

The spotlight effect in a marketing context

Overestimating brand appearance and judgments, and consumer behavioral consequences

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Abstract

A spotlight effect is described as the tendency to overestimate the extent to which one's actions and appearance are noted by others (attentional spotlight effect), the tendency to overestimate the way one is judged by others (judgmental spotlight effect), and the tendency to overestimate the extent to which the variability of one's actions and appearance are noted by others. In three studies we examined whether these effects are also present in a marketing context. Can brands be used to evoke a spotlight effect? Does the consumer's behavior change because of the effect? Studies 1 and 2 provided clear support for the attentional spotlight effect in the case of low status brands compared to high status brands. Several behavioral consequences were found. Persons who were not evaluated on sociability and popularity underestimated the duration of the experiment when wearing a low status brand compared to when wearing a high status brand (i.e. they were able to think less clearly). Such a difference was not found when evaluated explicitly. Furthermore, persons with a low status brand took shorter to fill in a certain scale in public (i.e. they exhibited avoidance behavior). Study 1 also indicated personality characteristics to play a moderating role. Persons low in self-consciousness were more subject to an attentional spotlight effect when wearing a low status brand compared to when wearing a high status brand. Such a difference was not found with persons high in self-consciousness. In study 3 the judgmental spotlight effect was present with low status brands as well as with high status brands. Audience characteristics were important: a judgmental spotlight effect was only present in the case of confronting strangers.

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Imagine yourself standing in the queue of the local drugstore and asking the cashier for a package of condoms. Did you ever have the embarrassing feeling that everyone behind you is watching you? Would it make a difference whether an acquaintance or a stranger is standing behind you? Would you not prefer to take the package yourself and cover your purchase by buying other products too?

This situation describes a certain action, the resulting thoughts of being the centre of attention, and possible consequences of the estimated attention. Research shows that people overestimate the extent to which their actions and appearance are noted by others, a phenomenon dubbed the spotlight effect (Gilovich et al, 2000). This article describes three studies replicating and extending the spotlight effect in a marketing context, i.e. the stimulus being a marketing-related one (e.g. a brand) and / or the spotlight effect having marketing-related consequences (e.g. a change in consuming behavior). We want to find out what factors cause people to be more or less subject to this effect. Aspects being considered are brand status, personality characteristics, and audience characteristics. Furthermore, the role of affect and potential consequences of the spotlight effect are considered. Three experiments were designed to test our assumptions. After describing the three studies, discussion points and ideas for future research are given.

Spotlight effect

It is not easy to assess the extent to which our behavior or appearance is noted by others, because we are so focused on our own behavior. Gilovich et al (2000) showed people to be subject to a spotlight effect: they overestimate the extent to which they are noted by others. This spotlight effect occurs in embarrassing situations (like having a bad hair day, or

misreading a crucial passage of your speech) as well as in proud situations (e.g. making a brilliant point in a group discussion). In one of their studies, targets had to put on a T-shirt with a picture of the head and neck of an unpopular singer on the front (Gilovich et al, 2000). After that, targets were directed to a room with observers. They were instructed to knock on the door so that another experimenter could guide them through the rest of the experiment. Targets were invited into the room and had to take place at a table facing a number of observers. When targets were about to sit, the experimenter stated that “on the other hand,” the others were too far ahead and that it would be best for the target to wait outside for a moment. Outside, targets were asked how many persons in the room would be able to tell the experimenter who was pictured on their shirt. These estimates were compared to the actual number of persons who noticed this. The comparisons showed that target participants substantially overestimated the number of persons. This result indicates the existence of a spotlight effect. A second study, using popular persons on the shirt, replicated these results, indicating that the existence of a spotlight effect is not limited to embarrassing situations only. In both studies, however, it was not checked explicitly whether the shirt was actually making the participant feel embarrassed or proud. Furthermore, no control group was run. In the remaining of this paper, the tendency to overestimate the number of persons will be referred to as the attentional spotlight effect. This attentional spotlight effect is subject of research in studies 1 and 2.

Besides overestimating the extent of attention we get, Savitsky et al (2001) also found a spotlight effect on the valence of this attention: people think they are judged more harshly than they actually are. In one of their studies, persons who imagined that they were carrying a shopping bag with an unpopular store printed on it, thought they would be evaluated more harshly by others than they actually were (Savitsky et al, 2001). Because the spotlight effect does not seem to limit itself to embarrassing situations, it is quite likely that persons carrying

a bag of a popular store will think that they are judged more positively than is actually the case. In the remaining of this paper, the tendency to overestimate the valence of the attention, is called the judgmental spotlight effect. The judgmental spotlight effect is subject of research in studies 2 and 3. Contrary to the imaginary setting that was used by Savitsky et al (2001), a real-life setting was used in study 2.

Finally, Gilovich et al (2002) found a third spotlight effect: persons overestimate the extent to which the variability of their actions and appearance are noted by others. In one of their studies, they asked each person at a small seminar to rate everyone in the seminar – themselves included – in terms of their physical appearance that day. They were not interested in the general level of physical attractiveness, but in how each person looked relative to how he or she typically looked. The results showed that persons believed that the variability in their appearance was noticed by others more than it actually was. When we feel like having a bad hair day, it is quite probable we are the only ones to see it. This effect is suggested to be a corollary of overestimating the extent to which our actions and appearance are noted by others. This type of spotlight effect is left out of scope.

In the present research, we focus on the attentional and judgmental spotlight effect in a marketing context. We believe marketing stimuli (like brands) may cause persons to feel the centre of attention and to feel more extremely judged by others than they actually are. Factors assumed to moderate this process, are brand status (in what way do others judge the brand in general?), personality characteristics (are you conscious of yourself?), and audience characteristics (do others evaluate you explicitly?; are you familiar with your audience?). Ultimately, we believe these effects to result in a certain behavior, e.g. in a marketing context a certain type of consumer behavior. For instance, persons might cover the purchase of a low status brand product by buying other (higher status) products too, by putting the product at the bottom of their shopping cart, or by leaving the store more quickly. On the other hand, in

the case of a high status brand persons might behave showier. Such avoidance and approach behavior might also be present in the choice of brand one buys from a certain product category when taking into account the anticipated consuming environment. For example, persons might buy popular brand clothes in order to wear at public places (e.g. at work) and less popular brand clothes for private places (e.g. at home). This might also be the case for other product categories, like snacks and drinks. A final example of certain approach or avoidance behavior is that persons might choose their visiting of stores differently depending on the day or time they are living. At busy hours they might visit more popular stores; at quiet moments they might go to less popular stores. Especially the moment of going into (or out of) the store is important for them, because at that moment they think outsiders will see that they are visiting that particular store. All of the examples mentioned, describe a certain approach or avoidance behavior, which can be directly ascribed to thoughts of being seen or judged and corresponding feelings of pride or embarrassment. The present research, therefore, is closely related to embarrassment studies like those of Dahl et al (2001), who state that “awareness of a social presence during purchase selection and commitment, whether real or imagined, is a motivating factor in creating embarrassment for the consumer.” The social presence they mention, is also an important aspect in the present research. However, the current research goes a step further, because – besides emotions – we will look at the person’s thoughts of how noticeable (s)he is and in what way (s)he is judged by others. These thoughts are assumed to result in an approach or avoidance behavior. However, the spotlight effect states that persons overestimate the attention they get and think that the valence of this attention is more extreme than actually is the case, which means that the resulting approach or avoidance behavior that is exhibited, is out of place (i.e. they do not have to be behave in an avoiding or approaching way, because they are not the centre of attention and are not judged as extremely as they think).

Accounts for the existence of the spotlight effect

Anchoring-and-adjustment. What is it that makes us feel the centre of the universe? Why do we think others judge us more harshly than actually is the case? And why do we think we are so different from one moment to the other? Gilovich et al (2000) proposed an anchoring-and-adjustment explanation for spotlight effects. People begin their process by focusing on their own experience (setting the anchor) and then adjust downward, because they understand that others have another perspective than they have themselves (e.g. others are less focused on them). This adjustment, however, is generally insufficient, ending up in a spotlight effect on attention, judgment, and variability. In one of Gilovich et al's (2000) studies, participants had to put on an embarrassing shirt and were confronted with an audience again. However, one group was confronted with an audience immediately after putting the shirt on, the other group was confronted after a 15 minute delay. This last group experienced a smaller spotlight effect, because they were allowed to habituate to the shirt resulting in a less intense focus on their own experience. Because being less concerned with the shirt themselves (i.e. being less focused on the shirt and therefore setting a lower initial anchor), they concluded it would be less noticeable to others as well.

Besides setting the anchor, Gilovich et al (2000) stated that a person's adjustment is insufficient. This insufficient adjustment is present when estimating the attention one gets, but also when estimating others' judgments about oneself. An important reason for this insufficiency is a person's excessive focus on his own actions or appearance while neglecting other (moderating) factors (Gilovich et al, 2000; Savitsky et al, 2001). A complete overview of reasons for insufficient adjustment can be found in Gilovich et al (2000) and Savitsky et al (2001). In the present research, the anchoring-and-adjustment mechanism is used to explain the phenomena found.

Spotlight effect and self-discrepancy theory. Gilovich et al's (2000) studies on the anchoring-and-adjustment mechanism show that a certain embarrassing stimulus (a shirt) causes an individual to have a (bigger) discrepancy with his 'normal' self. The delay experiment showed that a certain focus on the own experience (i.e. a discrepancy) seems to be of importance in setting the initial anchor and thus in being subject to an *attentional* spotlight effect. Focus was also mentioned as an aspect causing insufficient adjustment (Gilovich et al, 2000; Savitsky et al, 2001), which results in a bigger spotlight effect. The same factors (i.e. amount of self-discrepancy and focus on the discrepancy) appear in Higgins' (1989) self-discrepancy theory, which states that these factors – together with the relevance of the discrepancy – are important in determining self-esteem and emotions. Thus it seems plausible to state that the *judgmental* spotlight effect is mediated by emotions: more negative emotions (e.g. by wearing an embarrassing shirt) are hypothesized to cause a bigger judgmental spotlight effect. More precisely, the own emotional state is hypothesized to be used to set an initial judgmental anchor, which is so high that it results in a judgmental spotlight effect. Because spotlight effects also occur in non-embarrassing situations, it is hypothesized that more positive emotions (e.g. by wearing a popular shirt) also cause a bigger judgmental spotlight effect.

In short, a stimulus can be used to create a certain amount of discrepancy. When this discrepancy is in a relevant domain (e.g. you attach value to expensive brand clothes) and you are focused on the discrepancy, you will be subject to an attentional spotlight effect (studies 1 and 2). When the discrepancy has a positive or negative valence¹, you also create a certain emotional state (which, therefore, is a mediator) which causes you to be subject to a

¹ A discrepancy does not necessarily have a valence attached to it. For instance, imagine yourself having a new haircut which is clearly discrepant from your normal self. You will probably experience an attentional spotlight effect. However, when you do not know whether you or other persons will like it, the discrepancy has no valence. Therefore you will not experience emotional feelings because of your haircut, and you will not experience a judgmental spotlight effect.

judgmental spotlight effect (studies 2 and 3). Given a certain situation, it is clear which stimulus and domain we are dealing with. We now have a closer look at a personality trait related to the concept of focus.

