

FEEDBACK: AN EXPLORATORY NARRATIVE ANALYSIS

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ABSTRACT

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The focus of the study was to establish that feedback is a complex construct and that looking at it as a whole might give us a chance to use it more efficiently. The effect of feedback on motor activity is manifold; the nature of the feedback, the timing of when feedback is given, the individual who gives the feedback, the frequency of feedback, the reason behind why feedback is given as well as the type of feedback all influence motor learning and performance. The aim of this study was to examine how coaches and athletes perceive and understand different effects, and types of feedback; how the purpose, timing, context or the content of feedback influences performance. A qualitative narrative design was adopted for the study. The study sampled 6 participants out of whom 5 participants had experiences as both athletes and as coaches while 1 participant was only a former athlete. Semi-structured interviews were conducted, and the data was analysed with the help of Atlas.ti. A content analysis was conducted, and 2 main themes emerged as a result of selective coding, namely successful and unsuccessful feedback with 10 major codes. On further analysis it was found that 7 main codes such as who is giving the feedback, personality factors of the recipient, the types, the content, the purpose, the timing and the strategy of feedback seemed to be leading to successful feedback while 3 other codes such as, how feedback is received, environmental factors and how ready one is to receive feedback also influenced the success of feedback but that all are important parts that need to be investigated further. Finally, the limitations the possible explanations for divergent results and future scope are also discussed.

Keywords: feedback, motor learning, augmented feedback, sports, coach communication.

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1 INTRODUCTION

Most coaches and athletes are familiar with the term feedback and most even have an idea of what it is, but finding a consensus on defining what feedback should consist of seems to be more of a challenge. Feedback could consist of a lot of things. In golf it could be about your swing or the distance between the ball and the hole, in gymnastics it could be about body positions while you are flipping in the air and making a landing, in basketball it could be about learning a lay-up, in ice hockey it could be a defensive strategy that your coach explains to you. There are a myriad number of different ways feedback can be given, received and perceived. With the advent of social media today, feedback is coming at us through different channels and we are receiving feedback from all sorts of people. All these differences that we encounter when we talk about it makes it a challenging but interesting topic to look into.

In the field of sport psychology, feedback has been married to motor learning and is primarily studied under that branch (Papaioannou & Hackfort. 2014) however, not much attention has been given to understanding feedback within all these different contexts as a whole. In spite of the research that exists for feedback that has looked at it more as a variable than a construct, there is little consensus of what is the best method to adopt when giving or receiving feedback. Perhaps then it is time to look at feedback differently and try and identify what it constitutes of in its entirety, to understand it better and try and find common ground that would help us use it more efficiently.

Therefore, we will try and look at it from different angles and try and adopt an approach that assists us by giving us a larger picture so that we can then know which areas to focus on when researching it in the future.

2 REVIEW OF LITERATURE

2.1 Feedback

Much like within the field of research on modeling and observational learning, consistency in terminology has also been an issue with research on feedback. (Schmidt & Lee 2013). For the purpose of this section sensory information and sensory feedback will be used interchangeably. We will use the term augmented feedback to mean anything that is added or enhancing sensory information; also, while discussing augmented feedback researchers often find the need to subdivide augmented feedback into two different categories, better known as Knowledge of performance (KP) and Knowledge of Results (KR) (Hodges & Williams 2012). Support for the KP and KR constructs can be found in the book by Papaioannou and Hackfort (2014) however, Magill and Andersen (2012) argue that these terms are used quite arbitrarily and that the inconsistency in which they have been used makes them difficult to talk about. They prefer to look at augmented feedback based on the content and the specific characteristics of it.

2.2 Purpose (Why)

Within these characteristics they identify three key functions of feedback, the first one being how feedback is used to facilitate new skills, the second being how feedback is used to improve an already learned skill and they also talk about how augmented feedback can be a motivator that helps an individual to adhere to practice a certain skill. Feedback as a motivator has been studied more in depth and is well highlighted in a study by Lewthwaite and Wulf (2010). Papaioannou and Hackfort (2014) also added that feedback might also be used to execute and develop game strategies and regulate psychological and physiological states.

2.3 Forms (How)

In the field of sports research augmented feedback has been used in many ways, sometimes it has been verbal feedback like in a study conducted by Wulf, Chiviacowsky and Lewthwaite (2010), or via a stopwatch or simple video devices, but as technological advances have come into the field of sports there exists now a possibility for feedback to be provided by specific measurement tools such as motion

analysis systems, force transducers, inertial sensors and strain gauges. With the advantages of specifically targeted software, feedback is now being provided aurally, visually, or kinesthetically. (Phillips et al., 2013) Despite these many forms Phillips and colleagues argue that there has been a lack of systematic research that deals and addresses what the most effective way to use these technologies in sports related contexts.

2.4 Who

Papaioannou and Hackfort (2014) make a very interesting case on the who of feedback. They claim that the general research as to whom feedback should be directed towards is pretty clear, most research focuses on how the learner will benefit from the feedback that is being provided so that he or she can improve their progress, but as we see in the applied model of observation by Ste-Marie 2012, there might be a case to address the issue as to who might be the most effective in providing the feedback if it is given verbally. Will a skilled individual be more effective or will a peer giving feedback be more efficient? In regards to this question there seems to be a gap within the literature and a possibility for further research according to them.

2.5 What

In their review, Phillips et al., (2013) state that three key criteria have often been disregarded when it comes to addressing the content of feedback. They note performance parameters that are used as feedback need to be task specific and specific to the performer. They propose that a variable that is selected to measure feedback must be key to improving performance, this variable should be able to adapt and be adjusted by the athlete who is using this variable, and finally the system or device used to provide this feedback must be as reliable and accurate as possible in terms of providing feedback. Although they reason that this seems like common sense, they highlight the fact that the identification of a key variable hasn't been holistic enough and that currently there exists only a one-dimensional approach to the measurement of such variables. Papaioannou and Hackfort (2014) also identified three important aspect to the what question in regards to feedback. They question what the appropriate level of precision that feedback needs to be in, in order for it to matter. This effect is corroborated in a study by Wulf and Lewthwaite (2010) that gives false feedback

information to one of the groups, and still notice that the groups improve on a balance task.

The next aspect that Papaioannou and Hackfort (2014) address is whether feedback should focus on correcting errors or rather on improving performance. And the final aspect that they underline is, whether feedback should encourage internal or external focus of attention. Wulf and Shea (2010) refer to focus of attention as one of four key influential factors when it comes to performance and motor skill learning. In their review they summarize that most studies that focus on the effect of the movement, that is external focus of attention, are more effective and efficient in promoting better movement when compared to internal focus or focus directed at the performer's own body movement.

2.6 Where

In their review Phillips et al. 2013 state that research on augmented feedback in sports has traditionally been used by coaches, clinicians and sports scientists, in the form of verbal cues or simple devices. Wulf and Shea 2010 in their review have added that there have been some studies in the field of surgical medicine as well. Nonetheless because of the confounding terminology that we alluded to earlier in this review, understanding where all feedback research has been conducted successfully is still being discovered. Considering its application would lead to believe that feedback would be a successful method in aiding individuals learn and perform any motor tasks, although it would also be very dependent on the complexity of the task, the time involved in learning or mastering that task and eventually improving the skills related to task.

2.7 When

The timing of feedback has been a field of much interest since the beginning of feedback research. (Phillips et al. 2013). Papaioannou and Hackfort (2014) confirm that the timing of feedback has been one of the most studied variables when it comes to motor skill learning. Much of the research has been inspired by the guidance hypothesis developed in the early 1980s by Salmoni, Schmidt and Walter (1984) although Phillips and colleagues (2013) argue that the advent of new technological devices, despite being pleasing for coaches might be counter-productive for learning. Papaioannou and Hackfort (2014) though state the opposite and they cite the guidance hypothesis to

underline the importance of augmented feedback, which they claim is a temporary crutch for learners and that it has the potential to help or guide learners to discover new and effective solutions for performing movements that learners will be able to implement in the absence of the augmented feedback. Nonetheless, they emphasize that in order for it to be effective it needs to be delivered appropriately. Some methods of delivery that they refer to include scheduling the augmented feedback in a way to measure how effective its effect on learning the task has been. They allude to research in the past where researchers tapered down and reduced the frequency of augmented feedback to measure its effects. This was done post the task and there seems to be some success in this method.

