USING VIDEO MODELING WITH VIDEO FEEDBACK AS AN INTERVENTION TO INCREASE THE PERFORMANCE ACCURACY OF SOCCER SKILLS

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ABSTRACT

This study evaluated the effects of video modeling in combination with video feedback to enhance the performance of three soccer skills. Two female competitive soccer players, 10-11-years-old, participated in this study. A multiple baseline across behaviors design was used to evaluate the effects of video modeling and video feedback. During baseline participants were video recorded performing the three target skills. During intervention, video modeling and video feedback were given to each player after she performed the target skill. Specifically, the player viewed a video of another player correctly performing the same skill, while she simultaneously viewed a video of herself performing the skill next to the other player. The results indicated that video modeling in combination with video feedback increased both participants' skill performance from baseline on the three targeted soccer skills. Social validity measures indicated that both participants liked the procedure and felt comfortable performing two out of three skills accurately.

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CHAPTER 1
INTRODUCTION

Behavior analysts have studied sports performance for over three decades (Martin & Tkachuk, 2000). According to U.S. the Youth Soccer Association (2012), there are over 3 million soccer members ages 5-19, with 48% of them being females. The instep pass, throw in, and shot with the laces are critical soccer skills that players need to be able to perform to be successful players. Youth soccer players often have deficits in these skills; therefore methods other than traditional coaching methods should be incorporated to help in the acquisition of these skills. There have been a variety of behavioral procedures found to be effective in improving athletic performance. Behavioral techniques used in sports have included public self-recording (McKenzie & Rushall, 1974), public posting of performance data (Brobst & Ward, 2002; Ward & Carnes, 2002), goal setting (Ward & Carnes, 2002), various forms of video feedback (Boyer, Miltenberger, Batsche, & Fogel, 2009), and teaching with acoustical guidance (Quinn, Miltenberger, & Fogel, 2015). For example, Allison and Allyon (1980) examined the effectiveness of a coaching "package" of behavioral methods in three different sports. The behavioral coaching package was immediately effective in increasing the correct execution of complex skills in football, gymnastics, and tennis.

Video Feedback

Video feedback is defined as showing an athlete a video clip of his or her own performance of a specific skill as a means of performance feedback (Hazen, 1990). Video feedback (e.g., a means of delivering information about the athletes correct and incorrect performance) has been used to improve performance of a variety of sport-related skills,

for example, yoga (Downs, Miltenberger, Biedronski, & Witherspoon, 2015), martial arts (Benitezsantiago & Miltenberger, 2016), tennis (Rikli and Smith, 1980), and horseback riding (Kelley & Miltenberger, 2016). Benitezsantiago and Miltenberger (2016) evaluated the effects of video feedback on the performance of three martial arts skills. There was a 15-step checklist used to rate the performance of each skill. During baseline there was no type of feedback given, participants performed the target skill, were videotaped, and then scored. During the intervention phase, the participants were videotaped performing the target skill and were then immediately shown the video clip; participants were able to watch the video in slow motion, and were provided with verbal feedback. An additional condition was added including video feedback along with practice. The study showed that accuracy of martial art skills increased from baseline to intervention, but performances did not approach 100% accuracy. Downs, Miltenberger, Biedronski, and Witherspoon (2015) also investigated the effects of video feedback but focused on improving horseback riding skills. There were three skills sets assessed. During baseline, participants were video taped while performing the skill and received verbal feedback during the lesson. During the intervention phase the participant performed the skill, was videotaped, and was shown the video while receiving verbal feedback from the coach. The results showed that video feedback substantially increased performance from baseline levels.

Video Modeling

Video modeling involves presenting the athlete with a video of someone else or themselves engaging in the correct performance to prompt correct performance (Boschker & Bakker, 2002; SooHoo, Take-moto, & McCullagh, 2004; Winfrey &

Weeks,1993; Zetou, Tzetzis, Vernadakis, & Kiou-mourtzoglou, 2002). Video modeling has been used to improve performance of a variety of skills, mainly for children with disabilities. For example, Nikopolus and Keenan (2004) used video modeling to increase social initiations and play behaviors in children with autism spectrum disorder (ASD). Participants were three children with ASD. Each participant watched a videotape of a typically developing peer initiating a social interaction with the experimenter. Following the video the experimenter engaged in the same social interaction with the participant. All participants increased social initiation and reciprocal play skills with video modeling.

