CHAPTER 6

Discussion

The present dissertation addressed the role of social comparison from an identification-contrast perspective (Buunk & Ybema, 1997) with respect to relevant psychological factors in the academic and work areas. On the basis of this model, four types of social comparison responses were distinguished, i.e., upward identification, downward contrast, downward identification and upward contrast. On the one hand, we examined the relationship between these social comparison responses and self-efficacy, goal orientation, and performance in the academic area. On the other hand, we examined the relationship between the social comparison responses and coping styles, burnout, organizational commitment and organizational identification in the work area. In addition, we investigated the differences in these social comparison responses between the Dutch and the Spanish. Further, we examined cultural, context and gender differences in a number of basic aspects of social comparison, i.e., comparison direction, comparison dimensions and choice of comparison target. This chapter discusses and summarizes the main findings, presents a number of theoretical and practical implications, and ends with a general conclusion.

Summary of the Findings

In Chapter 2, we presented the results from a study among 120 university students in which we examined the relationship between goal orientation, social comparison and self-efficacy, and the relationship of these variables with academic performance. Furthermore, we investigated how the relationship between goal orientation and self-efficacy perceptions was mediated through the social comparison responses, and how, in turn, self-efficacy was related to academic performance. According to Bandura (1986), self-efficacy is determined by four sources. One of those sources is the vicarious experience provided by social models which is described as a learning process through which individuals perceive successful and
unsuccessful role models perform. That is, seeing people similar to oneself succeed by sustained effort may raise observers' beliefs that they also possess the capabilities master comparable activities to succeed. By the same token, observing similar others' fail despite high effort may lower observers' judgments of their own efficacy and undermine their efforts. The impact of modeling on perceived self-efficacy is strongly influenced by perceived similarity to the model. Therefore, social comparison can be conceptualized as a type of vicarious experience, through which individuals may learn how they are doing compared to other individuals. In particular, according to the identification-contrast model (Buunk & Ybema, 1997) when individuals compare themselves with others they may identify and contrast themselves downward and upward with others, and this may influence their self-efficacy perceptions. However, it might be that this relationship between social comparison and self-efficacy may be affected by the goal orientation individuals engaged in. In particular, according to with Higgins (1997), individuals may have two types of goal orientations: a promotion orientation, i.e., a focus on promoting success, and a prevention orientation, i.e., a focus on preventing failure. Therefore, we expected that these specific goal orientations would be related to the way individuals' compare themselves with others, and through this to their self-efficacy and subsequent performance.

The results showed partial support for the expected hypotheses. In particular, students who had a tendency to promote success felt similar to better-off students (i.e., upward identification), and perceived a higher self-efficacy. In contrast, students who had a tendency to prevent failures felt similar to worse-off students (i.e., engaged more in downward identification), dissimilar to better-off students (i.e., engaged more in upward contrast), and perceived less self-efficacy. Finally, the results showed that individuals who had a tendency to prevent failures, felt dissimilar to better-off students, and that this upward contrast mediated between a prevention orientation and self-efficacy perceptions and their subsequent academic performance. These findings suggest that a strong focus on preventing failures makes people compare themselves to better-off others in a negative way, which decreases their self-efficacy which, in turn, undermines their performance, and that a
stronger focus on promoting success enhances directly individuals self-efficacy perceptions.

In Chapter 3, we examined the independent role of the social comparison responses and coping styles in predicting burnout over the course of the academic year among 558 teachers. Previous research has shown evidence for the relationship between coping styles and burnout, and between burnout and social comparison (Brenninkmeijer, Van Yperen, & Buunk, 2001). However, the effects upon burnout of social comparison responses as conceptualized in the identification-contrast model have not been both directly examined over time, and have not been related to coping styles. We expected that, overall, the way individuals compare themselves with others and the coping styles they use in stressful situations may influence their development of burnout, and that the coping styles would be related to the four specific social comparison responses. The results revealed that teachers who felt similar to worse-off teachers (i.e., engaged in upward identification), who felt dissimilar to better-off teachers (i.e., engaged in upward contrast), and had a palliative coping style (i.e., tended to ignored the situation), reported a higher level of burnout. In contrast, teachers who felt similar to better-off teachers (i.e., engaged in upward identification) and had a direct coping style (i.e., focusing on solving the problem) reported a lower level of burnout.

