

## Video Self-Reflection and Coach Development in New Zealand

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**Abstract**

Drawing on data from semi-structured interviews with New Zealand coaches (N = 6) this study examined how video self-reflection (VSR) was perceived as a tool for learning within 'on-going' coach development. This study also looked to determine the potential barriers experienced by coaches before engaging in VSR. Each participant was a Performance coach (as identified by the NZ Coach Development Framework) with 5+ years coaching experience and had recently (in the previous 12 months) participated in a coach development programme that aligned with Sport NZ's Coach Development Framework. Five main themes emerged from the data, coaches had a positive perception of the benefits of VSR, a desire to engage in VSR but did not prioritise the time, logistical concerns, a fear of self confrontation, and evidence of knowledge for 'modern' coaching development. Findings indicated that coaches valued VSR as a tool for learning however, the lack of exposure and experience in the process meant coaches did not value the practise enough to dedicate specific time towards it. This study provides an evidence-base that can be used to support National Governing Bodies coach development frameworks, and the modification of content to encourage the use of VSR as a tool for learning.

**Keywords**

Coaching, Self-reflection, Coach Development, Video

**Introduction**

The nature of coach learning has become an increasingly subject of research (Cassidy, Jones & Potrac, 2009; Cushion, Armor & Jones, 2003; Cushion, Nelson, Armour, Lyle, Jones, Sandford & O'Callaghan, 2010; Lyle, 2002). Formal coach education has traditionally been a primary vehicle for 'learning' and raising the standard of coaching practice with a subsequent increase in the level of investment and delivery of coach development programmes in western nations such as Australia, UK and Canada (Cassidy, Potrac, & McKenzie 2006; Cushion et al., 2003; Nelson, Cushion & Potrac, 2013; Trudel & Gilbert, 2006). However, learning can happen through a number of means, including informal environments such as observation, discussion with 'others' and self-reflection of practical experience. (Cushion et al., 2003; Irwin, Hanton & Kerwin, 2004; Nelson & Cushion, 2006; Nelson et al., 2013).

In attempts to better prepare coaches, national bodies responsible for coach education have

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2  
3 started to embrace the value of informal approaches to learning and development (Werthner  
4 & Trudel, 2009). Informal learning is a learning experience without a prescribed curriculum,  
5 including self-learning, interactions with other coaches, on the job learning, seminars and  
6 conferences (Sport NZ, 2012). This call for a broader emphasis on informal learning (Cushion  
7 et al., 2010) has led to, theoretically informed, pedagogical approaches in the design of coach  
8 education curricula, learning and on-going development (Cassidy et al., 2006; Lyle, 2007).  
9 Such approaches have included the utilisation of reflective practice (Schön, 1983; 1987),  
10 competency-based programmes (Demers, Woodburn & Savard, 2006), issue based learning  
11 (Trudel & Gilbert, 2006), problem based learning (Jones & Turner, 2006), mentoring schemes  
12 (Cushion et al., 2003), and communities of practice (Culver & Trudel 2006; Kidman &  
13 Penny, 2014).  
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23 Over the past decade the focus on coaches becoming reflective practitioners has gained  
24 popularity (Cassidy et al., 2009, Dixon, Lee & Ghaye, 2014). Literature highlights that  
25 reflection is a proven and valuable tool in understanding coaches' long-term learning  
26 (Cassidy et al., 2009; Cushion, 2006; Cushion et. al., 2003; Gilbert & Trudel, 2001).  
27 Reflective practice is particularly relevant for coach education as it empowers coaches to take  
28 ownership of their learning (Kidman, 2001), and enables the linkage between practical and  
29 theoretical knowledge gained from various sources (e.g. coach professional experience,  
30 coaching observations, coaching theory and coach education) (Nelson & Cushion, 2006). In  
31 an attempt to be world leaders Sport NZ is one national body that has adopted self-reflection  
32 and on-going learning as an underpinning element to their coach development framework.  
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41 To enhance the self-reflection process the use of video has been suggested as a tool that could  
42 enable coaches to review their coaching, without the reliance on memory for in-depth analysis  
43 (Carson, 2008). Recent advances in technology have meant that video analysis is already  
44 widely accepted as an integral part of team/player development (O'Conner, 2012). Tablets,  
45 smartphones and wireless recording devices are now all considered habitual coaching tools  
46 (Sport UK, 2014). Furthermore, within the education sector video self-reflection (VSR) has  
47 already become an integral part of professional development to student teachers, and has been  
48 shown to significantly increase their level of reflective thought and self-awareness (Freese,  
49 1999; Sherin & Van Es, 2005; Trip & Rich, 2014).  
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57 Video analysis technology coupled with reflective practice could enable the complexity of  
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3 coaching behaviours to be captured and assist in taking significant steps towards guiding  
4 coaches to useful pedagogical practices (Cushion et al., 2012). However, while reflective  
5 practice and VSR is becoming widely recognised as a key element to coach learning, there are  
6 a number of logistical challenges (for example obtaining high quality video and sound) that to  
7 need to be overcome (Carson, 2008). Furthermore, reflection is often undertaken in a  
8 superficial way, and there is limited understanding of how to best implement and fully  
9 evaluate the impact of reflective practice on coach learning and development (Cropley et al.,  
10 2012; Cushion, 2011; Cushion et al., 2010, Dixon et al., 2013).

