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Impression management leads to spent resources

The influence of impression management on a person's self-control

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### Abstract

In the present paper, the relationship between impression management and self-control is investigated. It was expected that individuals engaging in impression management will be depleted of their self-control resource. Moreover, due to their monitoring and controlling behavior, it was assumed that this effect would be even stronger for people high in self-monitoring. In two laboratory experiments, the motivation to manage impressions was manipulated and the subject's reduction in self-control was measured by means of the Stroop Color-Word Task. As predicted, a main effect of impression management on the level of depletion was found. Furthermore, the moderating role of self-monitoring in this relationship was demonstrated, meaning that high self-monitors were more depleted of their self-control resources than low self-monitors after engaging in an impression management task.

Impression management leads to spent resources

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Imagine you are a man walking on a treadmill in a health center. You have already run for 30 minutes, you are wheezing like a grampus and your legs ask you to stop. Suddenly, you notice a pretty female colleague watching you. You don't know her that well, but of course you want to make a good impression on her. You pretend that everything is going well; you are smiling and act the tough guy. Having finished your workout, you hear yourself say to her: "Hey, would you like to have dinner with me tonight?" Immediately after you finished this question, you realize that this was a very spontaneous action.

The current paper provides insights into why you acted this way. It investigates the relationship between impression management strategies and an individual's amount of self-control. More specifically, it attempts to show that in certain circumstances, managing impressions leads to a reduction in a person's self-control. Furthermore, it investigates the moderating role of self-monitoring in this relationship.

This paper is divided into several sections. First, a theoretical background is provided to review earlier literature on self-control, impression management and self-monitoring. Second, two experiments about the effect of impression management on self-control are reported. The paper is concluded by a general discussion and practical implications.

#### *Self-control and impression management*

Self-control refers to conscious efforts to modify or override behavior, including thoughts, emotions and actions (Baumeister, 2002). According to Schmeichel, Vohs and Baumeister (2003, p. 33), self-control "is used for many different tasks, like regulating thoughts, controlling emotions, inhibiting impulses, sustaining physical stamina, and persisting in the face of frustration or failure". But not all cognitive activities require self-

control. For example, logical reasoning and problem solving require much more self-control than simple mental activities, like perceiving, categorizing, storing and retrieving information (Schmeichel et al., 2003). The concept of self-control is frequently studied in many fields of research. Poor self-control is associated with several behavioral / impulse problems, like overeating, overspending and interpersonal problems (Baumeister, Bratslavsky, Muraven, Tice & Baumeister, 1998; Tangney, Baumeister & Boone, 2004; Vohs & Faber, 2007).

Baumeister, Heatherton and Tice (1994) proposed the idea that self-control depends on a restricted amount of energy. According to their “strength model”, humans have a limited energy resource (or self-control strength), which becomes depleted by any act of self-control and causes poorer performance on a second self-control task. It seems to work like a muscle, which also shows impaired performance after it has been used. The state of reduced self-control, stemming from prior effort, is called *ego depletion*. Several studies have been conducted to explore this ego depletion effect and how it operates. Baumeister et al. (1998, experiment 1) found that resisting the temptation to eat from tasty food resulted in the depletion of the subjects’ self-control resources. Muraven, Tice and Baumeister (1998, experiment 2) investigated the effect of suppression of thoughts on the level of ego depletion. They concluded that people who were instructed not to think of a white bear were less able to persist in an unsolvable anagram task than a control group who was allowed to think of everything including a white bear (see for more examples Baumeister, Gailliot, DeWall & Oaten, 2006; Baumeister, Vohs & Tice, 2007).

Behavior that will also deplete self-control resources is impression management. Impression management is the process by which individuals try to influence the images that others have of them (Rosenfeld, Ciacalone & Riordan, 1995). Individuals can use different strategies to impress. For example, an ingratiation strategy is used when people want to be seen as likeable and a self-promotion strategy is used when people want to appear as being

competent. The objective of using impression management is to generate a particular impression in others' minds (Leary & Kowalski, 1990). The information one presents is most of the time true, but it is fitted to the appropriate circumstances, for example the individual's goals and the audience's expectations. It is not always the case that people present themselves in a positive way; research has shown that people will even present themselves negatively if it serves their goals, for example when they want to avoid complex responsibilities in a certain situation (Schlenker & Weigold, 1992).

The term impression management can be distinguished from self-presentation. Some authors (e.g. Schlenker, 1980) use the term self-presentation when the projected images are self-relevant. Impression management is then applied to include the impression management of things other than themselves, for example the organization they work for. Furthermore, impressions can be managed by a third party (think of celebrities). Overall, impression management is a broader term than self-presentation (Leary & Kowalski, 1990). However, this paper focuses on how people control and manage the impressions that others form of them. Therefore, both impression management and self-presentation are used interchangeably here.

Often, people are not consciously managing the impressions they want to convey to others and in many daily situations they are not constantly aware of using a particular strategy. Most forms of impression management are therefore habitual and automatic (e.g. Jones, 1990; Schlenker & Weigold, 1992). However, in certain situations people become motivated to control others' views of them. When this occurs, impression management is not an automatic process anymore. According to Leary and Kowalski (1990), impression motivation is increased when the behavior is public (i.e. could be viewed by others). The more likely the individual is to be concerned with how he or she appears to others, the more motivated he or she will be to manage the impression. People become also more motivated to

use impression management when future interactions with another person are expected. Next, individuals are more motivated to engage in impression management when the value of the desired goal increases. For example, a salesman would be more motivated to manage his impressions when the customer is a large account compared to when the customer is a small player in the market.

To summarize, impression management occurs quite automatic and in a habitual way in daily life. This changes when people become motivated to manage their impressions; in case when performance becomes more important to the person. In this situation, the standard automatic process of self-presentation shifts to a more controlled course of action (Schlenker & Weigold, 1992).

When individuals are highly motivated to engage in impression management and this management becomes more controlled, it is reasonable that this will require effort compared to habitual ways of self-presentation. The effort one uses to manage impressions will consume some of an individual's self-control. The depleting effect of impression management is demonstrated by Vohs, Baumeister and Ciarocco (2005). The authors state that although most people have developed some skill to present themselves (e.g. Jones, 1990; Schlenker, 1980), the modern social life is full of unexpected events and relationship partners and therefore it is very unlikely that self-presentations become totally automatic. As a consequence, the individual has to explicitly control his or her behavior in these situations in order to convey the desired image. This process will consume some amount of self-control. The question is then when impression management consumes self-control. According to Vohs et al. (2005) impression management is depleting when one presents oneself in unfamiliar ways or in challenging situations. They tested this hypothesis in four studies. To test whether unfamiliar situations would lead to ego depletion, they induced half of the participants to present themselves modestly to a stranger and very favorable to a friend. This is an atypical situation,

since it is more logical to present oneself favorable to a stranger and modestly to a friend.

After this task, all participants were presented with 140 difficult calculation exercises and asked to work on them until they had finished every sum or they decided to stop. Participants who were presenting themselves in the unfamiliar way, persisted shorter on the calculation task, indicating that they were more depleted. In another study, self-presentation was made even more challenging. In the most challenging condition, people had to present themselves being competent and likeable in front of a very skeptical audience. Compared to control conditions in which people could present themselves “normal” and in front of an accepting audience, people in the challenging condition were the least able to keep their face neutral during an emotional film, demonstrating the depletion effect.

These results indicate that effortful impression management leads to a depletion of one's self-control resource. It would be very useful to investigate for which type of individual this effect will be especially present.

