

Using Introspective Coaching Behavior Analysis for Reflection and Improvement

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### Abstract

The Coaching Behavior Assessment System (CBAS) is an instrument that analyzes twelve different categories of coaching behaviors and has been used to develop many coaching training programs. In this study, I utilized this tool to assess a video recording of one of my field hockey practices in late September. The purposes of this structured observation were to self-reflect upon behaviors during a field hockey practice and use this knowledge to target areas for improvement. The highest levels of behaviors observed were reinforcement of desirable behaviors, encouragement, and technical instruction. Being the coach of a Third Team field hockey program, especially at a small private school where sports are required, I am pleased with these high levels of positive behavior and the athletes seem to enjoy coming to practice. If I want to take my coaching to the next level, however, there might be a need to decrease the reinforcement and show a bit more negativity towards mistakes.

### Using Introspective Coaching Behavior Analysis for Reflection and Improvement

Coaches play a critical role in the experiences of youth in sports. A coach's behaviors can influence not only the development of skill in their athletes, but also their psychosocial outcomes. The actions of a coach can shape their players' interpersonal behaviors, values and attitudes, and goal priorities (Smoll & Smith, 2002). There have been several systems developed to expand the behavioral research of coaches. For example, the "Coach Analysis and Intervention System" (CAIS) is a recently developed instrument that uses a computerized analysis system with a "multi-level form of event recording," letting an observer record "up to five levels of simultaneous behavior" (Cushion, Harvey, Muir & Nelson, 2012). It uses digital video recordings of coaches to code for not only 23 "primary" behaviors (ex. feedback/reinforcement, instruction, questioning, management), but also "secondary details" of behaviors (ex. performance states, content, recipient, and timing) (Cushion et al., 2012). Though this recording instrument is thorough, it is quite complex and requires a lot of training to use effectively.

The Coaching Behavior Assessment System (CBAS) is another instrument that can be used to observe and code for a coach's actions during practices and games. The twelve categories of behaviors are divided into the two major classes of "reactive" and "spontaneous" behaviors, and the system basically allows for the observer to see interactions between the situation and the coach's behavior (Smoll & Smith, 2002). Many of the categories consist of behaviors that have been shown to have an effect on children and adults in non-sports settings (Smoll & Smith, 2002). Due to the simpler nature of this recording system, this was the system used to perform this introspective structured observation.

The CBAS has been used to develop many coach training programs, including Coach Effectiveness Training (CET) (Smoll & Smith, 2002), Mastery Approach to Coaching (MAC),

and the Individualized Program for Counseling Coaches (PAPE) (Cruz, Mora, Sousa, & Alcaraz, 2016). Many of these training programs have led to positive results in athletes, including reducing performance anxiety and increasing motivation (Cruz et al., 2016). In a study by Smith, Smoll, & Curtis (1979), the authors found that Little League baseball coaches that had been trained using CET were better liked and rated as better teachers than those that were untrained. Additionally, the players with the trained coaches liked their teammates better, had higher general self esteem, and overall had a more enjoyable experience than those on the teams of the untrained coaches (Smith et al., 1979). One important goal of several of the programs, including the CET and the PAPE, is to increase coaches' self-awareness of their own behaviors (Cruz et al, 2016; Smoll & Smith, 2012). By making coaches aware of their own coaching behaviors, they can improve in targeted areas, which will enhance their athletes' overall experience.

In this study, I, a high school Third Team field hockey coach, performed a self-observation using the CBAS during a practice in late September. I am in my fourth year of coaching and am known for being positive, enthusiastic, and having high energy. Many players and parents have shared that they have enjoyed playing for me and a high percentage of players that have played with me have continued to play in the program in their subsequent years. This lead me to a prediction that positive reinforcement behaviors would have the highest incidence during my practice, and I hypothesized that there would be very little punishment and punitive instruction. The purposes of this structured observation were to (a) self-reflect upon behaviors during a field hockey practice and (b) use this knowledge to target areas for improvement.

## Methods

### Participants

I am twenty-six years old and in my fourth year of coaching the Third Team field hockey team at Tower Hill School, a PK-12<sup>th</sup> grade private school in Wilmington, Delaware (727 students total, 291 in high school). The school is situated on a 44-acre campus just outside of the city of Wilmington. The tuition for high school ranges from \$28,580-\$29,220, and most of the families that attend the school have a high socioeconomic status. Tower Hill is my alma mater, and I played field hockey, basketball, and lacrosse at the school. I also currently teach middle school science (some of my current players were in my sixth grade science classes) and coach JV basketball and middle school lacrosse.

