Competing with oneself or with others: Achievement goal endorsement in amateur golf competition

Mickaël Jury, Annique Smeding, Céline Darnon

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Mickaël Jury[1], Annique Smeding[2], Céline Darnon[1,3]

1. Université Clermont Auvergne, Université Blaise Pascal, Laboratoire de Psychologie Sociale et Cognitive, France
2. Laboratoire InterUniversitaire de Psychologie, Université Savoie Mont Blanc, France
3. Institut Universitaire de France, France

Abstract.

Among the antecedents of achievement goal endorsement in sports, competition is a consistent predictor of other-approach goal endorsement (trying to perform better than other players). However, most of this previous research was conducted in a context implying a strong focus on normative social comparison. We argue that in other competitive contexts, where both social comparison and temporal comparison are salient, competition can affect players' self-approach goals (trying to perform better than one has done in the past) rather than other-approach goals. Two experiments were conducted with golf players. Results showed that when an intrapersonal standard was salient (e.g., "handicap competition"), golf competition increased self-approach but not other-approach goal endorsement. However, when interpersonal-standard is made salient (e.g., match-play competition), golf competition increased other-approach goal endorsement. Limits and future perspectives are discussed.

Introduction

Competition, as a central component of sports, influences various outcomes (Cooke, Kavussanu, McIntyre, & Ring, 2013; Jones, Lane, Bray, Uphill, & Catlin, 2005; Stanne, Johnson, & Johnson, 1999; van de Pol, Kavussanu, & Ring, 2012b). The most prototypical forms of competition involve an opposition between at least two people (or teams) for a reward, with one individual (or one team) who wins and one who loses. That is, there is a negative (achievement) outcome interdependence (Murayama & Elliot, 2012; van de Pol & Kavussanu, 2012). In such competitive contexts, individuals' competence is defined relative to others; the more competent one will be the winner. A great deal of research has examined motivational processes involved in such contexts (Harwood, 2002; Murayama & Elliot, 2012; van de Pol, Kavussanu, & Ring, 2012a; van de Pol et al., 2012b; van de Pol & Kavussanu, 2011, 2012). But, in competition, is one's competence always defined in comparison to others' performance? According to Murayama and Elliot (2012), a distinction can be made between *intra*personal and *inter*personal competition. The main difference between these two kinds of competition is the standard of comparison used to determine competence. In interpersonal competition, what matters is outperforming others; thus, competence is defined based on social comparison with others. In intrapersonal competition, what matters is self-improvement that is, the comparison between previous and current performance (i.e., temporal comparison). Thus far, research on the motivational processes of competition has examined contexts that mainly involved the social comparison process (e.g., football, tennis,...). The purpose of the present research is to examine motivational processes in a domain that also strongly involves temporal comparison: The amateur golf domain. Indeed, classic golf competitions imply both interpersonal and intrapersonal forms of competition. In particular, in classic golf competition, to increase one's index of competence (i.e., the handicap), one has to attain a relative standard of performance (i.e., a number of shots) that is better than one's previous performances (regardless of other players' performances). Thus, in this kind of competition, even if comparison with others is still possible, the need to self-improve is particularly salient.

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Achievement Goal Theory

Sports' motivation and the achievement goal theory share a long common story (for a review see Duda, 2005), and recent work largely contributes to continuing this tradition (Dewar & Kavussanu, 2011; Kavussanu, Morris, & Ring, 2009; Morris & Kavussanu, 2008; Sachau, Simmering, Ryan, & Adler, 2013; Stenling, Hassmén, & Holmström, 2014; van de Pol et al., 2012a, 2012b; Vansteenkiste, Mouratidis, Van Riet, & Lens, 2014). According to this literature, goals depend on the standard used to define competence. Elliot and his colleagues (Elliot & McGregor, 2001; Elliot, Murayama, & Pekrun, 2011; Elliot & Murayama, 2008) have argued that three types of standards can be used to define competence: the absolute standard (task mastery), the intrapersonal standard (one's past performances), and the normative standard (the performance of others). Furthermore, goals can also be classified depending on their valence -namely, depending on whether they are focused on the approach of positive outcomes (i.e., succeeding in a competition) and/or on the avoidance of negative outcomes (i.e., avoiding failure). Thus, according to the most recent model of achievement goals (Elliot et al., 2011), people can pursue six types of goals: self-approach goals (i.e., doing better than before), self-avoidance goals (i.e., avoiding doing worse than before), other-approach goals (i.e., doing better than others), other-avoidance goals (i.e., avoiding doing worse than others), task-approach goals (i.e., doing the task correctly) and task-avoidance goals (i.e., avoiding doing the task incorrectly). Adopting these different achievement goals has consequences on several outcomes in the sports domain (Biddle, Wang, Kavussanu, & Spray, 2003; Kavussanu et al., 2009; Stenling et al., 2014) including in the golf area (e.g., emotions, Dewar & Kavussanu, 2011; learning, Thill & Cury, 2000, and performances, van de Pol et al., 2012b).