Self-consciousness. Self-awareness theory (Duval & Wicklund, 1972) suggests that certain individuals are characteristically more self-focused than others. Fenigstein et al (1975) defined self-consciousness as “the consistent tendency of persons to direct attention inward or outward.” The (Dutch) self-consciousness scale can be found in Appendix C (Vleeming & Engelse, 1981). The self-consciousness scale consists of several subscales, including private self-consciousness (i.e. the tendency to introspect about our inner thoughts and feelings) and public self-consciousness (i.e. the tendency to focus on our outer public image). When persons have to wear an embarrassing stimulus like a shirt (Gilovich et al, 2000), it causes a person to experience a discrepancy with himself and ultimately to become subject to an attentional spotlight effect, because of an excessive focus on the stimulus. Generally, persons who are high in self-consciousness, will be aware of themselves more often, and will therefore notice their self-discrepancies more often (Duval & Wicklund, 1972; Fenigstein et al, 1975). Mostly, these discrepancies are negative and result in lowered self-esteem, because we discover we fall short (Hass & Einstadt, 1990; Flory et al, 2000). For instance, in the case of having a bad hair day, persons high in self-consciousness will be aware of this fact more frequently, because of their tendency to direct attention to their appearance. However, in Gilovich et al’s (2000) setting, an excessive focus on the T-shirt was already present regardless of the person’s amount of self-consciousness (i.e. the attention on the discrepancy was implicitly present immediately after putting on the T-shirt). Therefore, in such a setting no differences between low and high self-conscious persons are suggested in focus on the discrepancy.

Besides becoming aware of one's (mostly negative) discrepancies more often when high in self-consciousness, other research shows more beneficial outcomes of self-consciousness (Creed & Funder, 1999; Trapnell & Campbell, 1999). High private self-conscious individuals, for instance, have more attention for their private thoughts and feelings and, therefore, maintain self-concepts that are less discrepant with what others think of them (Franzoi, 1983). According to Kernis & Grannemann (1988) persons high in private self-consciousness have a better self-understanding such that within-self discrepancies are reduced, resulting in a more consistent self-concept. They suggest that "high private individuals have more 'realistic' self-concepts, in that they are both more consistent and less inflated in terms of self-esteem, than do low private individuals" (Kernis & Grannemann, 1988). Furthermore, Belk (1988) stated that "we are what we have." Our clothes, for instance, are a part of our material self, and therefore contribute to our self-concept (Belk, 1988; Reed, 2002). Demo (1992) stated that the self-concept does not only consist of a stable structure, but is also situationally variable. This suggests that the wearing of the T-shirt in Gilovich et al's (2000) studies, could change the target's self-concept at that specific moment. Furthermore, high private self-conscious persons have a self-concept which is less discrepant with what others think of them, resulting in the assumption that high private self-conscious persons are more accurate in their judgments about the T-shirt (i.e. they are less subject to an attentional spotlight effect).

So in short, the wearing of the T-shirt in Gilovich et al's (2000) studies leads persons (either low or high in self-consciousness) to excessively focus on the T-shirt and, therefore, to notice an amount of discrepancy. However, the T-shirt also becomes part of our self-concept and could change this self-concept temporarily. Because persons high in private self-consciousness have a better understanding of themselves and hold a self-concept which is less discrepant with what others think of them (i.e. they are more realistic about themselves

and, therefore, set a lower initial anchor), they are hypothesized to be more accurate in their judgments about the T-shirt (i.e. they are less subject to an attentional spotlight effect). This is assumed to be the case in both positive and negative situations. It is also assumed that high private self-conscious persons are less inflated in terms of self-esteem and affect. Self-consciousness will be the subject of research in study 1.

Evaluation. In the previous section, personality characteristics were mentioned as an important factor in accessing our self-discrepancies, having a realistic view of ourselves, and ultimately in evoking an attentional spotlight effect. However, in this process audience characteristics might be important too. An example of an audience characteristic is, whether the audience is present to evaluate you as a person on sociability and popularity. When an audience evaluates one explicitly, we hypothesize the actual number of persons noticing the brand to be bigger, i.e. besides the basic number of persons noticing the brand in the non-evaluative condition, an extra number of persons will notice the brand. However, because one generally overestimates the number of persons, it is hypothesized that in the evaluative condition one not only overestimates the basic number of persons (i.e. those who would notice the brand even in the non-evaluative condition), but also the extra number of persons noticing the brand. This results in an even bigger overestimation of attention when being evaluated explicitly compared to a situation where the individual is not being evaluated. This hypothesis is tested in study 2.

An attentional overestimation causes one to overestimate the judgments about oneself, because the action has to be noticed before others can judge one on it (Savitsky et al, 2001). Furthermore, Baldwin and Holmes (1987) stated that self-aware persons evaluate themselves to a failure experience using the same evaluative style of a salient private audience. This means that only thinking about a specific audience is enough to influence your evaluative style. Furthermore, it means that when the audience's acceptance is contingent on success,

persons will be more negative about themselves after a failure experience. More negative feelings may cause a bigger judgmental spotlight effect to occur, because of a higher initial anchor (which is based on the own experience of feelings). Baldwin and Holmes' (1987) studies do not show whether the same effect exists after success, i.e. will we be more positive about ourselves after success when the audience's acceptance is contingent on success? Will we think more persons will notice our success? We hypothesize this to be the case. In the second study the effect of explicit evaluation on feelings and judgmental spotlight effect is tested.

Ideas of being evaluated might not only be a result of situational aspects (e.g. the audience you are actually confronted with), but might also be an aspect of personality or personal thoughts. For instance, only thinking about certain persons (your private audience) might color the way actual people are experienced. As Baldwin and Holmes (1987) state "a contingent private audience [...] might be projected onto the world, with the result that others are seen as evaluative and judgmental". In study 2, however, we varied the evaluation criterion between the different conditions in order to test the effects of evaluative aspects on the spotlight effects.

Type of audience. Another important audience characteristic having effect on the spotlight effect, is the familiarity with the audience. Do we know them, or are they complete strangers to us? In the bad hair day study described earlier (Gilovich et al, 2002), it is implicitly suggested that others know what we normally look like. So the results showed a spotlight effect in the case of a confrontation with acquaintances, who can compare our appearance (or actions) at a certain moment to how we usually look. But what do actors think when being confronted with strangers? Will the spotlight effect be bigger? It will probably be. Strangers do not know our standard and we think they will probably judge us using peripheral cues (e.g. the blunder), because they are not motivated to make extensive judgments (Petty &

Cacioppo, 1986). After all, when we meet new people, do we not want to make a first good impression on them because we feel it is so important? Therefore, it is quite likely that, in the case of strangers, targets will think the fundamental attribution error is more present than in the case of acquaintances: targets will think strangers will attribute each aspect of their appearance or behavior to them as a person instead of to the situation (Ross, 1977). In study 3 familiarity with the audience is examined as a moderating factor.

Overview of present research

In the present research, an attempt is made to replicate and extend the existence of a spotlight effect in a marketing context. We believe a spotlight effect to exist using marketing stimuli like brands. Furthermore, it is assumed that a spotlight effect results in a certain type of consumer behavior: the overestimation of one's own visibility results in approach behavior when the person is standing out in a positive way; when the visibility is of a negative kind, the person will exhibit avoidance behavior. In studies 1 and 2 a keycord with a brand logo printed on it, was used to evoke an attentional spotlight effect. A keycord was used, because actors have to put it on and it is more difficult for them to psychologically distance themselves from it: others will attribute it to the person more easily than, for instance, when carrying a shopping bag with a brand logo printed on it. Subjects with a high status or low status brand were expected to overestimate the number of persons that noticed the brand. However, Fiske (1980) mentioned the existence of a greater salience of negative information than of positive information. This means that it is more difficult to stand out with high status clothes than with low status ones. Therefore, we hypothesize the amount of spotlight effect to be smaller when wearing the high status brand: a difference in attentional spotlight effect is assumed between the low status and the high status brand. In the first study the target's self-consciousness was also taken into account, because persons high in private self-consciousness have a more 'realistic' view of themselves (i.e. their self-concept is less

discrepant with what others think of them) and will therefore be able to make more realistic judgments about the stimulus (which is part of the self-concept). Therefore, they will be less subject to an attentional spotlight effect than persons low in private self-consciousness. Because the attentional spotlight effect will particularly be present with persons wearing the low status brand, the amount of self-consciousness has a bigger influence in the low status brand condition: when persons are high in self-consciousness, a smaller difference is suggested between high status and low status brands than when persons are lower in self-consciousness. Also, a difference in affect is assumed between the different conditions, because the created discrepancies have a valence (low status vs. high status) attached to it: persons with a low status brand will feel more negative than persons wearing a high status brand. This will especially be the case when the persons are low in private self-consciousness, because these persons have a less realistic view of themselves (and therefore of the discrepancy), and will therefore experience more inflated self-esteem because of the discrepancy's valence (Kernis & Grannemann, 1988). It is presumed that the domain of clothes is relevant to the participants.

In the second study we varied the audience's characteristics in terms of evaluation: one group of subjects was evaluated explicitly on sociability and popularity, the other group was not. An evaluating audience is hypothesized to cause a bigger attentional and judgmental spotlight in both the positive and the negative situation. However, because it is generally more difficult to stand out in a positive way (and particularly in the domain of clothes), it is hypothesized that the difference in (attentional and judgmental) spotlight effect between the low status and high status brand will be bigger in the evaluative situation.

In study 3 we have a closer look at the judgmental spotlight effect. It is not only suggested that persons being in an embarrassing situation will think that they are judged more harshly than they actually are, but also that persons being in a proud situation will think that

they are judged more positively than is actually the case. Furthermore, familiarity with the audience is examined: in the case of strangers a bigger spotlight effect is suggested than in the case of meeting acquaintances, because targets will think that a stranger will use peripheral cues in his judgment and will attribute each aspect of the targets' appearance or behavior to them as a person instead of to the situation.

Study 1

The first study was designed to replicate the spotlight effect in a marketing context using a procedure based on the one used in Gilovich et al (2000). Target participants were required to put on a keycord with a high or low status brand logo printed on it. A pilot test showed which brands to use. Compared to Gilovich et al's (2000) studies, a high status brand was added to the design as a control group. After being confronted with a group of people, we asked targets to estimate the number of people who noticed the brand. These estimates were then compared with the actual number who noticed.

We expected persons in the low status brand condition to overestimate the number of people who noticed the brand, compared to people in the high status brand condition, because according to Fiske (1980) there exists a greater salience of negative information than of positive information. Therefore, it is more difficult to stand out in a positive way by wearing a high status brand. Furthermore, a personality trait was included in the experiment, namely the self-consciousness scale (Fenigstein et al, 1975). This characteristic was expected to moderate the effect of brand on overestimation: people lower in self-consciousness were expected to be more subject to the spotlight effect than people who were high in self-consciousness, especially in the low status brand condition because it is more easy to stand out negatively. Persons high in (private) self-consciousness have a more realistic view of themselves (i.e. their self-concept – which includes the stimulus – is less discrepant with what others think of them) and are, therefore, more realistic about the actual attention the stimulus

gets from the audience. Finally, a difference in affect was hypothesized between the different conditions: persons in the low status brand condition will feel more negative than persons in the high status brand condition. This will especially be the case when the persons are low in self-consciousness, because those persons experience more inflated self-esteem because of the discrepancy's valence.

