International Journal of Golf Science, 2014, 3, 64-77 http://dx.doi.org/10.1123/ijgs.2013-0001 © 2014 Human Kinetics, Inc.



Sandbagging: Faking Incompetence on the Golf Course

Daniel Sachau

Minnesota State University

Luke Simmering

Walmart—Global Organizational Effectiveness

Max Adler

Golf Digest

Warren Ryan

Minnesota Golf Association

Sandbagging is a self-presentation strategy involving the false claim of inability. A golfer sandbags by intentionally inflating his or her handicap. Over 2,400 active recreational golfers participated in the study. The vast majority of these golfers claimed they would be unwilling to sandbag even in a setting where sandbagging was prevalent and one could sandbag without getting caught. Golfers who were willing to inflate their handicaps scored higher on Gibson and Sachau's (2000) trait sandbagging scale, were more likely to believe that sandbagging is common, and were more likely to use interpersonal sandbagging on the course (direct claims of inability) than golfers who were unwilling to inflate their handicaps. Motives for sandbagging are discussed as are suggestions for reducing sandbagging.

Keywords: sandbagging, golf, self-presentation, false-consensus

Sandbagging is a self-presentation strategy involving the false claim or feigned demonstration of inability used to create artificially low expectations for the sandbagger's performance (Gibson & Sachau, 2000, p. 56). In short, sandbaggers pretend to be less competent than they really are. The term *sandbagging* is part of the lexicon of many forms of competition. The pool shark sandbags by intentionally losing games. Auto racers complain about drivers who sandbag by deliberately

Sachau is with the Psychology Dept. Minnesota State University, Mankato, MN. Simmering is with Walmart, Global Organizational Effectiveness, Bentonville, AR. Adler is a writer with *Golf Digest*, Wilton, CT. Ryan is the Communications Director for the Minnesota Golf Association, Edina, MN. Address author correspondence to Daniel Sachau at daniel.sachau@mnsu.edu.

driving slowly in qualifying heats. A poker player gets sandbagged by being lured into a pot by a player who has a strong hand but bets as if he or she has a weak hand.

Sandbagging ranges from gamesmanship to outright cheating. For instance, a sandbagger might try to lull a worthy opponent into a false sense of security by withdrawing effort during warm-up or by understating his or her preparation for a match. Baseball pitchers sandbag batters by intentionally throwing slow pitches during warm-up. Some coaches have been known to overstate a player's injury.

Another form of sandbagging occurs when a competitor deliberately loses or "tanks" a game so that he or she can face a preferred opponent later in a tournament (Krakel, 2014). In the 2012 Olympics, eight badminton doubles players were disqualified after intentionally losing matches during a round-robin stage of the tournament so that they could receive a more favorable position in the knock-out phase of the tournament (Greene, 2012).

The most unethical cases of sandbagging involve competitors lying about their basic abilities so that they have an unfair advantage in competition. This is evident where an elite volleyball team enters a tournament for intermediate players. Most relevant to this paper, golfers sandbag when they enter a tournament with a handicap that is higher than it should be given the player's ability.

Sandbagging is a problem in any type of handicapped competition because sandbagging undermines the integrity of the handicap system. For example, a USGA golf handicap index (referred to simply as *handicap* by recreational golfers) is an inverse index of a player's ability. The handicap is used to determine the number of strokes that should be subtracted from, or in rare instances added to, a player's score. Thus, the least competent players have more strokes removed from their scores than the most competent golfers. In an equitably handicapped event, all players have a chance of winning¹ and the player who has the best performance relative to his or her own long-term average will win the competition. A golfer obtains a handicap by reporting his or her scores to a regional golf association. The association calculates and stores handicaps². Golfers can inflate their handicaps by either fabricating high scores or by failing to report low scores.

The researchers who have studied golf sandbagging have primarily focused on methods for spotting sandbaggers. For instance, Knuth, Scheid, and Engle (1994) calculated the probabilities associated with scoring below one's own average. Players who score too many standard deviations below their own average are suspect and their scores can be questioned by tournament officials (USGA, 2013). Aside from a few studies, surprisingly little is known about sandbagging among golfers.

Why Sandbag?

The obvious motive for golf sandbagging is to increase the chance of winning (Shepperd & Socherman, 1997). If a player enters a tournament with a handicap that is higher than it should be, the player has a greater chance of winning a title, trophy, or prize. However, sandbagging creates a trade-off for the sandbagger. It increases the likelihood of victory, but makes the victory less meaningful. A blowout against a weak player does not provide the victor with specific social comparison information (Festinger, 1954). Further, the dissonance of cheating should taint the joy in victory. So unless people sandbag simply to obtain some type of award, what might they gain from sandbagging?

