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On Being Exposed to Superior Others: Consequences of Self-Threatening Upward Social Comparisons

Dominique Muller[1]* and Marie-Pierre Fayant[2]
[1] *University of Grenoble and University Institute of France*
[2] *University of Grenoble*

Abstract

Being inferior to someone else can be hurtful. But what exactly happens when we found ourselves in such situations? We first address why and when upward comparison can be self-threatening and later review the effects of such threatening social comparison. We argue that two main kinds of disturbances can ensue: affective disturbances and attentional disturbances. Second, three ways to deal with self-threatening social comparison are reviewed: proactive regulation, defensive regulation, and regulation by avoidance. For each of these disturbances and regulation modes, we review empirical findings and later discuss the impact of upward comparison on performance. We conclude by going back to the very need behind the need for a positive evaluation.

Standards are all around us. It is difficult, if not impossible, to spend a day without running into standards of all sorts. Often these standards are other people's achievements and we hear about them from our friends, at work, on TV, and so on. All these standards suggest what we should be and often make us feel bad about ourselves.

Here, we deal with what happens when the person with whom we compare is better than we are. Frequently, this comparison other is used as a standard and the question becomes what happens when we fall short at reaching our standards? In other words, what happens when we compare upward, that is, with someone who is better than we are? First, we will see when and why such upward (social) comparison represents a threat to self-integrity. Second, and focusing on situations representing a self-threat, we present a distinction between the disturbances created by this self-threat and the regulation that takes place to cope with it.

When Upward Comparison is Threatening… and When It Isn't So

A seminal study showed that being exposed to an upward comparison target – Mister Clean, apparently the prototypical winner – threatened participants' self-esteem, when compared with participants exposed to a downward comparison target – Mister Dirty, the opposite of Mister Clean (Morse & Gergen, 1970). Presumably, this effect was because of the participants comparing their self-value (i.e., the value that defines the self on the dimension of interest) with that of the other person and illustrates that, sometimes, not reaching others' performance makes us feel bad about ourselves.

Being inferior to comparison targets makes us feel bad, because it contradicts what Festinger (1954) refers to as the drive upward, that is, a tendency to seek for the best possible performance (see also Bandura, 1986). More generally, being inferior to someone

else threatens our general need for self-integrity. Indeed, social psychology conveys the idea that individuals strive to maintain a positive self-image by trying to comply with society expectations (Steele, 1988; Tesser, 1988).

Hence, being outperformed by someone else is often interpreted as a failure to achieve what should be achieved in a given situation. The focus of the current piece is precisely what is known about our psychological reactions in these situations and how we try to cope with them. We first want to mention, however, that upward comparison is not always perceived as a self-threat. In fact, the literature has uncovered at least two factors that help experiencing upward comparison not as a self-threat, but as a self-enhancing experience: the processing mindset and the way the comparative information is used (i.e., is it used as a standard or assimilated to the self).

To understand the first factor, the importance of the processing mindset, one has to acknowledge that a comparative judgment can be conceptualized as similar to hypothesis testing (Collins, 1996; Mussweiler, 2003). Hence, when comparing the self with a standard, one can start with either a dissimilarity or a similarity hypothesis. The former hypothesis testing leads to contrast effects (i.e., self-evaluation moves away form the reference value) while the latter leads to assimilation ones (i.e., self-evaluation moves toward the reference value; Collins, 1996; Mussweiler, 2003). The importance of processing mindset is well illustrated in a study where participants have to search for similarities or dissimilarities in a supposedly first unrelated task (i.e., comparing two drawings). This procedural priming led respectively to an assimilation and a contrast effect on self-evaluation (Mussweiler, 2001). Among the factors known to influence the processing mindset, research shows that extreme standards lead to contrast effects (e.g., Morse & Gergen, 1970) while less extreme ones lead to assimilation effects (e.g., comparison with Nicky Lauda instead of Michael Jordan in the athletic domain; see Mussweiler, Rüter, & Epstude, 2004a,b). Along the same line, being similar on unrelated attributes (e.g., attitudes, birthday date…) also leads to assimilative effects (Brown, Novick, Lord, & Richards, 1992).