The most important finding from this study was that teachers who at the beginning of the first term of the academic year identified with worse-off colleagues developed more burnout over time, and that this effect was independent of the effect of coping styles, which did not predict a change in burnout over time. However, over time a direct coping style was negatively related to downward identification and upward contrast, and positively related to upward identification. Thus, those who used a direct coping style felt, on the one hand, similar and inspired by better-off others, and on the other hand, not inferior to better-off others and dissimilar to worse-off others. In contrast, a prominent palliative coping style was positively related to downward identification, and over time to downward contrast. Thus, while those who used a palliative coping style tended to perceive similarities with worse-off others, over time they seemed to focus more on how dissimilar they
were to those worse-off. To conclude, we showed that social comparison in
the sense of engaging in identification with others worse-off led to an increase
of burnout over time, and that the coping styles were over time consistently
related with the responses to social comparison.

Next, in Chapter 4 we examined the differences in identification and
contrast in social comparison between 404 Dutch and Spanish workers. In
addition, we investigated the relationship between these social comparison
responses and organizational commitment and identification. Social
comparison implies relating the self to others. However, the self may take
different forms, and may involve a more independent or a more
interdependent self-construal (Markus & Kitayama, 1991). As it has been
documented that there are differences between cultures in the prominence of
these two types of self-construal, there may also be differences between
cultures in the responses to social comparison. We thus examined the
differences in these responses between the Dutch and Spanish. In addition,
we examined how these responses were related to identification with and
commitment to the organization.

First, it was expected that contrast in social comparison would be more
prominent among the Dutch, whereas identification in social comparison
would be more prominent among the Spanish. In addition, it was expected
that contrast responses would be more related to organizational commitment
and identification among the Dutch, and that identification responses would
be more related to organizational commitment and identification among the
Spanish. The results supported in part the hypotheses. Upward and
downward identification responses were indeed more prominent among the
Spanish than among the Dutch, whereas downward contrast responses were
indeed more prominent among the Dutch than among the Spanish. Moreover, as expected, culture influenced the relationship between the social
comparison responses and organizational commitment and identification. In
particular, the higher the Spanish but not the Dutch were in upward
identification, the more commitment and identification they reported.
Moreover, the higher individuals were in upward contrast the less
organizational commitment the Dutch experienced, and the more
organizational commitment the Spanish experienced.
To complement the issues examined in Chapter 4, in Chapter 5 we further examined cultural, context and gender differences in a number of basic aspects of social comparison, i.e., comparison direction, comparison dimensions and choice of comparison target in a work context. On the basis of theorizing about the independent-interdependent self (Markus & Kitayama, 1991), we assumed that an interdependent self would be more salient in a more collectivistic culture like the Spanish, in public organizations, and among women. In contrast, we assumed that an independent self would be more salient in a more individualistic culture like the Dutch, in private organizations, and among men. Overall, we expected that these differences in self-construal would affect whether individuals compare themselves more often upward or downward, on which dimensions individuals prefer to compare themselves, and whether they prefer to compare themselves with men and women.

The results showed that the Spanish compared themselves more often upward than the Dutch, and that workers in private organizations compared themselves more often downward as well as upward than workers from public organizations. In addition, among the Spanish, women compared themselves more often upward than men did. In contrast, among the Dutch, men compared themselves more often upward than women did. Furthermore, men in private organizations engaged more frequently in upward comparison, whereas women in public organizations engaged more often in upward comparison. The results for the social comparison dimensions showed that workers in private organizations were the most focused on both the inputs (e.g., performance) and outcomes (e.g., salary) dimension of comparison when comparing themselves with others. Specifically, these findings suggest that in the probably more competitive context of a private organization, individuals tend to focus more on how they are doing with respect to their outcomes as related to their inputs in comparison with others. In addition, compared to the Dutch, the Spanish compared more often their outcomes. However, not only culture and context influenced which dimensions individuals compared themselves more often at. Interestingly, our findings suggest that there were also gender differences in this respect. In particular, Spanish women in private organizations were in
their social comparisons the most focused on outcomes, suggesting that Spanish women with a more assumed interdependent self preferred to compared more often their outcomes than their inputs at work. Furthermore, women in private organizations compared themselves more often with men than women in public organizations, and Spanish women compared themselves more often with men than Dutch women. We will return to discuss this issue in the next below section.