Gibson & Sachau (2000) studied people who sandbag in social settings and suggested that one motive for sandbagging is to create a low performance benchmark against which subsequent performance is contrasted. For example, an employee who knows she can perform well on the job might think that her performance will be rated more favorably if that performance is compared with a low performance expectation than a high expectation. The sandbagging job applicant might thus claim to be less experienced than she or he really is.

Another explanation for sandbagging, and one that may be more relevant for golfers, is the tactic functions as a form of self-regulation and is used to reduce performance pressure (Gibson, 2007; Gibson & Sachau, 2000; Gibson, Sachau, Doll, & Shumante, 2002). That is, if a golfer publically predicts a score that he is sure he can obtain, the golfer may experience less stress than if he predicts his typical level of performance. A sandbagger might play better if he or she has less to "live up to."

Gibson and Sachau (2000) developed a 12-item sandbagging scale to measure the propensity to sandbag. The authors describe the scale as a trait measure of sandbagging and suggest that scores on the scale reflect a tendency to sandbag across a wide variety of settings. The authors administered the scale to college students as part of a battery of tests. Weeks later, students were invited to a laboratory and asked to play a novel computer game. Participants were instructed that they would complete three practice trials and a final test-trial. Subjects thought they completed the practice trials in private; however the practice scores were surreptitiously recorded by the experimenter. To manipulate performance pressure, some participants were told that the experimenters expected the participants to perform well on the test-trial and this expectation was based on the participants' scores on the test battery that they completed earlier in the semester (high pressure condition). Others were told that the experimenter expected average performance (low pressure condition). Next, participants were asked to predict their score on the test-trial. Participants who scored high on the sandbagging scale, and who were in the high pressure condition, predicted lower scores for themselves on the test trial than did the other participants.

In a follow-up study, Gibson and Sachau (2000) manipulated the participants' expectations regarding the amount of information that observers had about the participants' past performance. The authors asked students to complete practice trials, predict performance, and complete a test-trial for a Graduate Records Examstyle test. Students who scored high on the sandbagging scale under-predicted their own performance but did so only if they thought that an audience was unaware of the students' performance in the practice trial. This supports the argument that sandbagging is not only a self-regulation strategy but is also an impression management strategy.

Gibson, Sachau, Doll and Shumante (2002) asked students to compete on a puzzle- solving task with a person who they believed was either more competent (than the participant), less competent, or of unknown ability. Participants who scored high on the sandbagging scale, and were favored in the competition, predicted lower scores for themselves than people who scored low on the sandbagging scale even though high and low sandbaggers scored the same on practice trials. Using a similar task, Sachau, Gibson, Hannah, and Hoheisel (1997) gave subjects the opportunity to choose their opponents. Students who scored high on the Sandbagging Scale chose weaker opponents than students who scored low on the scale.

Finally, Gibson (2007) asked college students to complete "a new kind of intelligence" test. Before taking the test, participants were given the option of either receiving normative feedback about their test performance or not receiving feedback. Most people chose to receive feedback. However, subjects who scored high on the sandbagging scale were likely to refuse the feedback if they thought that the feedback would be made public. In other words, participants who scored high on the sandbagging scale were more concerned about social evaluation and revealing their ability than were participants who scored low on the scale.

The picture one gets from these studies is that people who score high on the sandbagging scale prefer not to reveal their true ability and will hide their ability by under-predicting their own performance. High sandbaggers are most likely to under-predict performance when they are experiencing performance pressure. This performance pressure may come from competing against opponents of superior ability or from knowing that there are observers who have high expectations for the sandbagger's performance.

The studies using the Sandbagging Scale have all involved college student populations in laboratory settings. The Sandbagging Scale has not been tested in recreational or sports settings. With this in mind, the current study was designed to test whether people who score high on the sandbagging scale would be more willing to sandbag on the golf course than people who score low on the scale. It was also predicted that if given the option of competing against a strong or weak competitor, golfers who score high on the sandbagging scale would be more likely to choose to compete against weak players than would players who score low on the scale.