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18 With the inclusion of self-reflection as a component of Sports NZ's coach development  
19 framework, and the increased use of video analysis technology, the focus of this study was to  
20 qualitatively determine how NZ coaches currently perceive VSR as a tool for learning, how it  
21 is incorporated as part of their development process and the key barriers to its  
22 implementation. By exploring how coaches perceive VSR as a tool for learning, national  
23 coaching bodies such as Sport NZ can better understand how to apply self-reflection and VSR  
24 into coach development.  
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### 31 **Method**

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33 In attempts to capture the lived experiences and perceptions of the six participants a  
34 qualitative descriptive study design was employed in this study (Sandelowski, 2000). The  
35 philosophical underpinning origins of this qualitative research placed emphasis on the  
36 significance of understanding how coaches think and practise, including "the social-cultural  
37 context of social interaction" (Patton, 1997, p.20), that is how to empathically understand the  
38 participants and their connections between their behaviours and personal insight of VSR. This  
39 Studies methodology is situated within the post-positivist paradigm (Grant & Giddings,  
40 2002), based on the notion that we cannot be 'absolutely positive' about our claims of  
41 knowledge when studying the behaviour and actions of coaches (Creswell, 2013). This  
42 paradigm holds a deterministic philosophy, factors in the unpredictable and contradictory  
43 nature of human experience (Creswell, 2013) and is built upon the belief that reality is  
44 socially and culturally constructed and researcher objectivity is impossible (Giddings &  
45 Grant, 2007).  
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3 (Burt and Morgan 2014; Cropley, et al., 2012) this study utilised the method of semi-  
4 structured interviews. This allowed for a more in-depth understanding of coaches' perceptions  
5 compared to other qualitative methods such as survey and questionnaires. Thematic analysis  
6 was used to analysis the data because it is an independent and reliable qualitative approach.  
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8 (Vaismoradi, Turunen & Bondas, 2013).  
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### 11 12 13 ***Participants***

14 Amateur coaches (N=6) coaching at the performance level in New Zealand took part in the  
15 study. Coaches (24-44 years) (rugby, basketball, football and netball) all had coached for over  
16 five years and had recently (in the previous 12 months) participated in a coach development  
17 programme that aligned with the Sport NZ's Coach Development Framework. Participants  
18 were all coaching a provincial or representative age group team (15-19yrs) and half were also  
19 coaching a senior club team. Purposive sampling was employed enabling the researchers to  
20 enhance the depth and richness of the data (Sandelowski, 2000). Pseudonyms were used  
21 throughout this study.  
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### 28 29 30 ***Data Collection***

31 Semi-structured interviews were asked in a systematic order and audio recorded and  
32 transcribed (Patton, 1997; Berg, 2009). During the interviews, introductory statements,  
33 definitions, and the purpose of the study were explained, along with the participants' rights  
34 and declaration of confidentiality. In some instances the order of the questions varied, in  
35 accordance with the answers and flow of the interview, this allowed participants to express  
36 themselves in their preferred manner while still retaining the systematic nature of data  
37 collection (Patton, 1997). Each participant was different in the way they interacted, however  
38 as the interviews progressed every participant was keen to share their experiences and  
39 perceptions. Interviews were used as a primary source of data collection, allowing for a  
40 greater depth of meaning and understanding compared to alternate data collection methods  
41 such as survey and written questionnaires (Bryman, 2012). The interviews lasted between 30-  
42 60 minutes. Once the interviews were complete, they were transcribed by a third party, then  
43 were checked by myself and the participants to confirm they were accurate and true.  
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### 57 58 59 60 ***Pilot Study***

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Prior to the interview process a guide was created and tested with two coaches who met the selection criteria of the study. Their data was not included in the final study. The 30-45min interviews comprised a 5-stage structure:

Stage 1: introduction- interviewee relaxed, spoke about their situation and set the scene.