The second factor has to do with the very fact of using comparative information as a standard. For instance, individuals highly preoccupied with mastering the task (Harackiewicz, Barron, & Elliot, 1998) do not see co-workers as comparison others (i.e., standards), but as a source of information that could be used to improve in the task (Butler, 1992; Darnon, Muller, Schrager, Pannuzzo, & Butera, 2006). More directly relevant to our concerns, as it is true in the judgment literature (Schwarz & Bless, 1992, 2007), comparison target information can either be used as a standard against which the self is evaluated or he/she can be included in the representation of the self (Stapel, 2007; Stapel & Koomen, 2000, 2001). For instance, comparison targets are integrated to the self when a social self-construal (''we'') is activated as compared with an individual self-construal (''I''; Marx, Stapel, & Muller, 2005; Stapel & Koomen, 2001). Doing so, leads participants to assimilate comparison other's features, which results in a boosted self-evaluation when confronted with an upward comparison (see also Brewer & Weber, 1994; Martinot, Redersdorff, Guimond, & Dif, 2002).

In this section, we saw that upward comparison can be threatening by running against the drive upward (Festinger, 1954) and a general need for self-integrity (Steele, 1988). Although we just saw that these upward comparisons are not always threatening, contrast in social comparison is still a strong automatic tendency (Gilbert, Giesler, & Morris, 1995). Therefore, we now turn to the consequences of these threatening upward comparisons.

Effects of Self-Threatening Social Comparisons

As it must be clear by now, comparison targets are often used as standards setting what should be achieved in a given situation. In what follows, we argue, in line with the self-regulation theory (Carver, 2004; Carver & Scheier, 1990), that the effect of activated standards (here the performance of comparison others) is a function of the discrepancy between self-values and those standards (see also Martin & Tesser, 1996). Hence, in the presence of an upward comparison target the discrepancy between the self-value and the comparison other would induce, on the one hand, system disturbances in the form of negative affects and ruminative thoughts (Higgins, 1987; Martin & Tesser, 1996) and, on the other hand, self-regulation processes aimed at reducing the discrepancy between self-values and standards, as well as the negative affects and ruminative thoughts that comes with this discrepancy (e.g., Carver, 2004; Martin & Tesser, 1996). As we shall see, there are three main regulation strategies: proactive regulation, defensive regulation, and regulation by avoidance.

Social comparison and disturbances

In this section, we deal with affective and attentional disturbances. Affective disturbances signal that regulations strategies are necessary (Carver, 2004). Attentional disturbances do the same job, but in the mean time induce a redeployment of attentional resources (Muller & Butera, 2007).

Affective disturbances. As we just said, theorists in the field of self-regulation argued that not reaching relevant standards leads to negative affects (Carver, 2004; Higgins, 1987)[†]. The same is true in the social comparison literature where, again, others play the role of standards. Hence, social comparison theorists suggest that being inferior to the comparison other would be painful and induces negative affects (Brickman & Bulman, 1977; Tesser, 1991). Support for this contention has been found by relying on a large variety of affect measures going from self-report to physiological measures, through facial expressions.

First, studies relying on self-report showed that upward comparison leads to less pleasure and more dissatisfaction than downward comparison (Gastorf & Suls, 1978; Pleban & Tesser, 1981; Pyszczynski, Greenberg, & LaPrelle, 1985). More generally, studies relying on self-report found that upward comparison induces more negative affects than downward comparison (e.g., Kulik & Gump, 1997; Major, Sciacchitano, & Crocker, 1993; Testa & Major, 1990; Tyler & Feldman, 2005) as well as more negative affects than lateral comparison (i.e., the target has the same performance; Kulik & Gump, 1997). It is also noteworthy that, although most of these studies only reported valence, some of them measured specific emotions. For instance, Tesser and Collins (1988) found that upward comparison leads to more frustration, contempt, anger, fear, envy and jealousy, and less pride and happiness than downward comparison (see also Salovey & Rodin, 1984). Taken as a whole, these studies suggest that upward comparison does induce negative affects when relying on self-report measures. Of course, one could wonder whether these self-report measures reflect what participants really felt (e.g., Schwarz, 1999). For instance, individuals have difficulty to claim their superiority over others (Muller & Butera, 2004), and this could lead to inconsistent results. Although more negative affects can be found in upward comparison (when compared with downward comparison) even when relying on a bogus pipeline procedure (i.e., a procedure used to ensure participants provide honest answers; Gilbert et al., 1995), it is still critical to study this hypothesis with less obtrusive measures.