Normative Beliefs

If players think that sandbagging is a common practice, they may be more inclined to sandbag than if they think it is rare. Sachau, Simmering and Adler (2012), and Adler (2012) have demonstrated that golfers who are willing to break rules (moving a ball out of a divot, moving a loose impediment in a hazard, or grounding a club in a bunker) are much more likely to believe that rule breaking is common than are golfers who are unwilling to break the rule. The authors found that golfers who indicated that they would break a given rule overestimated the proportion of the population who would also break the rule. For 17 different infractions, between 89% and 99% of the people who indicated that they would break a given rule, thought that "most people" would break that same rule. Of course, it is difficult to say whether this false-consensus belief precedes cheating or is a rationalization after the fact, but there is evidence that the belief and rule-breaking go hand-in-hand. See Epley and Dunning (2000) for a review of the false consensus literature.

Not only would a belief that most people sandbag relieve some of the guilt associated with cheating, but believing that many people sandbag might increase the perceived need to sandbag to stay competitive with other sandbaggers. In other words, if a player thinks that everyone is sandbagging, then the player is at a disadvantage if he or she does not sandbag.

It was predicted that people who score high on the sandbagging scale would think that sandbagging is more common than would people who score low on the scale. It was also predicted that players who are willing to sandbag by inflating their handicap (regardless of their sandbagging scale score) would think that sandbagging is more common than would players who are unwilling to sandbag.

Interpersonal Sandbagging

The most widely discussed form of golf sandbagging involves inflating one's handicap. This can be done in such a way that the sandbagger never has to make a claim in front of his or her competitors. There are, however, a variety of sandbagging tactics that are directly targeted at individuals on the course. For example, when a golfer meets and opponent, he or she might complain about nonexistent pain, intentionally hit bad shots or otherwise pretend to be unskilled. This *interpersonal* sandbagging would be used to lower competitor effort or set favorable terms for a wager.

Interpersonal sandbagging can be done independently of handicap sandbagging. A golfer with a fair handicap can simply pretend to be "having a bad day." However the behaviors are similar and they do share a willingness to deceive one's opponents. Because handicap sandbagging and interpersonal sandbagging are similar, it was predicted that players who score high on the trait sandbagging scale would use more interpersonal sandbagging than would players who score low on the scale. It was also predicted that golfers who are willing to sandbag by inflating their handicap would be more likely to also use interpersonal sandbagging tactics than those players who are unwilling to inflate their handicap.

Method

Participants

We sent an e-mail invitation to complete a survey to 9,222 members of the Minnesota Golf Association (MGA). A total of 2,832 started the survey (31% response rate) and 2,416 completed it (85% completion rate). The sample included 2,077 males and 313 females (26 golfers did not indicate gender) with a mean age of 54.9 years (SD = 12), and a mean handicap index of 13.3 (SD = 7.56).

Golfers participated in exchange for the opportunity to win a raffle for one of 10, \$100 gift certificates from a popular golf retailer. Members were informed that no one from MGA would have access to their responses and no one from the research team would be able to identify who they were. This study had been reviewed and approved by the university Institutional Review Board.

Procedure

Members who agreed to participate clicked on a link embedded in the invitation and were directed to the survey. The questionnaire included Gibson and Sachau's (2000) 12–item sandbagging scale. This measure contains items that reflect a behavioral tendency to downplay one's ability, "I will understate my ability in front of my opponent(s);" a desire to lower observers' expectations, "I may understate my abilities to take off some of the added pressure;" and a motive to exceed those expectations, "I enjoy seeing others surprised by my abilities." Participants responded on a 6-point scale where responses varied from "disagree very much" to "agree very much." Midpoints included 3 "disagree a little" and 4 "agree a little. Reported Chronbach's Alpha for the scale range from .74 (Gibson & Sachau, 2000) to .81 (Peterson, 2014).

Next, participants completed a questionnaire that included questions about each players' age, handicap index, and gender. It also included items developed specifically for this study. Two items measured normative beliefs about sandbagging: "It's smart to keep your handicap a little higher than it should be because most players artificially inflate their handicaps (they sandbag), and you are at a disadvantage if you don't keep your handicap high," and "Everyone sandbags a little."

The survey also included four items designed to assess interpersonal sandbagging: "When I first meet an opponent, I pretend to be less skilled than I really am." "Sometimes I intentionally hit bad shots to give my opponents the impression that I am not as good as I really am," "I would intentionally dress-down or use old equipment to fool an opponent about my real skills," and "I might complain about pain at the beginning of a round to psych-out my opponent." Participants responded to each item on a 5-point scale where 1 corresponded with "disagree very much" and 5 corresponded with "agree very much."

