People’s responses to upward and downward social comparisons: The role of the individual’s effort-performance expectancy

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The aim of this research among practicing teachers was to demonstrate that the individual’s effort-performance (E-P) expectancy can explain different responses to upward and downward social comparison information in terms of positive affect and the intent to work harder. The results of both Experiment 1 (N = 100) and Experiment 2 (N = 162) show that exposure to a superior colleague generated more positive affect among teachers than exposure to an inferior other, particularly at high levels of E-P expectancy. Perhaps more importantly, explaining target’s superior performance in terms of high effort and inferior performance in terms of low effort enhanced participants’ intentions to work harder at their own jobs.

A critical problem for current social comparison theory, originally formulated by Festinger (1954), is to predict how people respond to upward and downward comparison information (Suls & Wheeler, 2000). Buunk and his colleagues (Buunk, Collins, Taylor, Van Yperen, & Dakof, 1990) emphasized that the nature of the reaction (positive or negative) is not consistent. That is, while knowing that others perform better may be unpleasant because one apparently falls short of the superior other (e.g. Brickman & Bulman, 1977; Smith, 2000), social comparison does not necessarily involve contrasting one’s abilities or attributes with those of better performing others. A person may also assimilate to the characteristics of the upward comparison target and draw inspiration and hope from the superior other (Collins, 1996; Lockwood & Kunda, 1997). In a similar vein, people may contrast themselves with others who perform at a lower level to feel good about themselves (Taylor, Wood, & Lichtman, 1983; Wills, 1981), but in the case of downward assimilation, downward comparison may also evoke discouragement and threat because it reveals that things might get worse for ‘someone like you’ (Aspinwall, 1997; Buunk & Ybema, 1997).

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The aim of the present research was to demonstrate that the individual's effort-performance expectancy (E-P expectancy) can explain different responses to upward and downward social comparison information. In particular, we argue that individuals (practicing teachers in the present study) respond differently to upward and downward social comparison information not only in terms of affect (Smith, 2000), but also in terms of behavioural intentions (i.e. the intent to work harder). Moreover, we tested the idea that besides the direction of comparison, the effort associated with superior and inferior performance is also an important factor determining individuals' reactions to social comparisons.

Our basic assumption is that people's beliefs regarding the link between effort and performance create a motivational framework that may direct their responses to social comparison information (cf. Dweck, 1999; Vroom, 1964). For example, for individuals who believe that there is no chance that effort will result in better performance (low E-P expectancy), upward comparison may provide the unwelcome information that they are inferior to the other and always will be. In contrast, for individuals who perceive the pace and quality of any improvement as dependent on people's own efforts (high E-P expectancy), upward social comparisons may provide information about how to improve their current level. The more employees, for example, believe that people are capable of doing their jobs well if they make the effort, the more they may be driven by self-improvement motives and draw inspiration from a superior colleague (Collins, 1996; Lockwood & Kunda, 1997; Wood, 1989). Accordingly, we predicted that after upward comparison, a stronger E-P expectancy is accompanied by more positive affect and a stronger intent to work harder (Hypothesis 1).

In contrast to upward social comparison, downward social comparison provides people with little or no information on how to improve, and accordingly, is unlikely to increase the individual's intent to work harder. However, particularly individuals low in E-P expectancy, who tend to believe in a fixed gap between themselves and inferior others, may derive pleasure and feelings of success from downward comparison (e.g. Taylor et al., 1983; Wills, 1981). Therefore, we predicted that after downward social comparison, a weaker E-P expectancy is accompanied by more positive affect (Hypothesis 2).

EXPERIMENT 1

Method

Participants and procedure
The sample in Experiment 1 consisted of 100 teachers in secondary education. The mean age of the participants was 45.0 years (SD = 10.1); 70% of the sample was male, and 65% had had higher vocational training. The remaining 37% had had a college education. The average length of experience as a teacher was 18.6 years (SD = 11.9), and the average number of working hours per week was 30.2 hours (SD = 9.9). The questionnaire, which the participants found in their personal mail-boxes at school, consisted of a general part, including measures of job strain, job satisfaction, and motivation, and an experimental part, containing a bogus interview with a teacher. The item used to assess the individual's E-P expectancy was embedded in the beginning of the general part of the questionnaire, which preceded the experimental part. The participants were asked whether or not they agreed with the following statement: 'Most
People are capable of doing their jobs well if they make the effort. Respondents could indicate their answers on a 5-point scale that ranged from (1) completely disagree, to (5) completely agree. This construct is assumed to be related to Dweck’s (1999) concept of incremental theory, which refers to the belief that people’s attributes are dynamic and changeable and that exerting effort leads to performance improvement.

