed to others, leading to fundamentally different kinds of responses. In addition, the influence of two individual differences variables on how people may respond to upward and downward exposure were investigated. Firstly, people may differ in their inclination to compare themselves with others, that is in social comparison orientation (SCO). We predicted that people high in SCO would respond more strongly to upward and downward exposure, and that they would specifically identify themselves more with others than would people low in SCO. Secondly, the influence of individual differences in subjective well-being was examined. We investigated how people low in subjective well-being may benefit from exposure to worse-off others. In this chapter, the main findings of the research presented in the previous chapters is first summarized, and then integrated and discussed. In addition, the implications for the theory of and the research into social comparison are discussed.
Chapter 2.
In two studies, student participants were exposed to an interview with a fellow-student who either had a very good social life (upward target) or was feeling lonely (downward target). In both a correlational study and an experimental study, the affective and self-evaluative responses to these exposures were related to comparison and identification with the targets. In Experiment 1, it was found that social comparison was related particularly to a contrastive response to self-evaluation: the more people compared themselves with the upward target, the more negative their self-evaluations were, and the more they compared themselves with the downward target, the more positive their self-evaluations were. In addition, identification was related to an assimilative response to affect after upward exposure: the more people identified themselves with the upward target, the more positive affect the exposure evoked. However, this effect was found only for those who were high in social comparison orientation. In line with these results, Experiment 2 showed that a comparison instruction increased the contrastive response to self-evaluation whereas an identification instruction increased the assimilative response to affect. Thus, as expected, the social comparison and identification processes appeared to influence different kinds of responses in opposite directions. Concerning the influence of individual differences in social comparison orientation, the two studies showed that people with a high social comparison orientation both compared and identified themselves more with better and worse-off others than did those with a low social comparison orientation. Study 1 also showed that only people with a high social comparison orientation derived more positive affect from spontaneous identification with the upward target.

Chapter 3.
The interplay between the affective and the self-evaluative reactions to exposure to others who are either better off or worse off was investigated. It was assumed that the affective reactions are primary and that the self-evaluative reactions are secondary. Therefore, we predicted that the strongest effects on both affect and self-evaluation would be found when affect was assessed first and self-evaluation next. In line with this prediction, affective effects were found only when they were measured first, and not when they were measured after
self-evaluation. However, the effects on self-evaluation were the same whether they were measured first or last. Furthermore, individual differences in social comparison orientation were found to enhance the self-evaluative reactions, but not the affective reactions.

Chapter 4.
We investigated the influence of individual differences in social comparison orientation (SCO) on the affective responses to exposure to better- and worse-off others. We tested the hypothesis that people with higher SCO identify themselves more with downward and upward others, and will, therefore, be in a more negative mood after downward exposure and in a more positive mood after upward exposure. In addition, we expected that people’s low levels of well-being, loneliness in this research, would moderate these effects. The results concerning upward exposure were not in accordance with our hypotheses, or other existing evidence, and we suggested that future research should investigate under what conditions people high in SCO do respond either positively or negatively to upward exposure. In contrast, the results concerning exposure to a downward target were largely in line with our predictions as we found that people who were high in both SCO and loneliness were in the least positive mood after downward exposure. In addition, we found indications that the less positive reactions of individuals high in SCO to downward exposure may be partially attributed to their heightened identification with downward others.

Chapter 5.
In two studies, we investigated how, when, and for whom exposure to a downward target would be beneficial. Concerning the question of how, it was investigated whether a social comparison process or an identification process leads to beneficial effects. Concerning the question of when, it was examined whether it is particularly when people are under threat (cf. Wills, 1981), or, more generally, when people find the comparison dimension personally important that downward comparison is beneficial. Concerning the question of who, we predicted that only people with a high social comparison orientation would benefit from downward comparison. The results showed that, when people found the comparison dimension important, either because they were under threat or because they found it important to excel on the comparison dimension, comparison, and not identification, with the downward target had beneficial effects, but only when they were high in social comparison orientation.
General discussion

Taken together, the present findings may further the understanding of people’s responses to others who are doing better or worse. Most importantly, the present dissertation contributes to the social comparison literature by demonstrating 1) the difference between affective and self-evaluative responses to upward and downward exposure, 2) the role of two processes underlying these responses, social comparison and identification, and 3) the role of individual differences in social comparison orientation and in subjective well-being.