Students at the school are required to play three sports in their freshmen and sophomore years and two sports in their junior and senior years. There are three high school field hockey teams (Varsity, Junior Varsity, and Third Team). The Tower Hill Varsity team has won seventeen state championships in field hockey, the most of any school in Delaware, and the school has a reputation as a high caliber program. The Third Team is comprised of players with the lowest skill levels, and it currently consists of nine freshmen and one junior. Of the freshmen, five are new to the school this year, and four have been at Tower Hill since elementary school. Only one of the freshmen was a beginner field hockey player at the start of preseason and the others had been playing for at least two years. The junior is a Chinese exchange student who came to Tower Hill last year and was on the Third Team last year. There are seven scheduled Third Team games for the season.

**Procedures**

My practice was video recorded by a player on my team that was unable to play due to injury on September 19, 2017, from 3:40-5:00pm on the field called the “Rice Paddy.” Though the Third Team sometimes practices with the JV team, this particular practice was a Third Team only practice as the JV had an away game. The injured player used a “Go Pro Hero” camera and walked around with me as practice was conducted. After practice, I sat on the field and recorded my qualitative observations of the field and its surroundings, noting everything I saw and what implications those sightings might have. A few days later, I watched the video and used the CBAS instrument to tally behaviors that I observed.

The CBAS is divided into two classes of behaviors, “reactive” and “spontaneous,” with reactive behaviors referring to any behavior that follows and/or responds to a particular player or team behavior, and spontaneous behaviors classified as not responding to a specific event. The “reactive” behavior class is then subdivided into three categories, responses to desirable performance, mistakes, and misbehavior. Using the system, desirable performances can be either reinforced, which would be a positive reaction, or non-reinforced, which would mean that the performance is ignored. Mistakes are either followed by encouragement, technical instruction, punishment, punitive technical instruction, or ignored. Reactions that are classified as “controlling misbehavior” are also tallied. The “spontaneous” behavior class is subdivided into game related or game irrelevant. The game related behaviors include general technical instruction, which would be instruction not directly following a mistake, general encouragement, which would be encouragement not following a positive play or mistake, and organization, which is “administrative behavior.” The game irrelevant behavior is “general communication,” which is talk that is not related to the game.

## Results

### Qualitative Observations

The practice on September 29, 2017, took place on the grass field called the “Rice Paddy.”

Though the field hockey team normally practices on a “state of the art” turf field, because they were playing on a grass field for a game the next day, the practice took place on the Rice Paddy.

The Rice Paddy has a negative reputation; partly because it is juxtaposed with the high quality turf field, but also because the field itself has a few large dirt spots at either end by the cages, has some divots and bumps throughout, and the grass has some thick spots in addition to some unkempt and sparse parts. The grounds crew had freshly painted the white lines distinguishing the sides and field hockey specific lines (ex. attacking circle, center-line, 25 yd. line). The field is a bit smaller than regulation size, and a black fence surrounds the field, which is locked when not in use. It is interesting to see that even though the field is less than impressive, Tower Hill still does not allow outside people to use it. The field has two old cages that were the ones that were there when I was in middle school in the early 2000s, and a new (within the last year) equipment bin to store spare balls, pinnies, and cones (also locked).

Surrounding the field on two sides are roads that lead directly to the front of school. They are busy with parents of middle school students picking up their children, and several runners and people walking their dogs also frequent the adjacent sidewalks. By having many people driving and walking by, not only does it make the practice very visible, but it also can be a bit distracting for the players as their minds start to wander. On another side of the field, though mostly covered by trees, a man can be seen watering the garden in his backyard, providing yet another distraction. Finally, on the fourth side, is the driveway that leads to the headmaster’s enormous mansion of a home. The house has a garage that is the size of a three-bedroom house,



and the home itself probably has about ten bedrooms with an expansive green yard full of plush grass. Though the Rice Paddy could be a grassy field found at any school in the state, the headmaster's home is a constant visual reminder of the caliber of the school that the players are representing.

### Quantitative Observations

The results of the CBAS for my own practice on September 29, 2017, from 3:40-5:00 are summarized in *Table 1*.

*Table 1: Coaching Behavior Frequencies*

<b>Coaching Behaviors</b>	<b>Instances (233)</b>
<b>Class I – Reactive Behaviors</b>	<b>159</b>
<b>Responses to desirable performances</b>	<b>111</b>
Reinforcement	103
Non-reinforcement	8
<b>Responses to Mistakes</b>	<b>45</b>
Mistake-contingent encouragement	15
Mistake-contingent technical instruction	12
Punishment	0
Punitive technical instruction	0
Ignoring mistakes	18
<b>Response to Misbehavior</b>	<b>2</b>
Keeping control	2
<b>Class II – Spontaneous Behaviors</b>	<b>74</b>
<b>Game related</b>	<b>61</b>
General technical instruction	21
General encouragement	7
Organization	33
<b>Game irrelevant</b>	<b>13</b>
General communication	13