Method

Participants. Eighty Twente University students served as participants in exchange for a chance on winning 50 euros. Five outliers were identified (standardized residuals > 3) and excluded from further analyses resulting in a total of seventy five respondents (52 males, 23 females, $M_{\text{age}} = 21.49$, $SD_{\text{age}} = 2.53$).

Procedure. One of three confederates (one female, two males) approached students at Twente University and asked them to participate in a study for about 10 minutes. In exchange for their participation, the subjects had a chance on winning 50 euros.

After expressing their willingness to participate, the confederate started a stopwatch and subjects were asked to fill in a personality questionnaire. Then subjects were asked to select, at random, an envelope that contained the name of an attribute which the participant had to keep with him during the study (Dahl et al, 2001). In fact, each of the envelopes identified the keycord as the attribute to keep. The confederate took a keycord at random out of his bag and showed it to the subject with the (brand) logos upwards. The brands were all from the same product category (in this case clothing shops) in order to keep the relevance of the domain constant. A pilot test showed the following brands to be used: Zeeman as a low status brand ($\alpha = .77$), and Boss as a high status brand ($\alpha = .93$; Appendices A and B). Subjects were instructed to put the keycord on. The confederate took care that the logos were visible for the audience by handing over the keycord in a correct way and, if necessary, by asking the subject to take off his coat.

Subjects were told that they would go with the confederate and ask a group of people to fill in a news quiz. Subjects did not have to say anything and would just have to pretend to be the second researcher. In front of the group, the confederate would introduce the subject (by saying his name and pointing at him) and himself and would explain that the both of them were working on a research project involving people's knowledge of recent news. Then the group would be asked to fill in the quiz for which they only had three minutes to work on. The subjects then would have to hand out the quizzes and would have to fill in a different questionnaire. All of the subjects agreed to participate in this procedure.

After asking a group and handing out the quizzes, subjects were asked to fill in a questionnaire including Watson et al's (1988) Positive Affect and Negative Affect Schedule (PANAS) which measured the subject's positive and negative affect (Appendix D). The confederate recorded the time needed to fill in the PANAS scale in order to measure approach or avoidance behavior: persons with the low status brand were hypothesized to avoid the situation, i.e. to fill in the PANAS scale more quickly. After finishing the questionnaire, subjects were told that the group still had time left to finish the quiz. The subject and confederate got back to the initial place; the quizzes would be collected later on. Subjects got a final questionnaire in which it was explained that the study was about "incidental memory, or people's awareness of things they are not told to pay attention to" (cf. Gilovich et al, 2000). Subjects were asked several questions on their incidental memory (group size, number of males / females). Furthermore, they were asked about their intuitions of the group's incidental memory. This intuition was assessed by asking for the number of persons in the group that would be able to tell the researcher what was on the keycord. It was made clear to participants that their estimates should not include the experimenter. Finally, subjects were asked to estimate the time they were participating in the study. Then the

experimenter explained the study was over and the subject was thanked. Subjects were debriefed afterwards by email.

The experimenter got back to the participating group to collect the quizzes and to hand out a final questionnaire containing two questions involving whether the person noticed the keycord the other researcher was wearing and whether (s)he could say what it said. After answering these questions, the group was thanked. Again, debriefing was done by email.

Measures

Attentional spotlight effect. The attentional spotlight effect was measured by assessing the difference between the subject's estimate and the actual number of observers that were able to mention the brand. Because there were different numbers of observers in the different experimental sessions, the difference was converted to a percentage. More positive numbers indicated a bigger attentional spotlight effect

Affect. Positive and negative affect were determined by letting the subject fill in the PANAS scale (α s = .83, and .81 for positive and negative affect, respectively). This was done after the subject was already confronted with the audience. Affect was hypothesized to differ between the conditions because of a difference in valence of the discrepancy: in the case of the low status (clothing) brand a negative discrepancy and, therefore, more negative emotions were assumed; in the case of a high status brand a positive discrepancy and, therefore, more positive emotions were assumed. This would especially be the case when the person was less realistic about the stimulus' impact (i.e. the person was low in (private) self-consciousness). We emphasize that affect was not assumed to play a mediating role between brand and self-consciousness on the attentional spotlight effect, because the attentional spotlight effect was assumed to be caused by an amount of discrepancy and affect was assumed to be caused by the valence attached to this discrepancy.

Results

Attentional spotlight effect. Because the group size differed per setting, the target's estimate of the number of persons who would correctly state the brand depicted on the keycard, was converted to a percentage. In the Zeeman condition the estimated number of persons was the highest: on average targets thought 25% of the observers would be able to state the brand. In reality, only 10% was able to do this. In the Boss condition, targets thought 11% would be able to mention the brand, whereas 15% did actually see it. To assess reliability and to test for significance we took the average discrepancy between estimated and actual number of observers who noticed the brand. The discrepancy was 14% in the Zeeman condition, and 4% in the reversed direction in the Boss condition. An analysis of variance showed that the discrepancy in the Boss condition was significantly lower than in the Zeeman condition ($F(1, 73) = 9.92, p < .01$). In accordance with Gilovich et al's (2000) analyses, we also looked at the 95% confidence intervals for the degree of overestimation (6% to 22% for Zeeman, and -13% to 5% for Boss). We can conclude that there was a significant overestimation in the Zeeman condition ($t(38) = 3.62, p < .01$). The Boss condition did not show a significant difference between estimation and actual observation of the brand ($t(35) = -.95, p = .35$). These results confirm the existence of an attentional spotlight effect in low status brand situations and not for high status brand situations.

But what causes the differences in overestimation between the brands? Is it because targets' estimates differed, or is it because certain brands were noticed more often? An analysis of variance of brand on targets' estimations (in percentages) showed that the estimations differed significantly ($F(1, 73) = 7.50, p < .01$): the estimates in the Zeeman condition were significantly higher than in the Boss condition. Further analyses indicated that there were no differences between the number of observers noticing the different brands ($F(1,$

73) = 1.45, $p = .23$). These results suggest only a difference in the estimates between persons wearing a Zeeman or Boss keycord.

Gilovich et al (2000) reported that in their study target participants' estimates were grounded in reality: participants' estimates were correlated with the actual number of observers who would identify the person on the shirt. In our case, the partial correlation controlling for the type of keycord was smaller, but still significant ($r = .21$, $p < .05$, one-sided).

Self-consciousness. In order to prevent the negative power effects of a median split on the variability of the self-consciousness scale, a multiple regression analysis was used in the way Aiken and West (1991) proposed to test the role of self-consciousness and brand type on the attentional spotlight effect. The full regression analysis equation looked like this:

$$\text{spotlight} = b_1 \text{key} + b_2 \text{SC} + b_3 (\text{key} \times \text{SC}) + b_0$$

in which *key* is a dummy variable for the brand on the keycord, *SC* represents the continuous and centralized self-consciousness scale² ($\alpha = .66$), and *key* x *SC* represents the interaction between each brand and self-consciousness.

The regression analysis with Boss as comparison group ($\text{key} = 0$ in the Boss condition, and $\text{key} = 1$ in the Zeeman condition) showed a significant model ($R^2 = .193$, $F(3, 71) = 5.65$, $p < .01$). First of all, the model showed a significant interaction between brand and self-consciousness (test of b_3 : $R^2_{\text{change}} = .073$, $F(1, 71) = 6.42$, $p < .05$, $f^2 = .090^3$). This result indicates different roles for the brand in the low and high self-consciousness conditions. For illustrative purposes a median split was carried out on self-consciousness: in the low self-consciousness condition, persons wearing a Zeeman keycord were much more subject to a

² The scale is centralized by subtracting the overall mean from the self-consciousness values (Aiken & West, 1991).

³ f^2 represents the effect size and is defined as the strength of a particular effect, specifically the proportion of systematic variance accounted for by the effect relative to unexplained variance (Cohen, 1988). The effect size f^2 is directly related to statistical power and is computed as follows: $R^2_{\text{change}} / (1 - R^2)$ (Aiken & West, 1991).

spotlight effect ($M = .21$, $SD = .23$) than persons wearing a Boss keycord ($M = -.12$, $SD = .27$; see Figure 1), $F(1, 71) = 17.00$, $p < .01$. No difference was found for persons high in self-consciousness ($F(1, 71) = .11$, $p = .75$).

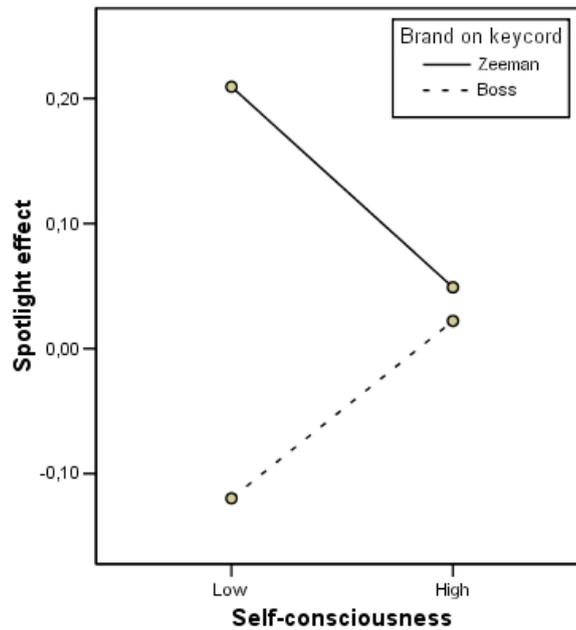


Figure 1. Mean overestimation of the number of persons noticing the brand (i.e. attentional spotlight effect), by brand condition, separately for persons low in self-consciousness and persons high in self-consciousness.

The regression analysis also showed a significant main effect for the brand on the keycord ($t(71) = 3.25$, $p < .01$) indicating a difference in overestimation between the brands Boss and Zeeman. The overestimation was higher in the case of Zeeman ($M_{Zeeman} = .14$, $SD_{Zeeman} = .25$) than in the case of Boss ($M_{Boss} = -.041$, $SD_{Boss} = .26$).

In sum, we can conclude that there were differences between Zeeman and Boss. As we expected, persons wearing a Zeeman keycord were subject to an attentional spotlight effect, whereas Boss persons were not. Furthermore, in the low self-consciousness condition, persons wearing a Zeeman keycord were more subject to the spotlight effect than persons wearing a Boss keycord. For persons higher in self-consciousness, no differences were found.

A closer look at the subscales revealed that the private self-consciousness items (Fenigstein et al, 1975) were mainly responsible for the effects found. This was consistent with our hypothesis that persons low in (private) self-consciousness would have a less realistic view of themselves (and therefore of the attention the stimulus actually gets from the audience) compared to persons high in (private) self-consciousness. Therefore, they would overestimate to a greater extent, especially when wearing a low status brand.