Comparison Studies

Hazen, Jonstone, Martin, and Srikameswaran (1990) compared video feedback versus standard coaching for improving skills of youth competitive swimmers. Two experiments were conducted during the study. Experiment 1 examined traditional coaching versus a videotaping package that consisted of modeling, role-playing, videotaped feedback, and verbal feedback. Experiment 2 examined traditional coaching, group videotaping package, and individualized videotaping feedback. The results of both experiments suggested that an individualized videotaping feedback package was more effective than traditional coaching for increasing performance of swimming skills. Emmen, Wessling, Bootsma, Whiting, and Wieringen (1985), Zetou, Tzetzis, Vernadakis, and Kioumourtzoglou (2002), and Baudry, Leroy, and Chollet (2006) also examined video feedback and video modeling in a variety of sports. Emmen, et al. (1985) compared video modeling, video feedback, and the combination of video modeling plus video feedback on tennis services by novice players. Although the intervention showed promise when compared to standard coaching procedures, differences were not observed

between video modeling, video feedback, and the combination of video modeling and video feedback for improving skill performance. Zetou, et al. (2002) compared expert modeling and video feedback on volleyball skills. Expert modeling increased overall volleyball skill acquisition, but participants exposed to video feedback scored higher on serves than participants exposed to expert modeling. Baudry, Leroy, and Chollet (2006) studied the effectiveness of the combination of self-modeling, video modeling, and performance feedback in gymnastics. The experimental group received the self and expert-modeling package, while the control group received no feedback. The experimental group performed better than the control group on specific gymnastic skills.

The combined use of video modeling and video feedback holds promise for improving the execution of complex athletic skills (Boyer, et al. 2009). There have been several studies that have combined video modeling and video feedback to enhance athletic performance. These studies focused on athletic skills in tennis (Rikli & Smith, 1980) and gymnastics (Boyer, et al. 2009). Rikli and Smith (1980) used video modeling and video feedback to improve tennis serving form. Boyer, et al. (2009) used video feedback and video modeling to improve three specific gymnastics skills. Results of each study supported video feedback and video modeling as an effective intervention package to increase athletic performance.

Video feedback and video modeling used as separate interventions have proven to be effective in improving performance of athletes, also (Benitezsantiago & Miltenberger, 2016; Downs, Miltenberger, Biedronski, & Witherspoon, 2015; Kelley & Miltenberger, 2016; Nikopolus & Keenan, 2004). Video feedback and video modeling combined in one treatment package have also shown promise in improving performance (Boyer, et al.

2009; Rikli & Smith, 1980). To date no study has evaluated the combination of video modeling and video feedback in improving soccer skills. The present study expanded the use of video modeling in combination with video feedback to improve three specific soccer skills. This study addresses the following research question; will video modeling in combination with video feedback improve soccer skills (throw in, instep pass, & shot with the laces) of 10-11 year old female soccer players?

CHAPTER 2
METHOD

Participants

Two 10-11 year old female soccer players, who had been receiving training from the same soccer club twice a week, participated in this study. Hannah, an 11-year old girl in fifth grade, had been playing travel soccer for 2 years. Pam, a 10-year old girl in fourth grade, had been playing travel soccer for 1 year. All participants were typically developing.

Each soccer club practice was an hour and a half long and focused on developing skills like the ones included in this study. Participants were players who had deficits in the three skills chosen to study. Participants lacked accurate performance of the instep pass, throw in, and shot with the laces. Participants were chosen based on their performance accuracy of the target skills. Accuracy needed to be less than 80% for each skill. The intervention (video modeling with self video feedback) was implemented during scheduled practice times as well as during one-on-one sessions. The intervention primarily occurred two days per week for approximately 10-15 minutes per session.

Materials and Setting

The research study was performed at the Smyrna High School in Smyrna, Delaware. All sessions were conducted outside on the grass soccer field. Soccer sessions were approximately an hour and a half, but only about 15-20 minutes were used to collect data and conduct the intervention.