In sum, we have shown that social comparison from the identification-contrast model is a relevant factor to take into account for many psychological processes that may influence out daily life.

**Theoretical Implications**

Social comparison theory is a theory of self-evaluation and postulates that people have a “drive” to evaluate their opinions and abilities. Decades of research have shown that people may compare themselves on many other personal characteristics, such as their income, attractiveness, and health, but the theory’s original emphasis on opinions and abilities is still quite relevant to a consideration of peer influences in a variety of different contexts (Suls & Miller, 1977; Suls & Wills, 1991; Wood, 1996). In the present dissertation, we show not only that social comparison is an important process in the academic and organizational realm, but we also provide evidence that social comparison preferences and the responses to social comparison may depend on gender, organizational context, and culture. Therefore, our results contribute to the literature on social comparison in a number of ways. In general terms, the studies contribute to understanding the role of identification and contrast in social comparison in relation to psychological processes such as goal orientation, self-efficacy and performance in the academic area, and psychological processes as coping styles, burnout, organizational identification and commitment in the work area. Further, the present dissertation contributes to highlighting the differences in social comparison between cultures, between different organizational contexts, and between men and women.
Social Comparison Responses in the Academic and Work Areas

Previous research on social comparison has generally shown that when a motive for self-improvement is activated, individuals tend to prefer to engage in comparisons with others who are doing better (Brickman & Bulman, 1977; Buunk, Collins, Taylor, Van Yperen, & Dakof, 1990; Lockwood & Kunda, 1997; Lockwood, Dolderman, Sadler, & Gerchak, 2004), whereas when individuals are threatened on a particular dimension, they may prefer to compare themselves with others who are thought to be worse than themselves on that dimension (Buunk & Ybema, 2003; Gibbons, et al., 2002; Hakmiller, 1966; Wills, 1981). In addition, the identification-contrast perspective (Buunk & Ybema, 1997), postulates that upward and downward comparisons may be interpreted in a positive or negative way, depending on whether individuals contrast or identify themselves with others. In the present dissertation, we showed that these responses to social comparison are related to a variety of psychological processes. Below we present a series of conclusions with respect to identification and contrast responses in social comparison.

The Identification-Contrast Responses and Self-efficacy

As shown in Chapter 2, we conclude that individuals who compared themselves with successful others and perceived themselves different from these better-off others (e.g., upward contrast) manifested lower self-efficacy perceptions. Previous research has shown that the exposure to the successful attainments of others may increase one’s self-efficacy (Bandura, Reese, & Adams, 1982; Brown & Inouye, 1978; Kazdin, 1979; Schunk, 1986), and that observing similar others’ fail may lower observers’ judgments of their own efficacy and may undermine their efforts (Vrugt & Koenis, 2002; Vrugt, Oort & Zeeberg, 2002). Thus, our research suggests that feeling frustrated because of the superior performance of others, may undermine one’s self-efficacy. Although the specific causal link between upward contrast and self-efficacy can not be ascertained with our correlational study, we assume that upward contrast may more likely lead to a low self-efficacy than the other way around. That is, in the case that individuals would have a low self-efficacy it would seem not very likely to be motivated by dissimilar better-off others.
instead of by worse-off others, as individuals experiencing a low well-being would focus more on comparisons with worse-off others (e.g. Wills, 1981).

The Identification-Contrast Responses and Goal Orientation
Our results suggest that promotion and prevention goal orientation are in a meaningful way related to the way individuals identify or contrast themselves with better-off or worse-off others. In particular, individuals who focus on preventing failure tend to identify themselves with worse-off others and to contrast themselves with better-off others, which seems to affect negatively how these individuals evaluate their performance. Thus, those who are inclined to prevent failure tend to feel inferior to better-off individuals and similar to worse-off others. In contrast, individuals who focus on promoting success identify themselves with better-off others, which seems to affect positively how they evaluate their performance. Thus, those who promote success feel inspired and similar to better-off others. These findings are consistent with previous research that has shown that promotion-focused individuals find positive role models to be especially motivating, and that prevention-focused individuals find negative role models to be especially motivating (Lockwood et al., 2002).

