

Train in Vain: The Role of the Self in Claimed Self-Handicapping Strategies

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Two field studies investigate the role of self in the tendency of athletes to engage in claimed handicapping strategies during training (anticipatively claiming that handicaps may interfere with their performance). Study 1 tested the relationship between trait self-esteem and athletes' engagement in claimed self-handicapping. As hypothesized, low physical self-esteem athletes claimed more handicaps than high physical self-esteem athletes. For stronger evidence for the causal role of the self, Study 2 tested whether securing athletes' self-worth through self-affirmation would lead to decreased claimed self-handicapping by using a mixed model design that allows for both between-subjects (affirmation vs. control condition) and within-subject comparisons (before vs. after self-affirmation intervention). Self-affirmed athletes had decreased levels of claimed self-handicapping. Studies 1 and 2 also demonstrate that athletes engage in claimed self-handicapping during training, which could have deleterious effects on subsequent performance. Discussion centers on theoretical implications and applications for coaches, sport teachers, and sport psychologists.

Keywords: self-affirmation, self-esteem, sport, training, athletes, coaches

Some people look how I do, how I prepare myself. I want to tell them that I'm not an example. I do everything for not succeeding. . . . I told Philippe (my coach) that [on] the day I'll do everything well, it will be something else! When there is something that I don't want to do, I don't do it. If I'm not tired, even at 2 am the day before a competition, I don't go to sleep.

—www.lequipe.fr, April 1, 2007

This description of her training regimen by a famous French swimmer who holds many world titles and records may lead fans and athletes alike to believe that she will swim even faster and win more races once she prepares herself in a better way. By reporting she is disrupting her training in this manner, this top athlete seems to be engaging in a self-protective strategy often observed in the domain of sport, namely, claimed self-handicapping. *Claimed self-handicapping* is an anticipative

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strategy whereby an individual claims that handicaps may potentially interfere with one's performance before entering a performance situation to protect one's self-image in the event of failure (self-protective motives) or to enhance it in the event of success (self-enhancement motives) (Hirt, Deppe, & Gordon, 1991). From an attributional perspective (Kelley, 1972), reporting the presence of handicaps permits, on one hand, strong internal attributions for success to one's abilities because the success would have been encountered despite the presence of handicaps, and, on the other hand, limited internal attributions for failure to one's abilities because the failure could be attributed to the handicaps that are claimed.

Self-handicapping seems to be used most when one's image of ability is threatened in a central domain for the self (Schultheiss & Brunstein, 2000). Although some research in industrial-organizational psychology has examined the relationship between social and self-evaluative processes and self-handicapping (see, e.g., Sanna & Mark, 1995), within sports psychology, however, there has not been a thorough examination how feelings of self-worth—both dispositionally in terms of self-esteem and situationally in terms of self-affirmation—have an effect on claimed self-handicapping. The present research proposes to explore the link between athletes' trait self-esteem and their engagement in claimed self-handicapping during training sessions and to test whether securing their self-worth through self-affirmation (Sherman & Cohen, 2006; Steele, 1988) could reduce their engagement in this strategy. Moreover, the present research examines these theoretical issues among athletes in training, where claimed self-handicapping has not been previously examined.

The Potential Negative Consequences of Claimed Self-Handicapping

Many studies have demonstrated that athletes engage in claimed self-handicapping in situations that threaten their image of physical abilities, such as competitions or physical tests (e.g., Coudeville, Martin Ginis, & Famose, 2008; Ferrand, Champely, & Brunel, 2005; K.A. Martin & Brawley, 2002; Prapavessis & Grove, 1998). Claimed self-handicapping has been observed in a wide range of individual and collective sports, such as track and field, judo, basketball, and soccer (Coudeville, Martin Ginis, Famose, & Gernigon, 2008; Finez, 2008; Greenlees, Jones, Holder, & Thelwell, 2006; Kuczka & Treasure, 2005). An athlete who engages in claimed self-handicapping may, for instance, report a physical pain, a state of anxiety, or the bad conditions of a competition before engaging in a competition. This strategy has been clearly differentiated from behavioral self-handicapping, which consists of actively constructing handicaps to one's performance (i.e., avoiding practicing before competition) (Hirt et al., 1991; Leary & Shepperd, 1986).

Although some studies have reported positive effects of claimed self-handicapping on short-term performance (Ryska, 2002), many other studies have showed that claimed self-handicapping has negative consequences. Studies conducted on athletes or students demonstrated that the more individuals engage in claimed self-handicapping the more they are perceived negatively by their peers regarding their abilities and general characteristics (K.A. Martin, 1996; Rhodewalt, Sanbonmatsu, Feick, Tschanz, & Wallers, 1995) and the worse they perform on physical tests (Elliot, Cury, Fryer, & Huguet, 2006). Longitudinal studies also suggest that this

strategy may have long-term negative consequences by negatively affecting self-esteem, emotions, well-being, and performance (Eronen, Nurmi, & Salmela-Aro, 1998; A.J. Martin, Marsh, & Debus, 2001; Zuckerman, Kieffer, & Knee, 1998; Zuckerman & Tsai, 2005). Further, over time, trait self-handicapping (the dispositional tendency to engage in self-handicapping) and maladjustment (e.g., loss in competence satisfaction, negative mood) seem to reinforce each other (Zuckerman et al., 1998; Zuckerman & Tsai, 2005).¹

Given the potential negative effects of claimed self-handicapping, sports coaches, sports teachers, and sports psychologists may want to anticipate its emergence and develop techniques to reduce its emergence when needed. This need has led researchers to investigate the personal and situational variables that might encourage athletes to engage in this strategy (e.g., Elliot et al., 2006; Ferrand et al., 2005; Greenlees et al., 2006; Kuczka & Treasure, 2005; Prapavessis & Grove, 1998; Ryska, Yin, & Boyd, 1999). Some of these studies conducted within sports domains (Coudeville, et al., 2008a; K.A. Martin & Brawley, 2002, Study 2; Prapavessis & Grove, 1998) as well as research conducted outside the sports world (Berglas & Jones, 1978; Kimble, Kimble, & Croy, 1998; McCrea & Hirt, 2001; Sanna & Mark, 1995; Spalding & Hardin, 1999; Tice, 1991) suggest that the motivation underlying self-handicapping may be to protect and/or enhance one's self-worth and self-esteem. We adopt this theoretical framework in examining different ways that the motive to protect self-worth can affect claimed self-handicapping.

