

## Putting in Golf: Is it as easy as it seems to be?

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### Abstract

*This study aims at revealing the specific distance considered hardest to putt and discovering the causal factors from the golfers' personal opinion. The objectives of this exploratory study are achieved by conducting two separate studies, using the same samples consisting of 153 golfers with ages ranging from 18 to 60 years old. Two putting tests were carried out right before the participants took part in a golfing competition. They were asked to putt only one time from four different distances (3, 6, 12 and 24 feet). The number of strokes taken until a ball sank into a hole indicates the samples' performance. Next, 10 golfers were randomly approached to take part in the interviews right after the competition. Repeated measures one-way ANOVA results showed there was a significant effect for putting distance, Wilks' Lambda = .43,  $F(3, 150) = 74.49$ ,  $p < 0.05$ , multivariate eta squared = .57 and the Pairwise comparison revealed 6 feet distance significantly higher ( $M=2.35$ ,  $SD=0.62$ ) compared to other distances. The qualitative results disclosed that most of the participants described their psychological states (i.e., anxiety and self-belief) play a big role in influencing their ability to putt. In addition, technically such as the position of the grip and stance alignments are other reasons that make putting in certain distances hardest to execute. In conclusion six feet distance is considered the hardest distance to execute. Meanwhile cognitive, emotional, and behavioural aspects associate for making the distance hardest to perform.*

**Keywords:** *hardest distance, golf putting*

### Introduction

To become a successful golfer, he or she requires more than a good swing (i.e., driving, pitching, short game, and putting) (Karlsen, Smith, & Nilson, 2008). Several studies found that golf putting seems to cause the biggest problem for golfers, for instance 30 to 60 % of problems found in the ability to putt, particularly in short distance (Farnsworth, 2009; Gelman, & Nolan, 2002; Hung, 2003). However, it might show some difference in psychology among the golfers when it comes to putting, since the past performances tend to be the most influential in future performance (Bandura, 1997; Smith et al. 2003).

Several studies showed most of the investigators have selected the distance of putt intuitively (i.e., Beauchamp, Halliwell, Fournier, & Koestner, 1996; Krane, Williams, & Feltz, 1992; Malouff, & Murphy, 2006). For instance, Wright and Erdal (2008) considered 3

feet distance as an easiest distance and 9 feet as hardest distance to putt. Different studies by Ploszay, Gentner, Skinner, and Wrisberg (2006) used 3 meter distance, Orliaguet and Coello (1998) used 12 feet distance. Meanwhile, Smith and Holmes (2004) used 3 meter distance and Van Raalte, Brewer, Nemeroff, and Linder (1991) used 3.5 meter distance to measure the performance of golf putting. The present study is aware golfers had no roles in identifying the distance from which the putting is most difficult. Therefore, the objective of this study was to identify the hardest putting distance to putt. Additionally, the second objective was to explore the reasons for making the certain distances hardest to perform.

## Methods

### Participants and procedures

In study one reported here, we administered a putting test to investigate the putting performance across four different distances. Additionally, we conducted a semi-structured interview right after the competition in study two. The proposal has been submitted to the Golf Association one month before the tournament, as preliminary information to the Golf Club. The two different tournaments (i.e., men and women) were selected due to the confirmation from the club management and the golf association. We administered the putting test to 153 golfers (48 male and 105 female) with average handicaps ( $M=15.8$ ,  $SD=9.45$ ). The participants were instructed to use their own putter and to putt only one time from four different distances at the actual putting green. Next, we administered the test at the real putting grass as conducted by the previous studies (Ramsey, Cumming, & Edwards, 2008). The putting green was validated by the professional golfer and relatively flat approximately 85ft. x 120ft. They were asked to use their own putter and ball to make them feel comfortable with their own technique. Next, they were instructed to putt only one time from four different distances 3, 6, 12 and 24 feet as conducted by Smith and Holmes (2004). Finally, the data for each participant's scores were recorded based upon the number of how many strokes taken until a ball sank into the hole and indicate the performance of the golfers. Repeated measures one-way ANOVA was used to determine putting performance across four different distances.

