U.S. National Development Program

Putting With Effective Speed

FOR THE GOOD OF THE GAME

Quick review of our last call:

• Strokes Gained Putting is the best stat that measures putting performance! The purpose of today's call is to help our Strokes Gained Putting get better. **Higher is better in SGP, not lower. You want a positive number, not a negative number!**

What does it take to putt great?

THREE BIG THINGS

1. Need to hit your line (stroke it well)
2. Need to read greens extremely well
3. **Need to putt with a speed that leads to putting well**

Three Reasons to Have Effective Speed

1. **Avoid 3 Putting**

-On the PGA Tour since 1990, only 7 players have finished a full season with as many or more 3 putts as rounds played. Meaning, 99.9% of the players averaged less than one three putt per round for the season.

2. **Helps you make putts that break**

3. **The hole is effectively bigger when the ball is moving slower**

Why Measure Speed Performance?

- Measuring speed on the greens transformed the way many of the players we have coached putted.
- Most golfers train their stroke but rarely train their speed control.
- We have found that when golfers prioritize having great speed, they get better at it in a short period of time.
- Some people consistently hit their putts too hard and don't understand why this is a problem. They are told that leaving a putt short is horrible. Once they understand how this is hurting their score and start measuring their speed performance, they putt better!
- **"That which is measured improves. That which is measured and reported improves exponentially." Karl Pearson**

Speed Ratio

A statistic designed to measure putting speed performance.