The bogus interview with the teacher, realistically printed as a ripped-out section from a newspaper article (cf. Buunk, Van der Zee, & Van Yperen, 2001; Ybema & Buunk, 1995), included a small part of a picture featuring the face of the target person. Only the neck and chin of the gender-ambiguous person could be identified. The fragment contained a detailed description of the similar other, whose job performance was either superior or inferior. Similarity between the self and other increases the likelihood of social comparison (e.g. Collins, 2000; Goethals & Darley, 1977; Lockwood & Kunda, 1997; Suls, Martin, & Wheeler, 2002; Wood, 1989). The participants were asked to read the fragment and to underline the words and sentences that were important to them. For example, in the upward comparison condition (N = 49), the bogus interview read as follows:

I have been working as a teacher for years now. My job as a teacher makes me very happy. I have good contact with my pupils and I believe this feeling is mutual. Pupils seldom cut classes and they tell that they find the atmosphere during class very pleasant. According to my pupils, my classes are inspiring and I typically come up with ‘exciting’ material. I am very satisfied about my pupils’ school performances. For example, the final examination grades of my pupils are generally above the national average. Colleagues tell me that I am the kind of person that is very enthusiastic and organized. Moreover, they consider me someone who is well informed about the latest developments. They regularly ask me to become a member of a committee.

In the downward comparison condition (N = 51), the poorly performing teacher was not very inspiring and did not come up with exciting material, and so on. The information used in the bogus interviews was based on earlier experiments in which teachers generated behaviours of good and poor performing teachers (Brenninkmeijer, Van Yperen, & Buunk, 2001).

**Measures**

**Manipulation check**

At the end of the questionnaire, the success of the manipulation was checked using two items. These items measured the extent to which the participants rated the target as superior or inferior to themselves. The participants were asked ‘How do you perceive your own functioning as compared to this person?’, and ‘How well does this person perform in comparison to yourself? These questions were answered on a 5-point scale, ranging from much worse (1) to much better (5). Cronbach’s α was .87.

**Positive affect**

Positive affect was measured using three items: ‘To what extent does this fragment give you a positive feeling?’, ‘To what extent do you find this fragment inspiring?’, and ‘To what extent do you find this fragment hopeful? The 5-point response scale varied from not at all (1) to very much (5). Cronbach’s α was .84.
Intent to work harder

The participants were asked ‘Does this person have an impact on your intent to work harder?’ Response categories ranged from *not at all* (1) to *very much* (5).

**Results**

**Manipulation check**

All analyses were executed with gender (male = 1, and female = −1), educational level (college education = 1, and vocational training = −1), years of experience, and the official number of working hours per week as covariates. Correlations, means, and standard deviations of the covariates and dependent variables are presented in Table 1.

A 2 (Direction of comparison: downward vs. upward) analysis of covariance (ANCOVA) with the manipulation check (i.e. the extent to which participants rated the target as superior or inferior to themselves) as the dependent variable revealed that, compared with those in the upward comparison condition (\(M_{\text{up}} = 2.62, SD = 0.52\)), participants in the downward comparison condition rated their own job performances as better relative to that of the target (\(M_{\text{down}} = 4.32, SD = 0.50\)), \(F(1, 94) = 302.16, p < .001, \eta^2 = .74.\) In addition, mean ratings in both the downward and upward condition were significantly different from 3, which was the point at which a person perceived his or her own job performance as equally good, \(t(50) = 18.74, p < .001\), and \(t(46) = 5.18, p < .001\), respectively. Thus, the participants felt superior to the downward target and inferior to the upward target. This is not an obvious result because people tend to perceive upward comparison targets as similar to themselves, rather than superior (Collins, 2000).