Self-Esteem and Engagement in Claimed Self-Handicapping

One of the main motivations that lead individuals to engage in self-handicapping seems to be their desire to protect (and/or enhance) their sense of competence and thus their self-esteem level and feelings of self-worth (see, e.g., Berglas & Jones, 1978; Brown & Dutton, 1995). Although strategies to protect or enhance one's sense of self-esteem such as self-handicapping are pervasive (Pyszczynski, 1982), individual differences moderate the specific self-protective strategies people use (for a review, see Crocker & Park, 2004; Crocker & Park, 2003). Several experiments have demonstrated that trait self-esteem is associated with differences in cognitions about the self, expectations of success, emotional reactions to failures in self-relevant domains, and sensitivity to the opinion of others on oneself (Baumeister & Tice, 1985; Blaine & Crocker, 1993; Brown & Dutton, 1995; Kernis, Brockner, & Frankel, 1989; A.J. Martin et al., 2001; for reviews, see Baumeister, Tice, & Hutton, 1989; Crocker & Park, 2004). All of these factors, can, in turn influence the perception of threat and thus engagement in self-protection and self-enhancement strategies.

Consistent with this idea, correlational studies observed that low self-esteem individuals score higher on the Self-Handicapping Scale (Jones & Rhodewalt, 1982), a measure of behavioral self-handicapping (e.g., Pulford, Johnson, & Awaida, 2005; Rhodewalt, 1994; Zuckerman & Tsai, 2005). In addition, Spalding and Hardin (1999) observed that people with low implicit self-esteem engaged in more claimed self-handicapping before participating in self-relevant interview whereas several studies conducted in the sport field demonstrated that low self-esteem athletes are more likely to engage in claimed self-handicapping as compared with high self-esteem athletes (Coudeville et al., 2008a; Finez, Berjot, Rosnet, & Cleveland, 2011; K.A. Martin & Brawley, 2002, Study 2; Prapavessis & Grove,

1998). These studies indeed demonstrate that when low self-esteem athletes are given the possibility to claim handicaps before an athletic task, they claim more disruptions than high self-esteem athletes. In particular, physical self-esteem is a better predictor of claimed self-handicapping than global self-esteem (Finez et al., 2011; K.A. Martin & Brawley, 2002). These findings with a measure of global self-esteem or a measure of physical self-esteem were observed in laboratory settings and in competitions (Finez et al., 2011; K.A. Martin & Brawley, 2002; note also Ferrand et al. (2005), who did not find this relationship between self-esteem and claimed self-handicapping). The present work extends these studies by examining the role of the self in claimed self-handicapping and whether athletes engage in claimed self-handicapping during training sessions.

Coaches and Athletes: Claiming Handicaps During Training Sessions

As self-handicapping is aimed at protecting and/or enhancing one's competence or image in central domains (Schultheiss & Brunstein, 2000), ideal situations to observe its existence among athletes are those that threaten their image of physical abilities, such as competition or physical tests (Carron, Prapavessis, & Grove, 1994; Ferrand et al., 2005; Greenlees et al., 2006). Yet, there exist other situations in athletes' lives in which physical abilities are evaluated and there exists a degree of uncertainty, and hence pose potential threats for the athletes' self-worth, and those focus on training. During training situations, the quality of athletes' technique, their speed on the exercises, the amount of weight they can lift, and the number of repetitions they can do give the coaches an idea of athletes' value and future potential. Training sessions enable coaches to properly interpret athletes' performances in competition and predict their ability to perform in the future (i.e., "he failed during this competition but on the basis of what I saw during training I know this athlete has the potential to do much better"). Training is thus a privileged moment for coaches to form an impression of the potential of their athletes.

It is generally the coach who selects athletes for the competition, who decides which athletes will get "advantages" (fellowship, access to prestigious sports facilities), and who helps athletes raise their performances. If athletes want a coach to invest time with them, select them for competition, and help them to get fellowships or other awards and opportunities, they need to have their coach believe in their potential (see, e.g., Payne, 2011). In addition, given the coach is an expert in the domain, for athletes to have their coach believe that they are gifted may be a way to build their own confidence in themselves regarding their ability and potential within the sport. As legendary UCLA basketball coach John Wooden put it (Johnson, 2003, p. 191), coaching is a balance between imparting wisdom and maintaining an athlete's psychological commitment to the sport, "A coach is someone who can give correction without causing resentment."

Because the literature has focused on high ego-threatening situations such as competitions, exams, or intelligence tests (Feick & Rhodewalt, 1997; Greenlees et al., 2006; Strube, 1986), it has not identified whether athletes engage in claimed self-handicapping only during highly threatening events or if they also engage in this strategy while they prepare for these events (i.e., during training sessions). This is a central question because training sessions are major determinants of sport

achievement. If athletes engage in claimed self-handicapping during their training sessions, they may not optimally improve their physical and mental skills, build team cohesion efficiently, or build constructive relations with their coach, resulting in less efficiency and potentially reduced success during competitions.