Stage 2: Coach Development. Questions related to their coach education pathway and their formal and informal coach development.

Stage 3: Self-reflection. The interviewee was asked to explain their self-reflection strategies they currently use.

Stage 4: Video self-reflection. Interviewee was asked how they perceive using video self-reflection as a tool for on-going development and whether they have had any experience of using video as a source of feedback.

Stage 5: Barriers to self-reflection. Interviewee was asked if there were any barriers that would stop them undergoing meaningful video self-reflection.

### ***Data Analysis***

Braun and Clarke's (2006) six phases of thematic analysis was utilised to examine the transcribed interview data. Initially, transcripts were repeatedly read and listened to, in order to ensure a familiarity. Systematic coding then began by working through the entire data set. Common words and quotes were identified and these quotes then became the raw data for the thematic analysis. These different codes were then placed into potential themes. Once all relevant codes were collated each section was read separately (for example all quotes with the category of 'barriers') to determine if the quotes were correctly categorised. Themes were then reviewed checking that the themes 'word' related to both the coded extracts and the full data set. Finally, themes were defined and named producing a 'thematic map'. This process allowed meaningful themes and categories to be defined until all common links were identified.

### ***Findings and Discussion***

All participants expressed a positive perception about the utilisation of VSR as a tool for learning. However, none currently use it as part of their 'on-going' development.

In analysing the data, five common themes were found: (1) 'Positive perception' towards VSR. (2) A 'desire to engage but do not prioritise the time'. (3) 'Logisites'. (4) 'self confrontation' and (5) 'Modern day vs old school coaches' perception'.

### *Positive Perception*

All participants spoke positively about VSR as a tool for on going coach development. They all engaged in some form of written self-reflection strategy, regularly used video as a in the development of their players, had used VSR in other areas of their lives and valued the self-reflection process. These culminating factors meant that all participants felt that VSR was an effective tool for self-learning, increasing self-awareness and creating the opportunity for self-modification of their coaching behaviour.

All participants commented that they currently used written self-reflection as part of their on-going coach development. Half of the participants said they used a systematic and structured process for evaluating coaching practice such as the Gibb's cycle (Gibb's, 1988):

*I definitely use the GIBB cycle, both for my year five team and for my under 17's and I used it last year for my premier team as well I find it quite useful. (Fiona)*

The others did not use such a structure. Their reflection was based around journal writing and making general notes on what they saw and how they felt.

*I journal all the time (laugh) I keep notes on my phone, like my notes is full of things like I might come away from you tonight and you've said something and I'll keep that...after I reflect and more so with journaling because they're my own thoughts and my own words I then try and take what I've learnt out of that and find some resource about what I'm struggling with and that just puts it into perspective for me. (Anna)*

While it is important to note that reflective models and journal writing are beneficial, it is unclear to the degree the participants used written self-reflection to critically analyse their coaching. Dixon et al. (2013) suggested that there is an over-reliance on paper and pencil reflective practice. One of the problems of reflective writing can be that individuals may only focus on negative aspects and 'search for problems'. The consequence when problems are the focus of sport coaching is: 1) coaches see improving performance as problem-fixing and therefore construct a world in which problems are central, and 2) coaches grow in the direction in which they ask questions and therefore grow in a deficit-reduction direction (Dixon et al., 2013). Nevertheless, it appeared that this engagement in written reflection and its habitual use provided the foundation for their positive perception towards video as a tool to reflect on their coaching practice.