The majority of the behaviors observed were “reactive behaviors” with the most frequent class being “responses to desirable performances.” These reactions were mostly short, quick, often one-word responses when someone made a positive play or showed a good skill. Examples include, “nice,” “good hit,” “great pass, Caroline,” “awesome shot,” etc... Even performances that were not particularly special, but rather someone just making a typical play that was not a mistake were often reinforced positively. With only eight observed occurrences of non-reinforcement of desirable performances, almost every good play was reinforced in some way. Most of the mistakes were followed by either encouragement or technical instruction. The encouragement was usually, “that’s ok,” or “that’s all right,” and the technical instruction was in a way that had the tone of, “here is how you could do that skill better next time.” There were no occurrences of punishment or punitive technical instruction, and the two responses to misbehavior were a simple request for attention when players were talking while I was giving instruction.

With only nine field players to work with, drills are cycled through quickly in order to avoid boredom and loss of interest. When introducing a drill, there was both technical instruction and organization involved. The technical instruction ranged from skill-based, like how to make a strong pass on grass, to strategy based, like the best strategy for the defender in a two versus one situation. Organizational behaviors involved asking players to help with setting up and moving cones, gathering pinnies and putting on pinnies, where to put the balls, and where to form lines. The game irrelevant “general communication” occurred while the players were warming up and stretching and during water breaks. It was mainly centered around the students’ school day and their general mood and feelings.

### Discussion

The purposes of this introspective coaching behavioral analysis were to (a) self-reflect upon behaviors and (b) use this knowledge to target areas for improvement. As expected, the highest quantities of behaviors observed were reinforcements of desirable behaviors. I am known to be an enthusiastic coach and have often received comments from parents about their surprise with how positive I am on the sidelines during games. Though sometimes quick and not specific, almost every positive play made by one of my players is reinforced. An area for improvement could be being more specific with the reinforcement. Instead of simply saying, “nice,” or, “great job,” perhaps a simple modification, like, “nice speed on that pass,” or “great job finding the open space” could make the reinforcement more meaningful.

Mistakes by players were followed with either encouragement, technical instruction, or ignored. Again, going along with the positivity theme, mistakes are never punished. Often when a mistake by a player was made, for example, an offensive player lost the ball in a one versus one situation; the player that made the good play in response to the mistake (ex. the defensive player) would be reinforced. This could be a possible explanation for why there were no visible signs of performance anxiety throughout the practice. On this team, since mistakes are not punished nor followed by punitive instruction, the players do not show fear of making mistakes.

When working with a Third Team in a school where sports are required, it has to be recognized that not all of the players have freely chosen to play field hockey. I want to create a climate that stresses enjoyment and effective learning of the game, and I have less of a focus on winning and talent. After seeing the high levels of reinforcement, encouragement, and technical instruction, I feel that my behaviors are matching with my intended climate. The thirteen occurrences of “general communication” also show that I enjoy getting to know my players

outside of the sport, often asking about their school day or other interests that they may have. My athletes seem to enjoy coming to practice, and they have fun while learning about the sport of field hockey. Though they might not be the most talented, they work hard and strive to get better.

### **Limitations**

There were several limitations for this introspective observation and analysis. First of all, I have no experience working with the CBAS tool, and it was difficult to code for when certain behaviors were beginning and ending. This would lead to differences in the counted number of certain behaviors and the actual behaviors that occurred. Due to my inexperience, it is also possible that I did not categorize behaviors correctly. For example, it was sometimes difficult to determine if the technical instruction was “mistake contingent” or “general.”

Furthermore, when filming the practice, the recording was mainly focused on me, and it was often difficult to see what was exactly happening on the field, which made coding for the “non-reinforcement of desirable performances” and the “ignoring of mistakes” quite difficult. There are potentially many “non-reinforcement” and “ignoring” behaviors that were not recorded. Also, because I was aware of my predicted behavioral outcomes, there definitely is bias both when the practice was being filmed and with my tallying of the behaviors.

### **Implications**

For now, I am pleased with my high levels of encouragement and instruction for this level (Third Team). I don't see a need to show punishment or punitive behaviors at this level as long as the athletes continue to work hard during practice. The reflection has shown me, however, that in order to take my coaching to the next level, I might need to cut back on my reinforcement of desirable performances and encouragement of mistakes. By having so much positive reinforcement, I wonder if this makes it less meaningful. If I provide positive reinforcement

more sparingly, perhaps this could increase the value of the compliment. Furthermore, by encouraging mistakes, I am saying that mistakes are “ok,” but at the next level, especially if I become a head Varsity coach of this high caliber program, perhaps mistakes should not be “ok,” and should occasionally be punished for reinforcement. At the Varsity level, more emphasis will be placed on winning and I will be expected to have successful teams. In the future, my coaching behaviors might need to change depending on the level and situation, but for now at the Third Team level, I am pleased with my overall coaching performance.

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