In addition, the survey assessed preferences for opponents. The item read: "The most enjoyable rounds are the rounds where I am competing against a player of ______ than(to) me." Players responded with either, "much lesser ability," "lesser ability," "equal ability," "greater ability," or "much greater ability." In addition, the survey included demographic items for gender, golf handicap index, and age.

Finally, the survey contained an item written in the form of a situational judgment test. This item assessed player willingness to inflate his or her handicap. Cheating is low in social desirability. In anticipation that people would be unlikely to confess to sandbagging unless the setting allowed sandbagging to be legitimized in some way, a scenario was created whereby sandbagging was prevalent and the player could sandbag without getting caught. The item read, "Imagine that you enter a tournament at a friend's golf club and you know that most of the players at the club have handicaps two strokes higher than they should have. This gives them an unfair advantage. The Tournament Director asks you for your handicap (you do not have to show your handicap card). How would you adjust your handicap to keep things fair?" Participants responded on a scale that included, "I would not change it," "I would increase it by 1 stroke," "I would increase it by 2 strokes," "I would increase it by 3 strokes," and "I would increase it by 4 or more strokes"

Results

Preliminary Analysis

A principal components analysis with orthogonal rotation was performed on the 12-item Sandbagging scale. Three components emerged with Eigenvalues greater than 1. Collectively, these three components accounted for 62% of the variance in the Sandbagging Scale. Similar to other analyses of the Sandbagging scale (Gibson and Sachau, 2000), the themes of the components included: 1) a preference for others to have low expectations for one's performance, 2) a desire to surpass those expectations, and 3) propensity to understate ability. Subscales were created by combining the items that loaded on each component (loadings greater than .45): SB Low Expectations (Alpha = .83), SB Surpass Expectations (Alpha = .74), SB Understate Ability (Alpha = .71). A Sandbagging Scale Total was also created by summing all items (Alpha = .85). See Table 1.

Table 1 Factor Loadings for Sandbagging Scale Items

	Component		Mean	SD	
	1	2	3		
The less others expect of me, the more comfortable I feel.	.848			3.2	1.2
The less others expect of me, the better I like it.	.834			3.1	1.2
When someone has high expectations for (of) me, I feel uncomfortable.	.779			3.2	1.2
It's better for people to expect less of you even if you know you can perform well.	.672			3.0	1.1
If I tell others my true ability, I feel extra pressure to perform well.	.460			3.1	1.2
I enjoy seeing others surprised by my abilities.		.770		4.1	1.1
I try to perform above others' expectations.		.752		4.4	1.1
I like others to be surprised by my performance.		.717		3.8	1.1
It's important that I surpass people's expectations for my performance.		.676		3.4	1.2
I understate my skills, ability, or knowledge.			.788	3.0	1.3
I will understate my ability in front of my opponent(s).			.763	2.6	1.1
I may understate my abilities to take off some of the added pressure.			.711	2.9	1.1

Next, a scale that measured Normative Beliefs about sandbagging was created by combining responses to the items, "It's smart to keep your handicap a little higher than it should be because most players artificially inflate their handicaps (they sandbag) and you are at a disadvantage if you don't keep your handicap high," and "Everyone sandbags a little," r(2395) = .32, p < 001. Agreement with the items in the Normative Belief scale were quite low. The mean response to the first item was (M = 1.8, SD = .83) and the second item was (M = 2.44, SD = .94). In fact, only 4% of the participants agreed or strongly agreed with each statement.

A measure of Interpersonal Sandbagging was created by summing responses to the items, "When I first meet an opponent, I pretend to be less skilled than I really am," "Sometimes I intentionally hit bad shots to give my opponents the impression that I am not as good as I really am," "I would intentionally dress-down or use old equipment to fool an opponent about my real skills," and "I might complain about pain at the beginning of a round to psych-out my opponent" (Alpha = .65). Again, agreement with the statements that comprised Interpersonal Sandbagging was somewhat low. If the Interpersonal Sandbagging Scale would have been scored on a 7 point scale, the mean agreements would have been 1.54 (SD = .49). This corresponds with a response between "strongly disagree" and "disagree." Again, only about 4% agreed or strongly agreed.

Sandbagging Scale

Age was negatively but only modestly correlated with scores on the SB Surpass Expectations, SB Understate and SB Total. Older players scored lower on the scale than younger players. However, there was no significant correlation with SB Low Expectations. Ability was only marginally related to the Sandbagging Scale or subscales. There were small, nonmeaningful gender differences for the sandbagging subscale scores but there was not a significant gender difference for the Sandbagging Scale total. See Table 2.