Another key factor that formed participants' positive perception of video reflection was that it was regularly used as a tool for player development. Participants frequently used tablets and

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3 smart phone cameras to provide video feedback to their players:  
4

5 *I just take the iPad which is brilliant because I can show them straight away after the*  
6 *game and go this is what was happening...I definitely know my players find that*  
7 *beneficial. (Sally)*  
8

9  
10 Participants stated passionately about the joy their players expressed when analysing their  
11 own performance using video. They suggested that using video feedback benefits a player's  
12 learning and helps them view performance from their own perspective. They highlighted how  
13 all players learn differently and video helps players gain a greater understanding through self-  
14 analysis.  
15

16  
17  
18 *Yeah they love it [the iPad], they love seeing themselves....they come round and they*  
19 *have a look and they really enjoy it cause they all learn differently, learn by doing*  
20 *and for some of them it actually reinforces that something, it actually highlights and*  
21 *makes them look at it and go, oh wow, I do, I do that and now I see where you're*  
22 *coming from. (Teresa)*  
23

24  
25 Their comments supported the literature, suggesting that video analysis is now widely  
26 accepted as an integral part of team/player development (O'Conner, 2012). It is this regular  
27 use of video feedback and participants' familiarity of using these video recording devices that  
28 provides another avenue for coaches to view VSR positively.  
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33 The majority of participants had also experienced using VSR as a learning tool in other areas  
34 of their lives. Fiona used it in her role as a gym instructor: "I have done it as a fitness  
35 instructor, videoed myself for that". Teresa used it at school in her teaching and coaching  
36 role: "I got filmed teaching, God that was a long time ago. We got filmed as trainer teachers  
37 and got made to watch it". Tom had used it as part of his work as a sales rep: "I do a lot of  
38 camera stuff for work... I get all cameras and stuff through work, so part of my job for work  
39 is doing camera stuff and doing video presentations". It appeared that VSR was used in a  
40 number of different contexts to enhance the learning process and further contributes to  
41 participant's positive perception towards it.  
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49 The participants further emphasised their positive perception of VSR by discussing the value  
50 they see in it even though none are currently engaged in it. Participants described video as a  
51 tool that could increase their self-awareness, and reducing their reliance on memory. It was  
52 also described as a tool that could allow them to 'observe' and 'hear' themselves from an  
53 external perspective i.e., more akin to how the players observe and hear them.  
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57 *Looking at body language, especially when I'm outside, 'cause like I said I don't like*  
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3 *the cold, so I quite often stand sort of cuddled up and I guess that can come across as*  
4 *stand offish or unsure, so there would be a lot of benefit in looking at my body*  
5 *language and how my presence is around my players. (Fiona)*  
6  
7

8 *I think you'd pick up little things like you know, um's and ah's and all that kind of*  
9 *stuff that puts a bit of doubt potentially into the boys' mind...How you address the*  
10 *guys, your tone, even just how outwardly emotional you are. (Tom).*  
11  
12

13 The participants' comments supported previous research that using video in the self-reflective  
14 process enabled coaches to be more self-aware of their verbal and non-verbal behaviour and  
15 provide a greater opportunity to change coach behaviour (Carson, 2008; Cushion et al., 2012;  
16 More & Franks, 2004; O'Conner, 2012). For change to take place, coaches must first be  
17 aware of the issue or behaviour, before a new behaviour patterns are adopted (Cassidy et al.,  
18 2009). Vivian highlighted in her comment below how VSR enabled her self-awareness to  
19 change her side-line feedback during games:  
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23

24 *During the course they recorded us during games and played back some stuff it was*  
25 *really cool to see how much we talk on the side-line and what affect that could have*  
26 *on our players, since then I have been working with more key words and things like*  
27 *that. So I really took that on board and have noticed that I have reduced the chatter*  
28 *from the side-line to just key stuff now. So that was really beneficial, getting that sort*  
29 *of observation, which I didn't realise that was happening. (Vivian)*  
30  
31

32 The participants also mentioned the ability to review verbal and non-verbal communication,  
33 without having to recall it from memory:  
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35

36 *I think it would highlight the things that I don't realise I'm doing or saying...like the*  
37 *amount I might converse, that's been something that I've been working on the whole*  
38 *less is more... getting the questioning out there and letting them think for it a bit*  
39 *more. (Fiona)*  
40