To use less obtrusive measures, researchers have relied on several measurement strategies like analyzing videotaped facial expressions. In several studies, participant's facial expressions in upward comparison were judged sadder and less happy when compared with downward comparison (Carlson & Masters, 1986; Masters, Carlson, & Rahe, 1985). These findings were confirmed by studies using physiological measures that are assumed to be even less controllable. For instance, cardiovascular measures allow differentiating between physiological patterns reflecting aversive states, often associated with feeling of threat, and appetitive states, often associated with feeling of challenge (Dienstbier, 1989; Mendes, Blascovich, Major, & Seery, 2001). As we could expect, upward comparison induces cardiovascular reactivity consistent with threat, while downward comparison induces cardiovascular reactivity consistent with challenge (Mendes et al., 2001). Finally, fMRI studies found that upward comparison causes an anterior insula activity while downward comparison does not (Zink et al., 2008). This is of particular interest because other studies have shown that this area is activated under affective distress – the same affective state observed under social isolation – and acts as an alarm system (Eisenberger, Lieberman, & Williams, 2003).

This literature review supports the idea that upward comparison often induces negative affects. This is true from studies relying on self-report, as well as more indirect physiological measures. We also suggested that upward comparison induces cognitive disturbances, in the form of attentional disturbances associated with ruminative thoughts.

Attentional disturbances. Relying on Martin and Tesser's model (1996), the self-evaluation threat hypothesis suggests that not reaching standards induces ruminative thoughts (Muller & Butera, 2007): recurring thoughts that intrude conscious thinking without immediate environmental cuing (Koole, Smeets, van Knippenberg, & Dijksterhuis, 1999). As comparison others are often used as standards, upward comparison – and the self-threat it represents – should also induce ruminative thoughts. Muller and Butera (2007) suggested further that occurring during the task at hand, these ruminative thoughts would consume attentional resources and could be equated with a distraction (see also Muller, Atzeni, & Butera, 2004).

As for the consequences of such distraction, Muller and Butera (2007) relied on the distraction-conflict theory (Baron, 1986) to make the counterintuitive claim that depending on task's characteristics this distraction could either help or hurt performance. Hence, to deal with both the task and the thoughts related with self-threat, an attentional focusing phenomenon would take place: cues that are only peripheral to deal with the task would be neglected (Chajut & Algom, 2003; Cohen, 1978; Geen, 1976). It follows that this attentional focusing should benefit performance when these peripheral cues disturb information processing. On the contrary, when peripheral cues happen to be useful, in addition to cues that are absolutely necessary to deal with the task (i.e., central ones), attentional focusing should impair performance.

To test this attentional hypothesis, one needs to rely on attentional tasks that enable to measure attentional focusing. Two such tasks are the Stroop (1935) task and the illusory conjunction paradigm (Treisman & Paterson, 1984). In the Stroop task, participants must name the ink color of color words and, typically, answers are slower when the meaning of the word does not match with ink color. Here, attentional focusing should decrease the Stroop interference because it should inhibit peripheral cues processing, namely the (hurtful) meaning of the word. In the second task, the illusory conjunction paradigm, participants search for the presence of a target (a leaning ''$'') displayed among distractors. Interestingly, when participants do not have the time to process all these elements, they have the illusion of perceiving the target when, in fact, only its features are present (i.e.,

leaning bars and leaning Ss). Here, attentional focusing should, therefore, reduce illusory conjunction because not processing peripheral cues (i.e., the distractors) should give more time to process central cues (i.e., target's features).