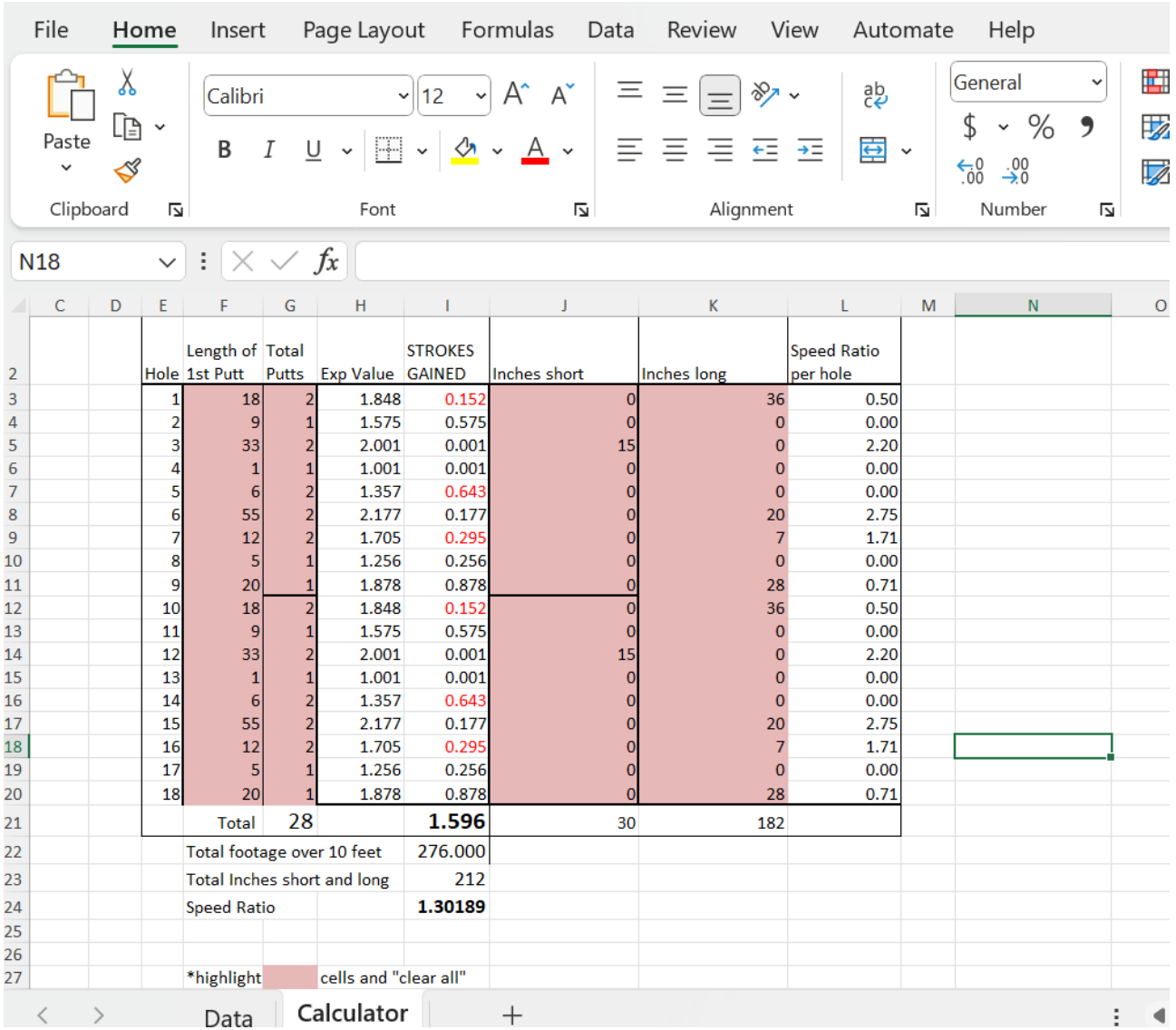
How to calculate the Speed Ratio

1. **For every first putt of 10 feet or more during a real round or a Simulated Putting Round on the practice green, record the number of inches short or long the first putt ends up (if the first putt goes in, estimate the inches it would have gone long of the hole).**
2. **Upon completion of the round, add up the footage of all first putts that were 10 feet or more.**
3. You will have two different numbers at this point: the **total footage of first putts 10 feet or more**, and the **combined inches short or long of the first putts on those 10+ footers.**
4. Divide the total footage of the putts 10 feet or more by the combined inches short and long: For example, if there are 300 feet of putts 10 feet or more, and there are 250 inches of short and long on those 10+ footers.....300 divided by 250 = Speed Ratio of 1.2

Calculating SGP and Speed Ratio for a normal round of golf…

1.	18 ft / 2 putts	+36
2.	9/1	
3.	33/2	-15
4.	1/1	
5.	6/2	
6.	55/2	+20
7.	12/2	+7
8.	5/1	
9.	20/1	+28
10.	18/2	+36
11.	9/1	
12.	33/2	-15
13.	1/1	
14.	6/2	
15.	55/2	+20
16.	12/2	+7
17.	5/1	
18.	20/1	+28

Strokes Gained Putting and Speed Ratio Calculator



Hole	Length of 1st Putt	Total Putts	Exp Value	STROKES GAINED	Inches short	Inches long	Speed Ratio per hole
1	18	2	1.848	0.152	0	36	0.50
2	9	1	1.575	0.575	0	0	0.00
3	33	2	2.001	0.001	15	0	2.20
4	1	1	1.001	0.001	0	0	0.00
5	6	2	1.357	0.643	0	0	0.00
6	55	2	2.177	0.177	0	20	2.75
7	12	2	1.705	0.295	0	7	1.71
8	5	1	1.256	0.256	0	0	0.00
9	20	1	1.878	0.878	0	28	0.71
10	18	2	1.848	0.152	0	36	0.50
11	9	1	1.575	0.575	0	0	0.00
12	33	2	2.001	0.001	15	0	2.20
13	1	1	1.001	0.001	0	0	0.00
14	6	2	1.357	0.643	0	0	0.00
15	55	2	2.177	0.177	0	20	2.75
16	12	2	1.705	0.295	0	7	1.71
17	5	1	1.256	0.256	0	0	0.00
18	20	1	1.878	0.878	0	28	0.71
	Total	28		**1.596**	30	182	
	Total footage over 10 feet			276.000			
	Total Inches short and long			212			
	Speed Ratio			**1.30189**			

*highlight cells and "clear all"

Data Calculator

Simulated Putting Round

- Instead of taking 4 hours to play a round of golf to test your putting, we came up with a simulated putting round to be done on a practice putting green. We did this by identifying the average 18 starting putts in feet our players had in every round they played during one of our seasons. These are those lengths:

2, 2, 3, 4, 5, 6, 8, 9, 11, 14, 16, 18, 21, 24, 28, 33, 40, 52

- The PGA Tour average to hole out these 18 putts is: **29**
  - In other words, if all 200 PGA Tour players putted from these distances, they would average 29 putts to hole out
  - A score of 29 is a SGP of 0.00, a score of 28 is +1.0 SGP, and a score of 30 is -1.0 SGP.
  - The best putter on the PGA Tour would average no better than **28,** and the worst putter on the PGA Tour would average at worst **30.0 or a bit higher.**

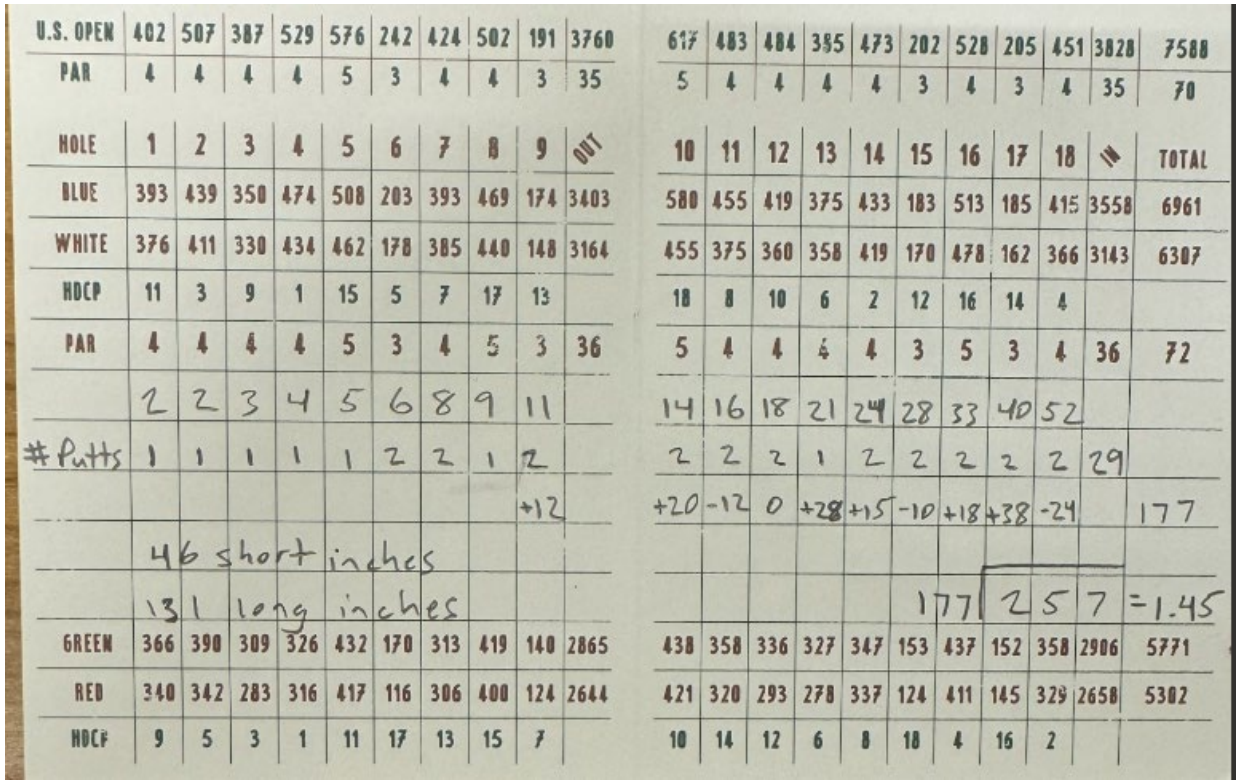
Speed Ratio and the Simulated Putting Round

- For the Simulated Putting Round, you will hit the following putts in random order, and you will hole out each putt. You will keep track of how many putts it takes to hole out each putt, and you will record the number of inches short or long for the following putts in red:

2, 2, 3, 4, 5, 6, 8, 9, 11, 14, 16, 18, 21, 24, 28, 33, 40, 52

- The sum of the putts over 10 feet in the Simulated Round amounts to 257 feet. You will divide 257 by the total inches short and long for those 10 first putts to get your Speed Ratio.
- The data you end up with after a Simulated Putting Round is the following: you end up with a total number of putts that can then be compared in a Strokes Gained world to the PGA Tour, and you get a Speed Ratio to describe your speed performance.