Another study by Helmer et al. (2010) demonstrate the value of a biofeedback tool, that they termed an 'interactive sleeve'. A participant wore the sleeve, and this provided him real time audio feedback about the movement of his arm. More specifically it made drum sounds if the participant was successful in making a certain movement of the arm and wrist while performing the shooting movement. Although this study showed that in its early stages participants weren't really challenged, ultimately it was beneficial to them and paved the way for further exploration of movement with real time feedback. Nonetheless Phillips et al. (2013) stressed that even though studies with real time feedback have shown success they are highly dependent on the characteristics of the learner as well as the characteristics of the task. None of these studies were able to identify one particularly superior timing for feedback, however if we look back at Wulf and Shea (2010) review, they identified self-controlled practice as one of the most influential factors in motor skill learning and performance. What they meant by this constructs is that the learner be in control of the feedback he or she receives. They found studies where learners were given the freedom to choose when to receive feedback and how much feedback to receive. This would account for the dependency of task characteristics as well as the characteristics of the learner, since the learner would be in control of the various types of feedback he or she would like to receive as well as the timing of it.

3 PURPOSE

The purpose of this study was to explore how coaches and athletes perceive and understand the different effects and types of feedback; how the purpose, timing, the context, or the content of the feedback influences performance. The study looks into whether they have used or been subjected to any kind of feedback and if so, how it has helped influence learning and performance.

4 METHODS

4.1 Participants

Participants were selected using a convenience sample technique. Six athletes were chosen for the study out of which five had coaching experience as well. The researcher used his academic network to get in touch with the participants. Two coaches who coach team sports and one coach who trains individual sports was contacted whereas three semi-professional athletes from whom two play team sports and one plays individual sports was selected. Participants were of (24- 28) years of age with different nationalities.

Inclusion criteria for participation were as follows: coaches and athletes who have coached or played at a semi-professional level at least, who speak English, and who were ready to sit and share their thoughts and experiences and who were willing to give their consent were selected. Data collection was terminated when results yielded no new codes and information.

4.2 Instruments

The participants were all given a chance to share their thoughts on a single semi-structured interview. The interview questions (appendix 1) were constructed in a way to help facilitate a conversation that brought to light detailed experiences of the participants while trying to avoid as many biases in the questioning as possible. The questions were retrospective in nature and focused on the participants reflections of their experiences within their sport and how feedback was a part of that experience. The interview questions were designed by the researcher with the theoretical background and literature in mind. Since the taxonomy in the feedback literature is rather inconsistent (Magill & Andersen., 2012) the questions were phrased in a way that allowed the participants to express what they interpreted as feedback and how they found it to influence performance.

The participants were asked about different experiences and different points of their sporting careers and whether or how feedback influenced their careers. Participants were also asked a series of demographic questions. Interviews were around 30-45

minutes in length. Interviews were recorded on an audio program called Audacity, after which they were transcribed.

4.3 Procedure

This study is of a narrative nature that bases its findings on the stories and experiences of the participants. A cross sectional narrative design was thus used for the purpose of the investigation. Feedback is a well-researched topic in the sport psychology literature with several textbooks dedicating an entire chapter to the topic, however even after being a popular research topic, the very nature of feedback is quite complex, with the content, the timing, the context, the giver and receiver of the feedback all factors that need to be considered when looking into feedback. Since there are so many factors influencing this topic a qualitative method seemed appropriate to try and understand how people perceive feedback in its entirety. A narrative and open-ended line of investigation thus seemed like a perfect way to understand how different people view feedback. Prior ethical consent was obtained before recording the interviews.

4.4 Data analysis

The interview guide was first tested and edited by an external reviewer. The data was collected on the audio program Audacity and all the recordings were then transcribed verbatim post the interviews. The transcriptions were read over several times to ensure accuracy. Prior to coding, participants were sent their transcriptions to confirm and validate what they had said; they were given the chance to edit or add something that was said as well as proof-read the transcripts. This was done as a form of member checking to enhance credibility of the study. The data was analyzed with the help of ATLAS.ti. program. After the analysis a second coder who holds a PhD in psychology was consulted for better reliability of the results.

4.5 Ethical consent and concerns

The consent form promised participants that the information they shared would remain strictly confidential and highlighted the ways the data will be safeguarded. Participants were also informed that they were free to leave the interview at any point in time and didn't need to state a reason for doing so. no personal information was revealed at any point during the collection of data.

5 RESULTS

Demographic data was collected on all six participants and the results of this are presented in table 1.

TABLE 1: Summary of demographic data

Participant	Gender	Nationality	Age (years)	Context	Experience (years)	
					As athlete	As coach
1	f	Ethiopian	25	football	15	6
2	m	Spanish	28	skating	10	8
3	f	Dutch	24	P.E.	17	8
4	m	Spanish	26	basketball	16	9
5	m	Bulgarian	25	cycling	10	0
6	f	American	24	football	20	6

Sixty-seven pages of single-spaced transcriptions were inputted into Atlas.ti for analysis. On the first analysis, thirty-three codes were generated based on the responses from the participants and the questions that had been asked to them. Upon second coder analysis it was agreed to finalise it to 10 main codes and 2 subcodes. These ten codes were derived based on two major themes, namely successful feedback and unsuccessful feedback and all that contributes to these two outcomes. Unsuccessful feedback denotes feedback that did not lead to any improvement or learning but rather demotivated the athlete whose performance was affected negatively, while successful feedback was feedback that resulted in learning a skill, improvement in performance or maintaining a high level of consistency by fixing errors. On further analysis of the data it was found that 7 of the 10 key codes seemed to lead to successful feedback while three other codes influenced the success of feedback. These codes could be looked at broadly in two categories namely causal factors that contributed to successful feedback and external factors that were a part of successful feedback in a number of cases. Figure 1 represents a summary of two themes and the final codes and how they relate to one another.

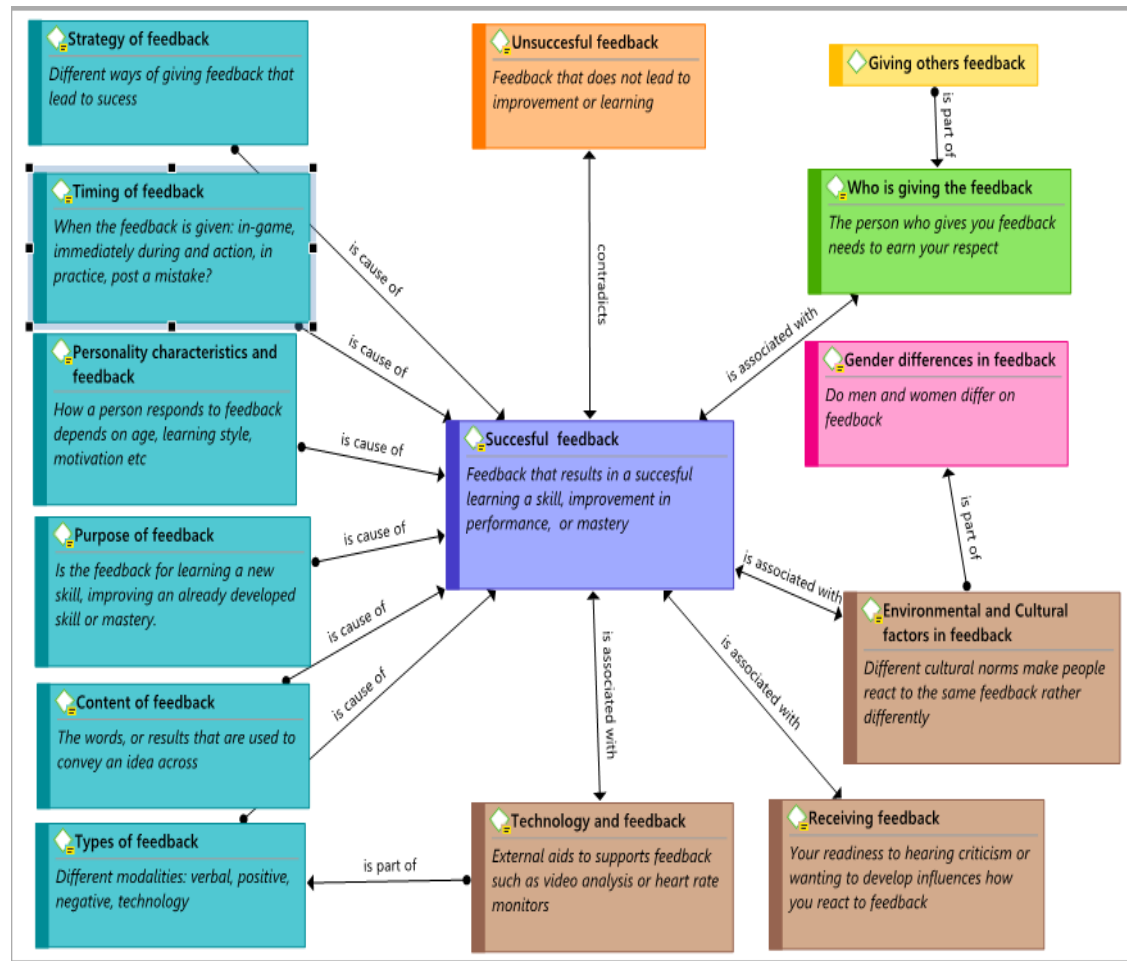


FIGURE 1: A summary of the results with short blurbs to elucidate the different themes, codes and subcodes.