Studies relying on these two tasks confirmed that participants in the physical presence of a better off coactor (i.e., someone doing the same task at the same time) were less prone to the Stroop interference (Huguet, Galvaing, Monteil, & Dumas, 1999) and to the illusory conjunction effect (Muller et al., 2004), when compared with participants either in downward comparison or alone all along. Moreover, the same attentional focusing effect was found when participants were not explicitly inferior to the coactor, but could fear to be so, and when a coactor was physically present but no feedback was provided (i.e., what has been referred to as mere coaction, Muller et al., 2004; Muller & Butera, 2007). Muller and Butera (2007) later demonstrated that this mere coaction effect can be explained by self-evaluation concerns: participants in coaction were concerned with not being good enough in the task. Importantly, the self-evaluation threat hypothesis also implies that once participants find out they are inferior to the activated standard (i.e., the coactor), the physical presence of this comparison other is unnecessary. This is precisely what Muller and Butera (2007, Study 1) found, relying, again, on the illusory conjunction task (see also Dumas, Huguet, & Ayme, 2005; for a similar effect with the Stroop task). Finally, if these attentional focusing effects were to be attributed to self-evaluation threat, one could expect that being inferior to a single target of comparison would not be as threatening whenever participants find out they are still better than most. This is also what was found in Muller and Butera (2007, Study 4).

It is important to note that the attentional focusing effect found with the two previous tasks should not be seen as a mere increase in performance. Indeed, with these two tasks a general increase in performance was not found: information processing was facilitated only when peripheral cues proved to be detrimental. An even better strategy, however, was to rely on a task – the cuing task (Muller & Butera, 2007; Study 5) – which contains both hurtful and helpful peripheral cues. With such a task, attentional focusing could translate both into facilitation and inhibition in performance. Here, one has to locate a target and an orienting cue – a simple black dot in an otherwise blank screen – is provided in the preceding screen. For some trials (50%), this orienting cue is said to be valid, as it is displayed where the target will appear; for some trials (50%), the cue is said to be invalid, as it is not displayed where the target will appear. A cuing effect is found when reaction times are faster for valid cues when compared with invalid ones (Briand, 1998; Posner, Snyder, & Davidson, 1980). In this task, targets are clearly central to perform the task, while orienting cues are only peripheral because they could be ignored without (on the whole) harming performance. Consequently, attentional focusing, by reducing these orienting cues processing, should reduce the cuing effect. In line with this attentional focusing hypothesis, participants in upward comparison showed less of a cuing effect than participants in downward comparison (Muller & Butera, 2007). Interestingly, participants under threat (i.e., upward comparison participants) were significantly slower, when compared with downward comparison participants, at detecting the target when the visual cue was valid. In other words, they did not processed peripheral cues that, for once, could have been helpful.

Relationships between affective and attentional disturbances. So far, we presented the two kinds of disturbances independently. One may wonder, however, what are the relationships between these disturbances. There are few reasons to argue that they are independent, notably because affects induce thoughts that are often irrelevant for the task at hand (Gunther, Ferraro, & Kirchner, 1996; Mackie & Worth, 1989; Seibert & Ellis, 1991). In

others words, affects could distract attention from the task and therefore contribute to attentional disturbances. Moreover, it could be that affective disturbances not only contribute to attentional disturbances, but also that it is nothing less than the mediator of the discrepancy-attentional disturbances relationship. We know of no work that directly tests this mediation, but this is a promising direction.

All along this section, we saw that being inferior to a comparison target induces affective and attentional disturbances. Although these disturbances can disrupt the completion of our activities, it can be argued that *in fine* these disturbances are aimed at enabling the achievement of the goal instantiated by the activated standards (Carver, 1996). More specifically, one consequence of these system disturbances could be to set in motion self-regulative strategies.

Regulation strategies

As we just saw, a discrepancy between self-values and standards is an aversive state we are motivated to avoid (e.g., Greenwald, 1980; Steele, 1988; Tesser, 1988). To do so, the self initiates a regulation consciously or unconsciously: a phenomenon known as self-regulation (Vohs & Baumeister, 2004). We distinguish three kinds of regulation: proactive regulation, defensive regulation, and regulation by avoidance. As will be made clearer, these three kinds of self-regulation are ordered from an actual reduction of the discrepancy to an absence of reduction.