The materials included an iPad with a camera, size 4 soccer ball, and the app Coaches Eye. The iPad was used to record the participants' performance. The model video clips were based on the video that best demonstrates the techniques that the

participants performed. Model videos were both recorded and chosen, but the videos must have met the criterion for a perfect performance for the target skill based on the operational definitions of each skill. Other coaches from the Smyrna Clayton Soccer Club were video recorded by the student researcher and used as models for the videos that were recorded. As far as the videos found online, these videos were found on YouTube and included soccer players performing the target skill with 100% accuracy. The app Coaches Eye was used to show the participants' performance and the model performance side by side. The app costs $4.99 and was downloaded from the Apple app store. The app records videos, plays back the video in slow motion, and can play two videos side by side to compare and contrast movements. The participants only needed a soccer ball to perform the target skills. The soccer ball used was a size 4 soccer ball as recommended by the US Youth Soccer Association. The soccer field was 110 yards long by 75 yards wide. On the soccer field were two standard sized soccer goals 8 feet tall and 24 feet wide. The field surface was Bermuda grass.

Dependent Variables

The dependent variables were the performance of three specific soccer skills. The three skills were selected based on skill deficits of youth soccer players, and skills needed to increase performance in soccer games. All targeted skills included deficits that were specific to the two participants in the study. However, two of the skills targeted are skills that most youth players seem to struggle to complete accurately. The skills included an instep pass, shot with the laces, and a throw in. An instep pass is defined as the plant foot is beside the ball and the toes are pointed in the direction of the pass; knee of the standing leg is bent; hips facing the direction of the pass; turn the kicking leg outwards from the

hip; the toes of the kicking foot point out and the sole of that foot should be parallel to the ground; lean a bit forward at the waist; head down with the eyes on the ball; arms out for balance; a medium backswing of the kicking leg; lock the ankle of the kicking foot; toes of the kicking foot up slightly; the kicking foot is turned out and pushes through the middle of the ball; push through the ball towards the target follow through with the foot towards the target. A shot with the laces is defined a non-kicking (plant) foot is alongside the ball; toes of the plant foot pointed toward the target; knee of the plant foot leg is slightly bent; shoulder on the kicking leg side is in-line with the ball; the ankle of the kicking foot is now with the toes pointing away from the kicker; the hips must now be facing the target; on the downswing of the kicking foot the sole of the foot is parallel to the ground; strike the center of the ball at the horizontal line A (equator) with the inside (arch) of the foot; the toes of the kicking foot turned slightly upward; knee of the kicking leg should come upwards on the follow through; the inside of the kicking foot should be flat to the target on the follow through; the kicking foot should go towards; the target on the follow through; keep the head down until after the kicking foot has landed on the ground. A throw in is defined as both feet remaining on the ground; both hands on each side of the ball; the ball should be held behind the head; throw the ball over head.

Data Collection

The student researcher was the primary data collector throughout the study. Data were collected throughout each session during practice. The target behaviors in the study included three specific soccer skills. The skills were an instep pass, throw-in, and a shot using the laces.

The main data collection tool was a checklist designed for each of the target behaviors. Each checklist contained 3 phases per skill including preparation, contact, and follow through. “Yes” was marked if the participant performed the step correctly and “no” was marked if the participant performed the step incorrectly. The players’ performances of the target skill were video reordered during their regular training times.

Experimental Design

A multiple baseline across behaviors research design was used to evaluate the effectiveness of the intervention. When a week occurred with no values higher or lower than those of previous weeks three times in a row, the intervention phase began. Players received video feedback for each of the targeted skills.

Procedures

Baseline and intervention data were collected for the three target behaviors performed by each participant. The intervention was presented for one skill at a time. The same intervention procedure was implemented for each behavior.

Baseline. Baseline data were collected for the three-targeted skills under typical practice conditions. During the baseline condition the student researcher was the coach, and continued her typical coaching procedures. The student researcher was the coach of the team, which included the players involved in this study. During data collection the student researcher did not coach the players, but prompted the players through baseline and intervention phases and collected data. Prompting included asking the players to perform the target skill during baseline, and asking the players to perform the target skill like the video model during intervention. After data collection was over for that session the student researcher began coaching the players using traditional coaching methods

(e.g., giving verbal feedback, modeling correct performance of skills). Players received three opportunities to perform each of the three target skills. Skill accuracy was measured using a frequency count of accurate and inaccurate skill performance. Baseline procedure continued, two sessions per week, until measures were stabilized. When a week occurred with no values higher or lower than those of previous weeks, the intervention phase began. Participants had three opportunities to perform each skill and an average percentage was calculated for each skill.