#### *The role of self-monitoring in impression management*

An individual trait that might be of interest in the relationship between impression management and ego depletion is self-monitoring. Originally conceptualized by Snyder (1974), the self-monitoring individual may *monitor* (observe and control) its self-presentation and expressive behavior. The typical high self-monitor is one who is concerned of social suitability, is sensitive to the self-presentations of others in social situations and uses these signals as a guideline to monitor his own self-presentation. In contrast, persons scoring low on self-monitoring seem to use their inner states to present themselves, rather than monitoring and controlling their behavior to fit the situation.

Individual differences in self-monitoring are investigated in a number of studies. For example, Fandt and Ferris (1990) found that high self-monitors were more prone to manipulate information to convey a more positive image of themselves compared to low self-

monitors. Kilduff and Day (1994) studied self-monitoring in an organizational context and found that high self-monitors obtained more internal promotions than low self-monitors. Turnley and Bolino (2001) investigated the role of self-monitoring in impression management and concluded that high self-monitors were better able to use impression management tactics than low self-monitors. That is, when high self-monitors used an ingratiation or a self-promotion strategy, they were seen as more likeable or competent than when low self-monitors were using these tactics.

Based on the above, it seems reasonable that high self-monitors will be more motivated to use impression management when the situation calls for this action, since they pick up cues from the environment in order to demonstrate the appropriate behavior. In turn, this process will consume self-control when the situation is unfamiliar or challenging to the individual. This reasoning is supported by Ickes, Holloway, Stinson and Hoodenpyle (2006). They focused in their review on the role of self-monitoring in impression management. Based on the findings of studies conducted the last 25 years, they concluded that "...high self-monitors are motivated impression managers who are willing to invest considerable thought and effort into planning the specific strategies and forms of impression management that will enable them to accomplish their interaction goals" (Ickes et al., 2006, p. 681). To investigate whether those high on self-monitoring will be more ego depleted than those low on self-monitoring after using an impression management strategy, the present research was conducted.

### The present research

In the following two experiments, the effect of impression management on ego depletion is illustrated and discussed. In experiment 1, it is shown that effortful impression management leads to ego depletion when individuals are high self-monitors. Experiment 2 replicated this

result by using a different procedure. In both experiments, the Stroop Color Word Task (Stroop, 1935) was used to determine the level of ego depletion. This Stroop Task is frequently used to measure self-control after individuals are depleted by another self-control task (e.g. Gailliot et al., 2007; Richeson & Trawalter, 2005; Richeson & Shelton, 2003). This task calls for overriding a habitual response (saying the name of the word, a dominant response) in order to say instead the color in which the word is shown. Stroop performance was determined by either the average reaction time to get the right answer or the number of errors made during the task.

### Experiment 1

Many forms of impression management are probably habitual and automatic in nature. In general, people do present rather uniform images of themselves, i.e. a combination of the truth and something extra to depict a social desirable image (e.g. Leary & Kowalski, 1990; Schlenker & Weigold, 1992). This is the reason why most people have developed some standard way of presenting themselves to others. A deviation from this standard is therefore necessary to get their resources depleted (Vohs et al., 2005).

This experiment was designed to demonstrate that the use of impression management will deplete regulatory resources when familiar or habitual patterns must be overridden to make the desired impression. In order to do this, one should control his or her behavior intensively, which in turn causes ego depletion. This effect is expected to be stronger for high self-monitors, because these individuals are observing and controlling their behavior more than low self-monitors, they are easily engaging in impression management (Turnley & Bolino, 2001) and therefore it is even more difficult for them to override this habitual response. Experiment 1 investigated therefore the hypothesis that the use of impression management leads to depletion of regulatory resources, especially for individuals scoring high on self-monitoring.

## Method

### *Overview and participants*

The hypothesis was tested in a 2 (impression management: high motivation vs. low motivation) X 2 (self-monitoring: high vs. low) between subjects factorial design. A total of 44 individuals (27 male, 17 female) participated in this experiment. All participants were students at the University of Twente. At the end of the experiment, they received € 2.50 for their participation. Subjects were recruited on the campus of the university and were asked if they would be willing to participate in several independent studies of the Marketing Communication and Consumer Psychology department. When they agreed, they were guided by the recruiter to the laboratory and they were randomly assigned to condition. All questions were shown on a laptop. In both conditions, subjects first completed demographic questions, like their age, sex, nationality and type of study. Participants then completed the Self-Monitoring Scale (Snyder & Gangestad, 1986). Next, dependent on condition, they were confronted with either impression management related questions or neutral questions. Then the subjects filled in the Positive and Negative Affect Schedule (PANAS; Watson, Clark & Tellegen, 1988) to check for mood effects and after that, all participants completed the Stroop task. Finally, they were thanked and paid for their participation.

### *Independent variables*

#### *Self-Monitoring*

In both conditions, the subjects completed the 18 items of the Self-Monitoring Scale (Snyder & Gangestad, 1986). As recommended by Briggs and Cheek (1986), the original True-False format was replaced by a 5-point scale ranging from strongly disagree to strongly agree. Examples of questions included in the scale are: “I find it hard to imitate the behavior of other people” (reversed scored) and “I’m not always the person I appear to be”. Cronbach’s alpha

for the scale was .73. The distinction between low and high self-monitors was made by means of a median split (median = 3).

### *Impression management*

The motivation to use impression management was varied between two conditions. In the high motivation condition (i.e. the impression management condition), subjects were motivated to use an ingratiation impression management strategy. In this strategy, the goal of the individual is to be seen as likeable (Jones & Pittman, 1982). The following text appeared on the screen: "This experiment is about the relationship between personal characteristics and the familiarity with charity organizations (for example Amnesty International and Greenpeace). At the end of the experiment, your answers will be discussed with you and the researcher, in order to obtain some more background information. Be aware: you are explicitly requested to answer as honest as possible." It was instructed on the computer screen that their answers on the upcoming questions would be discussed with the experimenter after the experiment took place, because this would motivate the subjects to engage in impression management. Answering as honest as possible would push subjects to control their responses. For their first response, it was encouraged that subjects would use the ingratiation strategy of impression management, since their answers would be discussed afterwards. However, they were instructed to answer as honest as possible at the same time. It was expected that this would be a depleting task, since the prototype student will usually not be motivated to spend money on charity organizations. Giving socially desirable answers and at the same time being honest, i.e. answering that one is *not* supporting charity organizations, would deplete subjects' self-control resources. Moreover, they had to indicate their names. It was supposed that when indicating one's name, the subject would be more motivated to impress the researcher compared to when he or she would remain anonymous, because in this way subjects were given the feeling that they could be tracked after finishing the experiment. Next, the participants completed 21 multiple choice questions and four open questions related to charity organizations. The questions offered them the opportunity to present themselves in

a favorable light. Examples of multiple choice questions are: “I find it important to donate money to a charity organization” and “I like to donate my used clothes to a charity organization”. An example of an open question is: “Imagine you win €100,-. Which percentage would you like to donate to a charity organization? Explain your answer.”

In the low motivation control condition, participants were told that their answers would be anonymous and their names were not asked. Instead, these subjects were asked to categorize 22 charity organizations into “Human rights/ Development”, “Animals/ Nature” and “Health”. Specifically, subjects saw the following text: “Please categorize the charity organizations below into the category in which the charity organization operates according to you. The number of correct answers is not important; the goal is to investigate which charity organization you associate with which category (i.e. their operating field). Your answers will remain totally anonymous.” Also, four open questions were asked, but this time the questions were neutral, like “Classify the charity organizations mentioned below on the basis of personal affinity. Explain your answer.” In this condition, nothing was said about answering honestly (see Appendix A for a detailed description of both manipulations).