Antecedents of Achievement Goals

Extensive research in the achievement goal field sought to identify which characteristics lead individuals to endorse achievement goals. Among these ones, researchers identified individual characteristics such as perceived competence, perceived motivational climate (Morris & Kavussanu, 2008) or fear of failure (Conroy & Elliot, 2004). However, research also identified several contextual factors which influence achievement goal endorsement in the sports domain (Chalabaev, Sarrazin, Stone, & Cury, 2008; van de Pol et al., 2012b; van de Pol & Kavussanu, 2012). In particular, van de Pol and colleagues (2011, 2012a, 2012b) have recently documented that in a competition condition (implying the social comparison process), participants reported more other-approach goals (i.e., called ego goals in those studies) than in a training condition (see also Harwood, 2002; Murayama & Elliot, 2012). This result might be explained by the fact that, in interpersonal competitive settings (defined by negative outcome interdependence), social comparison information is very salient and drives people to estimate their level of competence on the basis of a normative standard (Van Yperen & Leander, 2014).

Particularity of Amateur Golf Competition

As developed thus far, most of the aforementioned research on the contextual antecedents of achievement goals has been conducted in areas in which social comparison is salient. In such contexts, competition is undoubtedly a predictor of other-approach goals (Murayama & Elliot, 2012; van de Pol et al., 2012a, 2012b; van de Pol & Kavussanu, 2011, 2012) but not of self-approach goals (see, for example, van de Pol et al., 2012a). However, would the same effect be obtained in a domain in which competence is also defined through an intrapersonal standard? In amateur golf competition, players' handicap (i.e., players' index of competence) is at stake. Players' handicap evolves after each competition based on a comparison between one's current and past performances. If a player does better than s-he did in the past, the handicap decreases, whereas if the player plays worse, the handicap increases. Thus, the lower the handicap, the better a player is.

In golf competition, the handicap is thus particularly important, even if comparison with other players is still present. As a consequence, we argue that, in this context, others are less relevant sources of information to determine one's own level of competence than in other forms of more traditional

competition. Indeed, as golf players mainly anticipate self-referenced feedback, past performance may be a more relevant source of information than others' performances to conclude on whether one has, or has not, performed well. Thus, in this very domain, self-approach goals should be the most relevant goals to endorse. As a support to this idea, research has shown that when a self-referenced feedback is expected, students endorse more self-referenced goals than when a normative feedback is expected (Butler, 2006; Pekrun, Cusack, Murayama, Elliot, & Thomas, 2014).

Consequently, we hypothesize that, in the amateur golf context, competition would increase self-approach goal endorsement, but not other-approach goal endorsement, as compared to a no-competition condition. Experiment 1 tested this hypothesis by comparing goal endorsement in a competition condition (expected to make salient, by default, the intrapersonal standard) and a no-competition condition. Experiment 2 went a step further by making explicit either the intrapersonal standard or the interpersonal standard of the competition. Thus, Experiment 2 compared golf players' goal endorsement in three conditions: a no-competition condition, and two competition conditions, one that made salient the intrapersonal standard and another that only focused on the interpersonal standard. An increase of self-approach goal endorsement is expected only for participants in the intrapersonal standard competition condition, and an increase of other-approach goals is only expected for participants in the strictly interpersonal standard competition condition, as in previous research (Murayama & Elliot, 2012; van de Pol, et al., 2012a, 2012b; van de Pol & Kavussanu, 2011, 2012). It is worth noting that there is a debate toward the inclusion of the avoidance components of achievement goals in sport motivation (see Duda, 2005; Roberts, Treasure, & Conroy, 2007). This can probably explain why avoidance goals were not studied in most previous research (Harwood, 2002; van de Pol et al., 2012a, 2012b; van de Pol & Kavussanu, 2011, 2012). That is also the reason why our hypotheses focused on the approach form of achievement goals. However, as outside of the sport field, other-avoidance goal endorsement has been shown to be impacted by competition (i.e., on a verbal task, see Murayama & Elliot, 2012), results for self-avoidance and other-avoidance goals are also reported here.