5.1 Successful Feedback

Most participants struggled to define feedback in its entirety as a construct, but most of them could tell what constituted successful feedback, for example participant 3 explained:

“there's a lot of different forms of feedback and we've talked during my former studies about feed up, feedforward and feedback, all those kinds of things and just like differences between all of them. But still when I hear feedback I would think of something that the coach or the teacher either tells you or shows you after you've done something in order for you to improve it next time you're doing it, different ways of giving that...”

Participant 2 believed feedback involved different modalities:

“I think you can know what feedback is when you give information to the subject of what an action is, like the action that they perform, the feedback, it can be like communicative, visual or touching ... I think it's not a perfect fit, but it is the situation, like what the situation requires, like if you're coaching and uh, the players are playing, you cannot, you cannot go there and grab him and put him, like you need to do this. You can't show him because like you're in the middle of a match so if you're training you're more likely to be visual and communicative and touching explaining to them like you need to get this position.”

Other participants felt that giving feedback required more analysis and thinking, while the onus was equally on the receiver of the feedback, whose level or willingness would tailor the way that feedback was given. Participant 1 noted:

“I think that athletes that are constantly hungry, athletes that are goal set, you know, future oriented and athletes that, that understand their position within the context of the team, feedbacks are crucial to them. They die for it, they will come knocking on your door everyday so they receive it and no matter what you said to them, they will find a way to make it specifically about the performance.”

Participant 2 elaborated:

“For example, in my sport when you see a jump, you see a lot of mistakes that could be fixed, but what's the first thing we can fix and what's the first, the most effective change we can do in this jump that will make it better. So I think that that's, I think it's really difficult in fact to give the right feedback or positive feedback. I have to really analyze in one moment what have you seen from these mistakes, what you have seen exactly and what you want to fix as a coach, what do you try to fix for the next time?”

However, it wasn't just about the amount you knew but rather how you disseminated that information that would lead to feedback being successful, participant 2 corroborated this:

“Even if you know a lot, like even if your knowledge is really big and you know a lot a lot, but if you don’t know how to tell your ideas or this knowledge to your athlete you are not a good coach you are a good theorist. But to be a coach is not to be a theorist to be a coach is to know something and to translate that to your athletes, like I think a good coach is the one who sees in his/her athletes their own ideas and that means that your feedback was appropriate or was right. Like I think that you realize that your feedback was right when you see the change that you wanted to say. That’s the point.”

Participant 6 managed to explain from experience what she thought works the best:

“The best forms of feedback would be those that were verbal in time so being able to say something during the game quickly or during practice quickly and then something visual, so say watching a video and then having comments and commenting and doing analysis after practice, so being able to look back on that feedback. My coaches, the best coaches that I ever had were the ones that were able to give constructive feedback in a way that was easy to understand quickly because in the game you don’t want to be thinking about what they’re saying at all so there would be something like, you know "clean it up" or you know "keep it tight" "look long" you know things like this that are kind of the shorter they get the point across and it helps me organize the team”

Whereas participant 5 felt it could simply be explained:

“Probably the most effective type of feedback that I would receive, whether it's by the coach or by a more senior athlete, um, encouragement maybe that’s the most... I consider the feedback that I’m inspired by as the most important. So, um, yeah, in my opinion, this is the most effective feedback”

From his personal experience participant 4 felt he had identified what he needed to do in order for his feedback to be successful through a mistake he had made and after it had been pointed out to him, he said he immediately realized where he had erred:

“they told me before like it was Wednesday, yea, yesterday that I was making a mistake, a huge mistake, and I realized of it and it was like not telling the

players what we were doing what we were working in each session. So I was just proposing games for improving their conditioning. Yeah. I didn't tell them what we were working. What was that aim and why we're working on that and how we were working that, um, they got confused many times because they didn't know what we were doing.”

5.2 Unsuccessful Feedback

Unsuccessful feedback was equally hard to define entirely and constituted different opinions based on difference scenarios. Participant 1 recalled a story that had deeply impacted her and had left her with a bad taste in her mouth:

“she was absolutely like vocal about it and called me off right in front of the team and saying, how rude can you be? How disrespectful I'm talking to you and you won't even look at me in the eye and these kinds of things have happened. And, uh, I, I tell you that I think that was one of the worst games I've played in my career in the States because of that consistent feedback that I was getting from my coach while I was at the field getting yelled at. Saying that, how rude are you? How disrespectful are you that you're not listening to me or what I'm saying? But if you look at it from my point of view, I was doing exactly what she was telling me, what she was instructing me”

In addition, participant 4 felt that unsuccessful feedback could be easier to identify because it would present itself in a repeat of mistake that he had just tried to correct:

“if he's unsuccessful he will like perform bad again. And then you will have to tell him again and, if you say the same thing that you've said before, that might be an unsuccessful feedback. So that means that you're wrong in explaining it to the kid because he doesn't understand it.”

In another scenario, having trained in a team environment, participant 6 recalled two of her worst experiences on the field where she identified that an overly emotional style of feedback didn't suit her at all:

“I had a terrible coach in college who was very emotional all the time, everything she said was just screaming and yelling and you know it was this sharp kind of barking that he didn't really feel like how agitated it got me all the time and that for

me, put me on edge which made my anxiety go up way past where I needed, to be to perform optimally.”

While this experience left her feeling too anxious, the other incident she detailed seemed to have had an even more profoundly negative impact on her:

“... the ref didn't see it and my coach had thought that I had tackled this girl down to the ground and my coach runs out onto the field and starts screaming in my face like she runs all the way out into our box she's yelling at me like spit flying everywhere red faced you know she's like you're fucking putting this team in jeopardy I should rip you off the field right now. And she was trying I guess to make me feel bad but I was like you're embarrassing yourself, I was like I have no respect for you at all and I didn't but it, for the rest of the game I was like all my nerves were just like on fire you know cause I was angry and I was upset... and my head was somewhere else, it completely took me out of the game, it's probably one of the worst game I've ever played to be honest. The rest of the game we lost 6-1 or something, it was terrible, an awful game. I'm still like, ugh, my heart still sinks thinking about it. I'm like aww that was embarrassing, that was terrible.”

5.3 Types of Feedback

The different styles of feedback were a recurring concept and each participant recalled different instances where various modalities of feedback were used. These were all categorized into the most frequent code which was the different types of feedback the participants had received. It not only varied from sport to sport but from situation to situation so much so that a new subcode had to be made that was an integral part of the main code, namely technology and feedback.

Participant 1 described two different types of feedback she had received while she was an active athlete:

“sometimes you can get feedback where it is very personal, soft and touchy touchy and more comforting sort of feedback and then there is game time high pressure feedback, straight to the point”

As a coach in national level figure skating though, participant 2 identified two types of feedback in his sport, he noted that, not only do you need to give feedback to the athlete but when you identify a error you need to give yourself feedback on how to proceed to try and fix the mistake:

“So I think, like the most, most useful feedback finally that you can give to yourself is like to think the mistake is that, I need to fix that, but how I fix this ... Which is why I said, like in my sport, I don't know how it works with other sports, but in my sport there are two types of feedback, because when I see a big mistake it's not something, like that I can fix right away but I have to think ok next month we will work in this direction to fix this by the end of the month or the end of the season or in two years.”