Identification and Contrast Responses and Burnout
An important finding is that the way individuals identify or contrast themselves with better-off or worse-off others may play an important role in the development of burnout, especially the identification with worse-off others. Although previous research has found that lower levels of burnout are related to the positive interpretation of upward comparisons, and that higher levels of burnout are related to the negative interpretation of downward comparison (Brenninkmeijer, Van Yperen, & Buunk, 2001; Buunk, Ybema, & Gibbons, 2001), we extended these findings by showing that individuals who perceive similarities to worse-off others and dissimilarities to better-off others may develop negative feelings about themselves and show higher levels of burnout, whereas individuals who perceive similarities to better-off others may develop positive feelings about themselves and show lower levels of burnout. Interestingly, especially over time individuals who perceive similarities to worse-off others became the most burned-out.
Identification and Contrast Responses and Coping

In addition, the present dissertation provides a number of important findings on the relationship between coping styles and identification and contrast in social comparison. Former research has shown that social comparison may be interpreted as a way of coping with stressful situations (Bennenbroek, et al., 2003; Taylor & Lobel, 1989; Van der Zee, et al., 2000; Wills, 1997). However, no previous research has shown the relationship between identification and contrast responses and coping styles over time. Therefore, our findings extend the literature on social comparison and coping by showing that over time a direct coping style does predict a higher level of identification with better-off others, a lower level of identification with worse-off others, and a lower level of contrast with better-off others. That is, the use of a direct coping style seems to induce a perception of oneself as similar to well-functioning others, and as different from poorly functioning others (cf. Lockwood, Jordan & Kunda, 2002; Lockwood & Kunda, 1997). Moreover, our findings suggest that while individuals with a palliative coping style identify themselves with worse-off others, over time, the use of a palliative coping style seems only to lead to an increase in the use of downward contrast. This result is a nice demonstration of Wills' (1997) argument that downward contrast is engaged in primarily when instrumental action is not possible and functions primarily as a strategy aimed at reducing negative emotions.

To conclude, as social comparison responses were related to burnout, independently of coping styles, the present findings may extend the literature on social comparison and occupational health by showing the relevant role that in particular, identification or contrast with better-off or worse-off may play in the development of burnout over time.

Organizational Identification and Commitment

A next contribution to the literature constitutes our findings on how the responses to social may affect their commitment to and identification with the organization. Organizational attachment has been identified as a relevant key-factor for keeping workers in the organization, decreasing turnover intentions, and promoting a satisfying work environment (Ashforth & Mael, 1989; Benkoff, 1997; Mael & Ashforth, 1995; O’Reilly & Chatman, 1986;
Ouchi, 1980). Although many factors have been related to attachment to the organization, no research has directly focused on examining how the way individuals compare their performance with others is related to their attachment to the organization. Our results suggest that individuals who feel similar to better-off or feel dissimilar to worse-off others may develop a positive view of themselves which may increase their commitment to, and identification with, the actual organization they work for. In contrast, individuals who feel similar to worse-off others may develop a negative view of themselves, which may affect negatively their organizational commitment and identification perceptions. Of course, these results are based on a correlational study, and therefore any inference about causality should be made with caution. In fact, our results may be also interpreted in the reverse direction. That is, individuals with high levels of commitment and identification with the organization may be motivated by focusing on identification with better-off others and contrast with worse-off others. In fact, as previously has been shown, assimilation in response to upward comparison, i.e., deriving positive affect from seeing one's colleagues performing better than oneself has been related to the perception of a cooperative climate at work (Buunk, Zurriaga, Peiró, Nauta, & Gosalvez, 2005).