Proactive regulation. Proactive regulation consists in implementing strategies with the aim of elevating self-values toward the level of activated standards. The term ''proactive'' underlines that self-values are *actively* and *positively* elevated toward the standards (Bateman & Crant, 1993). ''Actively'' implies that, here, one voluntarily decides to reduce the discrepancy. Note that such a definition makes clear that attentional focusing should not be seen as one sort of proactive regulation, as attentional focusing must be seen as a by-product of ruminative thoughts, which is not set in motion voluntarily (see Huguet, Dumas, & Monteil, 2004). ''Positively'' implies that, here, we exclude strategies that consist to lower the standards (e.g., Tesser & Smith, 1980). Most of the time, this implies putting more energy or spending more time in the task at hand, in other words, increasing efforts (e.g., Carver, 2004; Festinger, 1954; Harkins, 2006; Wicklund & Duval, 1971). More generally, with proactive regulation individuals set in motion strategies qualitatively (e.g., choice of an alternative way of working) or quantitatively (e.g., doing more effort) different from those used thus far.

Qualitative changes can take the form of using comparison with upward comparison target to find better ways to deal with the task (Bandura, 1986). Hence, it has been shown that upward comparison target can be used, for instance, to find better ways to deal with severe illness (Taylor & Lobel, 1989) or laboratory tasks (Ybema & Buunk, 1993). As for quantitative changes, as already suggested by Festinger (1954), comparison with better off others leads to increase in effort. For instance, Johnson and Stapel (2007) used a task known to measure effort (see Harkins, 2006) to demonstrate that self-threatening upward comparison leads to heightened performance through an increase in effort (see also, Rijsman, 1974; Seta, 1982; Seta, Seta, & Donaldson, 1991). These results are comforted by field studies showing that students comparing with better off others tend to have better grades (Blanton, Buunk, Gibbons, & Kuyper, 1999; Huguet, Dumas, Monteil, & Genestoux, 2001).

It is important, however, to notice that, although the aim of these proactive regulations is to reduce the discrepancy between self-values and standards, this goal is not always

met. Indeed, under certain conditions more effort can result in inhibited performance (Baumeister, 1984; Baumeister & Steinhilber, 1984; Harkins, 2006; Jamieson & Harkins, 2007). The same is true with self-threatening comparison. For instance, Marx et al. (2005, Study 3) found that comparison with a talented other can actually impair performance when the task to be performed is a complex math test. Here, it seems that, as often, the effect of increased level of effort on task performance depends on the nature of the task (Harkins, 2006; Zajonc, 1965).

Defensive regulation. Generally speaking, defensive regulation embraces all the strategies that lead to decrease the discrepancy between self-values and standards in an artificial manner. The goal is again to maintain a feeling of self-integrity, as it was the case with proactive regulation, but this time in a more defensive manner. Hence, it is indeed possible to literally lower the standard (Tesser & Smith, 1980), but it is also possible to change comparison standard (e.g., Hakmiller, 1966) or to heighten self-values artificially through positive illusions (Taylor & Brown, 1988). Finally, it is also possible to move from lower order goals to higher order ones (''Maybe I'm not good in Math, but I'm good in all the other subject matters''; Carver & Scheier, 1999; Vallacher & Wegner, 1987) or to value alternative domains (Steele, 1988; Tesser, 2000, 2001).

The first aforementioned defensive strategy is concerned with situations where the discrepancy is reduced by actively reducing the comparison target's performance (i.e., their activated standard). For instance, participants threatened in their self-values can go as far as impeding their comparison target's performance – a friend! – by providing him or her misleading cues (Tesser & Smith, 1980).

A more prototypic strategy consists in the change in comparison target. It has long been known that under self-threat people often turn to downward comparison target (e.g., Hakmiller, 1966; Pyszczynski et al., 1985; Wills, 1981; Wood & Taylor, 1991). These downward comparison targets are sometime purely imaginary targets; targets we only construct in our heads (Goethals, Messick, & Allison, 1991). In line with this idea, women threatened in the health domain (i.e., women facing cancer) often rely on imaginary downward comparison targets (Wood, Taylor, & Lichtman, 1985). Interestingly, those women are often, at the same time, in contact with better off others – presumably to keep searching for hope and alternative coping strategies (Taylor & Lobel, 1989).