He also went on to underline that the situation dictates the type of feedback that you choose to use, certain times require more careful consideration than others:

“It's not the same the feedback that you give, negative feedback that you give when everything is going great or the same negative feedback that you give when the athlete has been struggling with something for the last two months, of course it affects really, really hard”

However, in a non-professional setting and during some family golf practice participant 4, received feedback by his father's friend. He states that within this familial setting feedback was more relaxed and more easily accepted:

“Most times it was like oh, the feedback is more, negative because um, he says no, don't do that. Yeah, drop the stick on this way. Or like positive ones was like, have you seen the ball? Like most likely you know when you're doing wrong because the ball is not going there. And then when the ball is not going there, he will remark it's because your hands were like, forward. That's a good feedback like that's a positive feedback because like you know what you've done wrong on a because you see the ball going away and someone tells you, oh, that's because there, but also the negative feedback or don't do that, do it this way, is kind of the same feedback but its more chill because uh, they tell you what you're doing wrong and you need to modify and they explain to you why

A rather more novel approach was explained by participant 3 through, who having trained in Dutch schools as a physical education (P.E) teacher preferred a more tangible approach to feedback. As a P.E teacher she specified that while learning a skill visualising an unfamiliar scenario was rather difficult and that students who are new to the task perhaps might benefit from a different approach:

“it's a very tactile way of giving feedback, we in the Netherlands, we also do swinging in the rings in a gym and it's sometimes very difficult for students to get their feet up high enough to actually make the swing or when they are swinging to make a turn at some point. Um, so we would hang something from the ceiling that they had to touch with their feet. So they see that they're doing it, they feel that they're doing it and that helps them to, to know how the movement should be going.”

She also went on to add that currently in the Netherlands, there seems to be a shift in the way they want to coach young athletes:

“a lot of the big football clubs that have junior teams, they tried to go back to more game like coaching. So not so much about the technical part of you have to put your foot like this, you have to shoot like that, but try to put it in a game situation so they understand the game better and like that improve themselves. So it's more tactically based than technical base.”

She posited that this change from technical to tactical requires a different set of feedback.

“So focusing on how to play a game in a sense of what tactics to use instead of how you have to do a layup in basketball and feedback is dependent on what you choose as your aim for teaching or like what is your goal”

While in the Netherlands, the different foci of the teams became a reason for different feedback, participant 4 revealed a completely different strategy that he uses:

“...like the action that they perform, the feedback, it can be like a communicative visual or touching like, yeah, um, but uh, I think it's not a perfect fit ... I'm trying to put themselves on the position that this will be and asking them can you

feel it. Like it's a mix of every single feedback to try to make the player understand what you want to.”

Nevertheless, having too many options wasn't favoured by everyone, participant 5 described that as a cyclist in an endurance sport it felt better for him to have less stimuli and try and focus on things that he could control while letting outcomes that were beyond his control to sort themselves out:

“But I do remember one of the piece of advice that our coach was giving to us that we don't need to strive for a particular position in the race, but just to make sure that we have committed ourselves to the race 100 percent. So, and I have pictured myself in that situation. So that's how I, that's why I found it useful. Because when, when you're told that you should fight for a win or middle position or top 10 or something, then you kind of don't really get a clear, um, you don't know how exactly you're gonna do that. But when you, and it's very uncertain whether you achieve that top 10 or top five, top three, but when you, when you strive for just doing your job to the best of your abilities, then there is a, just comes as consequence.”

5.4 Personality Characteristics and Feedback

All these different types of feedback and all these different situations begged the question as to whether people's individual differences factored into giving and receiving feedback, and the data set suggests that it does. Personality characteristics was the second most frequent code and kept recurring in the data. All participants agreed that the same feedback could be interpreted completely by two different people. Participant 1 recalled:

“You can say exactly the same thing. You can say, come on to X on the field. You're saying come on to me and you're saying, come on to my teammate Y. It can be perceived completely differently. To me when you say come on, it's like, okay, you are, you are playing, but I want you to play a slightly better when you're saying come on to my teammate Y, it could be like, I think you're doing a shitty job, or at least be perceived as that. So she will be completely out of the game in a matter of two minutes, three minutes. So knowing what is it that you are saying and to whom are you saying it and how you were saying it so that they can listen to what you're saying and be able to make the change in the games.

Within this passage, participant 1 pointed out three key factors she thought influenced feedback, it was “what.. you are saying”, “to whom” this is being addressed and “how you are saying” things that influence feedback. Participant 2 shared similar views, he elaborated on the factors he thought made a difference:

“Completely, completely, yea, yea, totally if I say the same words to one person, depends of the age, depends of the level, depends on the mood, depends on the moment of training, depends of the month of the year, depends on how the season has been going, depends on a lot of things, I say the same words with one will work a lot with another person it won’t work or not even that, I think at some points like it can make the trust of the coach stronger or destroy it completely”

While also adding an anecdote that supports his belief:

“I cannot tell the same way to my best skater, who has been doing a season an amazing season than a skater that is just growing up, and its, well she is really good also but at her age she is growing up and she has done a normal season but she is not still at the top, so I cannot give the same feedback, like today for example I was telling to my best skater, like “well, I think you should go home because today, like this week you are not here” if I say this, you should go home because like today you were not here to a younger skater maybe it becomes a drama or something like this, you know but, I knew that to this older skater, that she realized it already that , she realized that she was not there that she was completely out so it's fine so she didn’t took it bad, or maybe she took it badly in the moment but tomorrow she will be back and I know that it will be completely normal again.

Having coached different age groups, participant 3 also stressed that different age groups react differently to feedback and, she felt adults could be given more “abstract” feedback but for kids it's more beneficial for feedback to receive feedback that may be engaging more sense or be more tactile. She goes on however to add that two key factors might be individual perception and personal motivation as factors that influence feedback.

“when you talk about nonverbal feedback, so more the tactile feedback or, or maybe even video feedback that they can see themselves, even that can be

different from person to person because you perceive yourself differently and you perceive your actions differently. And it also really depends, I think when your attitude and for me, if I get feedback, um, because I don't have this drive to really become the best in something, I'm like, okay, I'll try and move along and if it doesn't work it doesn't work. But if someone really has this drive to improve themselves, um, then the same kind of feedback might have a different effect.

Participant 4, noted that an individual specific approach might be an effective method to make feedback more effective, and it all stemmed from understanding your player's personality.

“you do need to understand who you're working with and you need to make things work for them too. So you need to adapt, like you need to give different feedback and you need to try to sort out the feedbacks for those people who doesn't react well to the ones you're used to it. Okay. Um, for example, I have a player that he thought he was the top player of their, of the league and he did things wrongly sometimes I'm trying to modify them I couldn't because he thought he was doing everything, correctly. So those people need to realize on a game or through, different, um, situations that you can create to tell them, well, you're not doing it right it's like, that's a mistake. So if you do it this way, you might get success.

Success isn't always straightforward though and sometimes situations can be more demanding and handling those are trickier added participant 4:

“I got a few kids that I cannot tell them I cannot even look how they're doing the exercise because they are embarrassed, like not embarrassed but they don't want to do things wrong and that's not the attitude. Like I got few players, if I tell him, oh you should do this instead of that because it's good for this and that and because I'm giving them many because they are new. I need to give them a few steps trying to make them aware of what are the situations. Some of them doesn't take it properly and that's the challenging situation.”

These challenging situations could be mitigated depending on the point of view of the athlete thought participant 5:

“So I mean that a coach or, or another athlete or a friend or a teammate, um, their feedback would be useful when, um, when the person receiving the feedback see themselves appropriately in that picture. So if it's something completely alien to them, it may be the correct advice, maybe, um, yeah, the best strategy or the best development plan that they can follow, but if, if the athlete receiving the feedback does not consider him or herself as the right person to, to follow these steps. Then. So basically, uh, suitability. Is the key thing.”

Identifying your athlete and his personality seemed to be a key step for all participants and participant 6 summarized it best:

“just depending on the type of player that you get is the type of feedback you can give but as a general rule until I can get to know them I give them the type of feedback that I want.”

5.5 Timing of Feedback

While there was some consensus amongst participants when it came to personality and characteristics when it comes to feedback, when exploring the timing of feedback opinions differed a little bit. Participant 4 believed feedback was most impactful when it was given almost immediately, she highlighted her reasoning stating:

“So that I think will be the most effective form of communication and feedback would be that which is in real time because then you can think about it and fix it in real time versus if you wait then you're like well I don't remember exactly what I was doing so sometimes I'd have coaches that would wait till it was half time then they are like ok "this, this and this thing" and i was like I don't remember exactly what I was thinking when I threw the ball to her and the other girl got it you know and I don't remember, all I remember it is that I had to do this, this and this afterwards, so I think real time feedback for me is easier so real time verbal quick stuff.

Participant 6 was even more emphatic in his response, he made his point by comparing what happens when you put your hand on a fire to giving feedback, underlining that it was paramount to do it immediately:

“Because if you do something and if you do it wrong, and you keep on doing like different stuff, you will forget what are the feelings of the actions that you've done. So for example, when you burn your hand when you have your feedback ?

Immediately.

Yeah. Would you put the hand on the fire?

No, it's true. Is it the same with a positive action? So if they've done something right, would you also...?

Yeah.

And immediately?