Affect. The brand stimulus and self-consciousness were assumed to have an effect on the amount of discrepancy and its valence. The amount of discrepancy on its turn, was assumed to cause an attentional spotlight effect, and the valence of the discrepancy was hypothesized to have an effect on the affective state. Therefore, no mediating role was assumed for affect between the type of brand and self-consciousness on the attentional spotlight effect. However, because the valence of the discrepancy was assumed to differ between the different brand conditions (i.e. a negative discrepancy was assumed in the low status brand condition and a positive discrepancy was assumed in the high status brand condition), a difference in affect was hypothesized between these conditions: persons wearing a Zeeman keycord were hypothesized to experience more negative affect (or less positive affect) than persons wearing a Boss keycord, especially when persons were low in self-consciousness. A multiple regression analysis was used to examine the different conditions. The following equations were used:

$$\text{positive affect} = b_1 \text{key} + b_2 \text{SC} + b_3 (\text{key} \times \text{SC}) + b_0$$

$$\text{negative affect} = b_1 \text{key} + b_2 \text{SC} + b_3 (\text{key} \times \text{SC}) + b_0$$

in which *key* is the dummy variable for the brand on the keycord, *SC* represents the continuous and centralized self-consciousness scale ($\alpha = .66$), and *key* x *SC* represents the interaction between brand and self-consciousness. No significant model was found for positive affect ($R^2 = .072$, $F(3, 71) = 1.84$, $p = .15$) or negative affect ($R^2 = .021$, $F(3, 71) =$

.51, $p = .68$). Although the amount of discrepancy was more salient in the low status brand condition than in the high status brand condition (i.e. a difference in attentional spotlight effect was found), the valence of this discrepancy was not present or did not have an effect on the affective state.

Behavior. In the procedure, several behavioral measures were taken along. First of all, we measured whether persons wearing a Zeeman keycord would be faster when filling in the PANAS scale. Despite the fact that the person was not in the centre of the attention when they filled in the scale (the audience was busy working on the news quiz), an analysis of variance of type of keycord on the time necessary to fill in the PANAS scale, showed a significant effect ($F(1, 71) = 4.86, p < .05$): Boss persons ($M = 115.64, SD = 39.98$) took longer to fill in the PANAS scale than Zeeman persons ($M = 98.78, SD = 23.44$). When taking into account the fact that an attentional spotlight effect was only present in the Zeeman condition, we conclude that a certain avoidance behavior took place in the Zeeman condition, which did not take place in the Boss condition.

In this study, also the actual time and the estimated time of the subject being in the experiment were measured. The difference between these measures was used as approach or avoidance behavior. Persons in a low status brand situation were hypothesized to exhibit avoidance behavior, i.e. to actually be shorter in the experiment than persons in the high status brand condition and to think that they were longer in the experiment than actually was the case. However, we did not find any of these types of behavior.

Discussion

The study provides support for the existence of the attentional spotlight effect in a marketing context. Participants wearing a keycord with a low status brand logo printed on it, were so consumed with the brand so that they overestimated the notability of the brand by others. Furthermore, as we expected, no overestimation was found for the high status brand,

because it is more difficult to stand out in a positive way with high status clothes. Differences in spotlight effect between the low status and high status brand are explained by the bias in the targets' estimations: persons in the low status brand condition had higher estimates of number of persons noticing the brand than persons in the high status brand condition.

The study also shows an important moderating role for personality traits like self-consciousness. When persons were lower in self-consciousness, a significant difference was found between the low status and the high status brand situation: when wearing the low status brand, persons were subject to an attentional spotlight effect. When persons were higher in self-consciousness, no differences were found between both brand conditions. The private self-consciousness items were mainly responsible for these effects. These results were consistent with our hypothesis that persons low in (private) self-consciousness would have a less realistic view of themselves (i.e. their self-concept would be more discrepant with what others think of them) and would, therefore, be less able to make realistic judgments about the stimulus (which is part of the self-concept). Because it was more easy to stand out negatively, persons low in self consciousness who were in the low status brand condition were more subject to an attentional spotlight effect than persons with the high status brand. Persons high in self-consciousness had a more realistic self-concept and were therefore more able to make realistic judgments about the attention the keycord got from the audience. Therefore, they were less subject to an attentional spotlight effect, just like the persons in the high status brand situation who were not able to stand out: no difference was found between the low status and high status brands with persons higher in self-consciousness.

Although the amount of discrepancy was more salient in the low status brand condition than in the high status brand condition (i.e. a difference in attentional spotlight effect was found), the valence of this discrepancy was not present or did not have an effect on the affective state. However, it is questionable whether the moment of filling in the PANAS scale

(right after handing out the news quizzes) was felicitously chosen. The subject was clearly not the centre of attention anymore, because the audience was working on the news quiz. In an embarrassing situation, this might cause the subject to feel kind of relieved of not being in the centre of attention anymore. Despite this fact, we did find a behavioral outcome: Zeeman persons (who were subject to an attentional spotlight effect) took shorter to fill in the PANAS scale. In the second study we will have a closer look at other aspects having a possible influence on the amount of overestimation. Also, possible behavioral consequences are examined again.

Study 2

The first study showed the existence of the attentional spotlight effect in a marketing context using low status brands compared to high status brands. It was already mentioned that the attentional spotlight effect is less profound (or absent) in positive situations, because it is more difficult to stand out in a positive way in, for instance, the domain of clothes. In study 2 we wanted to replicate this difference in attentional spotlight effect between low status and high status clothing brands: an attentional spotlight effect particularly occurs when wearing a low status brand. In the first study we also found a significant moderating effect for self-consciousness. Besides this personality trait, audience characteristics can play a moderating role in the process of evoking an attentional spotlight effect. One of those characteristics might be the fact whether or not we think we are explicitly evaluated by the public we are confronted with. When the audience has to evaluate a subject explicitly, they will possibly notice the brand more often. However, we suggest that the subject will again overestimate the extra number of persons noticing the brand. In other words when not being evaluated, subjects adjust insufficiently from their initial anchor. When being evaluated explicitly, more persons will notice the brand, but the adjustment for this extra number of persons will also be insufficient. This results in a bigger overestimation when being evaluated explicitly. Because

of a difference in standing out positively or negatively, a bigger difference in attentional spotlight effect between the brands is suspected when evaluated explicitly: an interaction effect occurs between type of brand and the evaluation conditions on attentional spotlight effect.

The attentional spotlight effect might cause a judgmental spotlight effect to occur: persons with the low status brand stand out to a greater extent than persons with the high status brand and will therefore think that others will judge them more negatively, because the (low status) brand is noticed more often. Furthermore, the evaluation criterion will have consequences for the judgmental spotlight effect. According to Baldwin & Holmes (1987) persons feel more negative about themselves after a failure experience when the audience's acceptance is contingent on success. In the condition being evaluated explicitly on sociability and popularity, we will be more negative about ourselves when wearing the low status brand. This results in a higher initial anchor and therefore a bigger judgmental spotlight effect. When Baldwin and Holmes' (1987) process is also applicable to a positive situation, persons being evaluated explicitly and wearing a high status brand will be more positive about themselves and will ultimately be more subject to a judgmental spotlight effect than when not evaluated. However, we think this effect will be less profound, because of the difficulty of standing out positively (in the domain of clothes). Therefore, besides a main effect of type of brand on judgmental spotlight effect, an interaction effect is assumed between type of brand and the evaluation conditions on judgmental spotlight effect: in the condition being explicitly evaluated, a bigger difference is hypothesized between the brands. In short, it is assumed that – besides a main effect of type of brand on attentional and judgmental spotlight effect – in the evaluative condition, a bigger difference in attentional and judgmental spotlight effect will be found between the low status and high status brand.

Target participants were required to put on a keycord with a low status or high status brand logo printed on it. They were told that they would be confronted with a group of people and we asked them to estimate the public's judgment about them and to estimate the number of people who would notice the brand. In fact there was no group available. This means that, contrary to study 1, in this study the actual number of observers noticing the brand was not available for analysis. Therefore, we could not check whether the overestimation in the low status and high status brand conditions would be actually bigger or smaller when explicitly evaluated. Presumably, when a public is asked to evaluate a person, the actual number of persons seeing the brand is indeed greater. The hypothesized interaction effect, however, can still be tested: when being evaluated, the estimated number of people noticing the brand will be higher in the low status brand situation than in the high status brand situation; this difference will be smaller in the condition with no explicit evaluation. The study employed a 2 (brand: low status vs. high status) x 2 (evaluation: yes vs. no) between-subjects factorial design.

Method

Participants. Ninety-two Twente University students (47 males, 45 females, $M_{\text{age}} = 22.65$, $SD_{\text{age}} = 3.08$) served as participants in exchange for a chance on winning 50 euros.

Procedure. One of three confederates (one female, two males) approached students at Twente University and asked them to participate in a study for about 10 minutes. In exchange for their participation the subjects had a chance on winning 50 euros.

After expressing their willingness to participate, the confederate guided each subject into a small room and asked them to fill in two personality questionnaires. The confederate started a stopwatch. After being finished, the confederate told the subject they would go to a group of people. First, the subject was asked to select, at random, an envelope (out of two) that contained a brand name (Dahl et al, 2001). In fact, each of the envelopes contained the same

brand name. The confederate took a keycord out of his bag corresponding to the brand name selected. After showing the keycord, the subject was instructed to put the keycord on with the logos upwards. Again, the confederate told the subject they would go to a group. However, first the subject had a choice of keeping the keycord (s)he had on at the moment, or selecting one of the two envelopes again with the possibility of selecting the other brand name (and its corresponding keycord). Because each of the envelopes contained the same brand name, the subject always kept the keycord (s)he had on.

The confederate said (s)he would first check whether the group of people was already present. In the meanwhile, the subject was told to fill in a second questionnaire containing the question asking for the number of persons in the group that would be able to tell the researcher what was on the keycord. Furthermore, the questionnaire contained the PANAS scale, and a question asking for the type of gift voucher (s)he would prefer to win (the subject could choose between a gift voucher for a low status shop and a gift voucher for a high status shop). The chance of winning the gift voucher for the high status shop, however, was twice as low. Finally, the questionnaire contained several manipulation checks, and a question asking for an estimate of the time the subject was participating in the study. After a while, the experimenter returned into the room and waited for the subject to be finished. Then, the experimenter explained there was no group present and that the study was over. The subject was debriefed and was thanked for his participation.

Measures

Attentional spotlight effect. Contrary to study 1, the actual number of observers noticing the brand was not available in this study. Only the estimation was available, so the actual overestimation could not be calculated. However, because in each condition the number of persons of the imaginary public was the same, the estimated number of persons could be used to compare the different situations.

Affect. Affect was determined by letting the subject fill in the PANAS scale. Both scales were reliable ($\alpha = .83$, and $.78$ for positive and negative affect, respectively). Affect was hypothesized to be a factor mediating the effect of brand and evaluation type on judgmental overestimation. Contrary to study 1, the PANAS scale was filled in while the subject was still in the supposition that (s)he would have to confront the audience.