A last way to reduce self-threatening comparisons consists in highlighting the importance of alternative domains (Steele, 1988; Tesser, 2000, 2001). This strategy can be seen as a change in the level of abstraction in the quest for self-integrity (Carver, 2004; Vallacher & Wegner, 1987). In line with this argument, upward comparison in a specific domain can lead people to value an alternative domain (e.g., Tesser & Paulhus, 1983) or to discredit the (upward) comparison target by judging him or her less likeable (''he may be good in this task, but he is not a good guy''; Salovey & Rodin, 1984) – which could be seen as a way to feel better about ourselves.

Regulation by avoidance. With the two previous regulation modes, the goal was to decrease the discrepancy between self-values and standards, be it in an illusory manner. The last regulation mode relates to situations where the discrepancy is merely avoided. This can be a short-term avoidance: we keep on doing the task, but we try to avoid thinking about our failure to reach the standards (Martin & Tesser, 1996). In some other circumstances, this can be a long-term avoidance: we totally withdraw from the task physically (i.e., we stop performing the task; Duval, Duval, & Mulilis, 1992) or mentally (i.e., we keep performing the task, but without devoting our full attention to it; Carver & Scheier, 1981, 1982). Self-regulation theories suggest that this last regulation mode takes place mostly when we are not optimistic on the likelihood to ever decrease the

discrepancy (Bandura, 1986; Carver, Blaney, & Scheier, 1979a,b; Kluger & DeNisi, 1996; Monteil, Brunot, & Huguet, 1996). In line with this interpretation, Bandura and Jourden (1991) showed, in a dynamic fashion, that as the discrepancy between self-values and a more talented other's performance increased, performance as well as self-efficacy (i.e., optimism concerning discrepancy reduction) declined. This suggests that those participants withdrew from the task at hand.

Regulation modes in intergroup contexts. If one can be inferior to someone else, it is also true, of course, that one's own group can be inferior to another group. Interestingly, much of what we addressed so far can be highly relevant to cases of intergroup comparisons. In fact, the need for a positive group identity and intergroup upward comparison are also key aspects in the social identity theory (Tajfel & Turner, 1979). Interestingly, this theory underlines three strategies to deal with intergroup upward comparison that are very similar to the three individual strategies discussed above. Hence, with social competition members of the threaten group strive to reach outgroup performance (e.g., James & Greenberg, 1989), with social creativity group members try to redefine the difference by changing the dimension under comparison (e.g., Lemaine, 1974), and finally, with individual mobility individuals give up on their group and try to escape the threatening comparison by moving to another group (Jackson, Sullivan, Harnish, & Hodge, 1996). Research is needed to understand the extent to which processes occurring at the level of intergroup comparisons are similar to those occurring at the level of interpersonal comparisons (see Guimond, 2006).

When to use a specific regulation strategy? It must be clear by now that the three strategies we distinguished vary in terms of the reduction in the discrepancy: it goes from a potentially true reduction to no reduction, through an imaginary (or artificial) one. What remains unclear are the factors that influence the use of a specific regulation mode.

A first factor that may orient toward a proactive regulation, instead of the other two modes, is the distance between self-values and the comparison other. In line with this idea, it has been shown that this kind of regulation is more likely to be used (when compared with the other two) when the discrepancy between the self and the standard is small or modest (Duval & Lalwani, 1999). Distance, however, might be a proxy for perceived control over the ability to actually reduce the discrepancy (Nurra, Oyserman, Pansu, & Dupond, 2009), although distance might still have a role when perceived control is held constant. Accordingly, the second factor is perceived control: under a high level of perceived control, proactive regulation should prevail (e.g., Testa & Major, 1990). Finally, when distance is high and/or perceived control is low, defensive regulation might be the regulation of choice, as long as the frequency and the clarity of the confrontation with reality are not too high. Indeed, the more often and the less ambiguously we are confronted with the discrepancy, the harder it would get to hide behind defensive regulations (e.g., Alicke, Klotz, Breitenbecher, Yurak, & Vredenburg, 1995; Muller & Butera, 2004). In such situations, regulation by avoidance may very well be the regulation of choice.