A pretest was conducted to see whether the manipulation of impression management was successful. Eighteen individuals (not participating in the experiment) filled in either the impression management related questions or the control questions. Afterwards, they were asked to fill in on a 5-point scale (1 = totally disagree, 5 = totally agree) the statement “The questions gave me the opportunity to present myself in the best possible light”. Subjects in the impression management condition scored significantly higher on this question ( $M = 3.67$ ,  $SD = .34$ ) than subjects in the control condition ( $M = 2.56$ ,  $SD = .34$ ;  $F (1,16) = 5.48$ ,  $p < .05$ ).

### *Dependent measures*

#### *Mood*

To investigate whether the manipulation of impression management would result in unplanned negative affect, subjects completed the PANAS which contains 10 positive and 10

negative items on a 5-point scale. A subject's score on positive / negative affect was obtained by averaging the respective items ( $\alpha = .67$  for positive affect and  $\alpha = .46$  for negative affect).

### *Ego depletion*

To measure the level of ego depletion, participants completed 32 trials of the Stroop Color Word Task. They saw words on the screen (red, green, blue and yellow) that appeared in font colors (red, green, blue and yellow), but the font colors differed in 24 trials from the meaning of the word (i.e. the word RED appeared in blue font color). In the remaining 8 trials, word and ink color were congruent. Congruent and incongruent trials appeared randomly on the screen. The task of the participants was to click with the mouse on the color in which the word was written. The way to analyze the data of the Stroop task, and in turn to determine the level of depletion, is to look at the average reaction time of the individual or the number of errors made during the task (Gailliot et al, 2007). Therefore, the average reaction time and the number of errors served as a measure of performance on the Stroop task.

## Results

Data were analyzed using a two-way ANOVA. No significant main effects of impression management condition or level of self-monitoring on the level of ego depletion were found. However, the expected interaction effect, that people who are high in self-monitoring will be more depleted after using an impression management strategy appeared to be significant ( $F(1,40) = 7.58, p < .01, \eta^2 = .16$ ). Moreover, a simple main effect analysis revealed that the effect of impression management on depletion was only significant when individuals were high self-monitors ( $F(1,40) = 9.18, p < .01, \eta^2 = .19$ ), not when people are low self-monitors ( $F < 1$ ). This means that high self-monitors, who engaged in impression management showed weaker Stroop performance (i.e. more errors;  $M_{\text{Impression management/ high SM}} = .50, SD = .12$ ) compared to participants who were in the control group ( $M_{\text{control/ high SM}} = .00, SD = .11$ ).

However, for low self-monitors, engaging in impression management had no effect on Stroop performance ( $M_{\text{Impression management/ low SM}} = .10$ ,  $SD = .12$  versus  $M_{\text{control/ low SM}} = .23$ ,  $SD = .11$ ; see Figure 1).

While an interaction effect of impression management and self-monitoring was found on Stroop errors, no significant effects on the average reaction time on the Stroop Task were found, although the results were in the desired direction ( $F(1,40) = 1.78$ ,  $ns$ ).

A MANOVA was used with impression management and self-monitoring as independent variables and Positive and Negative Affect as dependent variables to check for possible mood effects. No significant results were observed. That is, both main effects ( $F < 1$ ) nor the interaction between impression management and self-monitoring were significant ( $F(1,40) = 1.11$ ,  $ns$ ). This suggests that mood effects could not explain the previous findings.

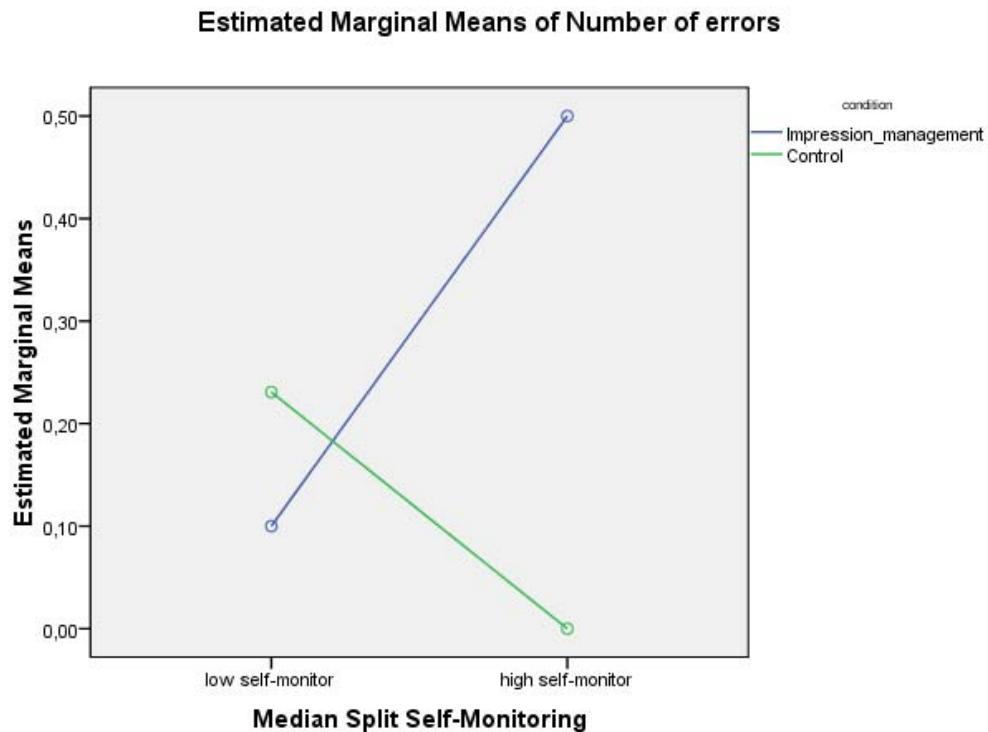


Figure 1. The interaction between impression management and self-monitoring. Individuals engaging in impression management and being high self-monitors made more errors on the Stroop Task.

## Discussion

The results from experiment 1 indicate that when a high self-monitoring individual has made a self-control task, this individual performs worse on a second self-control task. In this experiment, the first self-control task consisted of overriding a response by being motivated to impress the researcher by appearing likeable (an ingratiation strategy) but on the other hand being as honest as possible. This initial task led to a reduction in subject's self-control, illustrated by the fact that those scoring high on self-monitoring who were managing impressions performed worse on the Stroop Task compared to subjects in the no impression management control condition. This result adds to existing literature that the effect founded by Vohs et al. (2005), being that effortful self-presentation depletes regulatory resources, only holds for high self-monitors.

One could question whether the number of errors can be used as a measure of Stroop performance, since the amount of errors could have been due to the speed at which participants completed the trials of the Stroop Task. Faster response time could lead to more errors. However, the correlation between average reaction time and the number of errors made in the Stroop Task was not significant, so it is likely that the amount of errors made in Stroop Task was due to the use of impression management by the subjects.

However, this experiment is not without limitations. First, the sample size is limited, which makes it difficult to generalize the results. Second, the expected main effect of impression management on ego depletion was not significant. This may be due to the manipulation of impression management. In order to address these limitations, experiment 2 was designed.