Yea, immediately because they, if, if they're positive, well the positive actions come sometimes after a good action so they will interiorize, for example, if they move properly, they got the ball and they score, that's a good action, That's a positive feedback as well for them, you just need to reinforce and they just need to get positive feelings for their action”

Participant 3 was less certain about the question, she believed the timing of feedback was determined when you get a chance to implement what you've just been told:

“I know the timing with the feedback has something to do with it, but I can't really pinpoint what it is and can't really explain that well, I do think that after getting feedback you should be able to try the same thing again because otherwise it's no use, like if you get feedback and then you go to another exercise or another thing, uh, not doing anything with the feedback, you just got them involved in it. What's the point? You're going to forget to do it anymore.”

While this was fundamentally different from what participant 4 and 6 mentioned, participant 1 suggested that her method was to try and combine these practices.

“Sometimes I stopped the game right away when they in the days of mistakes or when there is a play that I was hoping or something or if my players are in the wrong position right there so that there is not like, you know, after practice I'm like, do you remember 15 minutes ago there's this happened. It's not relatable. There's not under context, so they won't remember it. They won't apply it, but usually within and in play I stop it and said, look at it. How about it? What are better ways that you can do?

And I don't only tell them, but I also make them think and that let them give you feedback for themselves. Then they're like, oh yeah, maybe you're right. I shouldn't have played this way because there's more defense on this side so I can switch the side and play that side and then you let them go, continue to play.

While there seemed to be some sort of common belief that was emerging, participant 2, jokingly recalled from his experience that "there is never a good time to give feedback." On first hearing it, it seemed funny but as he thought about it a little more he made an interesting observation.

"Let's say that the coaches, we must, we have to give feedback, but there is never a perfect time, like there's always a perfect time to say yea great job, but that's not a feedback, for me feedback is something that will fix something, so you have, in the feedback there is always a small part of criticism, nobody likes to listen that you are doing this bad, you have to fix it, so that's why I say there is no, there is never a good or perfect time for it. But still I would say the best moment to give a feedback is the moment that you know that the skater will stop and will look at you... For me the feedback is this, the best moment to give feedback is when you know cause of the body language or the situation that this person will take this feedback, like not always we take the feedback so you have to be sure that when you give the feedback this person will take it."

Expanding on a similar line of thinking participant 5, believed that it was the coaches job to understand his/her athlete and identify the right time to give feedback:

"I think that a good coach would recognize when, when the athlete needs to make these improvements or so they will find the exact time to, to provide this feedback. If feedback is given all the time, I think it's the incorrect way of doing things because it just turns into flooding of information that the athlete starts to ignore at some point. So that's why I said it up. The good coach knows when to give feedback and this is when they can recognize the athletes need the feedback. Even if the athlete doesn't realize it, so that could be at the time, I think it's quite silly to give a specific timeframe like just before a race or just after. Of course, probably this is when feedback is given, but my point is that the coach would give the feedback on other times when on the out it

may not seem that there isn't anything wrong going on, but the coach would recognize the situation and they will make that.”

5.6 Receiving Feedback

Now that we determined the importance of timing another important aspect alluded to by the participants was one's readiness to receive feedback, it reminds us of the old adage that you can lead a horse to the water but you can't make him drink. Participant 5 philosophized that if the feedback received would only be relatable only when one recognized themselves in the advice of their coach.

“Yeah, I think feedback would be successful when an athlete recognizes himself or herself as the person.. I can put that in a more clear way, um.. When an athlete recognizes themselves in the, uh, in the advice that they're being given. So I mean that a coach or, or another athlete or a friend or a teammate, um, their feedback would be useful when, um, when the person receiving the feedback see themselves appropriately in that picture.”

A more elaborate explanation came from participant 3 who thought that one's goals determine how you receive feedback:

“I will also look for feedback more and I think that's the big difference here that if, if you are looking for feedback yourself, if you are asking for feedback from someone around you, then you really want anything you can get to improve yourself. But if you're not looking for it and you get it, then it might be very annoying.”

She continued with an anecdote from her experience playing Gaelic football:

“When I'm playing Gaelic football, like right now, um, as I said before, because I'm not that competitive and because I like to just have fun. Of course I will listen to the feedback and I will try, um, but I don't take it that seriously. So for me, when they tell me, Oh, you should go closer to that person or you should do this, you do that, that's nice and I will, if it serves, the game, serves a purpose, but if it doesn't, it's fine by me too. So if someone continues trying to tell me what to do in that situation then I can get annoyed because I'm like, okay, that's nice. I understand that you want to

help me, but that's not what I'm looking for right now. I just want to play a nice game because I don't have the drive to really want to improve myself up to this maximum level.”

Participant 1 echoed some similar thoughts, but she had evolved as an athlete and started understanding herself and her goals better, in the beginning she felt:

“It's changed quite a lot because when I was, as I told you when I was playing quite younger, uh, the, we, I didn't necessarily understand what the hell is feedback you know. It's just like, okay, this guy is doing his job, what she's doing her job and she has to tell me something just so that they feel like they're doing. So you never get to see it from the point of view of why are they doing it. But I, as I get older and there's always this hunger within yourself, how umm, being an athlete, that's one of the things that I, it's absolutely amazing and transformational to other parts of your life is that you have this consistent desire and motivation within yourself, wanting to be better, and then you realize, okay, I am not an expert in doing everything I could to make myself as a better athlete and I have my coaches and I have my teammates and my environment around me to help me.

However, after having realized this now she feels very differently about receiving feedback, she recalls a more recent incident by saying:

“our coaches are really quiet, really most quiet coach I've ever had and he doesn't give individual feedback or no team feedback, so it does bother me a lot because to me I'm consistently like, am I getting any better each practice because for me I want to, I want to go to one practice and I want to make sure that I'm one step better than I was before it can because if not then I feel like I'm wasting my time and I'm not contributing to the team performance at all.”

Her self-awareness of herself and her goals make her more receptive to feedback and we see the same from participant 6 who says:

“I love feedback, i love the mirror so i love to watch myself or i love to have someone watch me and give me feedback because I feel secure enough in my

abilities as an athlete as a person who enjoys athletic activities to know that I'm not perfect, to know that I've got things to work on so having someone to tell me or having something to show me that what I'm doing is maybe not the right way or maybe not the best way to do it, is better for me because then i'm like ok then i can be that much better so I really do enjoy feedback. Sometimes of course it's hard to take so much criticism but over time you just, you get really used to the criticism and you don't see it as criticism it's more of an opportunity to get better and that's kind of my philosophy as far as athletics are concerned."

Even though participant 6 admits that over time feedback can seem like criticism, she seems to have taken it into her stride. In his capacity as a coach however, participant 2 understands the importance of criticism, but doesn't share the same enthusiasm as participant 6 when it comes to receiving it. He says:

"As a coach I don't enjoy but I use it. Well depends ok, sorry. As a coach you enjoy getting feedback when everything is nice like oh you made a great job here, you changed some things you don't enjoy it when they say that you have to change things and when they say you are doing things wrong. But I think the right thing to do here when you don't enjoy is to think ok is this person right or not. That's a good feedback, it's real easy to take a good feedback like a nice feedback like when someone says, like for example last year was the world championship in Helsinki, I got a judge, she came to me and she was like oh you are doing a really great job in Jyväskylä, I like that you changed this, this and this. That's really nice to hear but I also like to hear sometimes, that what can make it better, and that's like uh, I appreciate it but I don't enjoy it."

5.7 Purpose of Feedback

While receiving criticism can be hard at times, receiving feedback might be easier when a clear purpose is presented as to why you were told what you were told. Participant 3 felt that in her experience it was important for feedback to be given to help people enjoy an activity more, but the purpose might change depending on the level of the athletes being coached:

“Because I think in PE, even though of course you can give the feedback and try to improve their way of moving, eventually it should be about having fun and enjoying being active and if you keep giving feedback and they don't see the result of it, they're not going to achieve that joy. Whereas if you are in a in a sports club and children really choose to do that sport and really want to get better at it then I can imagine. You have to take giving feedback a bit more serious as well.”

As the level increases, one also needs to develop a sound reasoning behind the feedback that you give people. The reasoning or aim of your helps athletes to understand what they are doing and do it better. This was best explained by participant 4:

“I didn't tell them what we were working. What was that aim and Why we're working on that and how we were working that, um, they got confused many times because they didn't know what we were doing. Why are we doing this? So like the important thing with older ages is to tell them why, like reasoning, like give them reasons to believe on your ideas.”