As predicted, and as Table 2 illustrates, scores on the Sandbagging Scale were positively correlated with Normative Beliefs and Interpersonal Sandbagging. The higher the Sandbagging Scale scores, the more likely golfers were to believe that sandbagging is common and the more likely they were to use interpersonal forms of sandbagging.

Responses to the question about whom golfers would choose to compete against were examined next. As can be seen in Table 3, about 52% of the participants

	1	2	3	4	5	6	7	8	
1. SB Total	1.0								
2. SB Surpass Expectations	.73	1.0							
3. SB Understate	.75	.37	1.0						
4. SB Low Expectations	.86	.40	.50	1.0					
5. Normative Reliefs	.26	.14	.25	.23	1.0				

.31

-.10

-.06

.22 .36

-.02

.04

.01

.11

1.0

.04

.04

1.0

.34

1.0

Table 2 Correlation Among Study Variables

.27 .12

-.16

-.06

-.10

n is between 2,295 and 2,389. If r > .04 or < -.04, p < .05. If r > .06 or < -.06, p < .01

Table 3	Choice	of	Opponent
---------	--------	----	-----------------

6. Interpersonal

8. USGA Handicap .02

Sandbagging

7. Age

	Frequency	Percent
Much Lower Ability	1	.001
Lower	22	.9
Equal Ability	1,263	52.5
Better	1,034	43.0
Much Better Ability	87	3.6

n = 2407

would prefer to compete against someone of about equal ability, and 47% would like to compete against someone of greater ability. Because there were functionally four responses to the item, the participants were placed in four groups. One group included the respondents who preferred to compete against a player of lesser or much lesser ability (n = 23). The second group included respondents who preferred to compete against someone of equal ability (n = 1,263), the third group included respondents who preferred opponents of greater ability (n = 1,034). The fourth group included respondents who preferred opponents of greater ability (n = 87). Golfers who preferred to compete against a player of lesser ability (m = 46.09), scored higher on the Sandbagging Scale than golfers who preferred to compete against a player of equal (m = 40.20), greater (m = 39.65) or much greater ability (m = 37.05), m = 7.88, m = 7.88,

Next, players' willingness to sandbag by adjusting their handicap was examined. As is evident in Table 4, the vast majority (96%) of golfers in this sample stated they would not be willing to adjust their handicap even when they were in a situation when most others were sandbagging by 2 strokes. For subsequent analyses, the sample was dichotomized into participants who were not willing to adjust their handicap and those who would adjust it by 1 or more strokes (4%). A point-biserial correlation was calculated for the dichotomized item reflecting willingness to adjust one's handicap and the Sandbagging Scale scores. The correlations were significant but low because of the lopsided distribution of the item (96% vs. 4%): SB Low Expectations (r = .05, p = .027), SB Surpass Expectations (r = .04, p = .04), SB Understate (r = .08, p < .001); and SB Total (r = .07, p = .001).

Handicap Sandbaggers vs. Non Sandbaggers

In the next section, the direction of analysis shifts away from the sandbagging scale and onto comparisons between golfers who were and were not willing to inflate their handicaps. To get a more detailed picture of the differences between people who would and would not sandbag, and to avoid some of the problems associated with analyses of unequal cell sizes, a sample of 88 participants was randomly selected from the group of subjects who said they would not adjust their handicap. Then this group was compared with the group of 88 players who said they would adjust their handicaps.

There was a significant age effect such that the players who were willing to adjust their handicaps were younger than the players who were not willing to adjust. There was a significant effect for ability. Players who were willing to change had

•	•	
	Frequency	Percent
I would not change it	2,325	96.4
I would increase it by 1 stroke	21	.9
I would increase it by 2 strokes	63	2.6
I would increase it by 3 strokes	4	0.2

Table 4 Willingness to Change One's Handicap

a lower handicap index than the players who were not willing to adjust. There was not a significant gender effect. As predicted, the players who were willing to sandbag scored higher on SB surpass, SB Understate, and SB Total. They also scored higher on Interpersonal Sandbagging and the Normative Beliefs Scale. See Table 5.

A regression model was used to answer the question, which of the variables is the best predictor of willingness to sandbag? Age, USGA handicap, Sandbagging Scale, Normative Beliefs, and Interpersonal Sandbagging served as predictors and a dummy code indicating willing to sandbag/not willing to sandbaggers served as the criterion. The overall model was significant (R Square = .19), F (5, 159) = 7.58, p < .001. In this case, when adjusting for the mutual influence of the predictors, the only significant predictor of group membership between sandbaggers and nonsandbaggers was Normative Beliefs (Beta = .32), p < .001. In other words, the best predictor of willingness to sandbag was golfers' beliefs about the extent to which others sandbag.