Thus, it is reasonable to hypothesize—and important to document—whether athletes engage in claimed self-handicapping during training sessions. To triangulate on the role of the self, we sought to examine whether dispositional self-esteem predicts claimed self-handicapping during training sessions (Study 1), and further, whether an experimental manipulation to buttress self-worth—a self-affirmation procedure in which people write about important values (Steele, 1988)—could also attenuate claimed self-handicapping among athletes in training (Study 2).

Self-Affirmation and Claimed Self-Handicapping

Securing or bolstering athletes' self-worth through self-affirmation may reduce the threat they experience in sport situations and thus result in a decrease of claimed self-handicapping. The self-affirmation approach begins with the premise that people are motivated to maintain the perceived worth and integrity of the self (Sherman & Cohen, 2006; Steele, 1988). When information or events threaten a valued self-image, people attempt to maintain a global sense of self-integrity, rather than their perceived worth in a specific domain or in particular situations. Thus, if people can "affirm" an unrelated domain of self-worth, their self-evaluation will be less contingent on a particular focal stressor (e.g., training or competition), which will be experienced, consequently, as less of a threat to self-esteem (Sherman & Kim, 2005).

The studies that have examined the effect of self-affirmation on self-handicapping have all been conducted in the academic domain, finding that generally speaking, self-affirmation can reduce students' engagement in behavioral self-handicapping (e.g., Kimble et al., 1998; Siegel, Scillitoe, & Parks-Yancy, 2005). For instance, in research by Siegel and colleagues (2005), students wrote a paragraph on an important value (self-affirmation condition) or an unimportant value (control condition), and were provided with the opportunity to engage in behavioral self-handicapping while performing an intelligence test. Affirmed students engaged in relatively less behavioral self-handicapping (i.e., they were less likely to choose to listen to a performance-inhibiting tape) (see also McCrea & Hirt, 2011; Schimel, Arndt, Banko, & Cook, 2004).

However, no research has tested the effect of self-affirmation on engagement in self-handicapping among athletes. Other sports-related affirmation research has yielded consistent findings; in studies with intramural athletes, affirmation secured their feelings of being a worthy group member of their team and reduced group-serving and self-serving attributions for success and failure (Sherman & Kim, 2005). Affirmed athletes were more likely to attribute failure to internal causes, and less likely to take undue credit for success. As self-handicapping is also a biased attributional strategy (in this case, anticipatory, rather than retrospective), self-affirmation may also affect claimed self-handicapping.

The present research aims at better understanding the relationship between athletes' self-worth and their engagement in claimed self-handicapping. It focuses more specifically on the use of claimed self-handicapping during training sessions.

We conducted two studies: a correlational study to test the link between athletes' self-esteem and their engagement in claimed self-handicapping during training sessions (Study 1) and an experimental study to test whether securing self-worth through self-affirmation could result in a decrease of engagement in this strategy (Study 2).

Study 1

Study 1 was designed to test whether low self-esteem athletes engage more in claimed self-handicapping during training sessions than do high self-esteem athletes. Approval of the protocols of Studies 1 and 2 was obtained from the ethics committee of the university. The study was conducted in three steps (see Figure 1 for timeline).

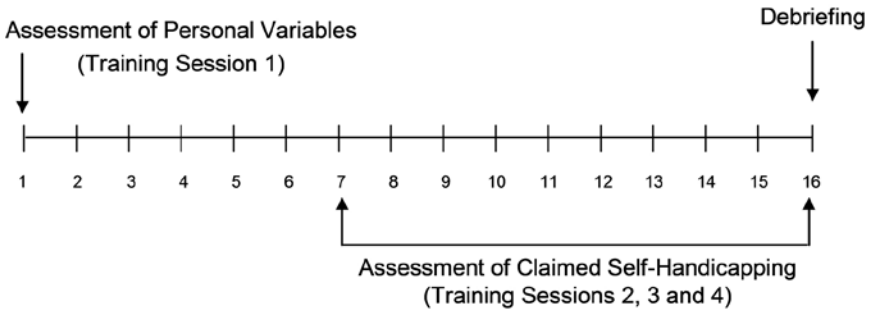


Figure 1 — Study 1 timeline in days.

Method

Participants. Fifty athletes (38 men and 12 women) voluntarily participated in the study ($M_{\text{age}} = 25.8$, $SD = 11.8$). All participants regularly practiced an individual ($n = 17$) or a collective sport ($n = 33$) in extracurricular teams (e.g., teams that are independent from university)² (i.e., track and field, judo, soccer, basketball, volleyball, hockey) and trained an average of 5.7 hr per week ($SD = 2$). All participants had a coach and competed against athletes from other teams of the county.

Assessment of Personal Variables. At the beginning of Training Session 1, the experimenter asked the participants to complete a consent form and a questionnaire packet that included self-esteem scales presented as part of a study on sport psychology. Physical self-esteem ($\alpha = .78$; $M = 4.82$; $SD = .91$) and global self-esteem ($\alpha = .78$; $M = 4.79$; $SD = .84$) were assessed with the French version (Berjot, Gregg, & Richards, 2004) of the physical abilities and self-regard subscales of Fleming and Courtney's (1984) adaptation of the Feelings of Inadequacy Scale (Janis & Field, 1959).

Primary Dependent Variable: Assessment of Claimed Self-Handicapping.

One week after Training Session 1, at the beginning of three regular training sessions (Training Sessions 2, 3, and 4), athletes rated on a sheet supposedly intended for their coach, the extent to which potential handicaps were likely to interfere with their execution during the training sessions—this was our measure of claimed self-handicapping. So as to create a situation similar to regular training sessions during which athletes could report handicaps to their coaches, this measure was ostensibly requested by the coach. In addition, the experimenter was not present to avoid modifying the conditions of regular training sessions.