Experiment 1

Method

Participants

One hundred and ninety-four French golf players participated in an online experiment and completed the questionnaire (31 women, 163 men), with a mean age of 49.33 years (SD = 15.24), a mean handicap of 24.21 (SD = 13.32) and a mean experience of 8.98 years (SD = 8.02) within the golf domain.

Materials and procedure

After receiving the agreement from several golf associations, their members were invited by e-mail to participate in an online experiment about their golf practice – a participation that could allow them to take part in a lottery. Players who were interested in participating to the experiment clicked on a link, received information regarding their rights in the experiment, and had to give their consent before completing the questionnaire. An institutional ethics committee approved the experimental protocol before data collection began. If participants finally did not consent, they were automatically redirected to an ending page without any further possibility to take part in the experiment. If they gave their consent, participants were randomly assigned to either a competition (N = 98) or a no-competition condition (N = 96). Experimental conditions were introduced with the instructions of the questionnaire. Participants in the no-competition condition read: "The following sentences refer to the different kinds of goals that you might pursue when you play with your friends, without competition. Please indicate to what extent each statement is true for you during your friendly games". Participants in the competition condition read: "The following sentences refer to the different kinds of goals that you might pursue when you play for competition. Please indicate to what extent each statement is true for you during the competition." Participants then answered the achievement goals questionnaire and provided

demographic information (e.g., age, handicap, frequency of playing). Participants were randomly assigned to one of the two conditions. Preliminary analyses confirmed that participants of the two conditions did not differ in term of age, frequency of playing and handicap (all $F < 2$, *ns*).

Measures

Achievement goals questionnaire. The achievement goals questionnaire (Elliot et al., 2011) was translated into French first and then back-translated into English. This questionnaire was adapted to fit golf practices. Participants answered on a 7-point scale, ranging from 1 "Not at all true for me" to 7 "Very true for me" (e.g. for self-approach goals, "To perform well relative to how well I have done in the past"; for self-avoidance goals, "To avoid performing worst than I normally do"; for other-approach goals, "To do well compared to others players"; for other-avoidance goals, "To avoid doing worse than others players"). Descriptive statistics, reliability, and correlations are reported in Table I. Of importance, reliability indicators were good and very close to those reported in Elliot et al. (2011).

TABLE I
Descriptive statistics and zero-order correlations for self-based and other-based goals (Experiment 1).

Variables	Reliability (α)	1	2	3	4
1. Self-approach goals	.83				
2. Self-avoidance goals	.78	.62**			
3. Other-approach goals	.93	.49**	.46**		
4. Other-avoidance goals	.89	.45**	.62**	.86**	——

Note. $^{**}p < .01$.

Results

To test whether players in the competition condition would endorse more self-approach goals than those in the no-competition condition, whereas no differences would be found for other-approach goal endorsement, ANOVAs were run on each type of achievement goals. The model integrated one predictor, the competition condition (coded -1 for no-competition and +1 for competition). Since the handicap has previously been linked to achievement goal endorsement (Sachau et al., 2013), in the two experiments, additional analyses included the handicap as a control variable. Including handicap did not change the effects. Therefore, this variable was removed from the analysis. Means and standard deviations by experimental conditions are presented in Table II.