Discussion

The study provided modest support for the validity of the trait sandbagging scale. Scores on the scale were related to self-reports of willingness to use interpersonal sandbagging. In addition, people who scored high on the scale were more likely to choose a weaker opponent than were people who scored low on the scale. This finding dovetails with the study by Gibson et al. (2002) and Sachau et al. (1997). Scores on the sandbagging scale were also related to normative beliefs about sandbagging. This finding is consistent with a variety of studies on the false-consensus effect (Epley & Dunning, 2000).

There were parallel differences between golfers who were and were not willing to sandbag by inflating their handicaps. The golfers who were willing to

Table 5	Means for Players Who Would and Would Not Adjust Their
Handica	ps

	Would Not Adjust	Would Adjust			Eta
	(n = 88)	(n = 88)	F	р	Squared
SB Low Expectations	15.7	16.7	F(1, 174) = 2.01	.15	
SB Surpass Expectations	15.4	16.4	F(1, 174) = 4.09	. 045	.02
SB Understate	8.4	9.7	F(1, 174) = 9.33	.003	.05
SB Total	39.5	42.9	F(1, 174) = 6.72	.01	.03
Normative Beliefs	4.1	5.3	F(1, 171) = 28.74	.001	.14
Interpersonal Sandbagging	6.0	6.9	F(1, 169) = 7.45	.007	.04
Age	54.7	48.9	F(1, 174) = 7.54	.007	.04
USGA Handicap	13.5	11.1	F(1, 169) = 4.90	.028	.02

sandbag scored higher on the trait sandbagging scale. They were more willing to use interpersonal sandbagging on the course and were more likely to believe that sandbagging is common. The best predictor of willingness to inflate one's handicap was the belief that others are sandbagging.

Discouraging Sandbagging

The vast majority of players stated that they would be unwilling to inflate their handicap even if they were in a setting where most people were sandbagging, and they could sandbag without getting caught. This is encouraging in a sport where players are responsible for reporting their own scores and calling their own penalties. However, although only 4% of the respondents were willing to change their handicap, this is not an insignificant amount of cheating. In a full field of tournament players, 4% translates into 5 or 6 golfers. This may be enough cheating to keep honest players from entering tournaments.

Tournament officials have looked for methods for reducing sandbagging. The methods they choose should reflect the underlying motive for sandbagging. For example, there was a relationship between sandbagging and beliefs about the prevalence of sandbagging. People who sandbag think sandbagging is more common than do the people who do not sandbag. A reasonable approach to reducing sandbagging is to make golfers aware that sandbagging is uncommon. An antisandbagging public awareness campaign might be similar to the popular college antibinge drinking campaigns that have reduced binge drinking simply by stating statistics illustrating that over-drinking on campus is relatively uncommon (Perkins & Craig, 2006).

If the desire to win a prize is a motive for sandbagging, then sandbagging could be discouraged by changing the reward structure of tournaments. Amateur golf tournaments often award token prize money, usually in the form of pro shop credit, to top place finishers. Because sandbagging has been a problem, the directors of some recreational and social tournaments have turned to tournament formats that involve flighting players *after* the round is complete. For example, prizes can be awarded to players who finish in places 1, 2, 3, 11, 12, 13, 21, 22, 23. A postround flighted award structure gives everyone a chance to win something and could discourage sandbagging.

Additional Research

In this study, the sandbagging scale was examined as a composite score and as three subscales. The large sample size in the study allowed us to examine the facture structure of the scale. The results suggest there is little to be gained by dividing the scale. None of the subscales was consistently a better predictor than the scale total. We suggest researchers simply use the scale total in the future.

The items used in the Normative Belief scales were not ideal. One was triple barreled (It's smart to keep your handicap a little higher. . .), and the other was a bit vague (Everyone sandbags a little). Although agreeing with each item has unequivocal meaning, one could disagree with the items and still believe that sandbagging is common. For example, if a respondent believed that sandbagging happened frequently, he or she might disagree with the "It is smart" clause in the first item. The person who thinks that sandbagging is very common might also

disagree with the statement "everyone sandbags *a little*." Because beliefs about the frequency of sandbagging were most highly related to willingness to sandbag, it would be wise to use less ambiguous measures in future studies.