Participants responded to the question about their training: “How do you feel today? To what extent might the following elements affect your execution during the training session?” They were presented with a list of 16 potential handicaps and a 7-point Likert scale ranging from 1 (*not at all*) to 7 (*very much*) on the sheet. The list of potential handicaps was adapted from previous research on claimed self-handicapping (Kuczka & Treasure, 2005) and included handicaps such as “injury,” “stress,” “lack of sleep,” or “academic worries.” Participants could also report additional handicaps as in the previous research.

Claimed self-handicapping was assessed for each training session by calculating the mean of disruptions reported by participants such that higher scores indicated more engagement in self-handicapping (see, e.g., Finez et al., 2011; Kuczka & Treasure, 2005). To achieve a more reliable assessment of claimed self-handicapping, we assessed claimed self-handicapping on the basis of three training sessions. A composite score was created by calculating the mean of the scores for Training Sessions 1, 2, and 3 ($\alpha = .92$; $M = 2.27$; $SD = .85$, composite scores ranged from 1.06 to 4.67) (Training Session 1: $\alpha = .89$; Training Session 2: $\alpha = .89$; Training Session 3; $\alpha = .94$).

Debriefing. At the end of Training Session 4, the experimenter fully debriefed the athletes. Then the coaches gave their athletes back the sheets on which they had reported handicaps, asked them to report their anonymous code on them and to give them to the experimenter.

Results

Descriptive Statistics. An alpha level of .05 was used for all statistical analyses. Physical and global self-esteem were positively correlated together ($r = .53$; $p < .001$). There was no effect of sex on physical or global self-esteem (respectively, $t(48) = .10$; $p = .91$ and $t(48) = .92$; $p = .37$). Men claimed significantly more handicaps than women; respectively, $M = 2.42$, $SD = .88$; $M = 1.78$, $SD = .54$; $t(49) = 2.36$; $p = .02$. Thus the variable Sex was included in the analyses described below.

Main Analyses. Data were analyzed with regressions to test the main effects of independent variables (Physical Self-Esteem and Global Self-Esteem) on the mean of handicaps reported during the three training sessions (composite score). Because physical self-esteem and global self-esteem were highly correlated, analyses were conducted separately for physical and global self-esteem. The variable Sex was transformed (men coded 1 and women coded -1) and entered into the regression.

There was a main effect of sex, $\beta = .33$, $p = .014$, such that men handicapped more than women. Most importantly, there was a main effect of physical self-esteem,

$\beta = -.34, p = .011$, such that athletes with low physical self-esteem engaged in more self-handicapping during the three training sessions; the overall model proved highly significant, $F(2,47) = 6.62; p = .003; r^2$ adjusted = .19. Gender did not interact with physical self-esteem, $\beta = .23, p = .77$.³ Thus, for both male and female athletes, physical self-esteem predicted claimed self-handicapping. Theoretical means of claimed self-handicapping for participants with high and low physical self-esteem are presented in Figure 2; the scores of claimed self-handicapping for low and high physical self-esteem athletes were estimated separately for men and women with the following equations: $y = 3.65 - .322x$ (for women) and $y = 3.65 - .322x + .328$ (for men). These equations are written with the nonstandardized coefficients. Low and high physical self-esteem groups refer to estimated scores 1 *SD* below and above the mean of each sex. Similar analyses conducted with global self-esteem revealed a significant effect of sex on the mean of handicaps claimed by athletes during the three training sessions ($\beta = .34, p = .015$) but no significant effect of global self-esteem ($\beta = -.17, p = .21$); overall model, $F(2,47) = 3.62; p = .03; r^2$ adjusted = .10). Gender did not interact with global self-esteem, $\beta = -.15, p = .85$.

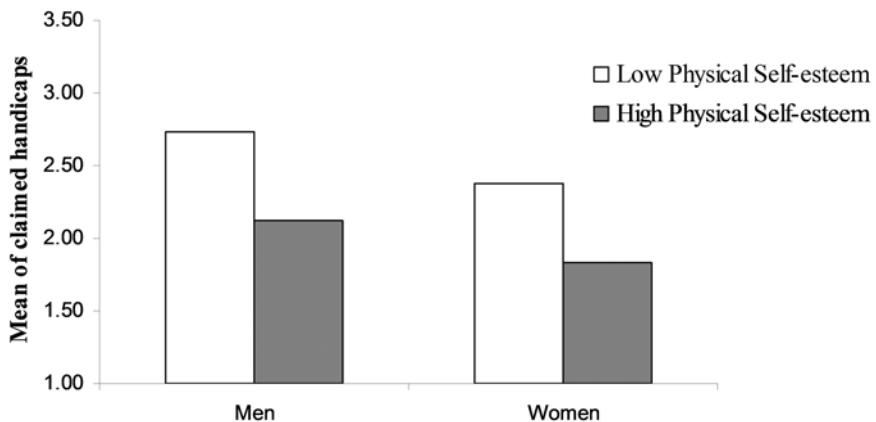


Figure 2 — Theoretical means of claimed handicaps for low and high physical self-esteem athletes.

Discussion

A unique contribution of Study 1 is that it demonstrates that claimed self-handicapping is not restricted to competition but that it could also emerge during regular training sessions. Further, Study 1 supports the hypothesis that physical self-esteem predicts claimed self-handicapping such that the lower the athletes' level of physical self-esteem, the more they engaged in claimed self-handicapping during training sessions. Consistent with the position of Rosenberg (1979) that domain-specific self-esteem is generally more related to domain-specific behaviors than to global self-esteem, these findings were not generalized to global self-esteem (see also Finez et al., 2011; K.A. Martin & Brawley, 2002). Study 1 builds on previous studies

showing a negative relationship between self-esteem and claimed self-handicapping in high ego-threatening situations (i.e., competitions) (Coudeville et al., 2008a; K.A. Martin & Brawley, 2002). The effect of gender on the amount of handicaps is quite unusual. Previous studies have found sex differences for behavioral self-handicapping but not for claimed self-handicapping (see, e.g., Berglas & Jones, 1978, and Hirt et al., 1991; for a review, see McCrea, Hirt, & Milner, 2008). The small sample size of women ($N = 12$) should lead to caution in interpreting this difference (see Note 3).