In the second study, we conducted the interviews at the café right after the tournament. Ten golfers (5 male and 5 female) with experiences from 5 to 15 years and average handicaps ( $M=15.8$ ,  $SD=9.45$ ) were recruited randomly after the tournament. One simple open-ended question used in this study as suggested by the previous studies: "What were you thinking when putt from the hardest distance that you feel it will affect your performance and can you please describe a situation when you had to do a putting from this distance" (Baumgartner & Hensley, 2006; Seale, 1999; Thomas, Nelson, & Silverman, 2005). Additionally, we assigned one professional golfer during the entire interviews to avoid any reflexivity and potential biasness during the interview. The interviews were recorded and lasted approximately 30 minutes including the introduction phase. We decided to integrate the results and discussion section to avoid repetition and increase readability since the descriptions are closely related in qualitative research. The first and second author

performing all analyses and a qualitative analysis was conducted in this study (Bos & Tarnai, 1999). This study was approved by the ethics committee of Sport Centre University of Malaya, Kuala Lumpur and from the relevant golf and club authorities.

## Results

A repeated measures one-way ANOVA was conducted to compare scores on the putting performance with Statistics Test at 3, 6, 12, and 24 feet distance. There was a significant effect for putting distance, Wilks' Lambda = .43,  $F(3, 150) = 74.49$ ,  $p < 0.05$ , multivariate eta squared = .57. Hence, the null hypothesis was rejected. There was a statically significant difference test scores putting distance in golfers.

Table 1 shows the Bonferroni Post hoc tests results revealed that golfers elicited an increase no of strokes taken from 3 feet to 6 feet distance ( $M=1.40$ ,  $SD=0.42$  vs.  $M=2.35$ ,  $SD=0.62$ , respectively) which was statistically significant ( $p < .01$ ). Additionally, 12 feet distance had been reduced no stroke ( $M=1.84$ ,  $SD=0.44$ ) which was statistically significantly different to 6 feet distance ( $p < .01$ ). Finally, putting performance from 24 feet distance had been increased no of strokes which were statistically significantly different to 12 feet distance ( $M=2.09$ ,  $SD=0.47$ ,  $p < .01$ ). Therefore, we concluded that the 6 feet distance considers the hardest distance to perform not 3 feet, 12 feet or 24 feet distance.

Table 1: Summary of Pairwise Comparisons, Means, and Standard Deviations for scores on the 3 feet, 6 feet, 12 feet, and 24 feet Distance

Distance	3 feet	6 feet	12feet	24 feet	M	SD
3 feet	-	-	-	-	1.39	.516
6 feet	.961*	-	-	-	2.35	.765
12 feet	.451*	-.510*	-	-	1.84	.539
24 feet	.699*	-.261*	.248*	-	2.09	.578

\*the mean difference is significant at the .05 level

Note. The comparisons for participants (n=153) are presented above and below the diagonal. Means and standard deviations for participants are presented in the vertical columns. For all distances, higher scores are indicative of more strokes taken to made putt in the hole; 3 feet, 6 Feet, 12 feet, and 24 feet.

In study two, the findings revealed three general themes related to why certain distances hardest to perform based on the thoughts and ability whilst performing (see Figure 1): (1) *Cognitive aspects*, (2) *Emotional aspects*, (3) *Behavioral aspects* and the codes, categories and themes. The label “hardest distance” was chosen since it describes the most

difficult distance to hole putt in putting. The categories for Cognitive aspects included *Positive self-belief*, *Negative self-belief*, *Deference belief between distance and performance*. Additionally, Emotional aspect the categories included *Difference feelings between distance and performance*, *feeling when putting*. Finally, Behavioural aspects the categories included *Technical preparation*, *Technical strategies* respectively.

*Cognitive aspects:* This theme included both positive and negative goals that make them to get hole putt or miss the putt. A *positive self-belief* described for instance one golfer stated “focus on my routine otherwise you might make 3 putts” and another golfer said “focus on the routine and relax”. Similarly, the perspectives explained by the Smith and Holmes (2004) when your mind tells you that you cannot make the stroke, especially from short distance.

Many golfers focus their attention on distracting thoughts, which results in poor performance for instance *negative self-belief*, one golfer stated “negative thought when I putt from 6 feet distance” and another golfer describe “20 feet, but other distances I have no problem”. Additionally, one golfer also stated “negative thought whenever I putt from the short distance”. The participants in this study also had an experience with the hardest distance to perform like one golfer said “every putt, 55 and 65 to under”.

The *deference belief between distance and performance* also described by the participants for instance one golfer justified in short distance “I need to do well, if relaxed for sure I will hole it” however, long distance “I don’t really expect the ball hole out”. In addition, one golfer stated “just want to park the ball closer to the hole” in longer distance and another described “I don’t really expect the ball hole out. I just want to get the feel of the putt”. These findings have been described by Gucciardi, Longbottom, Jackson, and Dimmock (2010); “Other distracting thoughts were prominent and included negative thoughts as well as an increased focus of performance expectations”.