Another shortcoming of the study is the use of self-reports of sandbagging. A long history of research suggests that self-reports of behavior and actual behaviors have a tenuous relationship (Ajzen & Fishbein, 1977; La Piere, 1934; Wicker, 1969). Obviously, it would be better to record what players do and say at an actual tournament. Further, we do not know the percentage of respondents who have already sandbagged their handicap and therefore would not need to raise their handicap in a situation where everyone else has sandbagged. More work could be done studying sandbagging on the course.

We were not able to identify the specific cause (perceived benefit) of golf sandbagging because we did not pit the desire to win, expectation benchmark, or pressure reduction explanations against each other. It is, however, unlikely that golfers sandbag to create a low performance benchmark because the handicap is a fairly objective indicator of ability. It is easier to create a low, vague benchmark with a statement like, "I am not very good" than it is to say, "I am a 26 handicap." The contrast effect may not work as well with a specific benchmark as a vague benchmark. From this study, one cannot be sure whether people sandbag on the golf course to reduce their own performance pressure or to increase the chance of winning. Certainly the goals are not mutually exclusive. More research needs to be done to identify the specific motives of golf sandbagging.

An interesting possibility that was not directly tested in this study is that some sandbagging may be the result of players misunderstanding the method that is used to calculate the handicap. Some golfers mistakenly believe that the handicap corresponds with a player's mean score and thus reflects his or her score on a typical round (Lahman, 2009). In fact, the golf handicap index is intended to mirror a player's *potential* performance rather than his or her *average* performance (USGA, 2013). In other words, the handicap index better reflects a golfer's 80th percentile score than his or her 50th percentile score. As such, a player should only perform better (score lower) than his or her handicap 20% of the time (USGA, 2013). If golfers think that the handicap represents their average performance, they may become frustrated by their tournament scores and be motivated to inflate their handicap. This possibility needs further study.

The Sandbagging Scale was related to golf sandbagging but did not account for a large proportion of the variance. Thus, a question that remains to be answered is the role that other personality traits may play in the propensity to sandbag. It might be wise to look at research on self-handicapping (Berglas & Jones, 1978). Sandbagging is similar to self-handicapping. Both are negative self-presentation strategies used to lower audience expectations for performance. Variables that are related to self-handicapping like self-esteem (Prapavessis & Grove, 1998), goal orientation (Kuczka & Treasure, 2005), self-compassion (Neff, 2011, Petersen, 2014), and trait anxiety (Ryska, Yin & Cooley, 1998) might also be related to golf sandbagging.

Finally, researchers could consider studying sandbagging in other types of competitive events. Sandbagging occurs in bowling (Goodger, 2013), chess (Evans, 2013), and tennis tournaments (Martin, 2009). Sandbagging can undermine the fairness of any type of tournament where players are flighted by ability.

Notes

- 1. Low handicappers actually have a slightly greater chance of winning under the current USGA handicap system. The USGA calls this the *bonus for excellence* (USGA, 2013).
- 2. The handicap system is somewhat more complicated than this. Regional golf associations calculate and store each player's *handicap index*. This index and a measure of course difficulty, called *course slope*, are used to determine the handicap that a player should be assigned for any given course. In other words, a player will be assigned a slightly different handicap for each course depending on the difficulty of the course (USGA, 2013). If a player handicaps his or her index, the course handicap would also be affected.