Identification and Contrast Responses and Culture

We have provided evidence that there are cultural differences in the way individuals identify or contrast themselves with others. Compared to the Spanish, the Dutch contrasted themselves with worse-off others, and compared to the Dutch, the Spanish identified themselves more often with better-off and worse-off others. That is, the Spanish are more focused on feeling inspired by others better-off, as well as on feeling annoyed or threatened by others worse-off. In contrast, the Dutch seem to be more focused on feeling happy as a result of feeling superior to others worse-off. These findings are in part in line with research in the tradition of self-construal theory (Markus & Kitayama, 1991) that shows that an independent self may be more prominent in individualistic cultures, whereas an interdependent self may be more prominent in collectivistic cultures (Leung, 1997; Triandis & Suh, 2002). In addition, our findings are in part in line with
Stapel and Koomen findings (2001), which show that an independent self may activate contrast processes, and an interdependent self may activate assimilation processes.

Besides, our results suggest that there are cultural differences in the relationship between identification and contrast in social comparison and organizational identification and commitment. We showed that compared to Dutch workers, the Spanish workers who identified themselves with better-off others had higher levels of organizational identification and commitment. Interestingly, upward contrast was differently related to organizational commitment for the Spanish and the Dutch. In particular, Dutch workers who contrasted themselves with better-off others had lower levels of organizational commitment, whereas Spanish workers who contrasted themselves with better-off others had higher levels of organizational commitment. Thus, it seems that the Spanish while contrasting themselves, at the same time are inspired by better-off others, in a way that affects positively their commitment to the organization. In contrast, the Dutch seem, as a result of their individualistic attitude, to perceive better-off performing colleagues primarily as competitors. These findings may suggest that it is important to take into account culture as a possible factor which may influence the way individuals compare themselves with others and their attachment to the organization.

Social Comparison Direction and Culture
A next conclusion from our results is that culture may influence the preferred direction of social comparison. As shown by White and Lehman (2005), there are differences in social comparison direction between individuals with individualistic versus collectivistic backgrounds. Our results provide additional support for such differences. That is, the Spanish compared themselves more often upward than the Dutch, which seems to be related to differences between Spanish and Dutch culture in the degree of individualism versus collectivism. This upward preference among the Spanish may suggest a preference for the Spanish to be more critical about themselves, and as a result of this develop a motive for improvement. According to Markus and Kitayama (1991), interdependent and independent self-construal gives rise to differences in cognition, emotion and motivation.
One of the assumed differences in motivation is that people with independent selves are motivated to enhance one’s self, while people with interdependent selves are more self-critical to one’s self. Consistent with our findings, recent research has suggested that the purpose of social comparison in a collectivistic culture as Japan is not self-enhancement, but self criticism with respect to the group (Kitayama, Markus, Snibbe, & Suzuki, 2003).

Social Comparison Direction and Organizational Context
We showed that there are differences in social comparison direction depending on the organizational context. In particular, compared to individuals in public organizations, individuals in private organizations compare more often upward as well as downward. These results may suggest that individuals in private organizations are more encouraged to compete by showing both a need for comparisons with better-off and worse-off other colleagues. In private organizations, aspects as being successful and promoting are more prominent than in public organizations. These insights are supported by Stapel and Koomen’s findings (2005), “… competition activates a differentiation mindset in which self-other differences are emphasized more—with contrast as the likely result” (p. 1036). Our research provides additional support for this notion in an organizational context. However, it must be noted that is also possible that there is a selection in the sense that more competitive individuals are attracted to private organizations. That is, we cannot conclude with certainty whether there are the differences in the organizational context that make individuals compare themselves more or that there are individual characteristics in the tendency to compete that make individuals seek out jobs in private organizations.