Difference between affective and self-evaluative responses.
A noteworthy conclusion of the present research concerns the distinction that was made between people’s affective and self-evaluative responses to exposure to others. Whereas in previous research, typically either one of these types of responses was investigated, the present findings suggest that the conclusions that are drawn about how people respond to better-off and worse-off others depend heavily on whether affective or self-evaluative responses are considered. In all of the present studies, the affective and the self-evaluative responses differed from each other. This was most clearly the case in both studies reported in Chapter 2, in which the affective and self-evaluative responses were even in opposite directions. Upward exposure was found to evoke positive feelings, but, did not influence people’s self-evaluation. Downward exposure was found to evoke negative feelings and, simultaneously, to lead to a more positive self-evaluative response. In other words, an assimilative response to affect and a contrastive response to self-evaluation were found. Using a different type of measurement, the subsequent studies unambiguously showed that the affective and the self-evaluative responses can not be considered interchangeably. It was found that, whereas self-evaluative responses are unaffected by whether they are measured first or last, the affective responses were found only when they were measured directly after the exposure, implying that affective responses may occur prior to self-evaluative responses (Chapter 3). Also, people’s affective and self-evaluative responses to exposure to a downward target were found to be influenced differently by individual differences in social comparison orientation (Chapters 3, 4, and 5). In conclusion, the present findings suggest that affective and cognitive responses may stem from two independent mental systems, as proposed by dual process theories (Chaiken & Trope, 1999; see also Swann, Griffin, Predmore, & Gaines, 1987). By considering both kinds of responses, we were able to obtain a more refined understanding of how people are influenced by seeing others who are doing better or worse.
The present findings suggested also that particularly the assessment of the affective responses may be sensitive to the type of measurement that is used. When people were asked to indicate the feelings that exposure to an upward or a downward target evokes, that is, when the question referred explicitly to the target, their answers appeared to be congruent with the affective state of the target. Upward exposure evoked predominantly positive feelings and downward exposure evoked predominantly negative feelings. Furthermore, the affective response was related to the degree to which people could identify themselves with the target and, thus, indicated something about the relation between the participant and the target (Chapter 2). In contrast, when people indicated their affective state when no reference to the target was made, their answer appeared to be more related to themselves (Chapter 3 and further). The affective reaction may then perhaps best be considered as the emotional forerunner of what the exposure implies for one’s self-evaluation.

In line with the findings of the present thesis, other researchers also found that people’s affective and self-evaluative responses to upward and downward exposure may differ. Buunk and Ybema (2003) recently found that, in a sample of married women in rural areas who compared their marriages with that of an upward or downward target, the affective and self-evaluative responses diverged. Similar to the findings in Chapter 2, they found that upward exposure evoked more positive affect than did downward exposure, but that people’s self-evaluations were more positive after exposure to the downward target than after exposure to an upward target (see also Bui & Pelham, 1999; Stapel & Koomen, 2000). Thus, although the present research was limited to investigating the responses to upward and downward exposure on two comparison dimensions, social integration and academic performance in student populations, there is good reason to assume that the present findings may be generalised to other comparison dimensions and populations.

A possible limitation of the studies presented in this dissertation is that a control condition in which participants were not exposed to a target was not included. This would have helped in making a more unequivocal interpretation of the findings concerning the affective and self-evaluative responses to exposure to upward and downward others. For example, it was found that people’s self-evaluations were more positive after exposure to the downward target than after exposure to the upward target. Yet, it remained unclear whether people’s self-evaluations had become more positive after exposure to the downward target
or whether self-evaluations had become more negative after upward exposure, or both. Although this would have been interesting to investigate, the present studies aimed to answer different questions. For instance, examining whether the order in which affective and self-evaluative responses are measured is important does not require a control condition. Likewise, investigating the influence of individual differences in SCO on the responses to upward and downward exposure, and the conditions under which exposure to a downward target results in positive outcomes, did not call for a control condition. Finally, in the studies described in Chapter 2, we used dependent variables that made a control condition superfluous. The questions assessing these variables measured directly how upward and downward exposure was perceived by the participants, for example, by asking the participants whether they were more or less satisfied with their own situation after reading about the target. Thus, although including a control condition in our studies would, in some cases, have strengthened the interpretation of the results, most research questions we addressed did not require a control condition.