We also executed a hierarchical regression analysis, with the manipulation check (i.e. the extent to which participants rated the target as superior or inferior to themselves) as the dependent variable, and E-P expectancy and direction of comparison (and their interaction) as predictor variables. To avoid multicollinearity between the predictors and the interaction term, the predictor variables were centred around zero and multiplied to form the interaction terms (Aiken & West, 1991). The regression analysis revealed that the strong main effect of direction of comparison was not qualified by E-P expectancy, \(F(1, 90) = 0.23, ns.\)

**Dependent variables**

To test the effect of the two independent variables on positive affect and the intent to work harder, we conducted two hierarchical regression analyses with positive affect and the intent to work harder as dependent variables, and E-P expectancy, direction of comparison (and their interaction) as predictor variables. With regard to the intent to work harder, neither main effects, \(F(1, 93) = 0.39, ns\), nor an interaction effect was found, \(F(1, 92) = 0.44, ns.\) The results of the regression analysis of positive affect are presented in Table 2. Because the regression equations contain interactions,

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1 Cohen (1988, pp. 283–288) has provided some useful guidelines for interpreting effect sizes in the behavioural sciences. He characterized effect sizes generated by analyses of variance (\(\eta^2\)) around \(\eta^2 = .01\) as ‘small’, around \(\eta^2 = .06\) as ‘moderate’, and around \(\eta^2 = .14\) as ‘large’.

2 Because teachers were not selected based on their effort-performance expectancies, we first tested whether scores for E-P expectancy were different for the upward and downward comparison groups. This was clearly not the case, \(F(1, 103) = 1.70, ns.\)
unstandardized regression weights are reported (Aiken & West, 1991). The \( R \)-squares are adjusted for shrinkage in the regression results; shrinkage is inversely related to sample size (Nunnally, 1978).

The results show main effects of both E-P expectancy and comparison direction on positive affect, which were qualified by a significant two-way interaction (see Fig. 1). The significant simple slope of upward social comparison, \( F(1, 92) = 15.91, p < .001 \), indicates that after upward comparison, a stronger E-P expectancy is accompanied by more positive affect, so that for positive affect, support was found for Hypothesis 1.

The slope representing the downward social comparison was not significant, \( F(1, 92) = 0.36, \text{ ns} \) (see Fig. 1), indicating that no supportive evidence was found for Hypothesis 2. That is, respondents did not report more positive affect after downward social comparison when one’s E-P expectancy was weaker. Rather, follow-up tests of differences between the predicted values on positive affect (for this procedure, see also Aiken & West, 1991) showed significant differences between downward and upward

### Table 1. Correlations, means, and standard deviations of the covariates and dependent variables (Experiment 1)

<table>
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<tr>
<th>Variable</th>
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Note. Correlations of .20 and above are significant at the .05 level (two-tailed).

### Table 2. Unstandardized regression weights of positive affect regressed on E-P expectancy and direction of comparison and their interaction (\( N = 100 \))

<table>
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<td>.64***</td>
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<td>( R^2 ) change</td>
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<td>.39***</td>
<td>.07***</td>
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<tr>
<td>Effect size ( f^2 )</td>
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<td>.08</td>
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</table>

\*\( p < .05 \), \**\( p < .01 \), \***\( p < .001 \).

Note. In regression analyses, effect sizes are expressed by \( f^2 \), which are computed on the basis of the percentage of explained variance (\( R^2 \) or \( R^2_{\text{change}} \)) (Cohen, 1988, pp. 413–414 and p. 479, Table 10.2.3). Cohen characterized effect sizes around \( f^2 = .02 \) (\( R^2 = .02 \)) as ‘small’, around \( f^2 = .15 \) (\( R^2 = .13 \)) as ‘moderate’, and around \( f^2 = .35 \) (\( R^2 = .26 \)) as ‘large’.
social comparison when E-P expectancy was weak, $F(1, 92) = 8.94, p < .01$, or strong, $F(1, 92) = 65.84, p < .001$. Thus, the results indicate that, overall, respondents felt better after upward social comparison, though that this was particularly true for those with a stronger E-P expectancy.