## Experiment 2

Experiment 2 was conducted to replicate and broaden the results of experiment 1 in three ways. First, due to the limited sample size in experiment 1, it would be necessary to see if the observed result would also hold for a larger sample size. Second, a different manipulation of impression management should lead to the expected main effect of impression management on depletion. In experiment 1, the motivation to use impression management was the expected future interaction with the experimenter. In contrast, experiment 2 increased participants' motivation to manage impressions by making their behavior public. Making the behavior public increases the motivation to impress (Leary and Kowalski, 1990), probably even more than expected future interaction does. Besides that, experiment 1 focused on *overriding* a habitual response, which causes a reduction in self-control. The current experiment was centered around *managing* a response, which should lead to ego depletion as well. This occurs because one is consciously controlling his or her thoughts. Especially those high in self-monitoring will do this, since they are known for their monitoring behavior. Last, in order to endorse the effect of impression management on depletion, evoking a different impression management strategy should lead to the same effect found in experiment 1. Therefore, experiment 2 forced subjects to use a self-promotion strategy instead of an ingratiation strategy. Whereas subjects in experiment 1 attempted to be seen as likeable, in experiment 2 they could exaggerate their abilities in order to be seen as competent.

In short, it was expected that the same interaction of impression management and self-monitoring on ego depletion was found; and this time, due to a different manipulation, complemented by a main effect of impression management on ego depletion.

## Method

### *Overview and participants*

The hypotheses were tested in a 2 (impression management: high motivation vs. low motivation) X 2 (self-monitoring: high vs. low) between subjects factorial design. A total of 72 individuals (54 men, 18 women; mean age 20.72,  $SD = 2.28$ ) participated in this experiment. Like in Experiment 1, all participants were students at the University of Twente. Subjects were recruited on the campus of the university and were asked if they would be willing to participate in several independent studies of the Marketing Communication and Consumer Psychology department. When they agreed, they were guided by the recruiter to the laboratory and they were randomly assigned to condition. Again, all questions were shown on a laptop. In both conditions, subjects first completed demographic questions, like their age, sex, nationality and type of study. Participants then completed the Self-Monitoring Scale (Snyder & Gangestad, 1986). Next, they were either motivated to promote themselves (impression management condition) or they were not (control condition). After the manipulation of impression management, the subjects continued with the PANAS (Watson et al, 1988) to check for mood effects and after that, all participants completed the Stroop task. Finally, they were thanked and paid € 2.50 for their participation.

### *Independent variables*

#### *Self-monitoring*

Like experiment 1, the Self-Monitoring Scale (Snyder & Gangestad, 1986) was used on a 5-point scale. Cronbach's alpha for this scale was .79. Also in this experiment two groups (low vs. high score on self-monitoring) were created by means of a median split (median = 3).

#### *Impression management*

The motivation to use a self-promoting impression management strategy was varied along two levels. In the high motivation condition (i.e. the impression management condition), the

use of a self-promoting impression management strategy was encouraged. Subjects in this condition were instructed on screen by the following: "TOPTALENT, a well-known employment agency for students, is investigating the relationship between verbal and nonverbal behavior during job interviews. The answers to the questions mentioned below are interesting for TOPTALENT, but they are at the same time a screening of best-graduate students of the University of Twente for a TOPTALENT-pool! When you get in this pool, you will be invited to meet one of your most preferred employers. Answer the questions as good as you can, since there is only place for a few students. To gain insight in your nonverbal behavior, notice that you are being videotaped. The tapes will be analyzed by three independent coders. The tapes will not be distributed further. After this part, you will not be taped anymore. Good luck."

In reality nobody was videotaped, but the light of the webcam - placed on top of the laptop - was on during the manipulation of impression management. The subjects faced five open questions in which they could promote themselves. Examples of questions are: "When your best friend is asked to state which traits characterize you best, which three traits will he or she mention?" and "What makes you the ultimate candidate for the TOPTALENT-pool?". The total time to answer the questions was approximately 2.5 minutes.

In the low motivation condition (i.e. the control condition), the subjects saw the following introduction on the screen: "Employment agency TOPTALENT, especially for students, is planning to establish oneself in the east of The Netherlands. Because of this launch, TOPTALENT wants to know several things of students living in the east of The Netherlands. Please indicate at each statement to what degree you agree with the statement. Your answers will remain anonymous." The statements were put on a 5-point scale, ranging from totally disagree to totally agree. The statements were about the subject's familiarity with employment agencies in general, the name TOPTALENT, the services TOPTALENT should provide according to the subjects, etc. It was expected that this type of questions would not lead to any form of impression management. The total time to fill in the statements was again approximately 2.5 minutes, meaning that both conditions did not differ with respect to time length (see Appendix B for a detailed description of both manipulations).

After completing the questions regarding TOPTALENT, subjects in both conditions completed four questions to assess the extent to which the subjects involved in effortful impression management. This manipulation check scale was composed of four items on a 5-point scale (1 = not at all, 5 = very much) and asked to what extent: 1) did you want to give a good impression of yourself at TOPTALENT?, 2) did you want to promote yourself at TOPTALENT?, 3) did you want to show yourself in the best possible light at TOPTALENT? and 4) did you want to present yourself in a good way at TOPTALENT? The combination of items appeared to be a reliable Impression Management Scale ( $\alpha = .92$ ). The average of these four items constituted the subject's motivation to use impression management.

#### *Dependent measures*

##### *Mood*

In order to explore whether the self-promoting impression management strategy would cause unintended negative affect, subjects completed again the 20 items of the PANAS. Cronbach's alpha for the positive items was .84 and for the negative items .69.

##### *Ego depletion*

Similar to experiment 1, the level of ego depletion was determined by means of Stroop performance. The amount of trials (32) as well as the nature of the task (stating the ink color instead of the meaning of the word) was exactly the same as in Experiment 1. To determine performance on the Stroop Task and to assess the level of ego depletion in turn, the average reaction time and the number of errors were investigated.

## Results

In order to make sure the manipulations of impression management were correct, a manipulation check was done on the data. The manipulation check, consisting of the individual's average score on the Impression Management Scale, showed that the two

conditions differed significantly ( $F(1, 64) = 6.41, p < .05$ ). This means that subjects in the impression management condition were indeed more motivated to manage their impressions ( $M = 2.77, SD = .17$ ) in comparison to subjects in the control condition ( $M = 2.20, SD = .15$ ).

The predicted main effect of impression management on ego depletion appeared to be significant, meaning that subjects in the impression management condition took on average more time to complete an item of the Stroop Task ( $M = 1.34, SD = .03$ ) than subjects in the control condition ( $M = 1.26, SD = .03; F(1, 68) = 5.03, p < .05, \eta^2 = .07$ ). In turn, this means that subjects in the impression management condition are more depleted of their self-control resources than subjects in the control condition.

The hypothesis regarding the interaction between the use of impression management and self-monitoring on ego depletion yielded a significant interaction effect ( $F(1, 68) = 4.34, p < .05, \eta^2 = .06$ ). Furthermore, a simple main effect analysis showed that the effect of impression management on ego depletion was indeed more pronounced when subjects were high self-monitors ( $F(1, 68) = 9.13; p < .01, \eta^2 = .12$ ). In case subjects were low self-monitors, this effect was not significant ( $F < 1$ ). This means that for subjects high in self-monitoring, using the self-promotion impression management strategy resulted in a longer average reaction time on trials of the Stroop Task ( $M_{\text{Impression Management/ high SM}} = 1.44, SD = .04$ ) than subjects in the control group ( $M_{\text{Control/ high SM}} = 1.27, SD = .04$ ). However, for low self-monitors, engaging in impression management had no effect on the average reaction time on trials of the Stroop Task ( $M_{\text{Impression Management/ low SM}} = 1.25, SD = .04$  versus  $M_{\text{Control/ low SM}} = 1.24, SD = .04$ ; see Figure 2).