Two underlying processes: Social comparison and identification.
A second aspect of the research presented in this dissertation concerns the role of two processes that were expected to underlie the affective and self-evaluative responses to upward and downward exposure: social comparison and identification. When people were asked to list their spontaneous reactions while reading an interview with an upward or a downward target, those reactions revealed both social comparison and identification with the targets. Furthermore, the present thesis shows that the degree to which people compare and identify themselves with upward and downward others influences their affective and self-evaluative responses. In several studies in this dissertation, participants were instructed to either compare or identify themselves with an upward or a downward target, while, in others, participants’ affective and self-evaluative responses were correlated with the degree to which they had compared and identified themselves with the targets. In general, these studies showed that social comparison typically leads to contrastive responses whereas identification with the targets typically leads to assimilative responses. The studies described in Chapter 2 showed that, in line with our hypotheses, social comparison specifically underlay the contrastive responses to self-evaluation whereas identification specifically underlay the assimilative responses to affect. Note that, whereas the term social comparison
Chapter 6

is often used to refer to both contrastive and assimilative responses to seeing others doing better or worse, the present dissertation showed that, when people really compare themselves with others, contrastive responses are typically found, and not assimilative responses (for similar findings, see Cattarin et al., 2000; Martin & Gentry, 1997).

The finding that social comparison underlay the cognitive responses and identification the affective responses can be taken as an indication that, as was assumed, the comparison process operates according to the rules of a cognitive system and identification operates according to the rules of an experiential system. However, the precise nature of the social comparison and identification processes was not investigated directly in this dissertation. Future research may be aimed at this; for example, with some additional reaction time and priming studies, it may be tested whether identification is more automatic than social comparison, or whether social comparison is an automatic process, as suggested by Gilbert, Giesler, & Morris (1995). In addition, since it appeared that the comparison and identification processes may occur simultaneously, it would be interesting to investigate how both processes may interact. For example, how may a first strong feeling of identification with a person influence subsequent comparison between the self and the other?

Another issue that was briefly addressed in the present research, but that deserves more attention in future research, is that people’s responses to upward and downward others may be self-serving. That is, people may adjust the degree to which they compare and identify themselves with upward and downward others in such a way that they promote positive responses and prevent the occurrence of negative responses. In general, people compared themselves more with the downward target than with the upward target, whereas they identified themselves more with the upward target than with the downward target. As was shown, downward comparison and upward identification led to positive outcomes whereas upward comparison and downward identification led to negative outcomes. This self-serving tendency is in line with the identification-contrast model of Buunk and Ybema (1997; see also Buunk & Ybema, 2003). Their model states that people strive for a sense of relative superiority through identifying themselves with upward others and through contrasting themselves with downward others. However, the finding that people compared themselves more with downward others than with upward others is in contrast with the hypothesis of Festinger (1954), which states that people have a unidirectional drive to compare
upward. Stapel and Koomen (2001) also report a study in which they showed that people may use social comparison information in a self-serving way, particularly when the comparison dimension has high personal importance. In sum, social comparison and identification appeared to be important processes that distinctly influence people’s responses to upward and downward others. Identification typically steered the responses in an assimilative direction, whereas social comparison typically steered the responses in a contrastive direction.