Simulated Putting Round Example on a Standard Scorecard



U.S. OPEN	402	507	387	529	576	242	424	502	191	3760
PAR	4	4	4	4	5	3	4	4	3	35
HOLE	1	2	3	4	5	6	7	8	9	OUT
BLUE	393	439	350	474	508	203	393	469	174	3403
WHITE	376	411	330	434	462	178	385	440	148	3164
HDCP	11	3	9	1	15	5	7	17	13	
PAR	4	4	4	4	5	3	4	5	3	36
	2	2	3	4	5	6	8	9	11	
# Putts	1	1	1	1	1	2	2	1	2	
									+12	
	46 short inches									
	131 long inches									
GREEN	366	398	309	326	432	170	313	419	140	2865
RED	340	342	283	316	417	116	306	400	124	2644
HDCP	9	5	3	1	11	17	13	15	7	

617	483	484	385	473	202	528	205	451	3828	7588
5	4	4	4	4	3	4	3	4	35	70
10	11	12	13	14	15	16	17	18	IN	TOTAL
580	455	419	375	433	183	513	185	415	3558	6961
455	375	360	358	419	170	478	162	366	3143	6307
18	8	10	6	2	12	16	14	4		
5	4	4	4	4	3	5	3	4	36	72
14	16	18	21	24	28	33	40	52		
2	2	2	1	2	2	2	2	2	29	
+20	-12	0	+28	+15	-10	+18	+38	-24		177
						177	257			=1.45
438	358	336	327	347	153	437	152	358	2906	5771
421	320	293	278	337	124	411	145	329	2658	5382
10	14	12	6	8	18	4	16	2		

1. Write length of putts down on top row.
2. Input number of putts taken to hole out for each putt on the second row.
3. For every putt of 10 feet or more, record inches short or long of first putt.
4. Hit the putts in a random order.
5. Add total strokes upon completion.
6. Add total inches upon completion and then divide 257 by the inches total to get the Speed Ratio.

Speed Ratio standards for on-course rounds and Simulated Rounds (higher is better!)

- 2019 USC Trojans Men on course average Speed Ratio: **1.29**
- 2020 USC Trojans Men on course average Speed Ratio: **1.36**
- Best On Course Speed Ratio for a USC Men's season: **1.53** (Justin Suh)
- The Simulated Round scores should be better because the practice greens and the putts we choose tend to make the Speed Ratio better on average than the on-course measurements. **The average Speed Ratio for all Simulated Putting Rounds done at USC Men's Golf from 2016-2020 was 1.5.**

Important Information

1. How do you measure the length of your putts when you play? You will need to start pacing them. Pacing after your first putt is best.
2. When you start to measure speed results, remember that your putter is around 32-35 inches long. Use that as a guide when measuring inches short or long.
3. Remember, we are measuring speed. If you hit a 40 foot putt perfectly hole high but 3 feet to the right, the speed measurement would be 0, not 36.
4. We like to keep track of the inches in categories of short and long. Although, when adding the inches for Speed Ratio purposes, pay no attention to whether it was short or long. We like to know this short/long info to identify tendencies.
5. If a putt is holed from 10 feet or more, please estimate the number of inches it would have gone long for the Speed Ratio calculation.
6. Remember, the Speed Ratio is the following calculation: Total footage of all first putts 10 feet or more DIVIDED by total combined inches short or long of those first putts. The higher the Speed Ratio the better!