TABLE II
Achievement goal endorsement as a function of experimental conditions (Experiment 1)

	Self-approach goals		Self-Avoidance goals		Other-Approach goals		Other-Avoidance goals	
	M	*SD*	*M*	*SD*	*M*	*SD*	*M*	*SD*
Competition	5.71	1.08	5.36	1.20	4.50	1.66	4.28	1.68
No-competition	5.34	1.19	4.98	1.47	4.42	1.80	4.32	1.74

Self-approach goals

As expected, a main effect of the experimental condition, $F(1,192) = 5.30$, $p = .022$, $\eta_p^2 = .02$, indicated that participants in the competition condition ($M = 5.71$, $SD = 1.08$) endorsed more self-approach goals than participants in the no-competition condition ($M = 5.34$, $SD = 1.19$).

Self-avoidance goals

A marginal effect of the experimental condition, $F(1,192) = 3.85$, $p = .051$, $\eta_p^2 = .02$ showed that in the competition condition ($M = 5.36$, $SD = 1.20$), participants tended to endorse more self-avoidance goals than in the no-competition condition ($M = 4.98$, $SD = 1.47$).

Other-approach goals

The competition effect was not significant, $F(1,192) < 1$, *ns*. Participants in the competition condition ($M = 4.50$, $SD = 1.66$) did not endorse more other-approach goals than participants in the no-competition condition ($M = 4.42$, $SD = 1.80$).

Other-avoidance goals

There was no difference between the two conditions, $F(1,192) < 1$, *ns*. Participants in the competition condition ($M = 4.28$, $SD = 1.68$) did not differ in their other-avoidance goal endorsement as compared with participants in the no-competition condition ($M = 4.32$, $SD = 1.74$). In competitive settings, the main evaluative referent for competence can be either the self or others, but rarely the absolute demand of the task. Since task-based goals are not particularly relevant in such contexts, there are few reasons to expect task-based goals to be impacted by competition. However, as these goals are part of the 3 x 2 model (Elliot et al., 2011), task-based goals were also measured in this experiment. Results showed that competition did not impact task-approach goal, $F(1,192) = 2.38$, $p = .13$, or task-avoidance goal endorsement, $F(1,192) < 1$.

Discussion

As expected, players in the competition condition reported a higher level of self-approach goals than players in the no-competition condition, whereas no difference was found between conditions for other-approach goal endorsement. Also, competition tended to impact self-avoidance goal endorsement but not other-avoidance goal endorsement. Taken together, results provide preliminary evidence that in the context of amateur golf, where individual's competence is strongly defined through an intrapersonal standard, self-approach goals seem to be more relevant than other-approach goals.

It should be noted that our interpretation of these findings relies on the assumption that in the context of the present research – the amateur golf domain – competition puts the emphasis on an intrapersonal standard to define competence. But, in some instances, golf can also involve strictly interpersonal competition, as in the research of van de Pol et al. (2012b). Indeed, although usual weekly competitions do not strongly focus on normative comparison, some other kinds of golf competitions do (e.g., match-play competition). In match-play competition, two players are opposed with the purpose of making the lowest score on a hole to get one point. The winner is the player who has most points. In such contexts, competition would probably enhance, as in previous research, other-approach goals more than self-approach goals. In Experiment 1, the instructions did not explicitly emphasize the type of competition at stake: a competition for one's handicap (i.e., an intrapersonal-standard competition) or a match-play competition (i.e., a strictly interpersonal-standard competition). Results of Experiment 1 support the idea that, by default, golf competition emphasizes an intrapersonal standard. However, would the same results appear on a competition that would emphasize interpersonal standard rather than intrapersonal standard? Experiment 2 was designed to address this question. In this experiment, the type of standard at stake for the competition (i.e., intrapersonal *vs*. interpersonal) was directly manipulated. Experiment 1's finding on self-goals should be replicated in a competition condition that makes explicit the importance of intrapersonal standard (i.e., the handicap), but not in a competition condition that involves an interpersonal standard (i.e., match-play).

Experiment 2

Experiment 2 sought to replicate Experiment 1's findings with an explicit manipulation of the two different types of competition. More precisely, we expected players in the handicap competition condition to endorse more self-approach goals compared with those in the no-competition and match-play conditions. The rationale behind this hypothesis is that it is only in the handicap condition, but not in the two other conditions, that improving is particularly valued and rewarded. Regarding other-approach goals, based on past research, comparison with others should be most salient in the match-play context, but less so otherwise. Accordingly, we expected players in the match-play competition condition to endorse more other-approach goals than players in the no-competition and in the handicap conditions. Contrasts were coded (see below in the Results section) to reflect these specific hypotheses.