41 By not having to rely on memory VSR can increase the reflective capacity of coaches and  
42 move them towards a more critical analysis of their coaching (Carson 2008; Marsh &  
43 Mitchell, 2014). Furthermore, VSR has the ability to reduce the discrepancy between  
44 perceived and actual behaviour when compared to written reflection. Anna commented on  
45 how she felt video captures everything and could reduce the reliance on her memory:  
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48

49 *I could tie it in with what I was writing, then you see it, you know because I mean you*  
50 *learn by seeing, watching, we learn every day by using our eyes alone...if what I was*  
51 *thinking and noting and then what I'm seeing are too different things we've got a*  
52 *problem you know...It would be beneficial because you're capturing. (Anna)*  
53  
54

55 Education literature has highlighted videos taken during lessons in teaching practice, allowed  
56 teachers to make post lesson self-reflection that was grounded in the actual recordings, rather  
57 than uncertain recollections (Freese, 1999; Sherin & Van Es, 2005; Tripp & Rich, 2012). By  
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3 only relying on memory written-reflection may actually be detrimental by fictionalising  
4 events that did not happen and therefore weakening coach's emotional awareness (Dixon et  
5 al., 2013). The findings suggested that participants have a positive perception of VSR as a  
6 tool for learning. This positive perception was formed by the participants having a clear  
7 understanding of the benefits of incorporating VSR into their coach development, their  
8 habitual use of written reflection, the use of video feedback in player development and in  
9 other areas of participants' lives.  
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17 *Desire to engage but don't prioritise the time*

18 While participants had a positive perception towards VSR, they did not appear to be  
19 motivated to practice VSR within on-going coach development outside of expectations in  
20 learning environments in professional development opportunities. All study participants were  
21 classified as performance coaches and five out of six of them had an ambition to coach at a  
22 High Performance level. Because of this ambition they all expressed a strong desire to engage  
23 in VSR.  
24  
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27

28 *..14 years from now I wanna be coaching at the World Cup, not for New Zealand but*  
29 *for Georgia, Russia, Spain...if someone started a business that was filming people*  
30 *coaching I'd be all over it. I'd pay to see myself coach (Tom).*  
31  
32

33 Participants appeared to be motivated to become a better a coaches, yet despite all this 'drive'  
34 and 'desire to improve', participants were not motivated to dedicate specific time towards  
35 VSR as part of their on going coach development.  
36  
37

38 *Probably time would be a big factor because obviously you've just had an hour and a*  
39 *half training and so then to sit down and re-watch that hour and a half, trying to fit*  
40 *that into your busy week already would be quite hard. (Fiona)*  
41  
42

43 Busy lives and managing the balance between work, family and coaching commitments were  
44 suggested as primary reasons for why coaches do not prioritize time to undergo VSR:  
45

46 *yeah I think probably time...given the sort of work, the home life, the coaching life*  
47 *sort of three way balance, it's getting the time to actually see how I could implement*  
48 *that. I would say that's the biggest sort of stumbling block for me. (Sally)*  
49  
50

51 *Definitely time, yeah and having two children, so a nine year old and an eight month*  
52 *old so whenever I do get a bit of down time I'm trying to spend it with them or my*  
53 *husband or I'm busy planning for the next session. (Teresa)*  
54

55 Participants comments support previous studies that found similar demands such as work and  
56 family were primary reasons why the required time to undergo written reflection was seen as  
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3 a key barrier (Brut & Morgan, 2014 Cropley et al., 2012). Driscoll and Teh (2001) suggested  
4 that when life gets busy, reflective practice is the first think to be dropped and tossed aside.  
5 Interestingly, coaches already dedicate specific time towards written reflection suggesting  
6 that time did not appear as an issue.  
7  
8

9  
10 *journaling's my main one, like I ask a lot of other coaches who I trust, so I*  
11 *communicate with them a lot videoing was probably coming in to it...I'm not really*  
12 *into videoing myself at the moment. (Anna)*  
13

14 The findings suggested that 'time' itself is not the barrier to self-reflection, it is instead the  
15 prioritisation of specific time dedicated to VSR. It comes down to a question of personal  
16 motivation. This is highlighted in Tom's comment below:  
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21 *I mean time but you make time I think that's the thing. I mean if you want to be a*  
22 *decent coach and progress then you find time. It's not just me but all the guys that are*  
23 *trying to progress are spending the hours and hours. I mean it's all Tuesday all*  
24 *Thursday all Saturday then it's like Monday night planning and review then it goes*  
25 *on so yeh another hour is no big deal. (Tom)*  
26  
27