No significant effects were found on the number of errors made in the Stroop Task (all  $F$ 's  $< 1$ ). Also, no significant results were observed for possible mood effects. That is, nor the main effect of impression management ( $F < 1$ ), nor the main effect of self-monitoring ( $F$

(1,68) = 1.19, *ns*), nor their interaction ( $F < 1$ ) was significant. This suggests that mood could not explain the findings.

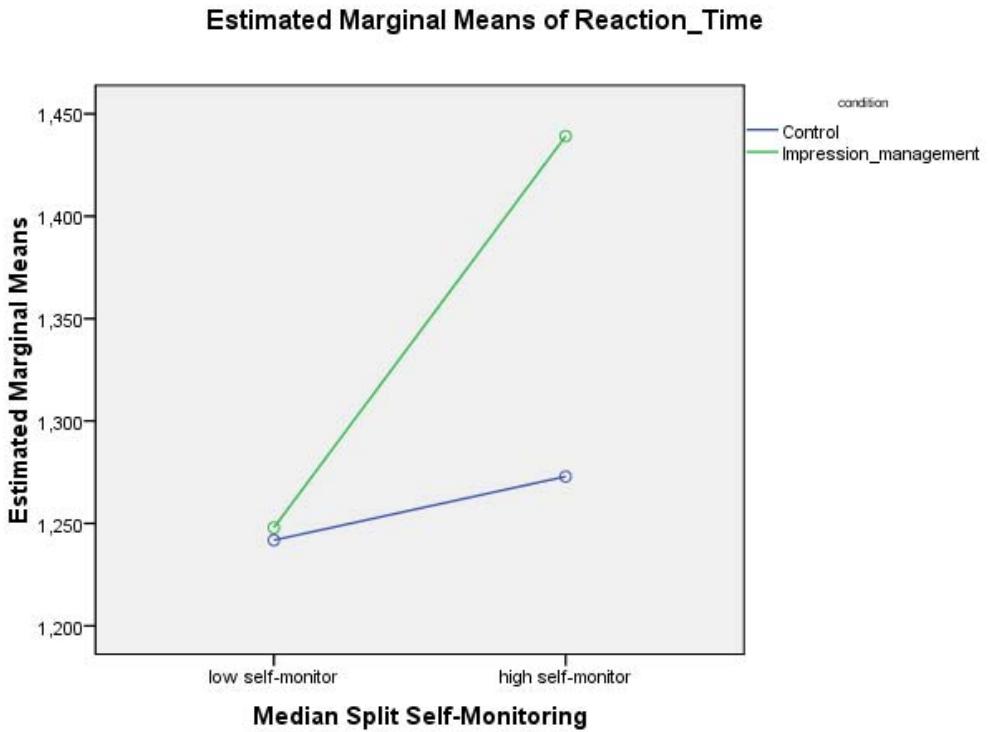


Figure 2. The interaction between impression management and self-monitoring. Individuals engaging in impression management and being high self-monitors had a longer average reaction time on the Stroop Task.

## Discussion

Experiment 2 replicated and extended the findings of experiment 1 by showing that with a larger sample, a different manipulation of impression management and a different impression management strategy, the same interaction effect of impression management and self-monitoring on ego depletion is found. In addition, the results indicated that the main effect of impression management on ego depletion was significant. This may be caused by a different and stronger manipulation of impression management, since this effect was not present in the data of the experiment 1. The observed effects were not attributable to mood states, meaning that a negative mood due to the self-promoting impression management

strategy cannot account for the weakened performance on the Stroop Task. In contrast to experiment 1, no significant effects were found on the number of errors made on the Stroop task. This may be explained by the different manipulation of impression management strategy. It can be that participants in the impression management condition in experiment 2 were focused on answering correctly (since they had to express themselves accurately to be distinctive from other students in order to be special enough for the TOPTALENT-pool) and therefore made less errors, but instead took more time to complete a trial of the Stroop task.

### General Discussion

The present research tested the moderating role of self-monitoring in the effect of impression management on the individual's amount of self-control. Previous research already found that unfamiliar and challenging self-presentations cost energy (Vohs et al., 2005) and that high self-monitors have a greater tendency to use impression management tactics than low self-monitors (e.g. Ickes et al., 2006; Turnley & Bolino, 2001). However, the current investigation broadened these results by combining these insights and found an interaction between impression management and self-monitoring on their amount of self-control. More specifically, it was found that individuals high in self-monitoring are more ego depleted than those low in self-monitoring after using an impression management tactic. In experiment 1, high self-monitors compared to low self-monitors made more errors on the Stroop Task after they were motivated to use an ingratiation strategy. In the second experiment, it was observed that individuals promoting themselves had a longer average reaction time on trials of the Stroop Task. Moreover, this effect was even stronger for high self-monitors.

Although these findings are in line with the conclusion of Ickes et al. (2006), they are not congruent with the findings of Seeley & Gardner (2003, study 2). They investigated the effect of individual differences in other-directedness (a subscale of Snyder's Self-Monitoring Scale)

on the level of self-control and found that high other-directed people were *less* depleted than low other-directed people. They ascribed this finding to the fact that socially oriented individuals are more motivated in daily life to engage in self-control tasks and in turn have built greater self-control strength due to practice. At first sight this result contradicts the current findings, but a few remarks need to be made. First, the scales used in both investigations are not exactly the same, so it is difficult to compare the outcomes. Besides that, and even more important, Seeley & Gardner (2003) have investigated only one form of self-control, namely thought suppression. For the manipulation of depletion, they used the white bear paradigm, which is a form of behavioral inhibition. However, the current research did not manipulate depletion as a form of inhibition (i.e. thought suppression); rather it focused on constantly *controlling thoughts* during an impression management task by overriding (experiment 1) or managing (experiment 2) a response. This is a different form of self-control. Although Heatherton & Vohs (1998) state that forms of inhibition can be practiced over time, this does not necessarily hold for other forms of self-control. Moreover, given that studious exercise is necessary to improve on self-control (Baumeister et al., 2006), one can wonder whether a person can improve his or her self-control by using unfamiliar or challenging self-presentations. Like Vohs et al. (2005) noticed, modern life is characterized by irregular encounters, so it would be unlikely that young students have already practiced a lot with these effortful forms of self-presentation. The most reasonable explanation for the current findings (i.e. that high self-monitors will be *more* depleted after this self-control task) is then that individuals high in self-monitoring simply picked up the cue to engage in impression management while those low in self-monitoring did not. This leaves the high self-monitor more depleted after the effortful impression management task. In short, one can conclude that the current findings do complement instead of contradict the findings of Seeley

& Gardner, by demonstrating that in other situations than behavioral inhibition, high self-monitors will be more depleted than low self-monitors.

Besides adding to the current scientific literature, the findings of this study are also relevant for practice. As it is known that a loss of self-control can result in for example overspending and impulsive buying behavior (Vohs & Faber, 2007), a salesman can profit from the customers' use of impression management tactics in order to sell his product. After being depleted of self-control resources, people are willing to spend more on a product and feel stronger urges to buy. Next to commercial benefits, a dietitian can also make use of the current findings. When chronic dieters are depleted, they will eat more (e.g. Baumeister et al., 2006; Vohs & Heatherton, 2000). Based on the present results, it is advised to dieticians to not let dieters engage in impression management strategies, especially not those who are high self-monitors, because this will produce the opposite result.