Video modeling with self-video feedback. The intervention phase was identical to the baseline phase with the addition of video modeling and video feedback. During the intervention phase, the player performed the target skills and was video recorded using an iPad camera. The player was about 5-10 yards away from the camera, and the participant was video recorded from a side view. The video recordings were approximately 5-10 seconds in length. After the player was recorded the player was given the verbal prompt, "Watch the two video clips carefully. Notice how your skill is similar or different from the expert player on the left. Try to copy the player." The student researcher showed each player her own performance on the right side of the iPad, and on the left side of the iPad the player was shown the video model simultaneously with the her own performance again. The video model clip ranged in time from 1 to 5 seconds. The instructions were later reduced to simple instructions, "try to match the player on the left." No verbal feedback was provided to the players at anytime.

The participant was allowed three opportunities to complete each skill for the Video Modeling and Video Feedback intervention. After the completion of the third opportunity, the player moved on to the next target skill and completed the same process.

When the participant did not accurately perform the skill the intervention went on with the three opportunities per skill, and no verbal feedback. Baseline and intervention occurred at the beginning of practice while the other players were stretching and passing.

Mastery for accuracy was achieved when a participant completes 90% correct skill performance.

Inter-observer Agreement

Two independent observers scored 35% of the video sessions to obtain inter-observer agreement percentages. The percentage of agreement was calculated for each observation by dividing the number of agreements by the number of agreements plus disagreements. Agreement included both the data collector and IOA collector agreeing with "Yes" or "No" to each step in the target skill. These same data collectors also assessed procedural fidelity by using a checklist.

Research assistants were trained to collect data by watching the accurate performance of each target skill via the video model. Each skill was shown to the assistant in slow motion and was stopped after each step on the checklist (preparation, contact, and follow through) used to collect data. The assistant had the ability to play back each step in slow motion to watch the behavior as many times as they needed. Assistants were shown examples of 100% accurate performances of each skill and examples of inaccurate performances and were asked to score the performance. Assistants were able to score each of the performances at the end of training with 100% accuracy.

For Pam, IOA data were collected for 35% of sessions and averaged 94% agreement (range 86%-100%).

For Hannah, IOA data were collected for 37.5% of sessions and averaged 95% agreement (range 90%-100%).

Procedural Fidelity

Procedural fidelity was taken on 41% across sessions including baseline and intervention phases. Procedural fidelity was measured using a checklist (see Appendix B for the checklist). The total number of steps on the checklist depended on weather the participant was in the baseline or intervention phase. The checklist included one step for baseline and five steps for the intervention phase. The research assistant was shown each checklist and each checklist was described to them in detail, and a model session of accurate implementation of baseline and intervention phases were shown to the assistant. The research assistant was given opportunities to collect procedural fidelity data in mock scenarios until 100% accuracy was reached.

Procedural fidelity was calculated by dividing the number of steps completed correctly by the number of steps on the checklist then multiplying by 100 to get an average percentage of procedural fidelity. During baseline procedural fidelity was collected 25% of the time and averaged 100% procedural fidelity. During intervention procedural fidelity was collected 28% of the time and averaged a mean of 98%. The mean data were 100% for Pam and 96% for Hannah.

Social Validity

Each participant was given a questionnaire at the end of the study. A likert scale was used to rate a total of 10 questions. The questions evaluated the participants' opinions on how well they liked the procedure, if the procedure was too long, if they

would like to use video feedback in the future, and how comfortable they are completing the targeted skills (see Table 1 for the survey).