Measured AND Reported… On Course Rounds

Scarlett S

On Course Round Putting Spreadsheet

Date	Score vs Par	SGP	Speed Ratio	Short Inches	Long Inches	Three Putts	Made Putts 10 ft or More
5/30/2024	5	0.927	2.48	61	76	1	4
5/31/2024	2	-0.014	2.2	66	102	1	3
6/4/2024	-2	1.462	2.04	126	76	0	2
6/4/2024	2	-2.017	1.71	111	79	1	1
6/5/2024	E	-1.541	1.63	140	55	1	2
6/12/2024	-2	-0.412	2.571	1	93	0	2
6/13/2024	-1	0.649	2.068	0	131	1	2
6/14/2024	-2	2.231	2.743	16	144	0	3
6/15/2024	-1	0.687	2.084	39	80	0	1
6/18/2024	-1	0.048	1.273	148	130	1	1
6/19/2024	6	-1.109	1.174	219	278	1	0
6/20/2024	-4	-1.067	1.88	84	76	1	1

Round Putting Spreadsheet | Simulated Round Spreadsheet | Ten Putt Test

Measured AND Reported… Simulated Putting Rounds

	A	B	C	D	E	F	G	H	I	J	K	L	M	N
1	Angela Z		2,2,3,4,5,6,8,9,11,14,16,18,21,24,28,33,40,52											
2														
3	**Simulated Putting Round Spreadsheet**													
4														
5	**Date**		**Score**		**SGP**		**Speed Ratio**		**Short Inches**	**Long Inches**		**Three Putts**		**Made Putts 10 Feet or More**
6	5/10/2024		29		0		0.87		3	291		1		1
7	16-May		29		0		1.78		22	122		1		3
8	5/21/2024		30		-1		2.54		37	64		0		1
9	5/23/2024		27		2		1.15		87	137		2		4
10	5/25/2024		30		-1		0.87		96	201		2		3
11	5/26/2024		30		-1		1.8		49	94		0		1
12	5/28/2024		29		0		2.36		51	58		0		1
13	5/31/2024		31		-2		1.6		5	156		1		0
14	6/1/2024		32		-3		0.94		106	167		1		0
15	6/4/2024		27		2		2.14		40	80		0		2
16	6/11/2024		29		0		1.25		98	107		0		2
17	6/14/2024		29		0		2.12		80	41		0		1
18	6/26/2024		29		0		1.36		115	74		0		1
19														

Round Putting Spreadsheet | Simulated Round Spreadsheet | Ten Putt Test

Average Speed Ratios for Best Putting Rounds and Worst Putting Rounds

Ruffels			Reiter	
Top 25%	1.59		Top 25%	1.52
Bottom 25%	1.03		Bottom 25%	1.23
Nam			Tanabe	
Top 25%	1.28		Top 25%	1.09
Bottom 25%	1.05		Bottom 25%	1.17
Muzi			Suh	
Top 25%	1.32		Top 25%	1.70
Bottom 25%	0.98		Bottom 25%	1.15
Manthena			C-Smith	
Top 25%	1.04		Top 25%	1.33
Bottom 25%	0.90		Bottom 25%	0.90
Leong			Suppa	
Top 25%	1.28		Top 25%	1.48
Bottom 25%	1.26		Bottom 25%	1.33
Garvey			Kim	
Top 25%	1.50		Top 25%	1.21
Bottom 25%	1.08		Bottom 25%	1.07
Corpuz			Onishi	
Top 25%	1.42		Top 25%	1.34
Bottom 25%	0.98		Bottom 25%	1.20
Chang			Henry	
Top 25%	1.14		Top 25%	1.19
Bottom 25%	0.95		Bottom 25%	1.09
Carr			Slater	
Top 25%	1.18		Top 25%	1.05
Bottom 25%	0.83		Bottom 25%	1.17
Abdulghany				
Top 25%	1.46			
Bottom 25%	1.19			
USC Women			USC Men	
Top 25%	1.32		Top 25%	1.32
Bottom 25%	1.03		Bottom 25%	1.15

Last Word: Our Goals

Let's strive to get our Speed Ratio over 1.2 for real rounds and 1.40 for Simulated Rounds.

Next:

- You will be emailed the SGP and Speed Ratio Calculator.
- You will be emailed this Power Point presentation.
- You will be emailed a link to the video of this webinar.