EXPERIMENT 2

The results of Experiment 1 suggest that teachers’ E-P expectancies may have important implications for the affective consequences of social comparison. Although upward social comparison evoked more positive affect overall than did downward social comparison, this seems to be particularly true for individuals who more strongly believe that most people are capable of doing their jobs well if they make the effort. However, the results of Study 1 did not provide evidence that social comparisons inspire people to work harder. The main purpose of Experiment 2 was to examine whether individuals can be inspired to work harder in the future by providing strong and unequivocal effort information. Upward social comparison information that is explicitly accompanied by information that has proven to be useful in self-improvement (i.e. high effort) may strengthen perceived control over one’s own job performance, enhance positive affect, and create a stronger behavioural intent to work harder at the job. Hence, Hypothesis 3 was that a strong E-P expectancy is accompanied by more perceived control over one’s own job performance, more positive affect, and a stronger intent to work harder after exposure to an upward comparison target exerting much effort.

A reverse pattern may exist in the case of downward comparison. A worse-off other who does not work very hard may increase expectations of success and motivate individuals to cope proactively with a potential undesirable scenario (Folkman & Lazarus, 1985). Proactive comparison activity may stimulate individuals to alter their own behaviour to reduce the chance of poor future job performance (Aspinwall, 1997). A poorly performing colleague who simply does not work hard enough provides information about what not to do and about the control one may have over one’s own job performance to avoid a similar lot. This may particularly inspire individuals who believe that effort is an important cause of success and failure. Accordingly, Hypothesis
4 was that a strong E-P expectancy is accompanied by more perceived control over one’s own job performance, more positive affect, and a stronger intent to work harder after exposure to an indolent, poorly performing colleague.

Method

Participants and procedure
The sample in Experiment 2 consisted of 162 teachers in secondary education. The mean age of the participants was 43.6 years (SD = 10.7); 56% of the sample was male, and 53% had had higher vocational training. The remaining 47% had had a college education. The average length of experience as a teacher was 17.7 years (SD = 11.0), and the average number of working hours per week was 30.7 hours (SD = 8.4). The same procedure was followed as in Experiment 1.

The experimental part of the questionnaire contained an extended bogus interview with the teacher. For example, the bogus interview presented in Experiment 1, containing upward social comparison information, continued in the low-effort condition as follows:

Actually, when you ask why I am performing so well in my job, I cannot come up with many reasons. I cannot claim that I invest much time and energy in my job. When I am teaching, for example, I do not have to try very hard. I do read an article every now and then, but actually, I am far from doing my best to remain up to date in my field. And I cannot say that my working weeks are very long . . . Someone recently said to me: ‘You are doing very well at your job, even though you do not put much effort into it.’ I think that is true. Actually, I do not have to work hard.

In the upward comparison condition (N = 87), the interview presented the teacher as performing well. In the downward comparison condition (N = 75), the participants were exposed to the bogus interview with a poorly performing teacher. In the low-effort condition (N = 86), the target person admitted that (s)he just does not work hard enough, whereas in the high-effort condition (N = 76), the target person indicated that (s)he works really hard.

Measures

Manipulation check
At the end of the questionnaire, the success of the direction of comparison manipulation was checked using the same two items used in Experiment 1. In Experiment 2, Cronbach’s α was .90. The effort manipulation was checked using a scale consisting of four items: (1) ‘How much effort does this person exert?’, (2) ‘How much time and energy does this person put into the job?’, (3) ‘How much effort does this person put into teaching?’, and (4) ‘How much effort does this person put into remaining up to date in the field?’. The response categories ranged from very little (1) to very much (5). Cronbach’s α was .95.

E-P expectancy
As in Experiment 1, in the general part of the questionnaire, preceding the experimental part, the participants were asked whether or not they agreed with the following statement: ‘Most people are capable of doing their jobs well if they make the effort’,
which was followed by a 5-point response scale that ranged from (1) completely disagree, to (5) completely agree.

Dependent variables
As in Experiment 1, we used positive affect and the intent to work harder as dependent variables. Cronbach’s $\alpha$ for the affect scale was .89. To assess respondents’ perceived control over their own job performances, they were asked: ‘To what extent do you feel that your job performance is determined by the degree of effort you put into your job?’ This item was followed by a 5-point scale, ranging from not at all (1) to very much (5).

Results
Manipulation check
As in Experiment 1, all analyses were executed with gender (male = 1, and female = −1), educational level (college education = 1, and vocational training = −1), years of experience, and the official number of working hours per week as covariates. Correlations, means, and standard deviations of the covariates and dependent variables are presented in Table 3.