Despite the observed negative relationship between physical self-esteem and athletes' engagement in claimed self-handicapping, it is important to note the correlational nature of the study. As we did not manipulate self-esteem, we cannot exclude that a third factor influenced both athletes' level of self-esteem and their motivation to engage in claimed self-handicapping. Being a better athlete may have led to both higher self-esteem and reduced use of claimed self-handicapping strategies; low self-esteem athletes may have claimed more handicaps because they are more likely to experience the difficulties they listed (e.g., lack of sleep, illness, injury, school worries) than their high self-esteem counterparts. Other studies that have found a link between self-esteem and self-handicapping in other contexts (Coudeville et al., 2008a; Finez et al., 2011; K.A. Martin & Brawley, 2002) suffer from similar problems of causality.

Having a control condition in which participants would have been led to believe that handicaps could not disrupt their performance during training would have permitted a test of this alternative explanation. However, whereas this kind of instruction might be credible in some contexts (e.g., Snyder, Smith, Augelli, & Ingram, 1985), it would not have been credible in the current study, as experienced athletes would not believe that the list of handicaps they were asked to rate could not affect their performance. Another possibility would have been to increase or decrease the threat level during training. However, manipulating the threat generated by training would not have permitted the natural condition of daily training to be retained (e.g., increasing threat would result in a condition similar to physical tests or competition; moreover, logistically, the coaches would not want their athletes' training affected in this way).

Our research solution was to manipulate participants' feelings of self-worth by having some participants engage in a self-affirmation activity. This strategy of having a correlational study complement an experimental study as a means of triangulating on a causal relationship is common practice in experimental social psychology. For example, in the work of Dweck and colleagues, they both measure whether people have performance vs. mastery goals as well as manipulate these goals to provide convergent evidence for their learning orientations in separate studies (Dweck & Leggett, 1988). More recently, Niiya, Brook, & Crocker (2010) examined self-handicapping as a function of self-theories by including both a correlational study measuring self-theories (Study 1) and experimental study manipulating them (Study 2).

The self-affirmation strategy (Sherman & Cohen, 2006; see McQueen & Klein, 2006, for a methodological review) has been employed before to demonstrate causality when a link between the self and a bias has been suggested in the literature. Most relevant to the present discussion, social identity theorists (e.g., Abrams & Hogg, 1988) offered a self-esteem hypothesis that suggested that people

make group-serving judgments, in part, to enhance the self. Yet, the causal role of the self in group-serving judgments was ambiguous. Sherman & Kim (2005) provided direct experimental evidence of the role of the self by experimentally buttressing feelings of self-worth via a self-affirmation procedure and showing that it attenuated group-serving biases in the sports domain. In the current study, we adapted similar reasoning to see whether self-affirmation would reduce claimed self-handicapping, and in so doing, provide convergent evidence for the role of the self in claimed self-handicapping in athletes who are in training. Other research has used self-affirmation to bolster self-worth and investigate the role of the self in different self-protective strategies (e.g., Jaremka, Bunyan, Collins, & Sherman, 2011, or Landau & Greenberg, 2006). If self-affirmation reduced claimed self-handicapping, it would support the argument that this strategy stems from a vulnerable sense of self.

Study 2

Study 2 again examined athletes' engagement in claimed self-handicapping during training sessions, using a mixed model design that allows for both a within-subject variable (time: before vs. after self-affirmation intervention) and a between subjects variable comparison (affirmation vs. control condition). The study was conducted in five steps (see Figure 3 for timeline).

Method

Participants. Thirty-six males athletes, who practice regularly an individual ($n = 10$) or a collective sport ($n = 26$) in extracurricular teams (i.e., track and field, tennis, wheelchair basketball, soccer, hockey) ($M_{\text{age}} = 24$ years; $SD = 9$), voluntarily participated in the study. They trained on average 4.8 hr per week ($SD = 1.5$), all of them had a coach, and all competed against athletes from other teams of the county.

Assessment of Individual Difference Variables. At the beginning of a regular training session, the experimenter asked the participants to complete a consent form and a questionnaire that included demographic questions.

Baseline of Claimed Self-Handicapping (Training Sessions 2–4). To get the most reliable measure of self-handicapping, we assessed multiple measurements in different training sessions (a baseline calculated on the basis of three measures is more representative and reliable of the amount of handicaps athletes claim to their coach during regular training sessions than a baseline calculated on the basis of a single measure). This also permitted a chance to see the longevity of the effect (examination of short-term effect of self-affirmation during Training Session 5 and long-term effect during Training Session 6). A week after the assessment of personal variables, at the beginning of the three training sessions, the coaches asked their athletes to rate on booklets the extent to which potential handicaps were likely to interfere with their execution during the training session and to return them upon completion. To create a situation similar to regular training sessions during which athletes could report handicaps to their coaches, the booklet was ostensibly requested by the coach and the experimenter was not present.