Behavior. Because both spotlight effects were assumed to play a role in approach and avoidance behavior, several behavioral measures were included in the design. First of all, the actual duration of the experiment was compared to the subject's estimation. An interaction effect between brand and evaluation was assumed: in the evaluation condition, subjects wearing a low status brand were expected to think that the experiment's duration was longer compared to persons wearing a high status brand; in the no evaluation condition, the difference between the brands was assumed to be smaller. Secondly, subjects with the low status brand on the keycord, were expected to select an envelope for a second time more frequently than when wearing a high status brand on the keycord. Finally, we thought subjects with the low status brand, would choose a gift voucher for a high status shop more often than would be the case for subjects wearing the high status brand.

Manipulation checks. To check whether our manipulations were successful, we asked for the subject's focus on the keycord and brand, the valence of the brand, and the estimated public's judgment of the subject.

Results

Manipulation checks. To check whether Zeeman was indeed evaluated more negatively than Boss, we asked participants to rate the brand that was on the keycord on several 7-point Likert scales. A 7-point valence scale was created ($\alpha = .85$) with low values corresponding to negative judgments and high values with positive judgments. Consistent with our expectations, Boss ($M = 5.13$, $SD = .93$) was evaluated more positively than Zeeman ($M =$

3.22, $SD = 1.01$), $F(1, 84) = 84.46$, $p < .01$. Furthermore, a focus scale was constructed ($\alpha = .87$) describing the subject's focus on the keycord and brand. No significant differences were found for focus.

To check for differences in a judgmental spotlight effect, an analysis of variance was carried out of type of brand and the evaluation criterion on the estimated public's judgment of the subject. A significant main effect was found for evaluation ($F(1, 87) = 4.49$, $p < .05$). Persons in the evaluated condition were more positive ($M = 4.70$, $SD = .89$) than persons in the condition not being evaluated ($M = 4.27$, $SD = 1.07$). Contrary to our expectations, no main effect for type of brand on the judgmental spotlight effect was found. Also, no interaction effect of type of brand and evaluation on judgmental spotlight effect was found.

Attentional spotlight effect. As expected, the estimated number of people noticing the brand on the keycord was significantly higher in the Zeeman condition ($M = 5.67$, $SD = 2.52$) than in the Boss condition ($M = 4.20$, $SD = 2.79$), $F(1, 88) = 7.17$, $p < .01$. Contrary to our expectations, the difference in attentional spotlight effect between the brands was not bigger in the case of explicit evaluation compared to the no evaluation condition, i.e. no interaction was present ($F(1, 88) = .40$, $p = .53$). This might be a reason of not finding an interaction between type of brand and evaluation on the judgmental spotlight effect, because the action has to be noticed before others can judge one on it (Savitsky et al, 2001).

In study 1 subjects were not evaluated explicitly. To see whether there were differences between the two studies, the estimations of study 2 in the no evaluation condition (in percentages) were compared to the results of study 1. It was clear that the estimated number of persons noticing the brand was bigger in study 2 than in study 1 (Zeeman: 51% in study 2 vs. 25% noticing the brand in study 1, and Boss: 40% in study 2 vs. 11% noticing the brand in study 2). A reason for this difference might be the total number of persons in the group. In study 2 the audience consisted of 10 persons, while in study 1 the average number of persons

was 3.66. It is likely that in the case of smaller groups, the subject is able to observe each person separately and to state whether (s)he noticed the brand on the keycord. With bigger groups this will be more difficult, probably resulting in a bigger spotlight effect. Another reason for the difference found, is that it is more difficult to make an impression of the situation in the case of not being confronted with the group yet. In study 2 the estimation was made before being confronted with the audience; in study 1 the estimation was made after being confronted with the audience.

Affect. Affect was assumed to play a mediating role in the influence of the brand and evaluation on the amount of judgmental spotlight effect. The first step in the mediation analysis was to test whether there was an effect from the independent variables (brand and evaluation) on affect (Baron & Kenny, 1986). An analysis of variance showed an almost marginal interaction between brand and evaluation on positive affect ($F(1, 88) = 2.76, p = .10$). A simple effect analysis, however, did not show significant differences between the brands within the evaluation condition ($F(1, 88) = .93, p = .34$) or the no evaluation condition ($F(1, 88) = 1.92, p = .17$). This result was in contrast with our assumption that a bigger difference in affect would exist between the brands when evaluated explicitly on success. No effects were found for negative affect. Therefore, we can conclude that affect did not play a mediating role between brand and evaluation on the judgmental spotlight effect. However, interestingly, an analysis of variance of brand and evaluation on the judgmental spotlight effect with covariates positive affect and negative affect, showed that positive affect and negative affect had a significant influence on the judgmental spotlight effect ($F(1, 85) = 9.45, p < .01$ and $F(1, 85) = 13.58, p < .01$, respectively). Persons lower in positive affect thought they were judged less positively than persons higher in positive affect; persons higher in negative affect thought they were judged more negatively than persons lower in negative affect. The evaluation criterion still had significant influence on the judgmental spotlight

effect ($F(1, 85) = 4.84, p < .05$). These results indicate the importance of the own affective state on the judgmental spotlight effect. The type of brand and evaluative condition, however, were not responsible for the affective state. The strong effect of affect might have caused us not to find a main effect for type of brand on the judgmental spotlight effect. The same may count for not finding the interaction between type of brand and evaluation on the judgmental spotlight effect.

Behavior. An analysis of variance of brand and evaluation on the time difference between the actual time (in seconds) the subject was in the experiment and the estimated time (more positive numbers indicating greater underestimations), revealed a significant interaction between type of brand and the evaluation criterion ($F(1, 87) = 5.09, p < .05$). An analysis on the simple main effects showed that in the no evaluation condition, persons wearing a Zeeman keycord ($M = 135.18, SD = 135.25$) underestimated the time being in the experiment compared to persons wearing the Boss keycord ($M = 58.09, SD = 151.20$), $F(1, 87) = 3.49, p < .10$. In the evaluative condition no such difference was found between the brands ($F(1, 87) = 1.74, p = .19$). So persons not being evaluated explicitly and wearing a Zeeman keycord, perhaps were able to think less clearly (because of the spotlight effect?), which resulted in worse estimations of time.

Participants also had the possibility to select one of the two envelopes for a second time with the possibility of selecting the other brand. We assumed subjects would make use of this possibility when they drew the low status brand the first time, because they wanted to avoid the negative situation. Because at this moment the evaluation condition was not introduced yet, a binary logistic regression with only the covariate brand was carried out. It showed no significant effects however. We think some persons just chose another time out of curiosity.

At the end of the experiment, subjects had to choose between a gift voucher of a high status shop or a gift voucher of a low status shop. However, the chance of winning the gift

voucher for the high status shop was twice as low. We assumed subjects with the low status brand on the keycord, would choose a gift voucher for the high status shop more often than subjects did who wore the low status keycord, again as a way to avoid the negative situation. A binary logistic regression was run with covariates brand, evaluation, and their interaction term. The analysis showed a marginal significant effect for keycord ($Wald(1) = 2.66, p = .10$). Interestingly enough, 70% of the persons wearing a Boss keycord chose a Boss gift voucher, whereas only 58% of the persons wearing a Zeeman keycord did this. Perhaps persons wearing a Boss keycord were primed with the brand, which resulted in the choice of the same brand.

Discussion

This study showed again that the estimations of the number of people noticing the brand were bigger for low status brands than for high status brands. Based on the results of study 1, we think the estimations were indeed overestimations in the case of the low status brand, i.e. there was an attentional spotlight effect. For the high status brand this overestimation was absent or less profound. The study also showed that this difference cannot be explained by focus on keycord or brand: focus did not differ between the different conditions. In contrast to our expectations there was no interaction effect between brand and evaluation on the subjects' estimations, i.e. the difference in estimations was not significantly bigger in the case of explicit evaluation.

Besides the existence of an attentional spotlight effect in the Zeeman condition, we also found a certain kind of behavior for these Zeeman persons. When not being evaluated explicitly, persons wearing a Zeeman keycord underestimated the time being in the experiment compared to persons wearing a Boss keycord. Although we assumed a general overestimation for Zeeman persons instead of an underestimation, it is clear that Zeeman persons were less able to think clearly. No differences were found in the evaluative condition.

Furthermore, a marginal difference was found in choosing a certain gift voucher: persons wearing a Boss keycord chose a Boss gift voucher more often than persons wearing a Zeeman keycord. This was in contrast to our expectations, because we thought persons in the negative situation to exhibit avoidance behavior.

Finally, only a main effect of the evaluation condition on the judgmental spotlight effect was found: persons who were explicitly evaluated, were more positive than when not evaluated. Presumably, subjects thought they were evaluated more extensively when being evaluated explicitly, which means that the keycord was just ‘a feather’ in the public’s judgment. In other words, subjects thought the audience did not judge them using peripheral cues only, because the audience was motivated to make extensive judgments. Therefore, when being evaluated explicitly, there was no need to feel less positive and there was no ground of thinking one would be judged less positively (even in the case of the low status brand). The expected main effect of type of brand on the judgmental spotlight effect as well as the interaction between type of brand and evaluation on the judgmental spotlight effect, were not found. Several reasons may be responsible for not finding these effects. First of all, no interaction effect was found between type of brand and evaluation on the attentional spotlight effect, which may have resulted in not finding such an interaction effect for the judgmental spotlight effect. As Savitsky et al (2001) mentioned the action has to be noticed before others can judge one on it. Secondly, we found affect to play an important role in determining the judgmental spotlight effect. Because the type of brand and the evaluative condition were not responsible for the affective state, this might have caused a certain noise. In the next study we will have a closer look at the judgment process and the factors playing a role in it.

The study showed some additional information on factors playing a role in evoking an attentional spotlight effect. When the group size is bigger, a bigger attentional spotlight effect

might occur. An explanation for this effect might be that with small groups, subjects are able to observe each person separately and to state whether (s)he noticed the brand on the keycord. As the group becomes bigger, this becomes more difficult resulting in less accurate estimations.

Study 3

The second study showed that the fact whether you are explicitly evaluated or not, has an effect on the way you think you are judged by others: when not being evaluated explicitly, persons thought they were judged more negatively. However, we were not able to state whether a judgmental spotlight effect was present, because no actual judgments were available. Savitsky et al (2001) showed that this estimated judgment is indeed subject to a spotlight effect. Two reasons are mentioned for this tendency. First of all, others cannot judge one harshly for an unnoticed action, and the existence of an attentional spotlight effect will lead to exaggerated fears of how harshly one is judged. Secondly, even when we suggest that a shortcoming is noticed, an excessive focus on the shortcoming causes a judgmental spotlight effect. This last aspect is the subject of this study.

In one of Savitsky et al's (2001) studies they showed that people imagining they were spotted carrying a shopping bag from an unfashionable store, thought they were judged more harshly by others than they actually were. The present research pursued this study and employed a 3 (type of person: target vs. observer vs. third person) x 2 (brand: unfashionable vs. fashionable) x 2 (relationship: acquaintance vs. stranger) between-subjects factorial design. Participants were asked to consider one of twelve hypothetical scenarios before answering three judgmental questions. Based on the results of Savitsky et al (2001), we assumed targets to think to be judged more harshly when carrying a shopping bag of an unfashionable brand than actually was the case. Furthermore, we extended Savitsky et al's (2001) study by adding a fashionable condition to the design, because we assumed a same

effect to occur in this fashionable condition: targets will think they are judged more positively than they actually were.