The manipulation of direction of comparison was as successful as it was in Experiment 1. Participants in the downward comparison condition rated their own job performances as better relative to that of the target ($M_{\text{down}} = 4.35, SD = 0.51$) than did those in the upward comparison condition ($M_{\text{up}} = 2.79, SD = 0.69$), $F(1, 159) = 254.07, p < .001, \eta^2 = .63$. The mean rating in both the downward and upward conditions was again significantly different from 3, which was the point at which a person perceived his or her own job performance as equally good, $t(73) = 22.69, p < .001$, and $t(86) = 2.79, p < .01$, respectively. Thus, also in Experiment 2, the participants felt superior to the downward target and inferior to the upward target. The manipulation of effort appeared to be successful as well. Participants in the low-effort condition ($M_{\text{low}} = 2.21, SD = 0.76$) rated the target’s effort much lower than did those in the high-effort condition ($M_{\text{high}} = 4.00, SD = 0.57$), $F(1, 157) = 277.10, p < .001, \eta^2 = .64$.

As in Experiment 1, we conducted an additional regression analysis in which the extent to which participants rated the target as superior or inferior to themselves was

<table>
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<td>0.66</td>
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Note. Correlations of .15 and above are significant at the .05 level (two-tailed).
hierarchically regressed on the covariates, E-P expectancy, direction of comparison, effort, and their interactions.\(^3\) This analysis revealed that the strong main effect of direction of comparison was qualified neither by the two-way interactions with effort and E-P expectancy, \(F(3, 150) = 0.98, \text{ ns}\), nor by the three-way interaction, \(F(1, 149) = 0.17, \text{ ns}\).

We ran the same analysis using the check on the effort manipulation as the dependent variable. This analysis revealed that the two-way interactions with E-P expectancy, \(F(1, 149) = 0.00\), and the three-way interaction, \(F(1, 147) = 1.58\), were not significant. However, the strong main effect of the effort manipulation was qualified by the direction of comparison, \(F(1, 148) = 9.55, p < .01, \eta^2 = .06\). Follow-up analyses indicated that in the low-effort condition, participants attributed low effort particularly to the colleague whose performance was inferior (\(M_{\text{down}} = 1.68, SD = 0.47\) vs. \(M_{\text{up}} = 2.61, SD = 0.69\)), \(F(1, 152) = 8.46, p < .001, \eta^2 = .38\). In the high-effort condition, the difference was not reliable, \(F(1, 152) = 2.97, \text{ ns}\).

**Dependent variables**

Table 4 presents the results of hierarchical regression analyses of positive affect, perceived control, and the intent to work harder on E-P expectancy, direction of comparison, effort, and their interactions. The main effect of comparison direction on positive affect was qualified by interactions with both the individual’s E-P expectancy and effort. The unexpected interaction with effort indicates that the upward comparison target generated more positive affect when the other was a hard-working colleague (\(M = 2.74, SD = 0.96\) rather than an indolent other (\(M = 1.97, SD = 0.92\)), \(F(1, 154) = 9.70, p < .01, \eta^2 = .06\). In the downward comparison condition, the difference between the hard-working and the indolent other was not significant, \(F(1, 154) = 1.14, \text{ ns}\).

The interaction effect of the individual’s E-P expectancy and direction of comparison on positive affect shows that the effects on positive affect in Experiment 1 (see Fig. 1) were almost perfectly replicated in Experiment 2. As in Experiment 1, the significant simple slope of upward social comparison, \(F(1, 154) = 10.51, p < .01\), indicates that after upward comparison, a stronger E-P expectancy was accompanied by more positive affect, so that for positive affect, support was found for Hypothesis 1. The non-significant slope, \(F(1, 154) = 1.08, \text{ ns}\), representing the downward social comparison condition indicates that E-P expectancy had no effect on positive affect after exposure to downward social comparison information. Thus, as in Experiment 1, empirical support was not found for Hypothesis 2: the individual’s E-P expectancy was not negatively related to positive affect after downward social comparison.

Furthermore, also in Experiment 2, follow-up tests of differences between the predicted values on positive affect (Aiken & West, 1991) showed significant differences between downward and upward social comparison when E-P expectancy was weak, \(F(1, 154) = 18.66, p < .001\), and strong, \(F(1, 154) = 71.12, p < .001\). Hence, across two experiments, we provide converging evidence that, overall, individuals feel better after upward social comparison, which is particularly true for those with a stronger E-P expectancy.