Table 1

Social Validity Questionnaire

		Strongly Disagree	**Disagree**	**Neutral**	**Agree**	**Strongly Agree**
1.	I liked the procedure.				**1**	**1**
2.	The procedure took too long.		**2**			
3.	I felt the procedure was helpful in learning the skills.				**2**	
4.	I liked using video feedback to learn the movements.			**1**	**1**	
5.	I would like to use video feedback in the future to learn new skills.			**1**	**1**	
6.	I am happy with the overall results of this study.				**1**	**1**
7.	I feel comfortable completing an instep pass.				**1**	**1**
8.	I feel comfortable completing a throw in.				**1**	**1**
9.	I feel comfortable completing a shot with my laces.			**1**	**1**	
10.	The video models provided a good model of each skill.			**1**	**1**	

CHAPTER 3

RESULTS

Results can be found in Figure 1 (Hannah) and Figure 2 (Pam). Both figures show that video modeling and video feedback increased the average percentage of correct steps for both participants. There were multiple trials of baseline for each behavior. Intervention was not started until baseline data points were no higher or lower than previous points and baseline stability was visually evident. For Hannah, all behaviors from baseline to intervention demonstrated a change in level and there were no overlapping data points. Her percentage of non-overlapping data across all behaviors was 100%. For Pam, once the interventions for each of the behaviors were implemented, her performance accuracy showed an immediate change. Her percentage of non-overlapping data across all behaviors was 81%. Each participant displayed relatively high percentages of correct responding in baseline. Therefore, there was not a very large increase when the intervention phase was implemented. Visually, the graph shows an increase for each behavior and participant. The average percentage of non-overlapping data across both subjects was 90.5%.

H**annah**

For Hannah, video modeling and video feedback implemented with the throw in exhibited the most stable data with the throw in performance accuracy increasing to 100%. Baseline for the instep pass and the shot with the laces data was variable. Baseline data means were 67% (range 44%-78%) accuracy for the instep pass, 70% for the throw in (range 67%-78%), and 59% (range 33%-67%) for the shot with the laces. Intervention data means were 100 percent for throw in, 98.1% (range 89%-100%) for the instep pass,