The second study showed persons to think that they would be judged more negatively when not being evaluated explicitly. We already mentioned the role of peripheral cues to explain this phenomenon. Based on these results, we assumed the spotlight effect to be more present in the case of strangers, because targets will probably think that strangers will judge them using peripheral cues. Acquaintances are familiar with the target's appearance (i.e. they have a general impression) and targets will probably think that a shopping bag does not change their opinion about the target. The fundamental attribution error will also be more present in the case of strangers: targets will think others will attribute cues to them as a person instead of to the situation. Based on the results of Savitsky et al (2001), a small spotlight effect was suggested in the case of acquaintances.

The judgmental spotlight effect was determined by assessing the difference between the targets' judgments and the observers' judgments. A third condition was included (third person), because of self-presentational reasons: observers might judge the targets harshly, but be reluctant to admit it (cf. Savitsky et al, 2001). The third person also imagined being an observer, but did not report their own judgments of the target, but rather indicated the impressions they thought others would form. In this way they did not have to admit making harsh judgments themselves, but were free to indicate that the target would be judged harshly in the negative case.

Method

Participants. Three hundred seventy three subjects participated in the study. One person was allocated as an outlier (standardized residual > 3) resulting in a data set consisting of three hundred seventy two respondents (205 males, 167 females, $M_{\text{age}} = 23.55$, $SD_{\text{age}} = 3.22$).

Procedure. The study concerned an online questionnaire. Subjects were informed of the study by a personal e-mail. Each subject was assigned to a random scenario. Before being confronted with the scenario, they had to fill in some personal information including their gender and age. Then the scenario was shown. Here is an example of one of those scenarios (see appendix H for a listing of the scenarios used). Actors were asked to imagine that they were shopping at a mall, carrying a bag with “Zeeman” printed on the side, when they were spotted by a group of college friends / colleagues. “They looked at your bag, nodded a quick hello to you, and continued on their way, talking amongst themselves” (cf. Savitsky et al, 2001). Observers and third-person observers each imagined having seen one of their college friends / colleagues at the mall with the “Zeeman” bag. “You and your friends looked at the bag, nodded a quick hello to your college friend / colleague, and continued your way, talking amongst yourselves.” Other scenarios mentioned Hugo Boss as the brand name (instead of Zeeman). Furthermore, scenarios differed in being spotted by an unknown contemporary instead of a college friend / colleague. All scenarios can be found in Appendix H.

Actors then estimated on a 7-point Likert scale the extent to which the college friends / colleagues would form a positive / negative impression of them (*very negative* to *very positive*), the extent to which the bag would make their college friends / colleagues want to associate with them (*they would certainly not want to associate with me* to *they would certainly want to associate with me*), and the likelihood that their college friends / colleagues were discussing them and their shopping bag as they walked away (*very unlikely* to *very likely*). Observers indicated the extent to which they themselves would form a positive / negative impression, would want to associate with the actor, and the likelihood of discussing the actor and his shopping bag. Third-person observers answered these same questions, but for each one estimated what their friends would think.

Results

Judgmental spotlight effect. The first two measures were used to construct a new judgmental scale ($\alpha = .67$). The third measure did not show high correlation with the first two, because the likelihood of talking has a different meaning in the different brand conditions: when people are talking about you when you carry an unfashionable bag, this implies a negative judgment; when carrying a fashionable bag, more talking implies a positive judgment.

An analysis of variance on the new judgmental scale showed a significant effect for brand ($F(1, 360) = 11.31, p < .01$). Looking at the judgments of all participants, Boss was rated more positively ($M = 4.23, SD = .91$) than Zeeman ($M = 3.89, SD = 1.06$). Furthermore, an interaction effect was found between brand and relationship ($F(1, 360) = 4.63, p < .05$). A simple effect analysis showed that in the case of strangers, a significant difference was found between the two brands ($M_{Zeeman} = 3.72, SD_{Zeeman} = .89$ vs. $M_{Boss} = 4.26, SD_{Boss} = 1.03$), $F(1, 360) = 15.29, p < .01$. There was, however, no significant difference when being confronted with acquaintances ($F(1, 360) = .73, p = .39$).

The analysis of variance also showed a significant interaction effect between brand and type of person ($F(2, 360) = 6.28, p < .01$). When comparing the brands with each other, there was only a significant difference in judgment between Boss and Zeeman in the case of the target itself ($M_{Boss} = 4.46, SD_{Boss} = .87$ vs. $M_{Zeeman} = 3.62, SD_{Zeeman} = 1.07$), $F(1, 360) = 23.25, p < .01$. This means that only the target thinks that he is judged differently depending on the brand he carries. For observers and third-persons targets are judged the same way regardless of the brand.

In accordance with Savitsky et al's (2001) analyses, we tested whether the target's estimated judgments differed significantly from the observers' and third-persons' actual judgments (i.e. whether a judgmental spotlight effect existed), by carrying out a simple

analysis on the types of persons. This analysis showed that in the Zeeman condition targets thought they were judged more harshly than they actually were ($M_{\text{Target}} = 3.62$, $SD_{\text{Target}} = 1.07$ vs. $M_{\text{Observer}} = 4.02$, $SD_{\text{Observer}} = 1.14$, $p < .05$ and $M_{\text{Target}} = 3.62$, $SD_{\text{Target}} = 1.07$ vs. $M_{\text{Third-person}} = 4.02$, $SD_{\text{Third-person}} = .94$, $p < .05$). In the Boss condition, targets thought they were judged more positively than they actually were ($M_{\text{Target}} = 4.46$, $SD_{\text{Target}} = .87$ vs. $M_{\text{Observer}} = 4.11$, $SD_{\text{Observer}} = .98$, $p < .05$ and $M_{\text{Target}} = 4.46$, $SD_{\text{Target}} = .87$ vs. $M_{\text{Third-person}} = 4.10$, $SD_{\text{Third-person}} = .82$, $p < .05$). There were no differences between observers and third-persons, i.e. there were no self-presentational reasons having effect on the observers' judgments.

Finally, the analysis of variance showed an interaction effect between brand, type of person, and relationship ($F(2, 360) = 3.34$, $p < .05$). A simple effect analysis showed a significant difference between the brands for targets when confronted with strangers ($M_{\text{Zeeman}} = 3.34$, $SD_{\text{Zeeman}} = 1.04$ vs. $M_{\text{Boss}} = 4.75$, $SD_{\text{Boss}} = .93$), $F(1, 360) = 32.48$, $p < .01$. No other significant simple effects between Zeeman and Boss were found, which means that Zeeman was only rated more negatively by targets than Boss when confronted with strangers. Again, observers and third-persons made the same judgments regardless of the brand. In conclusion, only for targets who were spotted by a stranger, there was a difference in estimated judgment between the brand conditions: targets who were spotted by a stranger thought they were judged more negatively when carrying a Zeeman bag than when carrying a Boss bag.

Again, in accordance with Savitsky et al's (2001) analyses, we tested whether we dealt with a judgmental spotlight effect by carrying out a simple effect analysis to compare each type of person. The analysis showed a significant difference between targets and observers / third persons when being strangers of each other in the Zeeman condition ($M_{\text{Target}} = 3.34$, $SD_{\text{Target}} = 1.04$ vs. $M_{\text{Observer}} = 3.86$, $SD_{\text{Observer}} = .80$, $p < .05$ and $M_{\text{Target}} = 3.34$, $SD_{\text{Target}} = 1.04$ vs. $M_{\text{Third-person}} = 3.94$, $SD_{\text{Third-person}} = .72$, $p < .05$) as well as in the Boss condition ($M_{\text{Target}} = 4.75$, $SD_{\text{Target}} = .93$ vs. $M_{\text{Observer}} = 4.08$, $SD_{\text{Observer}} = 1.11$, $p < .01$ and $M_{\text{Target}} = 4.75$, $SD_{\text{Target}} =$

.93 vs. $M_{\text{Third-person}} = 3.97$, $SD_{\text{Third-person}} = .90$, $p < .01$). Again targets were more negative in the Zeeman condition and more positive in the Boss condition compared to observers and third-persons. No other significant differences were found, meaning that targets were not subject to a judgmental spotlight effect when being confronted with acquaintances. This was in contrast to our expectations – based on the results of Savitsky et al (2001) – that a small judgmental spotlight effect would be present with acquaintances.

In short, the study showed a spotlight effect on social judgment for high status as well as for low status brands, but only when targets were confronted with strangers. Additional t-tests to examine observers' and third-persons' ratings in the case of the target being a stranger, showed no significant difference between their ratings and a neutral rating (i.e. on a 7-point Likert scale the test value was 4) in the Zeeman conditions (for observers: $t(31) = -1.00$, $p = .33$ and for third-persons: $t(32) = -.49$, $p = .63$) as well as in the Boss conditions (for observers: $t(30) = .40$, $p = .69$ and for third-persons: $t(29) = -.20$, $p = .84$). This suggests that the observers' and third-persons' ratings of strangers were neutral regardless of the brand. The same t-tests for targets showed that targets thought they were judged negatively in the Zeeman condition ($M = 3.34$, $SD = 1.04$, $t(30) = -3.53$, $p < .01$) and positively in the Boss condition ($M = 4.75$, $SD = .93$, $t(29) = 4.44$, $p < .01$).

Likelihood of talking. An analysis of variance on the likelihood that observers were discussing the target and his shopping bag as they walked away, showed a marginal significance for the type of person ($F(2, 360) = 2.65$, $p < .10$). A LSD post hoc test showed that targets thought it was more likely that persons were talking about them than really was the case ($M_{\text{Target}} = 3.00$, $SD_{\text{Target}} = 1.64$ vs. $M_{\text{Observer}} = 2.72$, $SD_{\text{Observer}} = 1.87$ vs. $M_{\text{Third-person}} = 2.50$, $SD_{\text{Third-person}} = 1.64$). This difference was significant between targets and third persons ($p < .05$). Furthermore, there was a significant interaction between relationship and type of person ($F(2, 360) = 4.11$, $p < .05$). Further analyses showed that targets thought it was more

likely that strangers would discuss them ($M = 3.33$, $SD = 1.72$) than acquaintances did ($M = 2.68$, $SD = 1.50$), $F(1, 360) = 4.37$, $p < .05$. A simple effect analysis of type of person within each relationship condition showed that these thoughts were subject to a spotlight effect, because only in the strangers condition the target's estimates ($M = 3.33$, $SD = 1.72$) were significantly higher than the likelihood observers and third persons stated ($M = 2.48$, $SD = 1.62$, $p < .01$ and $M = 2.32$, $SD = 1.52$, $p < .01$, respectively).

In sum, we can state that, regardless of the brand, targets thought that strangers were discussing them, while this was not actually the case. In other words, targets were subject to this type of judgmental spotlight effect. In the case of Zeeman, the talking can be seen as a negative thing; in the case of Boss the talking is positive.