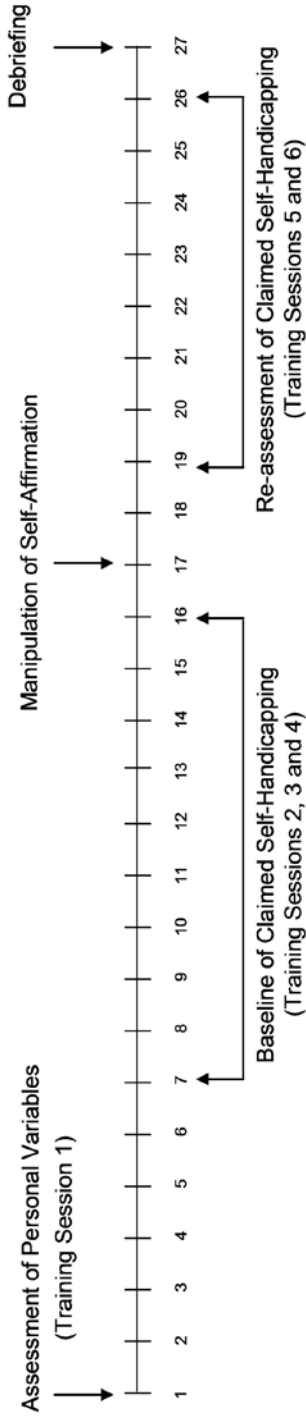


Figure 3 — Study 2 timeline in days.

A composite score (means of 16 items associated with a 7-point Likert scale) was created on the basis of the handicaps claimed during training session 2 ($\alpha = .82$), training session 3 ($\alpha = .89$) and training session 4 ($\alpha = .78$). This composite score was computed by calculating the mean of the score calculated for each training session (α for three scores = .93; $M = 2.27$; $SD = .89$, composite scores ranged from 1 to 5.3).

Manipulation of Self-Affirmation. Between the fourth and the fifth session, the experimenter came to the training and asked participants to complete a questionnaire. Participants were randomly assigned to the self-affirmation condition ($n = 16$) or the no-affirmation condition ($n = 20$) while controlling the team ratio (in each team half of athletes were assigned to each condition). Coaches were unaware of condition assignment. The self-affirmation procedure was based on the materials used in previous experiments (Cohen, Garcia, Apfel, & Master, 2006; Siegel et al., 2005; see McQueen & Klein, 2006 for a methodological review). This consisted of writing about important self-resources unrelated to the focal of sport stressors. Participants in the affirmation condition ranked 11 values or domains (e.g., sense of humor, independence) from the most important to the least important and then wrote for 15 min about their most important value. Participants in the control condition ranked same values, but wrote for 15 min on the value they ranked 11 (their *least* important value) and why this value might be important to someone else. This is a standard no-affirmation control condition that has been used before in studies with athletes (Sherman, Kinias, Major, Kim, & Prenovost, 2007, Study 1).

Reassessment of Claimed Self-Handicapping (Training Sessions 5 and 6).

As in Training Sessions 2–4, at the beginning of Sessions 5 and 6, coaches asked their athletes to rate the extent to which potential handicaps were likely to interfere with their executions during the training session on the booklet. Claimed self-handicapping consisted of the mean handicaps claimed by athletes ($M = 2.12$, $SD = .82$, $\alpha = .87$, for Training Session 5; and $M = 2.18$, $SD = .75$, $\alpha = .88$, for Training Session 6, respectively). Then, participants were debriefed.

Results

Main Analyses. We conducted a mixed-model ANOVA, with Time as a repeated measure and Affirmation status as the between-subjects factor to examine whether self-affirmation decreased athletes' engagement in claimed self-handicapping.

Analyses were first performed to observe the short-term effect of self-affirmation: comparison of the amount of disruption claimed during the period that preceded the self-affirmation intervention (baseline of claimed self-handicapping Training Sessions 2–4) and during the training session that followed the self-affirmation intervention (Training Session 5). Results revealed a significant two-way interaction Time \times Affirmation status; $F(1,34) = 6.58$; $p = .015$; $\eta_p^2 = .16$ but no significant effect of Time; $F(1,34) = 2.57$; $p = .12$. Comparison of means reveals that participants assigned to the self-affirmation condition claimed significantly fewer handicaps during the Training Session 5 ($M = 2.12$) than before the self-affirmation intervention ($M = 2.60$); $t(15) = 2.97$; $p < .01$ (see Table 1). Conversely, participants assigned to the no-affirmation condition did not differ in their tendency to report handicaps during Training Session 5 ($M = 2.01$) than before self-affirmation intervention

($M = 2.12$); $t(19) = -.69$; $p = .50$.⁴ These results suggest that self-affirmation reduced athletes' engagement in claimed self-handicapping during the training session that followed this manipulation (demonstrating a short-term effect).⁵

We then examined the long-term effect of self-affirmation by comparing the baseline and Training Session 6. There was no significant Time \times Affirmation status interaction; $F(1,32) < .01$; $p = .98$, nor significant effect of Time; $F(1,32) = .56$; $p = .46$. It appears that the effect of self-affirmation did not persist to Training Session 6.

Table 1 Means of Disruptions Reported Before and After Manipulation of Self-Affirmation

Condition and Time	<i>M</i>	<i>SE</i>
No-Affirmation		
Baseline claimed self-handicapping (Training Sessions 2–4)	2.01	.19
Reassessment of claimed self-handicapping (Training Session 5)	2.12	.19
Reassessment of claimed self-handicapping (Training Session 6)	1.91	.17
Self-Affirmation		
Baseline claimed self-handicapping (Training Sessions 2–4)	2.60	.21
Reassessment of claimed self-handicapping (Training Session 5)	2.12	.21
Reassessment of claimed self-handicapping (Training Session 6)	2.48	.18

Note. Numbers represent the means of disruption reported by participants.