Method

Participants

Two hundred and eighty-three French golf players (56 women, 227 men), with a mean age of 57.37 years (*SD* = 11.56), a mean handicap of 23.00 (*SD* = 11.01) and a mean experience of 12.37 years (*SD* = 8.61) within the golf domain, participated in an online experiment and completed the questionnaire.

Materials and procedure

Participants were recruited in the same way as in the first experiment and also had the opportunity to participate to a lottery. As previously, prior to the experiment, participants had to give their consent and were then randomly assigned to the handicap competition ($n = 98$), the match-play competition ($n = 91$) or the no-competition condition ($n = 94$). As in the first experiment, it should be noted that there were no differences between participants in the three conditions in term of frequency of playing or their handicap (all $F < 2$, *ns*). A significant difference appeared on age, $F(2,278) = 3.58$, $p = .029$, indicating that participants in the interpersonal competition condition were younger ($M = 54.90$, $SD = 11.42$) than participants in the control condition ($M = 59.34$, $SD = 10.53$). Nevertheless, including participants' age in the analyses did not change the results. Participants in the no-competition condition read the same instructions as in Experiment 1. Participants in the handicap competition condition read the following: "The following sentences refer to the different kinds of goals that you might pursue when you play a competition for your handicap. Please indicate to what extent each statement is true for you during such a competition.". Participants in the match-play competition condition read the following: "The following sentences refer to the different kinds of goals that you might pursue when you play a match-play competition. Please indicate to what extent each statement is true for you during such a competition.". Participants subsequently answered the achievement goals questionnaire and provided demographic information.

Measures

Achievement goals questionnaire. The same measure from Experiment 1 was used in this second experiment, with descriptive statistics, reliability, and correlations reported in Table III.

TABLE III
Descriptive statistics and zero-order correlations for self-based and other-based goals (Experiment 2)

Variables	Reliability (α)	1	2	3	4
1. Self-approach goals	.77				
2. Self-avoidance goals	.75	.57**			
3. Other-approach goals	.90	.12*	.11		
4. Other-avoidance goals	.87	.11	.33**	.77**	

Note. *$p < .05$; **$p < .01$.

Results

Data analyses

Data were analyzed using contrast analyses. This procedure allows testing specific hypotheses when there are more than two levels in the independent variable (Judd, McClelland, & Culhane, 1995). With this procedure, a contrast of interest, which tests the hypothesis, and an orthogonal contrast, which tests the residual variance, should be defined. The contrast of interest should be significant, and the orthogonal contrast should not. If the orthogonal contrast is significant, it means that the contrast of interest does not explain all the variance, namely, that the orthogonal contrast also contributes to explain variance in the data. Means are reported in Table IV.

TABLE IV
Achievement goal endorsement as a function of experimental conditions (Experiment 2)

	Self-approach goals		Self-avoidance goals		Other-approach goals		Other-avoidance goal	
	M	*SD*	*M*	*SD*	*M*	*SD*	*M*	*SD*
Match-play competition	4.76	1.23	4.77	1.23	4.91	1.28	4.74	1.25
Handicap competition	5.45	1.06	4.99	1.43	3.54	1.84	3.31	1.73
No-competition	5.09	1.29	4.99	1.37	4.40	1.48	4.25	1.58

Contrast coding and results for self-based goals

Participants in the handicap condition were expected to report a higher level of self-approach (and self-avoidance) goals than in the two other conditions (i.e., match-play and no-competition). Thus, the contrast of interest compared the handicap condition (coded 2) with the match-play and the control conditions (coded -1 each). The orthogonal contrast compared the match-play condition (-1) to the control condition (1), with the handicap condition coded 0.