The link between understanding the purpose and the effectiveness of feedback was also corroborated by participant 1, she stated:

“I think as a player from a very young age you start understanding what feedback is and the intention behind them. Most cases there are coaches who have the idea of giving the feedback but they don't necessarily communicate the intention behind it or the goal, so I think that, to me the most effective form of feedback has been, when i know the why I'm being given a certain form of feedback.”

She also added:

“So to me, even as a player is I like to know what I'm doing and why I'm doing this and what are the directions that I'm going to feedback that makes me feel like I have, I'm on the track or if I'm off the track, how can I get back to the track that's, that's the ones that I make, if you know, like really useful and also they are like long-term oriented. I could always relate to them. I can always come back and reflect to them because if you're just giving me feedback where they're like one or two minutes or just

contextual, but in a very short time I wouldn't really bring it back in. Practice that over and over again. But if it is that we can look back at it and say, all right, this was a certain feedback that I gave you. How far have you gone on since then? How much progress have you made? And stuff that, that helps me to think a lot.”

It seemed pretty evident for participant 1 and 4 that the “reason” and the “intention” were very important factors in determining how feedback affected them and their athletes. Figure skating coach, participant 6 believed there was a simple solution to the reasoning, he wanted his athlete to be better each time, so once he had figured out what to correct, and how he was going to proceed, his main purpose for the feedback was to improve his athletes:

“So let's say like in the moment that the athlete did something you tell them, you tell them like, what have you seen in this, which problem have you seen and from your point of view, what they have to fix or how they have to fix for me the feedback it's more like to tell them how to fix something, how to make it better than just to say the mistake it was, well the mistake sometimes is, even the skater themselves, they can realize what mistake they did, but it's the coach's well, I think the coach's role is to give the feedback that permits you to make better the next, the next tryout, so for me that's the feedback I think”

5.8 Strategies for Feedback

As pointed out the purpose behind giving feedback was seen as a significant factor for most participants, but some of them felt there may be different strategies that could be implemented once the underlying reasoning has been established. Here are some of the different methods that participants recalled employing. Participant 1 had a strategy that involved asking yourself a basic question before determining the method you chose to implement.

“So then you look at it from a coach point is that, okay, how can I be able to continuously want to make my athletic work harder? But also the reassured that they are something they are, you know, they are doing something that we appreciate and we will always make them realize that they have the potential and that's why I'm investing the time and the energy to help them by giving them feedback and coaching

them to move a few steps ahead to where they want to be kind of thing. So then, yeah. So, uh, I think for me it's like, Eh, I tried to give feedback as a collective team and also I tried to it, but most importantly, the most effective way I find it is, is connecting at an individual level.”

She elaborated with a story of an athlete whom she had coached with a very individual specific method.

“he said to me, I wanted to talk to me throughout the whole game. So I will, I will be giving feedback about his body position. I'll give feedback about the position that he's playing on the field. I'll be giving feedback about the vision and potential of the place that he can make. Because to him is that sometimes he, he, he said to me, he gets so sucked into looking at the ball and get caught up in his mind. He, he, he can easily underperform. So, my feedback for him is not only building his confidence but also helping his mind to ease and do the very simple thing so that he perform at his best...”

Apart from this individual method, participant 1 also expressed that as a general rule a goal setting approach might benefit most athletes:

“I think to me the goal setting is the most effective way because in a way in sports we always have that one aim or two aims or three aims. Like some of it is like, you know, my goal for the practice some of it is my goal for the game. Some of it is my goal for the season and weeks and we, you know, so you'd build up, you ordered up. So to me, even as a player is I like to know what I'm doing and why I'm doing this and what are the directions that I'm going to feedback that makes me feel like I have, I'm on the track or if I'm off the track, how can I get back to the track that's, that's the ones that I make, if you know, like really useful and also they are like long-term oriented. I could always relate to them.

Participant 2, who coaches for a more technical sport, namely ice skating, had a different strategy, he felt there needs to be a difference on the feedback you give yourself and the one you give your athlete, he thought:

“Okay. So, um, because of course like I think there are two kind of feedbacks in fact and the feedback, but you give to the skater and the feedback that you analyze yourself like that you give to yourself as a coach, because when you see something, okay you see you analyze. But I think it's very, it's very useful to tell yourself, okay, uh, we have to fix this. Like for me the feedback that I give to myself is not the feedback I give to the skater. Let's say, what I was saying these, what is the most effective or what's the first thing she can fix? Just making a point of attention, saying, okay, these things, trying to be careful with your shoulder for example, and the feedback I give to myself, it's like, okay, the big mistake is this one I have to prepare for next week.”

A completely different approach was explained by participant 6, who from her experience had learnt what approach she thought didn't work.

“General rule of thumb would be the compliment sandwich, everyone talks about it, you know compliment, but i think in sport especially if you are working with high level athlete, i don't think they really care so much about being praised all the time I think you know it's kind of like if you give a kid candy for every single meal they don't really enjoy the candy as much as if you give it you know once a day or once every other day or so and then they really kind of appreciate it more. I think the same thing goes with the whole compliment and then feedback is with higher level athlete in my experience, really they just want to know what they need to fix what they need to focus on.”

5.9 Content of Feedback

Participants varied with the strategies they liked using, but four of them highlighted that, the way you chose to express your ideas have to be taken into consideration. It's not only about the method always, but the contents of how you get your ideas across to your athletes. Participant 3 pointed out that language can have its own pitfalls but it's important to identify something positive and start with that:

“Everyone is different and that's especially when you give verbal feedback. That's been a problem with language as well. Even if you're speaking and listening in your native tongue, you might interpret it in a different way. And especially

in a situation where like now we're playing football with a very international team, so we have some people that are native speakers in English. Some people, most people that are not, most of them are good at English, but you know, giving feedback in English to someone that's doesn't speak English that well or it's not their native language if it can give a very different impact on different people. So language is a funny thing.... Always start with the positive, hey, this was really good, and then you can continue, but okay, next time we might be doing what we we said we did, you should pass to your teammate as well to give them a chance to something like that. So even if you don't really see that much that's positive and try to find something that's positive, at least that's what we've been taught. And that's what I really believe as well. Always start with positive feedback and then say, okay, so this for next time we can try to make this better if you just started immediately with all the negatives all the time, then their motivations going down, anyone's motivation will be going down no one wants to hear that they've done a bad job all the time.”

Participant 4 felt similarly about the positivity and added what he had learnt:

“So like a positive as well, needs to be like straight away in any kind of forms. Okay. If they've done something wrong, you just need to remark that next time they should change that thing that you saw. It's like positive negative positive. You need to build on like things, when they happen... I've been taught that is the best way to like get something out of the player because if you always give a negative feedback, the player is going to be, he's going to get frustrated because you'll never tell him what or how to do it better, or yeah, you're not telling them good things so the player doesn't see the evolution of his behavior, like of his learning. He's always like, I'm always doing something wrong. I'm never doing something right. So if they go like a positive feedback or good move but next time, try with the other hand. Uh, but yeah, like good move or something like that.”

Being positive was important, but participant 2 felt the words you chose to use must be selected very carefully because they can influence relationships in the long run:

“I think the words are really important because maybe something that you said when they are 10 years old it will change your interaction for the next year or

so. And also like, uh, for our athletes like the moment, not that they are like more in the best level. It's when; they are like really young, like 17, 18, 19 years old, 20 maximum, something like this. So most part of the interaction, when they are growing up, like when they are getting teenagers and this, it's when you have to advance more in techniques. So it means that it's a little bit like you have to be a little careful how you say things so like the words you used during these time is sort of important. I think. Um, I think that's probably the most important factors for me is interactions between people, Like finally doesn't matter if the mistakes are bigger or smaller, if, I think the words that you use and the interaction between athlete and coach is the main one.”

The interaction between coach and athlete was also referenced by participant 5 who felt that they should be “brief” but also represent something “meaningful” to the athlete.

5.10 Who is giving the Feedback

This interaction between the person who gives the feedback and the receiver also depended on the person who was giving the feedback. Three of the participants felt it was an influential factor in determining how successful the outcome of the feedback is. Participant 2 argued:

“Like, it's why there are good coaches and bad coaches, there are good coaches who knows less, who have less knowledge that other coaches. Wait, wait, let me say this properly: for me the best coach is someone who makes an effect on you, I met people who knows much more than me who are worse coaches than me, the best coach I've have knew less than me but he was better at personal interaction, so he was a better coach I think the feedback is the key to change an athlete and you have to be good at it.