Discussion

Securing feelings of self-worth through self-affirmation can reduce athletes' engagement in claimed self-handicapping during training. We can envisage that self-affirmation secured self-worth and in turn reduced preoccupation regarding the athletes' public image. Together, the findings of Study 2 and those of previous studies (Sherman & Kim, 2005) suggest that both self-protective and group-protective concerns play important roles in athletes' engagement in self-protective strategies. In addition to its theoretical implications for the role of the self in claimed self-handicapping, Study 2 has major applied implications. Indeed, whereas Study 1 demonstrated that claimed self-handicapping could occur during training sessions, Study 2 shows that it is possible to intervene to reduce its emergence among athletes by using a self-affirmation intervention. Self-affirmation interventions have been successful at reducing stress (Sherman, Bunyan, Creswell, & Jaremka, 2009) and improving academic performance among those experiencing stereotype threat (Cohen et al., 2006). Study 2, then, is a major finding as, up to now, no study conducted inside the sport domain has demonstrated the effect of a self-affirmation intervention on the reduction of claimed self-handicapping.

In the current study, the effect of self-affirmation was measurable only during the training session that followed the self-affirmation intervention but not during the following training session. Thus, we have evidence only that this technique could be effective in the short term. However, as previous studies demonstrated that self-affirmation intervention could have enduring effects (see, e.g., Cohen et al.,

2006; see Sherman & Hartson, 2011, for review), future research should examine whether additional manipulations of self-affirmation lead to greater effects on claimed self-handicapping over the long term.

An important question centers on the type of the self-affirmation most effective for reducing self-handicapping. In Study 2, the self-affirmation employed was an alternative domain affirmation, that is, an affirmation in a different domain than sports, the domain under threat. It may be that affirming the same domain as the threat leads to very different consequences on self-handicapping, as it has in other domains, leading, for example, to increased defense of the threatened identity. For example, cognitive dissonance research has found that same-domain affirmations exacerbate dissonance, whereas alternative domain affirmations reduce it (Blanton, Cooper, Skurnik, & Aronson, 1997; Sivanathan, Molden, Galinsky, & Ku, 2008). Indeed, recent research (McCrea & Hirt, 2011) has demonstrated that alternative domain affirmations were effective at reducing self-handicapping, whereas same domain affirmations were not. It is theorized (Sherman & Hartson, 2011) that alternative domain affirmations help give people more perspective on the threat by reminding them that their self-evaluation does not hinge entirely on the threatened domain.

General Discussion

Claimed self-handicapping may negatively affect athletes' performance and social relationships (Elliot et al., 2006; K.A. Martin, 1996; Rhodewalt et al., 1995) leading to a vicious circle in which self-handicapping and maladjustment reinforce each other (Zuckerman et al., 1998; Zuckerman & Tsai, 2005). Given the potential negative consequences of this strategy, it is necessary to understand the role of self-worth in this strategy. From an applied point of view, it is necessary to be able to anticipate the emergence of this strategy and to have available techniques to reduce its emergence. To address these different issues, two studies were conducted within the context of athletes training under the supervision of their coaches. Study 1 investigated the link between athletes' self-esteem and their engagement in claimed self-handicapping during training sessions and Study 2 tested if securing self-worth through self-affirmation can result in a decrease of engagement in this strategy. The originality of this work also rests on the fact that claimed self-handicapping was investigated within the context of training session, a period crucial for athletes and their success and performance.

Study 1 showed that low physical self-esteem athletes engage more in claimed self-handicapping compared with high self-esteem athletes, whereas Study 2 demonstrated that securing self-worth through self-affirmation could result in a decrease of self-handicapping and thus that the protection of self-worth may play a causal role in determining self-handicapping during training. These findings are consistent with Berglas and Jones (1978) hypothesis and with empirical work (see, e.g., Newman & Wadas, 1997; Tice, 1991) that showed that self-handicapping is mostly motivated by the need to protect or enhance one's self-esteem.

Despite contributing to the understanding of the motivations that initiate engagement in claimed self-handicapping, several questions remain. One question centers on gender, as we observed gender differences in Study 1 (although with a small sample of women) and had only male participants in Study 2. Additional

studies should be conducted to test whether the result that self-affirmation reduces engagement in self-handicapping could be generalized to women. Most research in self-affirmation has not found systematic sex differences unless one group is more threatened than the other systematically. For example, Martens, Johns, Greenberg, and Schimel (2006) found that stereotype threat about math affected women, who were the only ones boosted via a self-affirmation.

There are also interesting other interpretations of the self-affirmation findings from Study 2. Given that self-affirmation has improved performance in other domains (e.g., academic performance under stereotype threat, Cohen et al., 2006; Martens et al., 2006), it is plausible that self-affirmation secured participants' self-worth and consequently increased their expectation of success, which may have reduced their need to engage in claimed self-handicapping. The affirmation may have also reduced stress, which could have led the athletes to feel more efficacious (Sherman et al., 2009). Assessing performance during training would be an important direction for future research. Another interpretation consistent with recent research is that self-affirmation gave athletes a broader perspective on the threat, and thus, they felt less of a need to self-handicap (Schmeichel & Vohs, 2009; Sherman & Hartson, 2011; Wakslak & Trope, 2009). Future research should examine these possible mediators of the effect of affirmation on claimed self-handicapping.

Why is it important that claimed self-handicapping appeared during training under the direction of coaches? This finding suggests that self-worth is at stake not only during competition but also during training. There are serious reasons why athletes may feel the need to manage their public image during training. Indeed, what athletes are able to do during training permits both them and their coaches to draw conclusions about their physical abilities and what they would be able to do in the future. Thus, an important feature of the present work is that the athletes actually reported their self-handicaps to their coaches during training.

