### WHAT DO GOLF COACHES SAY? AN ANALYSIS OF COACHING VIDEOS ON PLAYING FROM SLOPES

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### Introduction

Golf coaching can take many forms, from specialized individual coaching to general advice for a population. Recently, there has been an increase in the amount of general advice given online, and golfers can now receive information from YouTube coaching videos. Many videos advise golfers on how to play from sloping lies, however, the information will be based on the coaches' experience, as there is currently little scientific evidence in this area. The aim of this study was to select and review popular coaching YouTube videos to identify key biomechanical parameters for playing golf from sloping lies. This information will be used to inform future research into golfers' technique and performance when playing these shots. No hypothesis was set, as it was important to start without any preconceived ideas of the outcome (Corbin and Strauss, 2008).

# Methods

Ten videos were selected for each of the 4 sloping lies: uphill, downhill, ball above feet, and ball below feet. A total of 26 videos were assessed, as some contained advice for multiple slopes. The criteria for selection were that a PGA certified coach was giving advice on a full golf shot on one of the isolated slopes (no slope combinations), with the top 10 most viewed videos for each slope selected (ranging from 10,938 to 878,639 views at the time of analysis). Ten clips for each slope allowed for a good range of coaching knowledge and was considered enough for reoccurring themes to be identified. Verbal information within each video was transcribed and any gestures that were deemed to be important were described and added to the transcription. Transcriptions for each slope were imported into NVivo for further analysis. Categories and sub-categories were created that identified specific areas of focus from the coach (Corbin and Strauss, 2008). Occurrences of each category and sub-category were counted, key concepts were established, and video quotes which gave a good representation of the advice were highlighted in each sub-category. Lesser mentioned concepts or contradictory advice were also noted.

# **Results and Discussion**

Each piece of information fell into one of three categories: ball, body, or club. Two sets of sub-categories were established for the two directions of slope, as there were differences in the key parameters between the uphill/downhill and ball above/below feet slopes (Table 1 & 2). An example of a quote regarding the most popular sub-category, draw/fade, was "With the ball below the feet, you can be guaranteed that the ball will always go slightly left to right", which was similar in most videos. However, contradictory information was given in others describing the same shot, such as "If you're in balance and you're swinging through the golf ball, the ball will always go straight". These results show a consensus on several key aspects when playing from slopes, identifying variables that can be investigated in future work. However, differing opinions remain within the coaching industry regarding the effect of slopes and how to adapt to them, again highlighting areas for future research.

#### Significance

This work has provided an overview of golf coaching advice when playing from slopes, from a highly popular resource, YouTube. Millions of golfers around the world watch these channels and, presumably, try to improve their game using the advice. Although some advice for playing golf shots on slopes is widely agreed upon, there are still differing opinions and conflicting advice given within these videos. Now that key variables have been identified, biomechanical analysis can begin and look to provide some evidence to support or refute the claims made in these videos, which can impact the advice given by coaches in the future. As much of the biomechanical analysis in golf is performed on flat lies, this work also highlights the need to consider sloping lies in subsequent work.

#### References

Corbin, J., & Strauss, A. 2008. Basics of Qualitative Research (3rd ed.): Techniques and Procedures for Developing Grounded Theory. Thousand Oaks, CA: SAGE Publications, Inc.

Table 1: Percentage of sub-category mentions for uphill/downhill videos Table 2: Percentage of sub-category mentions for ball above/below feet videos

Uphill/Downhill										Ball Above/Below Feet								
Ball			Club			Body				Ball			Club			Body		
	Up (%)	Down (%)		Up (%)	Down (%)		Up (%)	Down (%)			Above (%)	Below (%)		Above (%)	Below (%)		Above (%)	Below (%)
Ball Position	70	70	Club No.	80	70	Aim	30	30		Ball Position	40	20	Club No.	50	50	Aim	90	70
Direction	30	30	Impact	70	100	Balance	80	90		Direction	40	20	Grip	80	50	Balance	40	70
Distance	70	60	Swing length/speed	50	50	Spine Angle	90	100		Distance	20	10	Impact	50	50	Posture	60	70
Launch	70	70	Swing Plane	70	60	Upper Body	40	40		Draw/Fade	100	100	Swing length/speed	50	60	Upper Body	30	30
						Lower Body	30	40					Swing Plane	40	20	Lower Body	50	90