References

- Adler, M. (2012). Where do you fall on golf's honesty meter? *Golf Digest*, 63(3), 104-106. Ajzen, I., & Fishbein, M. (1977). Attitude-behavior relationships: a theoretical analysis and review of empirical research. *Psychological Bulletin*, 84(5), 888–918. doi:10.1037/0033-2909.84.5.888
- Berglas, S., & Jones, E. E. (1978). Drug choice as a self-handicapping strategy in response to noncontingent success. *Journal of Personality and Social Psychology*, *36*(4), 405–417. PubMed doi:10.1037/0022-3514.36.4.405
- Epley, N., & Dunning, D. (2000). Feeling "holier than thou": Are self-serving assessments produced by errors in self- or social prediction? *Journal of Personality and Social Psychology (Savannah, Ga.)*, 79, 861–875.
- Evans, L. (2013). This crazy world of chess. Las Vegas, NV: Cardoza Publishing.
- Festinger, L. (1954). A theory of social comparison processes. *Human Relations*, 7(2), 117-140. doi:10.1177/001872675400700202
- Gibson, B. (2007). The role of individual differences in sandbagging on selective avoidance of self-evaluative information. *Journal of Research in Personality*, 41(2), 481–487. doi:10.1016/j.jrp.2006.04.006
- Gibson, B., & Sachau, D. (2000). Sandbagging as a self-presentational strategy: Claiming to be less than you are. *Personality and Social Psychology Bulletin*, 26(1), 56–70. doi:10.1177/0146167200261006
- Gibson, B., Sachau, D., Doll, B., & Shumate, R. (2002). Sandbagging in competition: Responding to the pressure of being the favorite. *Personality and Social Psychology Bulletin*, 28(8), 1119-1130. doi:10.1177/01461672022811010
- Goodger, J. (2013). Sandbagging some call is a strategy, most call it cheating. Retrieved 12.27.2013 from http://bowling.about.com/od/leaguebowling/qt/Sandbagging.htm
- Greene, A. (2012). CNN News. Retrieved, 7/10/2013 edition.cnn.com/2012/08/01/sport / olympics-badminton-scandal.
- Knuth, D. L. (2003). Dealing with sandbagging. Retrieved 12/30/2013 from http://www.popeofslope.com/sandbagging/
- Knuth, D. L., Scheid, F. J., & Engel, F. P. (1994). Outlier identification procedure for reduction of handicaps. Science and Golf II: Proceedings of the World Scientific Congress of Golf. Cochran, A. (Ed.), London: E & F Spon.
- Krakel, M. (2014). Sandbagging. *Journal of Sports Economics*, 15(3), 263–284. doi:10.1177/1527002512449349
- Kuczka, K. K., & Treasure, D. C. (2005). Self-handicapping in competitive sport: Influence of the motivational climate, self efficacy, and perceived importance. *Psychology of Sport* and Exercise, 6(5), 539–550. doi:10.1016/j.psychsport.2004.03.007
- Lahman, E. (2009). Purpose of the USGA handicap system. Retrieved 12/30/2013 from https://www.usga.org/ourexpertsexplain.aspx?id=11485

- LaPiere, R.T. (1934). Attitudes vs. actions. *Social Forces*, *13*(2), 230–237. doi:10.2307/2570339 Martin, J. (2009). Ringers, sandbaggers and the theory of 7. *Tennis*, *45*(4), 8.
- Neff, K. D. (2011). Self-compassion: An alternative conceptualization of a healthy attitude towards oneself. *Self and Identity*, 2, 85–101. doi:10.1080/15298860309032
- Perkins, H. W. & Craig, D. W. (2006). A successful social norms campaign to reduce alcohol misuse among college student-athletes. *Journal of Studies on Alcohol*, 67(6), 868–879. PubMed
- Petersen, L. (2014). Self-compassion and self-protection strategies: The impact of self-compassion on the use of self-handicapping and sandbagging. *Personality & Individual Differences*, 56, 133-138. doi:10.1016/j.paid.2013.08.036
- Prapavessis, H. & Grove, J.R. (1998). Self-handicapping and self-esteem. *Journal of Applied Sport Psychology*, 10(2), 175–184. doi:10.1080/10413209808406386
- Rsyka T. A., Yin Z., & Cooley J. (1998). Effects of trait and situational self-handicapping on competitive anxiety among athletes. *Current Psychology (New Brunswick, N.J.)*, 17(1), 48–56. doi:10.1007/s12144-998-1020-9
- Sachau, D., Gibson, B., Hannah, M., & Hoheisel, B. (1997, May). Sandbaggers, ringers and rewards. Poster presented at the 69th Annual Meeting of the Midwestern Psychological Association, Chicago, IL.
- Sachau, D., Simmering L., & Adler, M. (2012, Spring). *Lake Wobegon's golf course: Misperceptions of superiority and consensus among recreational golfers.* Paper presented at the Sixth World Scientific Congress of Golf. Phoenix, AZ.
- Shepperd, J., & Socherman, R. (1997). On the manipulative behavior of low Machiavellians: Feigning incompetence to "sandbag" an opponent. *Journal of Personality and Social Psychology (Savannah, Ga.)*, 72(6), 1448–1459. 10.1037//0022-3514.72.6.1448
- USGA (2013). The United States Golf Association Handicap Manual. Retrieved 12/30/2013 from http://www.usga.org/Rule-Books/Handicap-System-Manual/Handicap-Manual/
- Wicker, A. (1969). Attitudes versus actions: The relationship of verbal and overt responses to attitude objects. *Journal of Social Issues*, 24(4), 41-78. doi: 10.1111/j.1540-4560.1969. tb00619.x