This is particularly noteworthy because claiming self-handicaps during training can have particular costs. Since athletes' results during competition are mostly determined by the quality of their training, routinely engaging in claimed self-handicapping may interfere with learning and progress (A.J. Martin et al., 2001). In addition, routinely emphasizing handicaps during training sessions may increase the risk that they turn into a vicious circle. From a group perspective, having members of a team that routinely claim handicaps during trainings may alter team members' motivation and team cohesion, leading to the rejection of high self-handicappers and altering the relationship between coach and athlete. From the coach-athlete relationship perspective, claiming handicaps could backfire and, rather than enhance athletes' public image, instead lead their coach to perceive them as having low abilities and negative general characteristics (see K.A. Martin, 1996; Rhodewalt et al., 1995 for a review on the effect of claimed self-handicapping on public image) and thus reduce the chance of having the coach select them for competitions. Additional studies should directly address the consequence on a coach's perceptions when an athlete claims handicaps.

To sum up, the present studies contribute to both identifying and alleviating the pernicious problem of claimed self-handicapping among athletes in training. Study 1 suggests that physical self-esteem can be used to identify those most likely to engage in this strategy. Those who feel worse about themselves physically,

self-handicap more. Study 2 suggests a possible intervention—one used to reduce stress and improve performance in other domains—a self-affirmation activity. Thus, sports coaches, sport teachers, and sport psychologists who do not want their athletes to self-handicap during training and thus *train in vain*, may intervene by targeting athletes' values and reminding them what is important to them outside the realm of sports as a means of securing their self-worth.

Notes

1. Note that in several of these longitudinal studies, trait self-handicapping was assessed with scales containing both behavioral and claimed self-handicapping on a single score, and this does not permit researchers to clearly distinguish the results that could be attributed to each form of self-handicapping. However, in one study, in which specific scales were used to assess each form of self-handicapping, researchers demonstrated that dispositional claimed self-handicapping was associated with indicators of adjustment such as decreased self-regulation and reduced persistence (A.J. Martin et al., 2001).

2. In France, most sports' teams are independent from universities.

3. Note that the data of participants of two teams (7 men and 8 women) were dropped from Study 1 because we only had data for claimed self-handicapping during Training Sessions 2 and 3 (but not for Training Session 4). When we add these additional participants (the means of handicaps for these participants were estimated on the basis of the measures taken during two sessions rather than on three sessions), the main effect of gender becomes nonsignificant (mean of handicaps claimed by men was not significantly different from the mean of handicaps claimed by women; $t(63) = -1.62$; $p = .11$). Physical self-esteem was negatively related to the mean of handicaps claimed by athletes during the training sessions; $\beta = -.34$; $F(1,63) = 8.48$; $p = .005$; $r^2 = .12$. Global self-esteem was negatively related to the mean of handicaps claimed but the effect was not significant, $\beta = -.18$; $F(1,63) = 2.23$; $p = .14$; $r^2 = .02$.

4. Note that the baseline of claimed self-handicapping was marginally higher in self-affirmation condition; $t(34) = 1.92$; $p = .07$. Thus one may argue that the interaction Time \times Affirmation status has been driven by the high baseline of the self-affirmation condition. To address this limitation, we ran additional analyses. We examined the distribution of claimed self-handicapping baseline scores of the whole sample and found that three participants had outlier scores (their baseline was higher than $M + 2 SD$ of the total population). These three participants were all (randomly) assigned to the self-affirmation condition. Thus, not including data of these participants yielded a baseline quite similar in each experimental condition; $t(31) = .71$; $p = .48$.

Analyses conducted without the data of those three participants replicated the previous findings: the two-way interaction Time \times Affirmation status was still significant; $F(1,31) = 4.54$; $p = .041$; $\eta_p^2 = .13$, whereas the effect of Time was still not significant; $F(1,31) = 1.35$; $p = .254$. Findings regarding comparison on means were also replicated: participants assigned to the self-affirmation condition claimed significantly fewer handicaps during Training Session 5 ($M = 1.78$, $SD = .52$) than before the self-affirmation intervention ($M = 2.15$, $SD = .62$); $t(13) = 2.70$; $p = .019$, whereas participants assigned to the no-affirmation condition did not differ in their tendency to report handicaps during Training Session 5 ($M = 2.01$, $SD = .53$) than before the self-affirmation intervention ($M = 2.12$, $SD = .78$); $t(19) = -.69$; $p = .50$. These additional analyses build on the previous analyses to suggest that self-affirmation led participants to reduce claimed self-handicapping during Training Session 5.

5. Note that the sample size does not permit to test whether athletes engage in different self-handicapping levels as a function of their particular sport. In addition, although sample size was too small to examine self-esteem as a moderating factor in Study 2, we did include measures of it in our study as part of the assessment of personal variables during Training Session 1. When

we introduce physical self-esteem as a covariate in the analyses, we still observed a significant two-way interaction Time \times Affirmation status; $F(1,33) = 6.42$; $p = .016$; $\eta_p^2 = .16$; and no significant effect of time; $F(1,33) = .38$; $p = .54$. Moreover, and consistent with findings of Study 1, we observed that physical self-esteem is negatively related to claimed self-handicapping ($\beta = -.19$, $p = .29$) during Training Sessions 2–4, although not significant, probably owing to the smaller sample size. Indeed, combining the samples across the two studies shows that the effect of physical self-esteem on claimed self-handicapping is quite robust; $\beta = -.26$, $p = .014$.

Acknowledgments

We thank Sophie Berjot and David Creswell for their helpful comments on earlier versions of this paper and the following master's degree students of the University of Amiens for their assistance in conducting this research: Marion Mursic, Jean-Claude Sylva, Eric Quillet, Julien Delaunay, and Loïc Bonnard.

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Manuscript submitted: January 9, 2012

Revision accepted: May 26, 2012