Although this research is valuable for both science and practice, some issues need to be remarked. First, both experiments were performed in a laboratory, which lowers the external validity. Second, in both experiments effortful self-presentation was used to reduce self-control resources; it is possible that different effects of self-monitoring are found when subjects' self-control resources are depleted in another way. It is therefore recommended for future researchers to investigate if the same results hold in the field as well as with other manipulations. Third, in experiment1 the number of errors constituted Stroop performance, while in the second experiment the average reaction time was used. This difference may be attributable to a different manipulation of impression management in both experiments. But since both ways of analyzing the Stroop task are applied in the literature (e.g. Gailliot et al, 2007), it is still regarded as a valid procedure. It is suggested that future research uses a different measure of the level of depletion to investigate if the same results are found. Next, the current research only used an ingratiation or self-promotion strategy to deplete resources.

It would be interesting to see how other impression management strategies (e.g. exemplification, supplication and intimidation, Jones & Pittman (1982)) will affect self-control. Furthermore, future research can look at other individual differences in the relationship between impression management and self-control. A person's need for approval or self-consciousness may affect this relationship next to self-monitoring. Finally, it would be of great value to investigate a possible mediating role of self-control. For example, it may be that self-control mediates the relationship between a self-control task (e.g. effortful impression management) and impulsive spending. It is strongly suggested for future research to gain more insight in this mediating role of self-control in order to enrich the existing knowledge in this field.

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## Appendix A Procedure experiment 1<sup>1</sup>

The goal of this experiment was to investigate the mediating role of ego-depletion in the effect of impression management on compliance. Subjects were recruited on campus and were as a cover story asked to participate in three independent studies conducted by the Marketing Communication and Consumer Psychology department. Participants entered the lab and were instructed by the recruiter to get their subject number. Next, they were randomly assigned to condition, i.e. the impression management condition or the control condition. The whole experiment was done on a laptop. In both conditions, subjects first completed demographic questions, like their age, sex, nationality and type of study. They then proceed with the Preference for Consistency Scale (Cialdini, Trost and Newsom, 1995), the brief Self-Control Scale (Tangney, Baumeister & Boone, 2004) and the Self-Monitoring Scale (Snyder & Gangestad, 1986; see for all items of these scales Appendix C).

Next, the manipulation of impression management appeared on the screen. In both conditions, subjects had to fill in yes or no to the statement “I am an active ambassador for a charity organization” in order to control for biased answers. In the impression management condition, subjects then saw the following text: “This experiment is about the relationship between personal characteristics and the familiarity with charity organizations (for example Amnesty International and Greenpeace). At the end of the experiment, your answers will be discussed with you and the researcher, in order to obtain some more background information. Be aware: you are explicitly requested to answer as honest as possible.”

The impression management questions consisted of multiple choice questions and four open questions. The multiple choice questions were on a 5- point scale (1 = totally disagree, 5 = totally agree):

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<sup>1</sup> The procedures of experiment 1 and 2 described in Appendix A and B are the procedures of the *original* experiment. This procedure differs from the one described in the article, since no significant results were found on the in the Appendix A and B described dependent measures and on the in Appendix C described personality scales.

1. I am familiar with more than 7 charity organizations.
2. I find it important to donate money to a charity organization.
3. I am aware of the fact that other people in the world are poor.
4. I like to donate my used clothes to a charity organization.
5. When somebody collects from door to door, I always donate some money, regardless of the kind of charity organization.
6. Sometimes, I have collected from door to door myself.
7. I can't contribute to the wellness of chronically ill children.
8. I never donate money to a charity organization that I don't know.
9. I have sold raffle tickets once.
10. I love to walk a charity walk when the revenues go to a charity organization.
11. I follow the activities of my favorite charity organization in the media.
12. The problems in the Third World keeping me busy.
13. A fixed monthly donation to a charity organization is an unwritten rule.
14. I don't feel a need to donate clothes or money to a charity organization.
15. I am aware of what happens with donated money.
16. I am always interested to participate in special activities organized by a charity organization.
17. I find it important to urge someone to become a contributor.
18. The government's budget for charity organizations needs to decrease dramatically.
19. I am the kind of person that is always ready for somebody who needs it.
20. When I have money left, I like to give up some part to a charity organization.
21. Hunting for protected animals should sometimes be allowed.

The open questions were:

1. Imagine you win € 100,-. Which part would you like to donate to a charity organization? Explain your answer.
2. When you were obliged to work 50 hours during your study while the work is not related to your study, how many of these 50 hours would you like to work for a charity organization? Motivate your answer.
3. Do you think that there should be more advertising / promotion for charity organizations in general? Explain your answer.

4. To what extent do you consider it important that people in your social environment work for a charity organization (collect from door to door, contributor, etc.)?

Moreover, subjects in this condition had to indicate their names.

In the control condition, subjects saw the following: "Please categorize the charity organizations below into the category in which the charity organization operates according to you. The number of correct answers is not important; the goal is to investigate which charity organization you associate with which category (i.e. their operating field). Your answers will remain totally anonymous."

	<b>Human Rights/ Development</b>	<b>Animals/ Nature</b>	<b>Health</b>
Unicef	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Amnesty International	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Sitchting KIKA	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Natuurmonumenten	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Cliniclowns	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Wereld Natuur Fonds	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Kankerbestrijding	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Stichting AAP	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Maag Lever Darm Stiching	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Bomenstichting	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
War Child	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Liliane fonds	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Villa Pardoes	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
KNFG Geleidehond	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Terre des Hommes	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Doe een wens	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Leger des Heils	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Neushoorn Stichting Nederland	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
SOS Kinderdorpen	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Artsen Zonder Grenzen	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Rode Kruis	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Federatie Paardrijden Gehandicapten	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

The four open questions were:

1. Which charity organization do you think of first when you hear Human Rights / Development, Animals/ Nature, Health? Explain why you think first of this charity organization.
2. With which of the charity organizations mentioned below are you most familiar? Order them, whereby 1 is most familiar and 5 is least familiar.
  - a. Unicef, b. Greenpeace, c. Rode Kruis, d. Artsen Zonder Grenzen e. Cliniclowns.
3. Imagine you get € 100,- to spend in total to charity organizations. Which charity organization will get which part of the money?
4. When you were obliged as part of your study to work once 3 hours for a charity organization, which charity organization will that be?

Afterwards, in both conditions subjects were asked on a 5-point scale (1 = totally disagree, 5 = totally agree) to answer the statements below to see if the manipulation was successful.

1. During the answering of the questions, I was motivated to make a deep impression.
2. I found it difficult to answer the questions as honest as possible.
3. It took me a great effort to answer the questions.
4. I had to think deeply about the questions.

Next, subjects were instructed by the experimenter to open another file on the laptop, which contained the Positive and Negative Affect Scale and the Stroop Task. They started by completing the 20 items of the PANAS. After that, the Stroop Task started automatically in order to measure the level of ego depletion. The following instruction was given: “In the next task, every time a word is appearing: blue, red, yellow or green. The color in which the word is depicted can also be blue, red, yellow or green. Please indicate in which color the word is depicted. For example, if you see the word **BLUE**, then you click blue, but if you see **BLUE**, then you have to click on red.” 32 trials appeared on the screen. After this task was done, subjects had to sign the experimenter that they were ready. Supposed to be done with the experiment, subjects were sent one by one (to avoid group pressure in their behavior to

comply) to the research assistant who was seated in the corridor (outside the view of the subjects). They handed in their subject number and received € 2.50. To measure the level of compliance of both groups, the research assistant said: “Thank you for participating in this experiment. I would like to ask you something else, out of reach of this experiment. Next to being research assistant, I am ambassador for the Ronald McDonald Kinderfonds, do you know that organization? It provides help to families with ill or handicapped children. I would like to ask you to offer a donation to this charity organization, in order to help families and their children in the future”.