*Emotional aspects:* It clearly showed that positive emotion is better than the negative whilst playing a round of golf. These findings are consistent with the previous studies, those golfers who expected to perform poorly had higher cognitive anxiety than golfers with expectations of successful performance (Bois, Sarrazin, Southon, & Boiche, 2009). Likewise, Chamberlain and Hale (2002) arrested that increasing of somatic anxiety intensity decreased the putting performance. The present study also found *difference feelings between distance and performance* like one golfer stated “nervous and psycho” in shorter distance while, “stress and anger when putts from 6 feet and below” and another golfer described “pressure from must make distance” from shorter distance however “less pressure, except you’re targeting from the 30 footer”. One golfer also described “confidence in 3 feet but not in 6 feet another golfer described “conscious, try to putt in and mental must be strong”. The findings found higher expectation on shorter distance than the longer distance like one golfer said “high expectations” in longer distance and “relaxes” in shorter distance. Another golfer said “I expected the ball hole out” while, one golfer describes longer distance “relax, and more firm” but shorter distance “pressure”.

The *feeling when putting* like one golfer expressed in statement such as “sad, angry because keep missing the hole” and another golfer described “very disappointing and pressure”. Two golfers said “I don’t feel angry or tense but sometime I’m confused, I don’t think can do this and I cannot control myself” while, another golfer felt “blanked”.

Furthermore, one golfer also described “I just want to let go, sometimes anger and mind shock”. As previously mentioned by the researchers mood is unpredictable (Hassmen, Koivula, & Hansson, 1998; Hellström, 2009). In the present study, almost cases golfers always feel nervous when performing the task like one golfer stated “I always feel negative and nervous”. Another golfer said “always negative and it’s all about your mind control”. Meanwhile, one golfer described “always thinking negative and tentatively”.

*Behavioral aspects:* Gucciardi et al. (2010) suggested regarding the factors contribute to the poor putting performance as well as Weinberg and Gould (1999) stated that somatic anxiety cause increases in muscle tension and can interfere with coordination while performing the task. In this study, the *technical preparation* such as one golfer expressed in his statement “shaking when downhill putts especially left to right”. Another golfer also said “confused with the alignment” and one golfer stated “cannot see the same line” made poor putting performance. These findings have been explained by the previous study, for example if eyes are fixated elsewhere at a position other than the ball, and head moves during the stroke these can lead to an improper stroke and miss the putt (Hung, 2003). Another reason maybe the players made faster first fixations and fixated for significantly longer toward the goalkeeper when taking the penalty kicks in soccer (Wilson, Wood, & Vine, 2009).

A failure to get a hole putt from the “hardest distance” probably because of technical changes made by the golfers. The *technical strategies* like one golfer said “light grip” and one golfer tried to grip the putter harder when putt from shorter distance like one golfer said “pressure grip not committed with body alignment”. One golfer said “grip a bit pressure and tension”. As previously mentioned by Farnsworth (2009) that common grip faults include too tight a pressure and softer grips have a propensity to twist easily. The present study found that one golfer said “shorter distance looser grip” and another golfer stated “fine grip and sometimes open the club face”.

Codes	Categories	Theme	
<ul style="list-style-type: none"> <li>• Make sure putting the ball into the hole</li> <li>• Focus on the routine and relax</li> </ul>	Positive self-belief	 <p data-bbox="1177 633 1369 667">Cognitive aspects</p>	
<ul style="list-style-type: none"> <li>• Negative thinking from 6 feet distance</li> <li>• Negative thinking of either putt or not.</li> <li>• Negative thinking from 20 feet distance</li> <li>• Negative thinking when putt from the short distance</li> <li>• Negative thinking from the score 55 and 65 to under</li> </ul>	Negative self-belief		
<ul style="list-style-type: none"> <li>• I don't really expect the ball hole out. I just want to get the feel of the putt.</li> <li>• More comfortable, just want to park the ball close to the hole</li> <li>• Near to the hole</li> <li>• I just want to park the ball close to the hole</li> <li>• Park to the pin</li> <li>• I need to do well, if I'm relaxed then for sure will hole it, longer distance I don't really expect the ball hole out</li> </ul>	Deference belief between distance and performance		
<ul style="list-style-type: none"> <li>• Confident in 3 feet but not in 6 feet</li> <li>• Less pressure, except you're targeting from the 30 footer</li> <li>• Relax and more firm in shorter distance</li> <li>• Stress and anger when putt from 6 feet and below</li> <li>• Pressure from must make distance</li> <li>• Higher expectations</li> <li>• Expectation the ball hole out</li> </ul>	Difference feelings between distance and performance		 <p data-bbox="1177 1507 1401 1541">Emotional aspects</p>
<ul style="list-style-type: none"> <li>• Nervous and psycho</li> <li>• Worry</li> <li>• Conscious</li> <li>• Anxiety</li> <li>• Confused and uncontrolled</li> <li>• Blanked</li> <li>• Sad and angry because keep missing the hole</li> <li>• Angry and tense</li> </ul>	Feelings when putting		