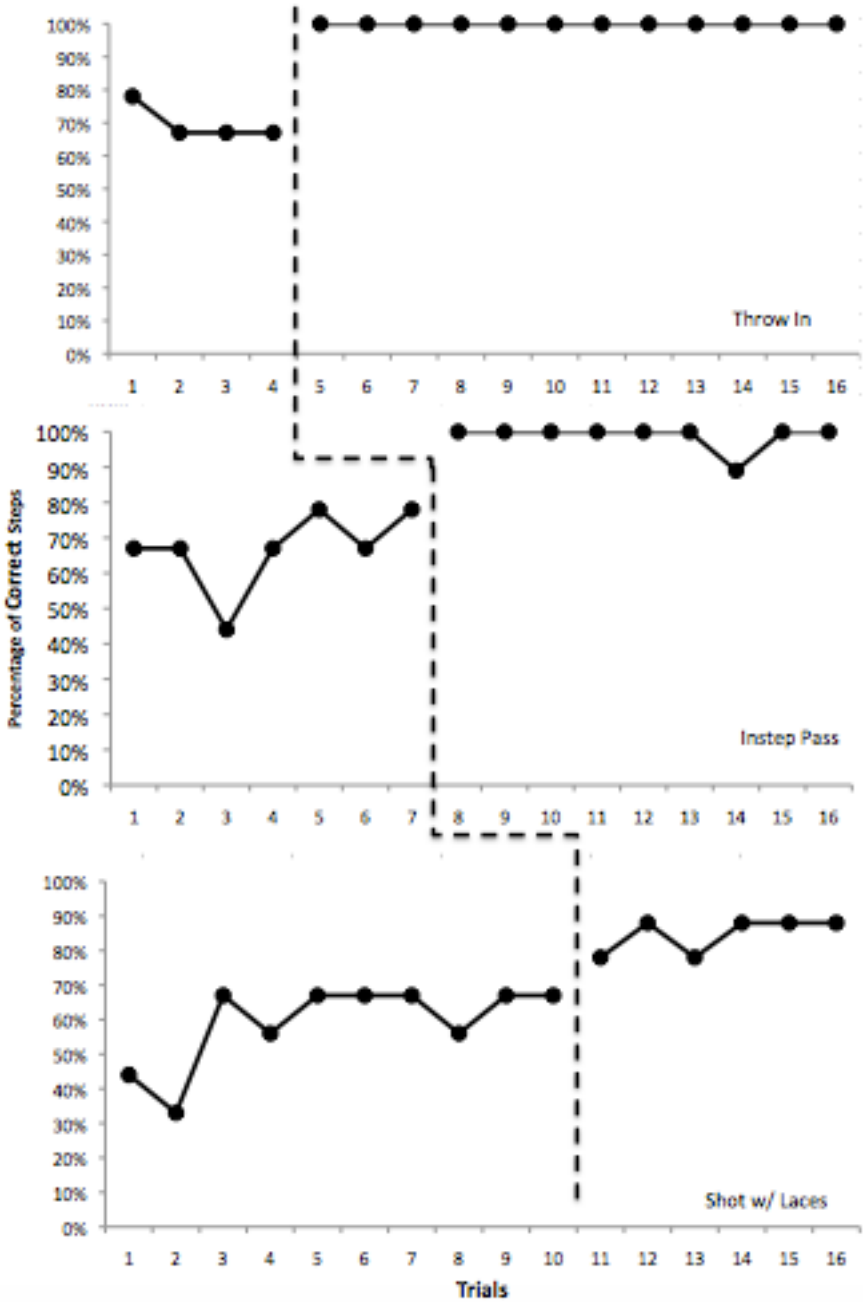

Figure 1. The percentage of correct steps completed by Hannah during baseline and intervention for all behaviors.