**Individual differences in social comparison orientation and in subjective well-being.**

A third contribution of the present dissertation was the clarification of the role of individual differences in social comparison orientation and subjective well-being in responses to exposure to upward and downward others. Firstly, it appeared that people with a high SCO employ an unfavourable identification pattern. Whereas they tended to identify themselves more with others doing worse and others doing equally well, they tended to identify themselves less with others doing better (Chapters 2 and 4). Although, in the studies discussed in Chapter 2, it appeared that people with a high SCO also identified themselves more with upward others, it must be noted that the upward target in those studies was not evaluated as being better off but as being equally well off. This unfavourable identification tendency of people with a high SCO may be related to their somewhat neurotic personalities (Gibbons & Buunk, 1999). Furthermore, the different identification tendencies of people with a low or a high SCO influenced the responses of people who were low in subjective well-being to exposure to worse-off others. Whereas Wills’ theory of downward comparison (1981) states that people who are low in subjective well-being may benefit from downward comparison, the present thesis offers some important qualifications and extensions of this theory. The present dissertation showed that people who are feeling lonely, and who are, in addition, high in SCO, tend to respond negatively to exposure to downward others. This finding is in line with a study among sociotherapists by Buunk, Ybema, Gibbons, & Ipenburg (2001c), which showed that downward exposure evoked negative affect among those who were high in burnout and high in SCO. These findings suggest that, in general, when people are low in subjective well-being and high in SCO, they do not benefit from exposure to a downward target, but, in contrast, tend to become more distressed by downward exposure. The present dissertation further suggests that this negative response of people low in subjective well-being and high in SCO may be partly due to their increased iden-
tification with worse-off others. The studies in Chapter 5 confirmed this, but also showed a remedy for the negative responses to downward exposure for people low in subjective well-being and high in SCO. That is, when they were instructed to compare, rather than to identify, themselves with a person doing worse, they did not respond negatively, but very positively, to downward exposure. This implies that, through comparing themselves with worse-off others these people can obtain a sense of being better-off than some others are. This result was in line with the findings of a study by Buunk, Olderma, & DeDreu (2001a) of relationship satisfaction. They found that people high in SCO who were, in addition, dissatisfied with their intimate relationship could enhance their satisfaction with their relationship by considering aspects of their relationship in which they were better than others. It thus seems that people with a low subjective well-being and a high SCO can benefit from exposure to a downward target only when their attention is directed at how they are better off than downward others, for example, by simply instructing them to compare themselves with the downward others. A possible extension of Wills’ theory that can be derived from the present dissertation is that downward comparison may be beneficial not only for people who are low in subjective well-being, but, more generally, for people for whom the comparison dimension has high personal importance. Chapter 5 showed that, similar to people who are low in subjective well-being, people who find it important to excel on the comparison dimension can benefit from comparing themselves with a worse-off other. Since being low in subjective well-being and finding it important to excel on a particular dimension can both make a dimension personally important, Wills’ theory may be extended to all dimensions that have high personal importance.

Concerning the responses to upward others, the present thesis showed that those low and high in SCO do not differ much. However, other researchers have found that, depending on their level of well-being, those high and low in SCO differ in the degree to which they identify themselves with an upward target (Buunk, Ybema, Gibbons, & Ipenburg, 2001c). With lower levels of well-being, only those low in SCO identified themselves less with an upward other, whereas those high in SCO continued to identify themselves with an upward other, irrespective of their level of well-being. This finding seems to suggest that, among those low in subjective well-being, particularly those who are high in SCO may use upward comparison information in a profitable way. Nevertheless, more research is needed into how people high and low in SCO differ in their responses.
to upward others.

**Conclusions**

Despite the limitations and unresolved issues mentioned above, the present dissertation offers an interesting pattern of results concerning affective and self-evaluative responses to exposure to others who are doing better or worse. Particularly by showing that affective and self-evaluative responses differ, or may even be opposite, the present dissertation is relevant to theory of and research into social comparison issues. Furthermore, insight was obtained into the processes that underlie these responses. The degree to which people either compare or identify themselves with others appeared to steer their responses in opposite directions. The present thesis also showed how people with varying levels of social comparison orientation differ in their responses. Finally, the present dissertation offers indications of how people for whom a particular domain is very important, either because they are low in subjective well-being in that domain or because they find it important to excel, may handle comparison with worse-off others and use it to their benefit. In conclusion, when people see others in their surroundings who are doing either better or worse than they are, it appears that it is sometimes more pleasant to listen to the heart, and others times more pleasant to listen to the head.