Social Comparison Direction and Gender
In the Spanish culture, women, but not men, compared upward more often, whereas in the Dutch culture, men, but not women, compared upward more often. These findings suggest that the effect of culture on social comparison direction depends on gender (Kemmelmeier & Oyserman, 2001; White & Lehman, 2005). However, to really understand the meaning of these findings,
we suggest that we need to pay attention to two related factors, "competition", which may be a more prominent feature among men than among women, and "self-criticism" which may be a more prominent feature among women than among men. In accordance with these insights, previous research has shown that competition is considered normative in boys' but not in girls' friendships, that girls find competition unusual and incongruous with the norms of their groups, and that boys tend to expect competitive behavior in prospective friends and are not be upset by it (Hartup, 1992). However, our findings suggest that the cultural context may be also an important moderator of the effects of competition. That is, competition is often seen as a feature of societies where the achievement of individual goals is valued, and it is seen as inconsistent with collectivistic cultures that focus on group goals (e.g., Ryckman, van den Borne, & Syroit, 1992; Schneider, Woodburn, del Pilar Soteras del Toro, 2005).

In addition, previous research has shown that women may be more self-critical or less self-enhancing than men (Kitayama, Markus, Hazel, & Matsumoto, 1997). In fact, consistent with our findings, we suggest that holding a self-critical attitude vis-a-vis socially shared standards of excellence may be a symbolic act of affirming one's belongingness to the social unit, which may be a primary need for women and not for men in order to connect with others, as well as may be relevant for more collectivistic cultures than more individualistic cultures (Kitayama, et al., 1997). Thus, we suggest that Spanish women with a more prominent interdependent self may tend to compare themselves more often upward in order to be more "self-critical", whereas Dutch men with a more prominent independent self may tend to compare upward more often in order to be more "competitive".

In addition, in line with the previous reasoning, our results showed gender and context differences by showing that men in private organizations engaged more frequently in upward comparison and that women in public organizations engaged more often in upward comparison. In fact, these findings might suggest that men and women compare themselves upward or downward in different organizational for different motives that may be in part related to competition and self-criticism. Thus, we suggest that in our study, women in public organizations with a more prominent interdependent
self may tend to compare themselves more often upward in order to be more “self-critical”, whereas that men in private organizations with a more prominent independent self may tend to compare upward more often in order to be more “competitive”. In fact, further research is needed to examine the motivations among men and women for comparing themselves with better-off and worse-off others in private and public organizations as well as in different cultures.

Social Comparison and Work Dimensions

Workers in private organizations were the most focused on comparing both their inputs (e.g., performance) and outcomes (e.g., salary). Specifically, these findings may suggest that compared to public organizations, in more competitive contexts as private organizations, the need for becoming successful is really important and it is reflected in the workers behavior by comparing themselves more often in work aspects.

Interestingly, our results also show gender differences in the way individuals compare different work dimensions. Spanish women in private organization were the most focused on outcomes dimension comparison. This finding may reflect current Spanish society in which differences between women and men in aspects such as salary and career opportunities are rather unequally salient at work, especially in private organizations. In addition, consistent with these findings, the results showed unpredicted gender differences. That is, women in private organizations compared themselves more often with men than women in public organizations, and in particular, Spanish women compared themselves more often with men than Dutch women. These findings may suggest that although nowadays in the North and South of Europe gender differences are decreasing, still comparisons with one’s own and the opposite gender may have different meanings for men and women. That is, comparisons with men may have an additional value in different cultures than comparisons with women, and this might be in particular relevant among Spanish women. Therefore, we suggest that in future research these findings may give relevant insights for taking into account how important the role of a man or woman is in that society considered in order to make preferences of comparison choice.
Overall, we conclude that our results are in line with the assumption that there is an influence of culture, context and gender on social comparison which seems to be related in part to the self that is salient (Markus & Kitayama, 1991; Turner, 1987).

**Practical Implications**

Given the fact that most individuals compare themselves with others to acquire information about themselves, the present dissertation may help to understand how identification and contrast in social comparison are related to processes that may influence individuals’ daily life, in specific areas such as academic and work. In fact, one anecdote happened to me some days before handing the present dissertation. “A friend of mine told me that when she is at the gym she always tries to find out in her class who is doing well and then she tries to follow up that person”. However, she also said, “I do this because I am a really competitive person”. And then I thought, this is really a social comparison example.