28 Motivation in itself is a complex subject and an in-depth discussion is beyond the scope of  
29 this project. However, it could be argued that the reason why coaches are not motivated to  
30 video reflect compared to written reflection is because VSR has less of a 'value proposition'.  
31 Value proposition in the context of sport, is defined as the benefits a coach will 'receive'  
32 (accuracy, non-verbal feedback,) compared to the 'costs' (time, organisation, quality of  
33 output). The concept of 'value proposition' has previously occurred in studies when 'written  
34 self-reflection' was first introduced to the coaching environment and was not undertaken  
35 (Brut & Morgan, 2014; Cropley et al., 2012). Cropley et al. claimed in his study "those  
36 reporting low motivation to reflect may have done so because they were not able to elicit the  
37 benefits" (p.21). Burt and Morgan argued, "the reason why coaches are not motivated to  
38 reflect is because they do not understand the benefits of it. Incentive Theory would suggest  
39 that coaches have not seen the benefits to be gained from reflection" (p.9). If the participants  
40 perceived an increased effort is required for VSR compared to that required for written  
41 reflection, yet do not see the immediate increased benefits of VSR, then this would reduce the  
42 likelihood of them undertaking it.  
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54 Teacher education in contrast, exposes novice teachers to actively engage in VSR very early  
55 in their training. VSR has been used as a compulsory tool in teacher training domain for a  
56 number of years (Fuller & Manning, 1973; Tripp & Rich, 2012). Teachers are not only  
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3 exposed to using VSR, but are engaged in meaningful in-depth reflective discussions around  
4 it with teacher educators, mentors and fellow teachers as part of their education (Freese, 1999;  
5 Marsh & Mitchell, 2014; Sherin & Van Es 2005; Tripp & Rich, 2012). The use of video in  
6 collaboration between a trainee teacher and mentor has been seen as critical in the  
7 development of teachers changing their practice (Marsh & Mitchell, 2014; Tripp & Rich,  
8 2012). It is these meaningful discussions and the absence of video feedback in mediated and  
9 structured environments that appeared to be lacking in the development of the participants.

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15 As indicated prior, the participants stated that they value VSR and were actively engaged in  
16 written reflective activity. Therefore the reason they were not allocating the time to  
17 incorporate VSR suggested that the performance benefits might not currently be truly  
18 recognised/acknowledged by them or that the motivation is lower than even they believe.  
19 Nevertheless, by providing coaches with practical experience using VSR in a mediated setting  
20 similar to the education sector, opportunities would be created for dialogue and shared  
21 learning to take place which may begin to increase the value they give to VSR. While this  
22 increase in exposure and experience can address the value coach's place on VSR, it still may  
23 not be enough to overcome some of the logistical barriers faced.

### 30 31 *Logistics*

32 Participants highlighted that the logistics of getting the video footage for VSR was a key  
33 issue. Participants discussed the need to be able to both 'see' and 'hear' themselves in order  
34 to use VSR effectively.

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37  
38 *Its more than just having a tripod set up...the thing is that you're moving around on*  
39 *court so much that it's getting it in the right position where you can hear myself and*  
40 *you can see what you're doing because you're moving up and down court all the time.*  
41 *(Fiona)*

42  
43  
44 Having both video and audio are essential elements to VSR (Cushion et al., 2012). Having  
45 one without the other would limit the quality of the coach reflection. The participants  
46 described how the camera needed to be close enough to hear the coach's instructions, while  
47 still being positioned far enough away to capture the coach's nonverbal communication.

48  
49  
50 *It's not just a case of somebody standing with an iPad on a balcony because yeah*  
51 *you can get set up, which is great, but can you hear the information? So if you can't*  
52 *hear the information then you can't really look at that sort of thing so you need the*  
53 *resource to sort of be up close and personal (Sally)*

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55  
56 Participants suggested that acquiring video of a high enough quality to undergo VSR  
57 effectively cannot currently be achieved through placing a stationary camera on a tripod  
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3 alone. While camera technology is rapidly advancing and drones, robotic cameras and  
4 wireless microphones are currently available on the market, the majority of these devices are  
5 expensive and out of most coaches resource ability. Therefore, coaches need to rely on a  
6 human resource.  
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10 *...it's just about having somebody there available all the time and able to film really,*  
11 *because we only got this iPad because of netball for the stats, for the girls, things like*  
12 *that because it's such a great tool. So I've got it there so I might as well use it*  
13 *(Vivian)*  
14