\(^{3}\)As in Experiment 1, scores for E-P expectancy did not differ across the experimental conditions: neither the main effects, direction, \(F(1, 172) = 1.02, \text{ ns}\), and effort, \(F(1, 172) = 1.93, \text{ ns}\), nor the interaction was significant, \(F(1, 172) = 0.73, \text{ ns}\).
Table 4. Unstandardized regression weights of positive affect, perceived control, and intent to work harder regressed on E-P expectancy, direction of comparison, and effort, and their interactions (N = 162)

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<tr>
<td>No. of working hours</td>
<td>.00</td>
<td>-.01</td>
<td>-.00</td>
</tr>
<tr>
<td>Educational level</td>
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<td>-.04</td>
<td>-.03</td>
</tr>
<tr>
<td>2. E-P expectancy (EP)</td>
<td>.07</td>
<td>.06</td>
<td>.07</td>
</tr>
<tr>
<td>Direction (D)</td>
<td>.57***</td>
<td>.59***</td>
<td>.58***</td>
</tr>
<tr>
<td>Effort (E)</td>
<td>.25***</td>
<td>.23***</td>
<td>.22***</td>
</tr>
<tr>
<td>3. EP × D</td>
<td>.15**</td>
<td>.16**</td>
<td>.01</td>
</tr>
<tr>
<td>EP × E</td>
<td>-.03</td>
<td>-.03</td>
<td>.00</td>
</tr>
<tr>
<td>D × E</td>
<td>.13*</td>
<td>.13*</td>
<td>.21**</td>
</tr>
<tr>
<td>4. EP × D × E</td>
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<td>.08</td>
<td>.08</td>
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<tr>
<td>Adjusted R²</td>
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<tr>
<td>Effect size f²</td>
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<td>.04</td>
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*p < .05, **p < .01, ***p < .001.
We observed the obvious main effect of the individual’s E-P expectancy on perceived control over his or her own job performance (see Table 4). The significant three-way interaction, displayed in Fig. 2, shows a pattern that supports both Hypothesis 3 and Hypothesis 4 with regard to perceived control. The significant simple slopes of upward social comparison, high effort, \( F(1, 154) = 6.48, p < .01 \), and downward social comparison, low effort, \( F(1, 154) = 3.81, p < .05 \), indicate that after exposure to either an upward, hard-working other (Hypothesis 3) or a downward, indolent other (Hypothesis 4), respectively, individuals reported more control over their own job performances when E-P expectancy was stronger. The other two slopes were not significant (\( p > .60 \)). Furthermore, follow-up tests of differences between the predicted values on perceived control showed significant differences between high and low effort at high levels of E-P expectancy in both the upward social comparison condition, \( F(1, 150) = 7.73, p < .01 \), and the downward social comparison condition, \( F(1, 150) = 6.44, p < .01 \).

No support was found for Hypothesis 3 and Hypothesis 4 with regard to the intent to work harder. Rather, the significant interaction effect of direction of comparison and effort on the intent to work harder (see Table 4 and Fig. 3) shows that, regardless of the individual’s E-P expectancy, the downward, indolent colleague inspired the teachers more than the downward, hard working colleague, \( F(1, 154) = 8.67, p < .01, \eta^2 = .05 \). Similarly, relative to the upward, indolent colleague, the upward, hard-working colleague inspired the teachers to work harder, \( F(1, 154) = 5.18, p < .05, \eta^2 = .03 \).

**GENERAL DISCUSSION**

The aim of this research was to demonstrate that, in an actual career setting, the individual’s E-P expectancy can explain different responses to upward and downward social comparison information. In line with our expectations, the results consistently
showed that the belief that most people are capable of doing their jobs well if they make the effort (i.e. a strong E-P expectancy) was positively related to positive affect after upward social comparison. Contrary to our expectations, however, we found no empirical evidence that after downward social comparison, a weaker E-P expectancy was accompanied by more positive affect. This postulated effect may have been neutralized by the tendency of individuals low in perceived control (i.e. low in E-P expectancy) to interpret downward social comparison information negatively as well (e.g. Aspinwall, 1997; Lockwood & Kunda, 1997; Major, Testa, & Blysma, 1991; Smith, 2000; Ybema & Buunk, 1995). That is, particularly individuals low in E-P expectancy may derive pleasure and feelings of success from downward comparison, but simultaneously, their perceived lack of personal control over maintaining one’s favourable standing may be terrifying and decrease positive affect.