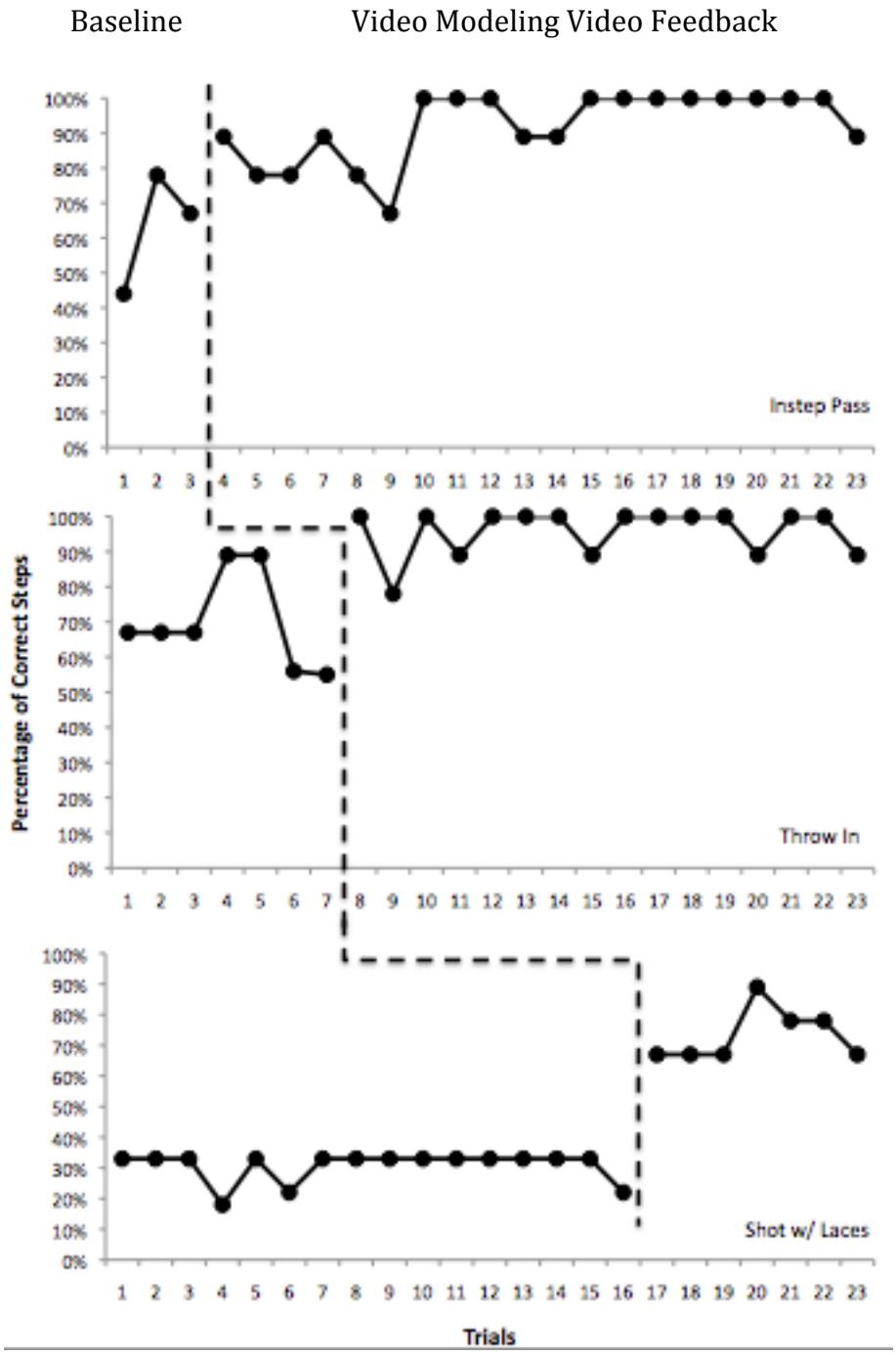

Figure 2. The percentage of correct steps completed by Pam during baseline and intervention for all behaviors.

and 85% (range 78%-88%) for the shot with the laces. For Hannah, the percentage of non-overlapping data across all behaviors was 100%.

Pam

For Pam, video modeling and video feedback implemented with the shot with the laces, which showed the greatest increase in skill performance. During baseline, Pam's percentage of accuracy did not exceed 33%. When the intervention was implemented for the shot with the laces the percentage of accuracy increased to 67%. During the instep pass and throw in intervention phases Pam's data remained stable. Baseline data means were 63% (range 44%-78%) accuracy for the instep pass, 70% (range 67%-89%) for the throw in, and 31% (range 18%-33%) for the shot with the laces. Intervention data means were 92.2% (range 67%-100%) for the instep pass, 96.2% (range 78%-100%) for the throw in, and 71% (range 67%-89%) for the shot with the laces. For Pam, the percentage of non-overlapping data across all behaviors was 81%.

The social validity survey revealed both participants liked the overall procedure with Pam strongly agreeing and Hannah agreeing (See Table 1). Each participant disagreed that the procedure took too long. Both participants agreed in that the procedure was helpful in learning the sills. Pam was neutral about using video feedback to learn the movements and Hannah agreed that she liked the process. Pam was neutral about using video feedback in the future to learn new skills and Hannah agreed that she would like to use video feedback in the future. Pam agreed and Hannah strongly agreed that they were happy with the results of the study. Pam agreed and Hannah strongly agreed that they were comfortable completing an instep pass and a throw in. Pam was neutral and Hannah agreed to being comfortable taking a shot with their laces. Pam was neutral and Hannah

agreed to the video modeling providing a good model of each skill. On average Hannah agreed with most statements on the survey, and Pam was neutral. There were only 2 out of 10 instances where Pam and Hannah agreed on the same response.

CHAPTER 4

DISCUSSION

The purpose of this study was to use video modeling in combination with video feedback to improve the performance of soccer skills of 10-11 year old female soccer players. This study extends previous research on video modeling and video feedback used in the athletic performance to include soccer performance. Results of the current study are similar to the findings in Boyer et al. (2009) and Rikli and Smith (1980). Boyer increased gymnastic skills performance rates using video modeling and video feedback of responding. Rikli and Smith (1980) used video modeling and video feedback to improve tennis serving form. The findings of this study support the intervention in its effectiveness of increasing skill performance from baseline. In relation to the two previous studies, the current study evaluated the effects of video modeling and video feedback with no verbal feedback during the intervention phase. Boyer et al. (2009) provided verbal feedback throughout the intervention phases. The present study supports video feedback and video modeling used to increase athletic performance in the area of soccer including the instep pass, throw in, and shot with the laces.

Limitations throughout the study included unforeseen extraneous variables such as inconsistent attendance. Hannah was unavailable for many of the sessions throughout the study. It was hoped to have the same number of sessions for each participant, Hannah was seven sessions short of Pam. The study was conducted throughout the summer months, and Hannah's attendance was variable throughout the course of the study.