The results of the present dissertation may have several practical implications. First, our findings suggest that role models are important sources of self-efficacy. Therefore, students may be in part influenced by perceiving their fellow students who have higher or lower degrees of academic talent. In that sense, one of the aspects that may be related to students’ academic performance is how they perceive themselves in relation to those better-off or worse-off others. As described in Chapter 2, social comparison responses and goal orientation may play an important role in the academic area. In particular, because individuals with a promotion goal orientation perceive a higher self-efficacy than individuals with a prevention goal orientation, and because this tendency to prevent failure may lead individuals to make negative comparisons, which lead them to lower their self-efficacy and academic performance, we encourage to take into account these findings in order to develop intervention programs for increasing students’ performance. In particular, we might include in an assessment tool that measures the strengths and weaknesses of the students, a specific part in which students can evaluate themselves with respect to others, and afterwards a specific training might be developed in which students may
learn how social comparison could benefit or obstruct their academic performance.

Second, regarding the work context, the results described in Chapter 3 suggest that more attention might be needed to pay to dysfunctional and functional social comparison responses in relation to burnout. In fact, a burnout research intervention program (Brake, Gorter, Hoogstraten, & Eijkmanhave, 2001) has shown that individuals who participated in individual meetings and workshops such as development of a professional perspective, vision on one's own practice, personal development, communication and action decreased their levels of burnout. As we have shown the relationship between the social comparison responses and burnout, we suggest to develop a specific workshop on social comparison interpretations as part of an intervention program to reduce burnout. The workshop could be based on classic cognitive-behavioral approaches described by Ellis (1962) and Beck (1967). The basic assumption would be that emotions and behavior are determined to a great extent by cognition, that is, by the way the individual views the world. When an event gives rise to irrational, unrealistic beliefs or distorted interpretations, the resulting emotions are intense and maladaptive and stress is experienced. Irrational cognitions are assumed to arise automatically as a response to environmental events and to represent dysfunctional assumptions. Thus, to reduce stress and burnout, basic assumptions about how individuals feel they are doing in comparison to others should be reassessed and need to be altered into more realistic and rational ones. The findings in Chapter 4 support the relationship between social comparison responses and organizational commitment and identification. That is, workers who focused on downward contrast and upward identification felt more committed and identified with their organization. In contrast, workers who focused on downward identification felt less identified with their organization, although no evidence was found for organizational commitment. These results may be valuable for organizations, and in particular for a human resources department which is responsible for managing the human resources and planning actions to enhance the commitment in the organizations. Specifically, with the 360-degree feedback technique which assesses performance information from
different sources, social comparison information on individuals' performance may be acquired. This information could be used as a primary measure that may reveal the positive and negative perceptions of comparing oneself with others in combination with the levels of commitment and identification with the organization. This may provide crucial information from subordinates, peers and superordinates, as well as a self-assessment to develop an effective strategic planning for increasing workers' attachment to the organization.

Considering the practical implications of Chapter 5, our results suggest that there are differences among individuals who feel threatened when seeing their colleagues performing worse and individuals who feel inspired when seeing other colleagues performing better. In addition, there are differences in the preferences of what dimensions individuals prefer to compare at, and between comparisons with men and women in private and public organizations. Therefore, we suggest that these differences might be taken into account as valuable information for the selection process in organizations. That is, individuals' preferences for comparing themselves with better-off and worse-off others may give relevant information through which men and women in private and public organizations may be accurately placed into specific jobs within those organizations.

**Final Conclusion**

The social comparison process has been widely studied in a variety of contexts. However, few studies have directly examined identification and contrast in social comparison in the academic and work areas by showing cultural, contextual and gender differences. The present dissertation evidences how identifying and contrasting oneself with better-off and worse-off others may influence positively and negatively our lives. For instance, among students contrasting oneself with better-off others may be highly negatively related to self-efficacy perceptions and subsequent academic performance. In addition, in the work area, identification and contrast with better-off and worse-off others may have positive and negative consequences in the development of burnout, organizational commitment and identification with the organization. Further, the present dissertation provides evidence for cross-cultural differences in identification and contrast in social comparison,
which may stimulate future research in this area. In addition, we show that not only culture may influence the way individuals compare themselves with others, but also gender and organizational context. Thus, these insights may provide an important extension on social comparison research by showing the influence of identification and contrast in social comparison with respect to relevant psychological processes that affect our daily life.