Participant 5 emphasized the difference between receiving feedback from different people and how he chooses whom to listen to:

“when it comes to feedback from other people, that serve as role models to you, then you only hear from them maybe from their public appearances or of course if you're lucky enough you may be able to speak with them. Of course, that depends at what level you are in the sport and whether they are people from your

country or competing in the same sport or maybe it just comes down to how, how feasible it is to actually see them in person. But um, I think that who you get feedback from is more important than how you get feedback.... When you think that in sport, but also outside sport, when you communicate, um, you take people's words on different, um, importance level, if I can put it this way. So for some, for some feedback can be considered is very important to you. The first thing that you would think about is how credible this person is to, to give you that feedback. So that's why I think that it's important who's giving the feedback because you have the credibility, so whether that's... They're older than you or they have more experience than you, they have gone through the same situation, that you're currently experiencing, many times. Um, and they just have a wider, yeah, wider life experience, then that makes them credible, that's why I think it's important who is giving feedback. Otherwise, yeah, I think it would be impossible for us to, to function because if we receive so much different types of feedback, not just in sport in life in general. So if you take everybody's feedback at the same level of seriousness and if you try to apply it, then you're going to be constantly running forwards and backwards because there's many conflicting views. So you really have to look for that credibility criteria and of course adjust it to your own personal values and goals.”

Participant 6 added that as long as you respect the person giving you the feedback it should help improve you. She states:

“I think if you respect the person that's giving the feedback, you'll have a much better chance of being able to implement the feedback successfully, so if you've got a coach that you respect and that respects you things will be good but if you've got a coach who thinks that they know more than they do or who acts like they, you know they are all that and a bag of chips, maybe you're gonna have a harder time implementing the feedback so you never really know if it's you know feedback for you or if it's just their own issues being projected onto you so for me the best coaches I've had are the ones that were respectful and calm and confident in the way that they gave their information there is no ulterior motive there is no sneaky business they are just ok, i need you to work on these things so you try.”

5.11 Environment and Cultural difference in Feedback

Apart from who is giving the feedback, since the participants of the study were from different parts of the world it was also interesting to hear from them about how they thought things varied in the different countries, where they have trained, coached and competed. Participant 1 compared her experiences in Africa, the United States and Finland. She recalled:

“In South Africa for instance, part of the coaching staff only gives feedback for players that they see a potential for. They think they know they can push you to your limits, because I had teammates who would break down or lose interest or quit completely the sport if they're consistently given feedback because they see it as a criticism rather than as a way to reflect on the way they can improve themselves as part on the field and off the field... When I came to the United States, I was a little bit different because our, our coaches are not afraid to give feedback to anyone regardless of how differently we react to it... Finland a little bit different. Also as a coach, and also even as a player, when I'm playing with my teammates, there's no feedback from the coach know almost feedback, even with each other. With a team mate. It's almost like you must think for yourself, see what you're doing right, see what you're doing wrong, figure it out, how to be a better player kind of thing. Because they're very protective of not wanting to hurt anybody, so there's no free communication.”

Participant 2 compared his experiences in Finland as a coach to his training and coaching in Spain. He felt things varied and recounted:

“Completely, It's a different world. It's the way you understand your skaters. Let's say in Spain we are more, well everyone knows that we're more open, we're more maybe more talkative more like loud, well the temperament is bigger, but at the same time something that you say today, tomorrow I don't remember you know so it's like a mountain of feelings and emotions. So, there probably you can be, a little bit like, not less careful about what you say, but well if one day you are loud nobody will be shocked with that let's say. One thing you have to be really careful about how you say the things. Well I think that kids get shocked really easily here, but probably it's because just that they are not used to someone being more loud or I think, for me it was a great experience, I think I had to, it helps also to myself to calm down and to think a

little bit more about which kind of feedback I want to give. Like the main difference I would say is people is very different in the way how people take the things and how they take frustration. Frustration how it comes to a Spanish, French athlete is not the same way it comes to a Finnish athlete. I'm still trying to figure out how it is, I cannot tell you yet but I see it's really different.”

This difference was also noticed by participant 6 whose personal experience of playing in Finland wasn't a pleasant one, but where she noticed that things are different than where she was from in the U.S.

“we had a few games where I think I could have played a really integral part if I would have been on the field because I think technically and you know athletically i'm much more superior to this one girl but the thing that she has that I don't have is the mastery of the language so when I get on the field I tell them what to do you know organizationally, tell them where they need to be but I tell them in English and that takes them a half second longer cause they have to translate it in their head to be able to do what I want them to do and it's frustrating to me because I don't think that it should be such a hard thing if you want me to learn you know if you want me to say something in Finnish, teach me I'd be more than happy to learn it. But they don't really, they don't tell me that, there's no feedback.”

5.12 Giving others Feedback

The results also indicated that giving others feedback could be challenging, this was classified as a subcode since only a few participants felt it was important and from the ones that did, their reasoning was all quite different. Participant 2 felt like there were two main factors when it came to giving others feedback.

“So I would say the first factor is to understand at which point your athlete is or which mood your athlete is, after this factor you have to well you have to really analyze how you say or tell the feedback so I think that I would say the two factors or two most important factors are how the athlete's mood is and how you can get to them depending on their mood, that's the two main factors I think.”

Participant 3 had observed herself in different scenarios and questioned how to give the most “beneficial” feedback to others.

“I find it difficult sometimes to give feedback that I think is very beneficial for someone because I noticed myself as well, like if I can feel, I can see that adjusting my movement according to the feedback, whatever kind of feedback it is has an effect. Then of course I will be doing it, but if you don't really see that effect especially if you don't see the effects immediately, it's very difficult. So if you tell them, oh, you should turn your foot like this, so the ball comes up there and then you can kick better whatever. Um, if they try that, but they don't see the effects immediately then they probably will not continue trying it because they don't see the result. And it would be the same for me.”

In addition, participant 1 touched on the difference of how she looked at feedback as an athlete and now as a coach and how she could transfer what she had learnt as an athlete to her coaching practice:

“It's much easier asking for feedback versus being a coach and be in a position where you're not only expected to, but it's really important that you are in a position to give a certain form of feedback that could set your athlete to be one or two or three steps enough even ahead of most of the people within the team and other teams as well. So then when you're a player you want the feedback, but then when you become a coach, you look at it, okay. When I was applying what was so appealing to me about getting feedback.”

5.13 Gender Differences in Feedback

The final subcode was gender and how it influenced feedback, only two participants had strong opinions about gender and how it influenced feedback. Participant 3 thought gender wasn't really a factor and she reasoned:

“I haven't done the research on that. In my experience especially when teaching kids. I try not to let gender affect my way of giving feedback. I try to just look at everyone as a student and or a child or whatever kind of age they are and try to give them what I think they need at that moment... I believe that there's a big difference within a gender as well. Like you can, people often say like, all boys picked us up easier than girls or the other way round but, I don't think that's how it works. I think even

within a group of boys there might be some boys that it pick up quicker than other boys and with the girls exactly the same. Um, so yeah, I don't like to put it on that. I think you have to look more at the individual, see what they need and with who you have to be a bit more abstract with who you have to be more practical in your approach.”

This was in contrast to what participants 1 and 6 felt. Participant 1 recounted how she had experiences with a coach who was insensitive to gender and how that led to negative consequences for the team.

“the language that he was using, the words that he was choosing and during the practices when he was giving individual feedback or team feedback was he was not as mindful in a way that how does these certain words can be perceived by women versus men. So he was saying for instance, if he wants to say we would like to get fit or improve our fitness level, he would talk about how much all of them need to get on a diet or lose a certain weight. Really! And some of the varsity players end up on quitting the team.”

Participant 6 meanwhile remembered from her personal experience that she had experienced some difference when it came to coaching women and men. She explained:

“I think you know if you got a group full of guys and you're a female and you're trying to coach them like you coach females it would be way different then if you're coaching them like males so if you try to teach them and be like, (highers the pitch of her voice) ok guys this is going to do today and then you know we're going to do this and this. No you can't be so soft with them you have to be like, alright we are getting this done this and this i need you guys to go do this. And if you, if you command them in the same way that they're used to being commanded by men then they respect you but if you try to kind of play it off as being sweet or you know too feminine then they won't respect you as a commanding figure so it's kind of at least in my country maybe it is different somewhere else but when I try to coach the guys which I do like coaching guys. I have to be very forceful very very masculine in the way that i approach them... And that really dictates how you know how I approach feedback so even if I'm working with male or female I still try to keep emotionally consistent but with females I can't be as critical because we already overthink everything we are always over-

analyzing always over you know doing this, this and this to help you know ourselves get to where we need to go so you can't be "that was shitty this is terrible I can't believe that you did this " i mean you can't do that with them because it doesn't motivate them and just kind of keeps them locked away inside their head and then they get too subconscious then they kind of freak out a little but with guys you can be like " what the hell are you doing. fix it " you know send them off and I they usually do pretty well because I think they're not so emotionally invested in the type of feedback that they get, but this is just my personal experience."