Self-approach goals. The contrast of interest was significant, $F(1,280) = 12.08$, $p = .001$, $\eta_p^2 = .04$, indicating that participants in the handicap condition ($M = 5.45$, $SD = 1.06$), endorsed more self-approach goals than participants in the match-play ($M = 4.76$, $SD = 1.23$), and the no-competition conditions ($M = 5.09$, $SD = 1.29$). The analysis also revealed a marginal effect of the orthogonal contrast: participants in the match-play condition tended to endorse less self-approach goals than participants in the no-competition condition, $F(1,280) = 3.44$, $p = .065$, $\eta_p^2 = .01$.

Self-avoidance goals. The contrast of interest examining the handicap competition in opposition to the match-play and the no-competition conditions was not significant, $F(1,280) < 1$, nor was the orthogonal contrast, $F(1,280) = 1.20$, *ns*.

Contrast coding and results for other-based goals

Participants in the match-play condition were expected to report a higher level of other-approach (and other-avoidance) goals than in the two other conditions. Thus, the contrast of interest compared the match-play condition (coded 2) with the handicap and the no-competition conditions (coded -1 each). The orthogonal contrast compared the handicap condition (-1) to the no-competition condition (1) with the match-play condition coded 0.

Other-approach goals. The contrast of interest was significant, $F(1,280) = 22.52$, $p < .001$, $\eta_p^2 = .07$, indicating that participants in the match-play condition ($M = 4.91$, $SD = 1.28$), endorsed more other-approach goals than participants in the handicap ($M = 3.54$, $SD = 1.84$), and the no-competition condition ($M = 4.40$, $SD = 1.48$). Analyses also revealed a main effect of the orthogonal contrast showing that participants in the handicap condition endorsed less other-approach goals than participants in the no-competition condition, $F(1,280) = 14.37$, $p < .001$, $\eta_p^2 = .04$.

Other-avoidance goals. The contrast of interest examining the match-play competition condition in opposition to the handicap competition and the no-competition conditions was significant, $F(1,280) = 24.24$, $p < .001$, $\eta_p^2 = .08$, indicating that participants in the match-play condition ($M = 4.74$, $SD = 1.25$), endorsed more other-avoidance goals than participants in the handicap ($M = 3.31$, $SD = 1.73$), and the no-competition conditions ($M = 4.25$, $SD = 1.58$). Nevertheless, the analysis also revealed an effect of the orthogonal contrast showing that participants in the handicap condition endorsed less other-avoidance goals than participants in the no-competition condition, $F(1,280) = 18.10$, $p < .001$, $\eta_p^2 = .06$. As in experiment 1, task-based goals were measured. Results showed a main effect of the experimental condition on task-approach goal endorsement, $F(2,280) = 10.82$, $p < .001$, $\eta_p^2 = .07$, with participants in the match-play competition condition ($M = 5.25$, $SD = 1.11$) endorsing less task-approach goals than participants in the handicap competition ($M = 5.71$, $SD = 0.93$) and the no-competition condition ($M = 5.89$, $SD = 0.85$). Regarding task-avoidance goals, the experimental condition did not affect their endorsement, $F(2,280) < 1$. As these goals were not the focus of the present paper, these results will not be discussed further.

Discussion

Experiment 2 aimed at extending and clarifying Experiment 1's findings via a direct manipulation of the type of standard at stake in the competition (handicap versus match-play). As expected, results demonstrated that the increase in self-approach goals observed in Experiment 1 was restricted to the handicap competition condition, with no such increase obtained in the match-play competition condition. Moreover, in accordance with previous findings and further supporting the specificity of the default amateur golf competition context of the present research, an increase in other-approach goals was observed in the match-play competition condition, but not in the handicap competition condition.

General discussion

Previous research has identified competition as an important and consistent predictor of other-approach goal endorsement (Murayama & Elliot, 2012; van de Pol et al., 2012a, 2012b; van de Pol & Kavussanu, 2011, 2012). Because amateur golf competition also implies a strong focus on self-improvement and temporal comparison, we hypothesized that self-approach goals should be more relevant than other-approach goals in this very context. In such a context, we therefore expected competition to lead golf players to specifically endorse more self-approach goals as compared to a no-competition condition, but not to increase endorsement of other-approach goals.