Another limitation included the weather. Occasionally, on a very sunny day, the sun provided a glare on the iPad screen making it difficult for the participant to view the

screen. On these days, we used a cardboard blocker that surrounded all sides of the iPad screen except the bottom and extended out about 12 inches for the participant to be able to see the screen.

Other limitations include that each of the skills were performed from a stationary position, therefore it could be hard for the participants to generalize the skill to an active game or practice activity because they would be in motion. Completing the skill from a stationary position and then completing the skill while in motion, the topography of the behavior would differ. Another limitation was the lack of generalization data to a game situation. Generalization was not measured in practice or games. If it were to be measured it would be beneficial to start with rolling a ball to the participant to help with the transition of completing the skill from a stationary position to completing it in motion.

Another limitation included the procedural fidelity checklist measured behaviors that included the dependent variables not the independent variables during baseline, therefore would not be appropriate for procedural fidelity.

Oftentimes in soccer practice or game settings incorrect technique is reinforced. For example, to perform an accurate instep pass you use the inside of your foot; sometimes in games players use the outside of their foot, which is reinforced because their pass makes it to their target. In other situations a player may not use the perfect technique when shooting with their laces, but this is still reinforced by a resulting goal. There are natural reinforcing consequences that occur in game situations. Some spectators at games also reinforce players' behavior. Spectators' cheer when they think the player did something well, and sometimes the player may be using incorrect

technique but this is reinforced by the positive praise provided by spectators and coaches. This could act as a limitation for the current study.

Social validity measures revealed that both participants liked the overall procedure and agreed in that the procedure was helpful in learning the sills. It would have been beneficial to interview other coaching staff, parents of participants, and participants to get their exact thoughts on the procedure. Other players were very interested in what the participants were doing, and often times asked to participate. Participant Hannah was always excited to participate each day, and would come to practice asking if she was going to use the iPad that day.

Future research could evaluate video modeling and video feedback to increase soccer skills to the adult population. Future research could examine the effects of video feedback and video modeling in improving soccer skills in game situations or to improve different soccer skills (i.e. goalie skills, soccer moves, ball movement around the field). Video modeling and video feedback could be applied to whole teams. It also may be interesting to run a comparison study with video feedback being done alone, then video modeling and video feedback done together to see how results would vary between phases when evaluating the performance of soccer skills.

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APPENDIX A: Checklist for Target Behaviors

Instep Pass

1. Preparation	Yes	No	N/A
2. Contact	Yes	No	N/A
3. Follow Through	Yes	No	N/A

Throw In

1. Preparation	Yes	No	N/A
2. Contact	Yes	No	N/A
3. Follow Through	Yes	No	N/A

Shot with the laces

1. Preparation	Yes	No	N/A
2. Contact	Yes	No	N/A
3. Follow Through	Yes	No	N/A

APPENDIX B: Procedural Fidelity Checklist

Steps	Accurate Implementation

BASELINE

Instep Pass

1. Participant performs instep pass	Yes	No	N/A

Throw In

1. Participant performs throw in	Yes	No	N/A

Shot with the laces

1. Participant performs shot with the laces	Yes	No	N/A

INTERVENTION

Instep Pass

2. Participant performs instep pass	Yes	No	N/A
3. Participant is shown video model performing the target skill	Yes	No	N/A
4. Participant views own performance of target skill	Yes	No	N/A
5. Participant is prompted to perform the target skill like the video model	Yes	No	N/A
6. Participant performs the target skill again	Yes	No	N/A

Throw In

1. Participant performs throw in	Yes	No	N/A
2. Participant is shown video model performing the target skill	Yes	No	N/A
3. Participant views own performance of target skill	Yes	No	N/A
4. Participant is prompted to perform the target skill like the video model	Yes	No	N/A
5. Participant performs the target skill again	Yes	No	N/A

Shot with the laces

1. Participant performs shot with the laces	Yes	No	N/A
2. Participant is shown video model performing the target skill	Yes	No	N/A
3. Participant views own performance of target skill	Yes	No	N/A
4. Participant is prompted to perform the target skill like the video model	Yes	No	N/A
5. Participant performs the target skill again	Yes	No	N/A
Total Percent			