A consistent finding across both experiments was that, overall, exposure to a superior colleague generated more positive affect than did exposure to an inferior other (cf. Lockwood & Kunda, 1999). Possibly, individuals faced with a similar (i.e. a colleague) upward comparison target selectively generate information that is consistent with the notion that the upward comparison target is similar to the self, which produces positive affect (Mussweiler, 2003). The present findings indicate that assimilation to the characteristics of the upward comparison target may occur particularly among individuals who feel that the performance level of the upward comparison target is attainable for themselves.

The aim of the present research was to demonstrate that, under specific conditions, individuals respond differently to upward and downward social comparison information not only in terms of affect, but also in terms of behavioural intentions (i.e. the intent to work harder). As noted by Smith (2000), the impact of the comparison process on the self is most directly to affect. Hence, much research on social comparison has focused on affect, or cognitive feelings (Schwarz & Clore, 1996), as the outcome variable (e.g. Aspinwall & Taylor, 1993; Buunk et al., 1990; Hemphill & Lehman, 1991; Ybema & Buunk, 1995). The present study is among the few that

![Figure 3. Scores for the intent to work harder as a function of direction of comparison and effort put into the job by target (Experiment 2).](image-url)
demonstrates that social comparison may have consequences for behavioural outcomes as well (cf. Aspinwall, 1997). In this regard, however, it should be noted that we assessed a behavioural intention rather than actual behaviour. Secondly, we found no effects on behavioural intention in Experiment 1. Apparently, it is only under specific conditions that social comparison has an effect on behavioural intention. The results of Experiment 2 suggest that social comparison information increases individuals’ intentions to work harder, but only when the high performance level of the target was unequivocally explained in terms of high effort or when the other’s poor performance was attributed to low effort. Contrary to our expectations, people’s E-P expectancies did not moderate these effects. It is easy to understand why a hard-working, successful colleague or an indolent, poor-performing colleague inspire individuals high in E-P expectancy. The stronger the E-P expectancy, the more that great effort will be considered a determinant of successful job performance (cf. Dweck, 1999). In the upward comparison and the downward comparison conditions, the high- and the low-effort information, respectively, enhanced perceptions of control over one’s own job performance when E-P expectancy was stronger. Because we did not find an effect on the intent to work harder in Experiment 1, individuals high in E-P expectancy apparently needed additional effort information to draw inspiration to work harder in the future.

When E-P expectancy was weaker, the effort information did not affect the perception of control. In terms of behavioural intentions, however, individuals low in E-P expectancy were also susceptible to high-effort information about a successful colleague and low-effort information about a failing colleague. The effort information did not enhance their feelings of control over their own job performances, but it did stimulate them to put more effort into their jobs in the future. It was apparently difficult for them to reject the obvious conclusion that their colleague was a successful teacher because he or she put much effort into the job, or a poor performer because he or she did not work hard enough.

A limitation of the present study may be the way the individual’s E-P expectancy was assessed, namely by using one single item. It should be noted, however, that the results of several studies have indicated that single-item measures compare favourably with multiple-item scales in terms of producing similar correlations with outcome variables (Nagy, 2002; Robins, Hendin, & Trzesniewski, 2001; Wanous, Reichers, & Hudy, 1997). An obvious disadvantage of single-item measures is that no calculations of internal consistency can be computed. Note, however, that the observed interaction effect of E-P expectancy and direction of comparison on positive affect was identical in both experiments. This perfect replication may be considered an indicator for the reliability and validity of the measures used.

In conclusion, exposure to a superior colleague apparently generates more positive affect among teachers than exposure to an inferior other, particularly at high levels of E-P expectancy. Perhaps more importantly, the present results suggest that additional effort information may help people to draw inspiration from social comparison information in either direction, regardless of the strength of their E-P expectancies. That is, explaining target’s superior performance in terms of high effort and inferior performance in terms of low effort enhanced teachers’ intentions to work harder at their own jobs.
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References


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