A paper box of the Ronald McDonald Kinderfonds was placed on the table. Subjects could donate some amount of money in this box. When money was donated, it was drawn from the box and the amount was then noted on a separate sheet, together with their respondent number. After that, subjects were debriefed when they want to.

During the analysis of the data, it appeared that the manipulation check was not successful. Probably the wrong questions were asked, so yet a “pretest” was conducted after the experiment. Eighteen individuals (not participating in the experiment) filled in either the impression management related questions or the control questions. Afterwards, they were asked on a 5-point scale (1 = totally disagree, 5 = totally agree) the statement “The questions gave me the opportunity to present myself in the best possible light”. This manipulation appeared to be successful.

## Appendix B Procedure experiment 2

The goal of this experiment was to demonstrate the moderating role of social proof in the effect of impression management on compliance. Besides that, a second dependent variable was introduced: impulsive buying. Moreover, the level of ego depletion was again measured to see if ego depletion mediates the effect of impression management on compliance/ impulse buying.

Subjects were recruited on campus and were asked to participate in three independent studies conducted by the Marketing Communication and Consumer Psychology department. In case of agreement, they entered the lab, received their subject number and were placed behind a laptop. There were four laptops, each representing another condition. In two conditions (1 and 3), subjects were motivated to engage in impression management. In the other two (2 and 4), i.e. the control condition, there were not. Moreover, in conditions 1 and 2, subjects were shown a social proof cue before they were confronted with the compliance measure, while in condition 3 and 4 they went immediately to the compliance measure. The design looks like this:

High motivation impression management with social proof cue 1	Low motivation impression management with social proof cue 2
High motivation impression management without social proof cue 3	Low motivation impression management without social proof cue 4

In both conditions, subjects first completed demographic questions, like their age, sex, nationality and type of study. They then continued with the brief Self-Control Scale (Tangney, Baumeister & Boone, 2004), the Self-Monitoring Scale (Snyder & Gangestad, 1986) and the Buying Impulsiveness Scale (Rook & Fisher, 1995; see for all items of these scales Appendix C). Next, the manipulation of impression management appeared on the screen. In the high

motivation condition, subjects saw the following: "TOPTALENT, a well-known employment agency for students, is investigating the relationship between verbal and nonverbal behavior during job interviews. The answers to the questions mentioned below are interesting for TOPTALENT, but they are at the same time a screening of best-graduate students of the University of Twente for a TOPTALENT-pool! When you get in this pool, you will be invited to meet one of your most preferred employers. Answer the questions as good as you can, since there is only place for a few students. To gain insight in your nonverbal behavior, notice that you are being videotaped. The tapes will be analyzed by three independent coders. The tapes will not be distributed further. After this part, you will not be taped anymore. Good luck."

In reality nobody was videotaped, but the light of the webcam – placed on top of the laptop - was on during the manipulation of impression management. The subjects faced five open questions on the screen in which they could promote themselves:

1. When your best friend is asked to state which traits characterize you best, which three traits will he or she mention?
2. Which achievement during your study are you proud of? Explain your answer.
3. Which skills distinguish you from your other students from the same year? Explain your answer.
4. What makes you the ultimate candidate for our TOPTALENT-pool? Explain your answer.
5. State what you want to achieve in the upcoming 5 to 10 years.

In the low motivation condition (i.e. the control condition), the subjects saw the following introduction on the screen: "Employment agency TOPTALENT, especially for students, is planning to establish oneself in the east of The Netherlands. Because of this launch, TOPTALENT wants to know several things of students living in the east of The Netherlands. Please indicate at each statement to what degree you agree with the statement. Your answers will remain anonymous." The statements below were put on a 5-point scale, ranging from totally disagree to totally agree:

1. When I am looking for work, I subscribe myself at as many employment agencies as possible.
2. When I am looking for work, I only subscribe myself to one employment agency.
3. I think I'll find a more appropriate job when I go to a student employment agency compared to a normal employment agency.
4. I feel more comfortable at a student employment agency than at a normal employment agency.
5. I feel better understood at a student employment agency than at a normal employment agency.

6. In my opinion, a student employment agency distinguishes itself clearly from a normal employment agency.
7. I am signed up / have signed up once at a student employment agency.
8. I have worked once for a student employment agency.
9. I prefer direct contact with a company rather than working via a student employment agency.

The next statements are about the need for student employment agencies.

1. I feel a need for the launch of a student employment agency in this region.
2. I think there are enough student employment agencies in this region right now.
3. I appreciate some more diversity regarding student employment agencies in this region.
4. I think that it is easier for me to find a student job when there is a student employment agency in this region.

The next question is about the different industries in which TOPTALENT should operate. Please indicate in which industries you think it is important for TOPTALENT to operate.

- Catering
- Administrative work
- Healthcare
- Transport (e.g. student- driver)
- IT
- Education
- Something else, being.....

The next statements are about the name TOPTALENT.

1. I consider the name TOPTALENT to be believable.
2. I consider the name TOPTALENT to be aggressive.
3. I consider the name TOPTALENT to be informative.
4. I consider the name TOPTALENT to be clear.
5. I consider the name TOPTALENT to be convincing.
6. I consider the name TOPTALENT to be not appealing.
7. I consider the name TOPTALENT to be successful.
8. I consider the name TOPTALENT to be distinctive.

The next statements are related to the location of TOPTALENT.

1. I find it important that there is some physical location where I can be welcomed by an interagent.
2. I am devoted to look at current vacancies in a shop window of a physical office of TOPTALENT, because I can walk in directly if I like a vacancy.
3. I find it important that TOPTALENT has a website where I can check for current vacancies.
4. I don't think it is necessary for TOPTALENT to have a physical office, provided that TOPTALENT is active on the Internet.

The next statements are related to the service of TOPTALENT.

1. I would appreciate it to be called when a new vacancy is present.
2. I would appreciate it to receive an SMS when a new vacancy is present.
3. I would appreciate it to receive an e-mail when a new vacancy is present.
4. I find it important that TOPTALENT offers job interview training.
5. I attach value to the fact that I can check my CV at TOPTALENT.
6. It would be interesting if I can do some assessment training at TOPTALENT.
7. I would like it when TOPTALENT helps me after my study to find a first job.

Do you still have some remarks regarding the launch of student employment agency TOPTALENT?

After that, in both conditions subjects were asked on a 5-point scale (1 = not at all, 5 = very much) to answer the statements below to see if the manipulation was successful.

1. To what extent did you want to make a deep impression at TOPTALENT?
2. To what extent did you want to promote yourself at TOPTALENT?
3. To what extent did you, by means of the questions, want to show yourself in the best possible light?
4. To what extent did you, by means of the questions, want to present yourself well at TOPTALENT?
5. To what extent did you have to reflect upon the questions of TOPTALENT?
6. To what extent did you have to think deeply about the questions of TOPTALENT?