Discussion

This study showed that a spotlight effect was also present when being judged by others. This judgmental spotlight effect was present when being confronted with strangers, but not when spotted by acquaintances. When carrying a Zeeman bag, targets thought they were judged more harshly than actually was the case. When carrying a Boss bag, targets thought they were judged more positively than actually was the case. Contrary to the results of Savitsky et al (2001), no differences were found between observers and third persons. Both, observers and third persons, were rather neutral in their judgments in the case of Zeeman and Boss, i.e. for them it did not matter whether a person carried a Zeeman or Boss bag.

The study also showed a spotlight effect on likelihood of talking about the target. Targets – wearing either an unfashionable or fashionable brand – thought that strangers would talk about them more often than actually was the case. A result confirming the spotlight effect in social judgment.

General discussion

The present research was designed to replicate the spotlight effect in a marketing context, to find mediating and / or moderating factors evoking the spotlight effect, and to look for consuming related consequences of the spotlight effect. The existence of the spotlight effect has already been proved in earlier research and is ascribed to an anchoring-and-adjustment process (Gilovich et al, 2000). Three types of spotlight effect have been identified: a spotlight effect on being noticed, on judgment, and on variability (Gilovich et al, 2002). Furthermore, stimuli evoking the effect have differed from embarrassing to non-embarrassing ones. In our studies the spotlight effect was placed in a marketing context. This raises important questions for the field of consumer research. Can brands, for instance, cause a spotlight effect to occur? What are the consequences for the consumers' behavior? When a spotlight effect indeed exists in the case of brands and when it influences the consumers' behavior, then marketers have extra information which can be used to win the consumers for themselves. In the case of a low status brand, the marketer knows that consumers will exhibit avoidance behavior. It is important then, to neutralize the spotlight effect by letting the consumer think that no one will notice him being associated with the low status brand. A low status brand product should, for instance, be presented as one to consume in private places. Low status brand stores should make the shopping experience rather anonymous (e.g. by having a less showy entrance) and should try to keep consumers in the store (e.g. by planning certain campaigns) in order to prevent avoidance behavior. When dealing with popular brands, the spotlight effect should be maintained: others will be watching and judging you! In the case of popular brand products, the products should be placed within sight and should be presented as a public consumption (e.g. for parties). Popular stores should be placed at busy areas and should have many windows, so that everyone will see that you are there.

It is clear that understanding the marketing-related questions and its answers can not only make us determine consumer behavior in a better way, but also to influence it more precisely. In the present research, embarrassing and flattering stimuli were used as a starting point (Gilovich et al, 2000). In this case the stimulus was a certain brand (either with a low status or a high status), which the subjects had to wear. In studies 1 and 2 the attentional spotlight effect was the subject of research. Do we overestimate the number of persons noticing the brand we are wearing? And do we behave in a certain manner because of this overestimation? Personality and audience characteristics were varied, because we assumed them to play an important moderating role in the existence of the spotlight effect. In the second and third study the judgmental spotlight effect was examined. Do others judge us as harshly as we think (Savitsky et al, 2001) when wearing an embarrassing brand? And do others also judge us as positively as we think when wearing a flattering brand? Again, audience characteristics were varied.

Most importantly, the studies confirmed a spotlight effect using brands as (marketing) stimuli. However, studies 1 and 2 showed a less profound (or even absent) effect in the case of the fashionable brand. Also, effects of personality characteristics (study 1) and behavioral outcomes (studies 1 and 2) were found. The idea of being evaluated by the audience did not have significant effects on overestimating the number of persons noticing their brand (study 2). Evaluation did have an effect on the judgmental spotlight effect. The estimated audience's motivation and judgments on peripheral cues probably played a role in this process. Furthermore, affect played an important role in determining the judgmental spotlight effect. However, the affective state was not caused by the type of brand or the evaluative condition. Study 3 showed a spotlight effect on judgment with both fashionable and unfashionable brands. This study also showed the importance of the relationship with the audience, e.g. being strangers vs. being acquaintances.

As Fiske (1980) mentioned, a greater salience exists of negative information than of positive information. This might be an explanation for the attentional spotlight effect being less profound (or absent) in the case of the fashionable brand (studies 1 and 2): it is more difficult to stand out positively. However, we think the particular product category is also responsible for the phenomenon found. In both studies a keycord was used as the stimulus, because the subject had to put the stimulus on making it harder for the subject to psychologically distance himself from it, i.e. it became more difficult to attribute it to a situation instead of to yourself. A keycord could be considered as a part of the outfit you are wearing. However, when it comes to clothing, many fashionable brands are accessible to many people and even normal to wear. Furthermore, it is more abnormal to wear unfashionable brand clothing. Therefore, it is plausible to state that especially in this product category, persons will stand out to a greater extent wearing unfashionable brands compared to fashionable ones. Perhaps an attentional spotlight effect can be found to a greater extent for fashionable brands in product categories which are less attainable to the public (e.g. cars), so that there is a salient discrepancy between you and the general standard: you are indeed standing out in a positive manner.

Another reason for the attentional spotlight effect being less profound (or absent) in the fashionable situation, is that a keycord might not be that popular these days and perhaps introduces embarrassing feelings on its own. In the case of the unfashionable brand, these embarrassing feelings intensified the brand's effect on the person. However, when wearing the fashionable brand, the negative feelings might have reduced the brand's effect resulting in a more neutral overall effect.

In studies 1 and 2, affect – like embarrassment or pride – was hypothesized to be different in the existing conditions, because of a difference in the amount and valence of the discrepancy (and therefore different attentional and judgmental spotlight effects). Brands

were chosen on the results of a pilot test, which showed which brands were embarrassing and proud. Despite the fact that an attentional spotlight effect was found for the unfashionable brand (i.e. an amount of discrepancy was present), there were no differences in affect between the conditions (i.e. the valence of the discrepancy was not present or did not have an effect on the affective state). Several reasons can account for this result. In study 1 subjects had to fill in the PANAS scale, which measured subjects' positive and negative affect. The moment of filling in this scale, was right after being confronted with the audience. Although the subject was still in the neighborhood of the audience, the fact that the audience was busy working on the news quiz and not looking at the subject anymore, might have caused the subject to feel kind of relieved in the negative situation: (s)he was clearly not the centre of attention. In study 2 this problem was solved, because subjects still thought that they would confront an audience when they filled in the PANAS scale. The results showed that type of brand and the evaluative condition did not have an effect on the affective state. However, subjects who were less positive, thought that they would be evaluated less positively by the audience: there was a relation between the own affective state and the judgmental spotlight effect. In conclusion, affect plays an important role in the judgmental spotlight effect. However, because the type of brand and the evaluative condition were not responsible for the affective state, no mediating role was found.

In the second study, an interesting thing happened with the persons who were not explicitly evaluated: they thought that they would be evaluated less positively by the audience (even the persons with a Zeeman keycord). A possible reason for this outcome, is that people thought they were evaluated more extensively when being evaluated explicitly. In this situation, the audience would not only judge them by the keycord, but also on other factors like clothes, attractiveness, and overall behavior. For this reason, when being

evaluated explicitly, persons did not have to be worried and there was no reason to think that others would judge them less positively (for instance, because of the keycord).

Our research has several limitations which are outlined below. Study 1 was conducted using a field study: groups of persons were approached in a real-life setting to act as an audience. However, real-life settings might cause noise to have an effect. Because of the fact that it was an experiment, this did not affect the overall results in case the experiment had enough power. In the second study an experimental setting was used to control the circumstances in a better way.

A limitation of the third study is the fact that we are dealing with an imaginary situation: subjects were confronted with a scenario instead of a real-life setting. This makes the experiment less powerful. However, Savitsky et al (2001) found that actors' exaggerated fears of harsh recriminations are not an artifact of "as-if" judgments. Furthermore, the results showed that the imaginary scenarios were already sufficient to evoke a judgmental spotlight effect. Study 2, however, did not show a judgmental spotlight effect in a real-life setting as a result of the type of brand and the evaluation criterion. We think that in the second study certain variables (like the attentional spotlight effect and the affective state) created noise, with the result of not finding this relationship. We still believe that a replication of study 3 in a real-life setting would result in even better results than in the imaginary situation.

Besides the replication of the spotlight effect in a marketing context, several moderating factors were found. Study 1 suggested the role of personality characteristics, in this case self-consciousness. Persons who were low in (private) self-consciousness were more subject to an attentional spotlight effect when wearing an unfashionable keycord than when wearing the fashionable keycord. For subjects high in self-consciousness no difference was found between the brands. It seems that persons high in self-consciousness indeed have a more realistic view of themselves (i.e. their self-concept is less discrepant with what others think of

them) and are, therefore, more able to make more realistic judgments about the actual attention the brand gets (the keycord and its brand became a part of the self-concept), resulting in no difference in attentional spotlight effect between the brands. Furthermore, study 1 showed a behavioral outcome of the spotlight effect: in the negative situation persons were faster with filling in the PANAS scale than persons in the positive case.

In the second study persons wearing an unfashionable brand and not being evaluated explicitly, underestimated the actual time of being in the experiment compared to persons wearing the fashionable brand. This behavioral outcome might be a result of not being able to think clearly when being subject to a spotlight effect. Furthermore, a marginal significant effect was found for the gift voucher that was chosen: persons wearing a Boss keycord chose the gift voucher for the Boss shop more often than persons wearing a Zeeman keycord did. This result was in contrast to our expectations, because avoidance behavior was expected from persons wearing a Zeeman keycord. Perhaps priming with the brand on the keycord, played a role in this process. In the future more extensive research is necessary on behavioral outcomes of the spotlight effect.

Finally, study 3 showed the existence of the judgmental spotlight effect, even in a situation with a stimulus which might be attributed to the situation instead of to the person (a shopping bag was used). Furthermore, it showed the importance of the audience we have in front of us: do we know them or are they complete strangers of us? A judgmental spotlight effect will only occur in the case of strangers, probably because we understand that strangers do not have a standard to compare us to and will probably judge us using peripheral cues.

Directions for future research

First of all, it is important to replicate the spotlight effects for potentially embarrassing stimuli in a marketing context. Besides this, other stimuli should be considered which will possibly lead to a spotlight effect in a proud marketing situation. Instead of using an outfit

related stimulus, other product categories should be considered, e.g. cars. Another way to vary the stimulus is to think of other stimuli than brands. For instance, the product itself can be embarrassing (condoms) or proud making (e.g. a new 'just on the market' product). Does an attentional spotlight effect occur in 'new' situations, even when a rather neutral stimulus is used? In the future a neutral product should be considered, to find out whether the novelty of the stimulus is enough to evoke an attentional spotlight effect or whether this stimulus should be embarrassing or proud making.

In the present research it became clear that our idea of the audience and our relationship to them are important moderating factors in resulting in a certain spotlight effect. Do we think others are motivated to evaluate us? Do we think they use peripheral cues in this process? In what way do we think these aspects have effect on noticing a brand or judging us? Future research should examine these aspects intensively, in order to understand the exact process resulting in a spotlight effect. Also, the familiarity with the audience plays an important role in this consideration.