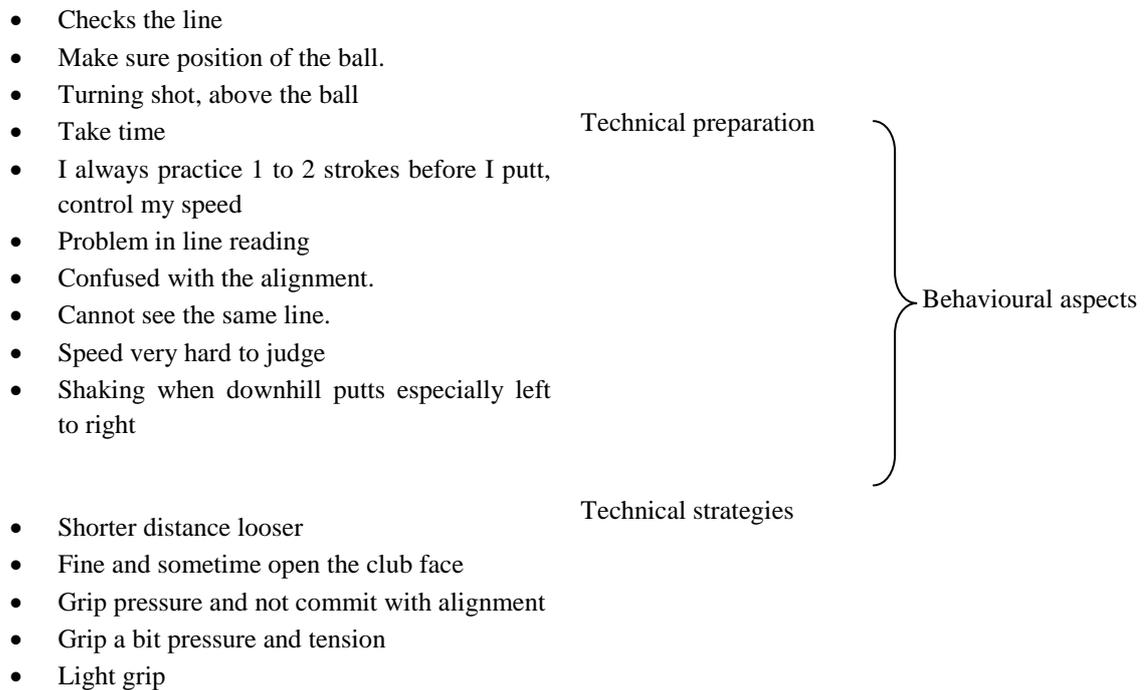


Figure 1: Structure of the theme based on the cognitive, emotional, and behavioural aspects when putting from hardest distance.

## Discussion

It is important to emphasize that our findings are related to identify the hardest putting distance to putt and the reasons for making the certain distances hardest to perform. The present study found both male and female golfers had a problem to perform from 6 feet distance. In contrast from what we expected, the longer the distance the hardest the distance to putt. Consistently, as discussed by Hassmen et al. (1998) that where some golfers were not being able to have the same stroke as in practice whilst playing. The present study summarized the different belief between distance and performance (i.e., “must make putt from short distance and just want to park the ball closer to the hole in long distance”) made disturbed the emotion of golfers (i.e., pressure from must make putt”). Therefore, they tried to change the strategies to putt technically (i.e., “grip position”). As a result they will miss the putt.

## Conclusion

Several strategies have been suggested by the previous studies particularly in psychological skill training (PST) such as attentional control, goal setting, self talk, emotional control, relaxation and imagery have been effective in improving performance of athletes (Hardy,

Roberts, Thomas, & Murphy, 2010; Munroe, Hall, Simms, & Weinberg, 1998). Additionally, 6 feet distance that is considered the hardest distance to putt (based on the putting test) has given an idea for future research to test the efficacy on this particular distance. In doing this, the psychological state of golfers can be predicted while performing from this distance.

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