Results from two studies confirm these hypotheses. First, Experiment 1 showed that an unspecified competition condition in an amateur golf setting increased self-approach goal endorsement but did not impact other-approach goal endorsement. The second experiment demonstrated that when the type of golf competition (match-play *vs*. for the handicap) was explicitly specified, both previous findings from the literature (in the match-play competition condition only) and Experiment 1's results were replicated (in the handicap com- petition condition only). Indeed, results from Experiment 2 showed that match-play competition increased other-approach goal endorsement but not self-approach goal endorsement, as in previous research (van de Pol et al., 2012a, 2012b; van de Pol & Kavussanu, 2011, 2012). Instead, golf competition for the handicap elicited higher self-approach goals endorsement, as in Experiment 1. Moreover, Experiment 2 demonstrated that other-approach goals in the handicap competition condition

and self-approach goals in the match-play competition condition were less adopted than in the no-competition condition, confirming, in a complementary way, that these two different types of goals are selectively less adopted if they do not match the most relevant standard of comparison.

Although our focus was on the approach dimension of achievement goals, as previously done in the sports domain (Harwood, 2002; van de Pol et al., 2012a, 2012b; van de Pol & Kavussanu, 2011, 2012) and, hence pro- viding a background for specific hypothesis testing, we also assessed the avoidance dimension of achievement goals. Confirming the rather exploratory nature of the competition avoidance achievement goal relation in sports, results for self-avoidance goal endorsement were somewhat inconsistent across the two studies. Indeed, whereas Experiment 1 showed that the competition condition, compared with the no-competition condition, led players to marginally endorse more self-avoidance goals, results from experiment 2 did not confirm these findings. Results for other-avoidance goal endorsement were more consistent. As for other-approach goal endorsement, in Experiment 1, the endorsement of other-avoidance goals was not affected by the competition condition, and in the second experiment, other- avoidance goal endorsement was elicited in the match-play competition condition and reduced in the handicap competition condition. These results conceptually replicate, in a different domain, those from Murayama and Elliot (2012) who showed that students in an interpersonal competition condition endorsed more other-avoidance goals than students in a control condition.

Taken together, results of the present research provide evidence that competition does not necessarily and systematically involve other-approach goal endorsement, as it has been shown in past research (Harwood, 2002; Murayama & Elliot, 2012; van de Pol et al., 2012a, 2012b; van de Pol & Kavussanu, 2011, 2012), but instead that the type of goal endorsement depends on how competence is defined in a given competition, namely in an interpersonal (as in the match-play competition) or in an intrapersonal standard-based competition (as in the handicap competition).

Notwithstanding this contribution to the motivational dynamics at play in the sports domain, some limits of the present research should be noted. First, as the studies were on-line experiments, possible biases could not be excluded in comparison with fields experiments (Gosling, Vazire, Srivastava, & John, 2004). Replicating the present results in a field experiment, possibly with an additional outcome (e.g., performance) may be an interesting prolongation of this work. Second, these results are very specific to the amateur golf domain. Future studies may examine the generalizability of the present findings to other sports in which competence can also be defined through an intrapersonal standard in competition. Finally, it should be noted that effect sizes are quite low in the two experiments (between .02 and .08). Thus, these effects must be interpret and discussed with caution.

Despite the need for further research to extend the present findings, these results make a contribution to the current knowledge on the competition-achievement goals relationship, as it shows that all forms of competition do not automatically result in other-approach goal endorsement. Thus, as suggested by several authors (Harwood, 2002; van de Pol et al., 2012b), if there is value in distinguishing contexts (i.e., training versus competition) when achievement goals are studied, paying attention on how competence is defined in a given competition (i.e., with interpersonal vs. intrapersonal standard) can also be particularly relevant.

Although our focus was on the approach dimension of achievement goals, as previously done in the sports domain (Harwood, 2002; van de Pol et al., 2012a, 2012b; van de Pol & Kavussanu, 2011, 2012) and, hence providing a background for specific hypothesis testing, we also assessed the avoidance dimension of achievement goals. Confirming the rather exploratory nature of the competition avoidance achievement goal relation in sports, results for self-avoidance goal endorsement were somewhat inconsistent across the two studies. Indeed, whereas Experiment 1 showed that the competition condition, compared with the no-competition condition, led players to marginally endorse more self-avoidance goals, results from experiment 2 did not confirm these findings. Results for other-avoidance goal

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