Several additional analyses on the data of studies 2 and 3, showed some differences between males and females when rating brand status or when estimating the number of persons noticing the brand. These findings are important to consider in future research. Not only gender of the actor, but also gender of the audience should be considered. Another interesting factor could be age. Belk (1988) stated that the emphasis on material possessions decreases with age (but remains high throughout life). Therefore, adolescents probably feel more judged by others because of the brands they wear than older persons do. That is why an attentional (but also a judgmental) spotlight effect using brand stimuli will probably occur to a greater extent in younger age groups.

Besides moderating factors, a mediating role was hypothesized for affect on the judgmental spotlight effect. The results showed that affect did have an influence on the

judgmental spotlight effect. However, type of brand and the evaluation criterion were not responsible for the affective state, so that no mediation could be established. The precise role of affect should be examined more extensively in the future. It is important then, to also use other methods to measure a person's emotional state. For instance, by looking at the changes in a person's nonverbal behavior (e.g. his posture), the more unconscious changes in his emotional state can be measured.

As a final suggestion, behavioral aspects should also be considered in the future. When a spotlight effect occurs, in what way do consumers behave? Can we determine their behavior? Can we influence their behavior? Ultimately, these are the goals of marketing...

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Appendix D

PANAS scale (in Dutch) used in studies 1 and 2 (Watson et al, 1988)

De volgende schaal bestaat uit een aantal woorden die verschillende gevoelens en emoties beschrijven. Bekijk ieder woord en schrijf het juiste getal op in de ruimte naast het woord. Geef aan in welke mate u zich op dit moment voelt.

1	2	3	4	5
Een klein beetje of helemaal niet	Een beetje	Gematigd	Behoorlijk	Heel erg
	_____ geïnteresseerd	_____ geïrriteerd		
	_____ ontdaan	_____ alert		
	_____ opgewonden	_____ beschaamd		
	_____ overstuur	_____ geïnspireerd		
	_____ sterk	_____ zenuwachtig		
	_____ schuldig	_____ vastbesloten		
	_____ angstig	_____ oplettend		
	_____ vijandig	_____ nerveus		
	_____ enthousiast	_____ actief		
	_____ trots	_____ bang		

Appendix E

News quiz used in study 1

1. Hoeveel maal won Lance Armstrong de Tour de France?
2. Wie is de nieuwe minister voor Bestuurlijke vernieuwing en Koninkrijksrelaties?
3. Wie bezocht namens het Nederlandse Koninklijke Huis de begrafenis van Prins Rainier?
4. Wat is de naam van de nieuwe televisiezender van John de Mol?
5. Wat is de (aangenomen) naam van de huidige paus en onder welke naam werd hij geboren?
6. Wat is de voornaam van de ex-man van Camilla Parker Bowles?
7. In welke Nederlandse plaats werd het eerste Nederlandse geval van Creutzfeld-Jakob geconstateerd?
8. Welk knooppunt kwam in 2005 op de eerste plaats in de file top-50?
9. In welke plaats sloeg Samir A een freelance fotograaf van de Telegraaf tegen de grond?
10. Waar gaat het referendum over dat op 1 juni 2005 zal plaatsvinden?

Appendix F

Scenarios used in study 2

Scenario 1: No explicit evaluation

Op dit moment zit een groep van 10 proefpersonen in een andere zaal te wachten. Deze 10 personen zitten allen op de voorste rij. Zij hebben meegedaan met een onderzoek naar hun intelligentie en zitten op de uitslag te wachten. U wordt straks door de proefleider verzocht naar deze zaal te gaan om een boek op te halen, dat op het bureau vóór in deze zaal ligt. Hoeveel van deze 10 personen denkt u dat mij (de proefleider) straks kan vertellen wat er op uw keycord staat?

Scenario 2: Explicit evaluation

Op dit moment zit een groep van 10 proefpersonen in een andere zaal te wachten. Deze 10 personen zitten allen op de voorste rij. Zij hebben de opdracht een oordeel te vellen over hoe sociaal en populair zij denken dat jij bent. U wordt straks door de proefleider verzocht naar deze zaal te gaan om een boek op te halen, dat op het bureau vóór in deze zaal ligt. Hoeveel van deze 10 personen denkt u dat mij (de proefleider) straks kan vertellen wat er op uw keycord staat?

Appendix H

Scenarios used in study 3

Scenario 1: Target, Zeeman, Acquaintance

Stel je jezelf voor dat je in het winkelcentrum bent. Je draagt een tas waar op de zijkant “Zeeman” staat afgedrukt. Je wordt gezien door een groep bekende studiegenoten/collega’s. Zij kijken naar jouw tas, knikken begroetend naar je, en vervolgen hun weg, pratend onder elkaar.

In welke mate zouden jouw studiegenoten/collega’s een positieve/negatieve indruk van jou vormen

Zeer negatief Zeer positief

In welke mate zorgt de tas ervoor dat jouw studiegenoten/collega’s zich met jou zouden willen associëren

Ze zouden zich zeker niet met mij willen associëren Ze zouden zich zeker wel met mij willen associëren

Wat is de waarschijnlijkheid dat jouw studiegenoten/collega’s het over jou en jouw winkeltas hadden toen zij wegliepen

Zeer onwaarschijnlijk Zeer waarschijnlijk

Scenario 2: Target, Boss, Acquaintance

This scenario was identical to scenario 1 with Zeeman replaced by Hugo Boss.

Scenario 3: Target, Zeeman, Stranger



Stel je jezelf voor dat je in het winkelcentrum bent. Je draagt een tas waar op de zijkant “Zeeman” staat afgedrukt. Je wordt gezien door een groep onbekende leeftijdsgenoten. Zij kijken naar jouw tas, knikken begroetend naar je, en vervolgen hun weg, pratend onder elkaar.

In welke mate zouden de leeftijdsgenoten een positieve/negatieve indruk van jou vormen

Zeer negatief Zeer positief

In welke mate zorgt de tas ervoor dat de leeftijdsgenoten zich met jou zouden willen associëren

Ze zouden zich zeker niet met mij willen associëren Ze zouden zich zeker wel met mij willen associëren

Wat is de waarschijnlijkheid dat de leeftijdsgenoten het over jou en jouw winkeltas hadden toen zij wegliepen

Zeer onwaarschijnlijk Zeer waarschijnlijk

Scenario 4: Target, Boss, Stranger

This scenario was identical to scenario 3 with Zeeman replaced by Hugo Boss.

Scenario 5: Observer, Zeeman, Acquaintance

Stel je jezelf voor dat je in het winkelcentrum bent met een groep vrienden. Jullie zien een bekende studiegenoot/collega. Deze draagt een tas waar op de zijkant “Zeeman” staat afgedrukt. Jij en jouw vrienden kijken naar de tas, knikken begroetend naar jullie studiegenoot/collega, en vervolgen jullie weg, pratend onder elkaar.

In welke mate zou jij een positieve/negatieve indruk van jullie studiegenoot/collega vormen

Zeer negatief Zeer positief

In welke mate zorgt de tas ervoor dat jij jezelf zou willen associëren met jullie studiegenoot/collega

Ik zou mezelf zeker niet met onze studiegenoot/collega willen associëren Ik zou mezelf zeker wel met onze studiegenoot/collega willen associëren

Wat is de waarschijnlijkheid dat jij het met jouw vrienden over jullie studiegenoot/collega en zijn/haar winkeltas had toen jullie wegliepen

Zeer onwaarschijnlijk Zeer waarschijnlijk

Scenario 6: Observer, Boss, Acquaintance

This scenario was identical to scenario 5 with Zeeman replaced by Hugo Boss.

Scenario 7: Observer, Zeeman, Stranger

Stel je jezelf voor dat je in het winkelcentrum bent met een groep vrienden. Jullie zien een onbekende leeftijdsgenoot. Deze draagt een tas waar op de zijkant “Zeeman” staat afgedrukt. Jij en jouw vrienden kijken naar de tas, knikken begroetend naar jullie leeftijdsgenoot, en vervolgen jullie weg, pratend onder elkaar.

In welke mate zou jij een positieve/negatieve indruk van de leeftijdsgenoot vormen

Zeer negatief Zeer positief

In welke mate zorgt de tas ervoor dat jij jezelf zou willen associëren met de leeftijdsgenoot

Ik zou mezelf zeker niet met de leeftijdsgenoot willen associëren Ik zou mezelf zeker wel met de leeftijdsgenoot willen associëren

Wat is de waarschijnlijkheid dat jij het met jouw vrienden over de leeftijdsgenoot en zijn/haar winkeltas had toen jullie weglieden

Zeer onwaarschijnlijk Zeer waarschijnlijk

Scenario 8: Observer, Boss, Stranger

This scenario was identical to scenario 7 with Zeeman replaced by Hugo Boss.

Scenario 9: Third-person, Zeeman, Acquaintance

Stel je jezelf voor dat je in het winkelcentrum bent met een groep vrienden. Jullie zien een bekende studiegenoot/collega. Deze draagt een tas waar op de zijkant “Zeeman” staat afgedrukt. Jij en jouw vrienden kijken naar de tas, knikken begroetend naar jullie studiegenoot/collega, en vervolgen jullie weg, pratend onder elkaar.

In welke mate zouden jouw vrienden een positieve/negatieve indruk van jullie studiegenoot/collega vormen

Zeer negatief Zeer positief

In welke mate zorgt de tas ervoor dat jouw vrienden zichzelf zouden willen associëren met jullie studiegenoot/collega

Ze zouden zichzelf zeker niet met onze studiegenoot/collega willen associëren Ze zouden zichzelf zeker wel met onze studiegenoot/collega willen associëren

Wat is de waarschijnlijkheid dat jouw vrienden het over jullie studiegenoot/collega en zijn/haar winkeltas hadden toen jullie wegliepen

Zeer onwaarschijnlijk Zeer waarschijnlijk

Scenario 10: Third-person, Boss, Acquaintance

This scenario was identical to scenario 9 with Zeeman replaced by Hugo Boss.

Scenario 11: Third-person, Zeeman, Stranger

Stel je jezelf voor dat je in het winkelcentrum bent met een groep vrienden. Jullie zien een onbekende leeftijdsgenoot. Deze draagt een tas waar op de zijkant “Zeeman” staat afgedrukt. Jij en jouw vrienden kijken naar de tas, knikken begroetend naar jullie leeftijdsgenoot, en vervolgen jullie weg, pratend onder elkaar.

In welke mate zouden jouw vrienden een positieve/negatieve indruk van de leeftijdsgenoot vormen

Zeer negatief Zeer positief

In welke mate zorgt de tas ervoor dat jouw vrienden zichzelf zouden willen associëren met de leeftijdsgenoot

Ze zouden zichzelf zeker niet met de leeftijdsgenoot willen associëren Ze zouden zichzelf zeker wel met de leeftijdsgenoot willen associëren

Wat is de waarschijnlijkheid dat jouw vrienden het over de leeftijdsgenoot en zijn/haar winkeltas hadden toen jullie weglieden

Zeer onwaarschijnlijk Zeer waarschijnlijk

Scenario 12: Third-person, Boss, Stranger

This scenario was identical to scenario 11 with Zeeman replaced by Hugo Boss.