Next, all participants were instructed on the screen to open the second file. This file contained the Positive and Negative Affect Scale and the Stroop Task. They started by completing the 20 items of the PANAS. After that, the Stroop Task started automatically in order to measure the level of ego depletion. The following instruction was given: "In the next task, every time a word is appearing: blue, red, yellow or green. The color in which the word is depicted can also be blue, red, yellow or green. Please indicate in which color the word is depicted. For

example, if you see the word **BLUE**, then you click blue, but if you see **BLUE**, then you have to click on red.” 32 trials appeared on the screen. When finished, subjects were instructed on the screen to open the third and last file.

This third file was a questionnaire containing the questions for dependent measures. Moreover, the social proof cue was introduced here. All subjects were first told that this study was a short study in the field of marketing. Next, subjects in condition 1 and 2 (the conditions with the social proof cue) saw: “153 student of the University of Twente already participated in this study. They wanted to be approached for future research by TOPTALENT on average 6.7 times and besides that, they were willing to spend 102 minutes to distribute some flyers on campus for TOPTALENT.” In the other conditions, nothing was shown. Then, all participants were asked:

1. How often a year can TOPTALENT approach you to participate in future research for the recruitment branch?  
 0    1    2    3    4    5    6    7    8    9    10 or more
2. How many minutes do you want to distribute once flyers on campus on behalf of TOPTALENT?  
 0-30    30-60    60-90    90-120    120-150

Subsequently, the measure of subject’s tendency to buy impulsively appeared on screen. All subjects saw the following text: “For a marketing study, we are investigating the price perception of different products. Please indicate at the 8 products below what price (in €) you want to pay for it. It is not about the fact if you are able to buy the product (imagine you have enough money) or if you want to buy the product; it is all about which price you want to pay for it at the moment.”

They had to assign prices to the following products:



After this manipulation, they were told that they were finished with all experiments and they were instructed to go to the experimenter. Then they had to hand in their subject number, they were thanked and paid € 2.50 for their participation. They were debriefed when they asked for it.

## Appendix C Personality Scales

### Preference for Consistency Scale

1. I prefer to be around people whose reactions I can anticipate.
2. It is important to me that my actions are consistent with my beliefs.
3. Even if my attitudes and actions seemed consistent with one another to me, it would bother me if they did not seem consistent in the eyes of others.
4. It is important to me that those who know me can predict what I will do.
5. I want to be described by others as a stable, predictable person.
6. Admirable people are consistent and predictable.
7. The appearance of consistency is an important part of the image I present to the world.
8. It bothers me when someone I depend upon is unpredictable.
9. I don't like to appear as if I am inconsistent.
10. I get uncomfortable when I find my behavior contradicts my beliefs.
11. An important requirement for any friend of mine is personal consistency.
12. I typically prefer to do things the same way.
13. I dislike people who are constantly changing their opinions.
14. I want my close friends to be predictable.
15. It is important to me that others view me as a stable person.
16. I make an effort to appear consistent to others.
17. I'm uncomfortable holding two beliefs that are inconsistent.
18. It doesn't bother me much if my actions are inconsistent.<sup>a</sup>

<sup>a</sup> Reverse scored.

Items were scored on a 9-point scale with the category designations: 1 = totally disagree, 9 = totally agree.

Cialdini, R.B., Trost, M.R., & Newsom, J.T. (1995). Preference for Consistency: The Development of a Valid Measure and the Discovery of Surprising Behavioral Implications. *Journal of Personality and Social Psychology*, 69 (2), 318-328.

Brief Self-Control Scale

1. I am good at resisting temptation.
2. I have a hard time breaking bad habits.<sup>a</sup>
3. I am lazy.<sup>a</sup>
4. I say inappropriate things.<sup>a</sup>
5. I do certain things that are bad for me, if they are fun.<sup>a</sup>
6. I refuse things that are bad for me.
7. I wish I had more self-discipline.<sup>a</sup>
8. People would say that I have iron self-discipline.
9. Pleasure and fun sometimes keep me from getting work done.<sup>a</sup>
10. I have trouble concentrating.<sup>a</sup>
11. I am able to work effectively toward long-term goals.
12. Sometimes I can't stop myself from doing something, even if I know it is wrong.<sup>a</sup>
13. I often act without thinking through all the alternatives.<sup>a</sup>

<sup>a</sup> Reverse scored

Items were scored on a 5-point scale with the category designations: 1 = totally disagree, 5 = totally agree.

Tangney, J.P., Baumeister, R.F., & Boone, A.L. (2004). High self-control predicts good adjustment, less pathology, better grades and interpersonal success. *Journal of Personality*, 72, 271-322.

### Self-Monitoring Scale

1. I find it hard to imitate the behavior of other people. <sup>a</sup>
2. At parties and social gatherings, I do not attempt to do or say things that others will like. <sup>a</sup>
3. I can only argue for ideas which I already believe. <sup>a</sup>
4. I can make impromptu speeches even on topics about which I have almost no information.
5. I guess I could put on a show to impress or entertain others.
6. I would probably make a good actor.
7. In a group of people, I am rarely the center of attention. <sup>a</sup>
8. In different situations with different people, I often act like very different persons.
9. I am not particularly good at making other people like me. <sup>a</sup>
10. I am not always the person I appear to be.
11. I would not change my opinions (or the way I do things) in order to please someone or win their favor. <sup>a</sup>
12. I have considered being an entertainer.
13. I have never been good at games like charades or improvisational action. <sup>a</sup>
14. I have trouble changing my behavior to suit different people and different situations. <sup>a</sup>
15. At a party I let others keep the jokes and stories going on. <sup>a</sup>
16. I feel a bit awkward in public and do not show up quite as well as I should. <sup>a</sup>
17. I can look anyone in the eye and tell a lie with a straight face (if for a right end).
18. I may deceive people by being friendly when I really dislike them.

<sup>a</sup> Reverse scored

Items were scored on a 5-point scale with the category designations: 1 = totally disagree, 5 = totally agree.

Snyder, M., & Gangestad, S. (1986). On the Nature of Self-Monitoring: Matters of Assessment, Matters of Validity. *Journal of Personality and Social Psychology, 51* (1), 125-139.

### The Positive and Negative Affect Scale

This scale consists of a number of words that describe different feelings and emotions. Read each item and then mark the appropriate answer in the space next to that word. Indicate how you feel *now*:

- interested	- irritable
- distressed	- alert
- excited	- ashamed
- upset	- inspired
- strong	- nervous
- guilty	- determined
- scared	- attentive
- hostile	- jittery
- enthusiastic	- active
- proud	- afraid

Items were scored on a 5-point scale with the category designations: 1 = totally disagree, 5 = totally agree.

Watson, D., Clark, L.A., & Tellegen, A. (1988). Development and validation of brief measures of positive and negative affect: The PANAS scales. *Journal of Personality and Social Psychology*, 54, 1063-1070.

Impulsiveness: Buying Impulsiveness Scale

1. I often buy things spontaneously.
2. “Just do it” describes the way I buy things.
3. I often buy things without thinking.
4. “I see it, I buy it” describes me.
5. “Buy know, think about it later” describes me.
6. Sometimes I feel like buying things on the spur of the moment.
7. I buy things according to how I feel at the moment.
8. I carefully plan most of my purchases.<sup>a</sup>
9. Sometimes I am a bit reckless about what I buy.

<sup>a</sup> Reverse scored

Items were scored on a 5-point scale with the category designations: 1 = totally disagree, 5 = totally agree.

Rook, D.W., & Fischer, R.J. (1995). Normative influences on Impulsive Buying Behavior. *Journal of Consumer Research*, 22, 305-313.

NB: all personality scales were shown in Dutch during the experiment. Therefore, there might be a little discrepancy between some statements mentioned here and those used in the experiment.