6 DISCUSSION

The purpose of this study was to explore how coaches and athletes perceive and understand the different effects and types of feedback; how the purpose, timing, the context, or the content of the feedback influences performance. A journalistic approach similar to a study done by Mackie (2011) was adopted to better structurize the data. Participants were unable to give a clear, complete and holistic definition for feedback, although participants identified aspects they thought were key when it came to try and define successful and unsuccessful feedback their responses varied, this was in accordance to the the literature. Various studies differ in their definition of what feedback is. Authors such as Schmidt and Lee (2011) and Magill (2010) state that there is an inconsistency when it comes to the definition of feedback within the research literature in the fields of motor learning, motor control and sport psychology research. While studies such as Ste Marie et al. (2012) and Schmidt and Lee (2011) try and provide an applied model and a basic guideline one needs to consider when looking at feedback, the results found in the study seem to match these suggestions. Ste Marie and colleagues used a journalistic approach when they coded over 100 modelling articles to come up with the five Ws and one H namely what, when, where, who, why and how. Most participants allude to most of these codes within their personal experience as a coach as well as an athlete.

Furthermore, participants recognized different modalities or types of feedback, while similar evidence was found by Lauber and Keller (2014) in their review where they investigated the theoretical background of augmented feedback and try and distinguish between two types of feedback, namely KR and KP. The results obtained by this study also noted that participants felt an emotional style of feedback or constant negative feedback was detrimental to performance, this was supported in a study by Høigaard et al. (2017) that looked at feedback patterns and humor of coaches in youth soccer and study by. However, there was a novel suggestion wherein a participant suggested that he was giving himself feedback on how to plan the feedback he was going to give to his athlete.

Unsuccessful feedback was identified as something that was negative, or something that resulted in a repetition of a mistake; while no studies focused on defining unsuccessful feedback, there is evidence to show that negative feedback isn't always a bad thing. Two studies by Halperin and colleagues in 2016 and 2018 looked at coach feedback in boxing. The first study noted that more internal, controlling and positive feedback was used by coaches instead of external instructions, negative feedback and autonomy supportive feedback. Meanwhile in the second study suggests at the professional level of boxing false feedback did not have an effect on performance. They concluded this may be because at that level, there is no learning effect and since an athlete possesses the skills already, false feedback does not impede the learning process. Another study by Wulf and Lewthwaite (2010) that gave false feedback information to one of the groups, still noticed improvements on performance.

Guadagnoli and Lee (2004) and Papaioannou and Hackfort (2014) both identified the moderating variables that influenced feedback. Among these variables where learner characteristic and skill level, the results of this study describe similar findings where participants identified personality characteristics as crucial to feedback. These characteristics influence how you structure your feedback, how many times you give your feedback and how you put it all across to the learner. However, the literature from the two studies also highlight the importance of the characteristic of the task itself and how difficult that might be, unfortunately the results did not recognize this as a factor. This may be because everyone was interviewed about their own experiences and their own biases might have been present when talking about a sport that they are familiar with.

In addition to this timing and content of feedback were both identified as important factors when it comes to giving feedback. These are probably the two most well represented aspects of feedback in the research. The guidance hypothesis that was developed in the early 1980s by Salmoni, Schmidt and Walter (1984) explains how learners use augmented feedback as a crutch in the initial part of their learning but might begin to depend on it if they are not correctly guided at the right moments.

Participants in the study disagreed when it came to the strategies and content of feedback. Some thought that sandwiching a negative remark with two positive remarks

was a useful strategy while others felt it was easy to see through this method. Other participants expressed a concern with language and how it might be interpreted differently by different people, but most of them agreed that feedback needs to be meaningful to the athlete. This is supported in reviews by Wulf and Shea (2004) and Hodges and Franks (2008) where they stress that the information received by the athlete should help them work on improving their performance.

All participants agreed that the why or purpose of the feedback was an important part of wanting to adhere to the feedback. Just like the review of Lewthwaite and Wulf (2010) the results indicated that if you know what the purpose behind the feedback is, i.e whether it is to learn a new skill, improve on a skill you have already acquired or fix an error and keep getting better there is a better likelihood you will buy into the feedback that you are given.

When it came to the question of who was giving the feedback, participants were ambiguous with their responses. This is in accordance to the literature wherein Ste-Marie 2012 and Papaioannou and Hackfort (2014) suggested that there is a gap within the literature when it comes to identifying who might be the best person to give feedback. It is not always the case that the most skillful person is the best person to give feedback. This is a rather important point, while experience and knowledge might be valuable factors when it comes to giving feedback, they might not always be the most effective in some cases and in these cases perhaps the learner or athlete might respond better to feedback from someone he or she respects.

Receiving feedback was also something that was touched on by the results, the motivation of the athlete and readiness to receive feedback was a big factor in the way they were affected by the feedback, there is little evidence to isolate this as a separate variable and so it is often confounded in the literature as motivation or learner characteristic, however the results here showed that as one ages and as one's motivation evolve the nature of how you receive feedback also evolves. This might be something to that future research could look into.

Similarly, the results of this study identified two more important aspects to feedback. One was how different cultures treat feedback and how it varies in different

environments. There is surprisingly little data on cultural differences when it comes to feedback results, this may be as a result of feedback being broken down and studied as different as different aspects rather than as a complete construct in the literature. Another interesting result to emerge was how participants differed in their ways of giving feedback as opposed to received feedback. While there were no comparative studies found to demonstrate how people change when it comes to giving and receiving feedback it might be worth considering for future research.

6.1 Strengths

There were several strengths within the scope of this study, the first being methodology. Few studies have been done of a qualitative nature when it comes to addressing feedback in sports, while there are a number of quantitative studies this thesis focuses on more detail in trying to better define feedback and the constructs associated with it. The interview guide was tested first and edited by an external reviewer. A second coder who holds a PhD in psychology was consulted for better reliability of the results. Member checks were done in order to confirm that the participants agreed with the transcriptions of the interviews.

6.2 Limitations

A convenience sample was used and therefore there might be some level of bias attributed to the results. There was no quantitative data to support the stories of the participants and therefore the results of this study had to primarily rely on the memory of the participants as accurate.

6.3 Future Research

Feedback is a complex construct, one might compare it to laughing. While we understand the biological mechanisms behind laughter, or when someone is laughing, what someone laughed at, who someone is laughing about, why people laugh in certain situations and who makes people laugh identifying what is universally funny at all times is still a question that remains unanswered. It is rather similar with feedback, while we understand some very specific aspects of feedback very well, understanding feedback as a whole system or theory would be an interesting topic for future research to focus on.

7 CONCLUSION

The results of this study suggest that while there is a large consensus amongst different disciplines and different athletes and coaches on the different aspects of feedback, as a complete construct feedback is very personal and rather unique to the person giving it or receiving it. Multiple factors come into play while trying to understand feedback. While it is difficult to find out which is the best method to use at all times, this study makes a case for feedback to be looked at uniquely for each specific case. Since all people, and all circumstances are different, it might be smart to understand as much of the different aspects of feedback before coming up with your very own formula for giving and receiving feedback.

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APPENDIXES

Appendix 1

Semi-structured Interview Questions

Demographics

- a. Gender
- b. Nationality
- c. Age
- d. Participation in sport (in years)?
- e. Participation in coaching (in years)?
- f. Preferred sport

Here's a brief background of the study: I'm looking into how feedback is perceived by athletes and coaches as construct. Feedback might be come in many different forms such as visual or auditory etc and can be given at different times such as before, after or during an action, by different people like your coach or your peers.

1. What do you understand as feedback in sports, as in what do you find to be most effective as feedback and in your experience what are factors that make feedback successful or unsuccessful?
2. Has feedback helped you or hampered you while playing? (If so how?)
3. What are some of the types of feedback you have received?
How have they affected your performance?
What type of feedback do you consider to be the most effective? Any factors that you think one needs to consider when looking into feedback?
4. Do you think people react differently to the same feedback?
a. Why do you think so?
5. When do you think is a good time for feedback?
6. What are some of your experiences with feedback?
7. Do you enjoy receiving feedback?
a. How do you use feedback to improve?
8. Does effective feedback depend on who is giving it?
a. Why do you think so?

Appropriate probing questions will be added if they need to be, like:

Could you elaborate?

What do you mean by that?

Could you perhaps give me an anecdote of what you are talking about?