Effects of Self-Threatening Upward Comparison: the Performance Case

It is interesting to study more specifically the effects of self-threatening upward comparison on performance, because predicting these effects on performance requires taking into account two levels of the presented model: attentional disturbances and regulation. We explained earlier that attentional disturbances impact performance by inducing a nonvoluntary attentional focusing. This by-product explains why upward comparison helps

performance when peripheral cues are hurtful for performance, but also hurts performance when peripheral cues are helpful (e.g., Muller & Butera, 2007). In the meantime, we saw that proactive regulation also impacts performance by inducing change in strategy and increase in effort invested in the task (e.g., Harkins, 2006). Here, an hypothesis such as the mere effort hypothesis would predict that upward comparison helps performance whenever the dominant response is correct or individual have the time to correct this dominant response when it is wrong, but also hurts performance when the dominant response is wrong and individuals do not have the time to correct this dominant response (Harkins, 2006; see also Cottrell, 1972; Zajonc, 1965).

It follows that the impact on performance will be hard to predict when these two effects do not add up. This would be the case, for instance, when peripheral cues are hurtful – making attentional focusing beneficial – and the dominant response is wrong – making increase in effort hurtful. Although several research have shown that performance is favored in this particular case (Huguet et al., 1999; Muller et al., 2004), we would argue that the end result depends on the balance between attentional focusing and increase in effort and, more precisely, which one prevails in the task at hand. One tentative hypothesis could be that attentional focusing prevails when the level of performance is primarily influenced by *the information being processed* while increase in effort prevails when the level of performance is primarily influenced by the *response to this information*.

Conclusion

Days after days, we are exposed to other people doing better than we are in all kind of domains, and sometimes, it is experienced as a threat to the self. We saw that when it does, affective and attentional disturbances can ensue. Furthermore, we suggested that when facing discrepancies between comparison targets and self-values three regulation modes can be distinguished: proactive regulation, defensive regulation, and regulation by avoidance.

But in the end, why should we care about reaching activated standards? In line with Geen (1991), we believe that we do so because deep inside, we know that evaluation standards are symbols of social acceptance: one of our most fundamental needs, not to say a need from which depends our survival (Baumeister & Leary, 1995; MacDonald & Leary, 2005).

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Short Biographies

Dominique Muller is Assistant Professor in the Department of Psychology, Grenoble 2 University (Université Pierre Mendes France). He is also a member of the University Institute of France. He studied at Grenoble 2 University until 2002 and spent a year and a half at the University of Colorado for his post doc. He was then hired at Paris Descartes University as an Assistant Professor and moved back, 2 years later, to Grenoble 2 University. He recently spent a semester as a Visiting Professor at the University of Michigan. Dominique Muller's research is mainly located at the intersection of social and cognitive

psychology. He studies the impact of social context on cognitive processes. He also worked in the field of data analysis. He notably studied Mediated Moderation and Moderated Mediation (Muller, Judd, & Yzerbyt, 2005). His research has been published in a variety of journals, including *British Journal of Social Psychology*, *Current Psychology of Cognition*, *Cahiers Internationaux de Psychologie Sociale*, *European Journal of Social Psychology*, *Journal of Experimental Social Psychology*, *Journal of Personality and Social Psychology*, and *Organizational Research Methods*.

Marie-Pierre Fayant is a member of the Department of Psychology, Grenoble 2 University (Université Pierre Mendes France). She is currently preparing her thesis under the supervision of Dominique Muller and holds a position of teacher assistant at Grenoble 2 University.

Endnotes

⋆ Correspondence address: Laboratoire Inter-universitaire de Psychologie, Université Pierre Mendes France, UFR SHS, 1251 avenue Centrale, BP 47, 38 040 Grenoble Cedex 9 – France. Email: dominique.muller@upmf-grenoble.fr

† It is worth noting that, in contrast with Higgins's formulation (1987), Carver and Scheier (1999) suggest that the standard that determines experienced affects is not the goal itself, but the progression toward this goal. Hence, one's self-value could be below a comparison other, but he/she could still experience positive affects whenever his/her performance rapidly progress toward this comparison other's performance (see Carver, 2004). This implies, however, a certain number of feedbacks, in order to assess progression toward the goal. With only one feedback, as it is often the case in the social comparison literature, the two theoretical frameworks would predict negative affect when facing a discrepancy, with an exception for situations where one has good reasons to expect a good progression rate toward the goal (see Carver, 1979).

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