15  
16 Using a human resource will solve a number of the logistical problems, however the concept  
17 of 'needing a camera operator' draws attention to the challenges associated with finding  
18 individuals to record coaching sessions.  
19

20 *I think resource is gonna be the issue, not only the cost of the equipment but just*  
21 *someone to actually stand there and film you. I think that's gonna be the biggest*  
22 *issue. (Tom)*  
23

24 *I mean we've got a camera at home so getting a camera to get the footage wouldn't*  
25 *be difficult but it's getting it set up so and finding someone that's happy to sit there*  
26 *for the hour and a half and solely video (Fiona)*  
27  
28

29  
30 Although not all participants shared this view, half of them states that finding a camera person  
31 would not be an issue:  
32

33 *...there's always a place to video in the gyms ...there's always a parent or an*  
34 *assistant coach or someone that if I needed to take 20 minutes of myself coaching*  
35 *they, they would. So there are no barriers there (Anna)*  
36

37 *I think that would be an easy one for me, um I could have done it Tuesday night with*  
38 *regards to me delivering and head coach videoing. We have the resource, we've also*  
39 *got team manager that could potentially pick that up as well. (Sally)*  
40  
41

42 Nevertheless coaches must still acquire high quality video and sound in order to undergo VSR  
43 effectively. This is support by Carson (2008) who stated that the primary concern to using  
44 VSR was related to the video and sound quality (unclear, too quiet, too much interference).  
45 The findings suggest that logistically, VSR is challenging to administer without a camera  
46 person. This could explain why written self-reflection is completed because it is simple and  
47 can be achieved on your own with little pre-planning or support required (Cushion et al.,  
48 2010). Seeking out technological solutions or trying and find an appropriate support person  
49 means VSR is considered too difficult to administer.  
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58 *Confrontation/Low self-confidence*  
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3 Participants expressed a ‘feeling of vulnerability’ or ‘just being uncomfortable’ when talking  
4 about using VSR. All five female participants did not like seeing or hearing themselves on  
5 camera. Anna commented: “*I don’t like watching it (laugh) personally I don’t like seeing*  
6 *myself*”, whereas Teresa commented: “*Just don’t like the way you sound, you start getting all*  
7 *picky, oh do I really sound like that*”. Female coaches in this study seemed to have low self-  
8 confidence when related to seeing themselves on camera. Fiona effectively summed up this  
9 hesitation in her comment below:  
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13  
14 *I probably would be hesitant just ‘cause it’s one of those things you never really*  
15 *wanna watch yourself and hear yourself being recorded.... Probably just self-*  
16 *confidence of how you look and how you sound, um, yeah I think that’s probably it*  
17 *you know just having that confidence to go right, I’m gonna do it. I’m actually going*  
18 *to sit down and watch it because it’s easy enough to do it but it’s probably sitting*  
19 *down and watching yourself is gonna be the hard part, watching the playback*  
20 *(Fiona)*  
21  
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23

24 Anna talks about the feeling of insecurity when thinking about watching herself on video:

25  
26 *...when I think video reflection I’m like insecurity, the word insecurity comes straight*  
27 *to mind you know and that, so, because you can’t hide anything at all...I don’t know*  
28 *if it’s a girl thing, it’s an image thing, like I kind of mentioned before I don’t know*  
29 *like I wanna look good... you see yourself and you just, you lose the whole point, I’m*  
30 *thinking I would lose the whole point of why I’m doing it. You know, that insecurity is*  
31 *a real self-centred position. (Anna)*  
32  
33

34 Several authors have commented that reflective practice is likely to lead to feelings of  
35 discomfort and vulnerability, as reflection directs us to challenge habitual knowledge,  
36 physical appearance and practice (Anderson, Knowles & Gilbourne, 2004; Cash, Theriault &  
37 Annis, 2004). The comments above are examples of feelings of vulnerability. Vulnerability is  
38 described as uncertainty, risk and emotional exposure (Brown, 2012). It appeared that  
39 participants had the perception that vulnerability is a weakness especially when they are  
40 totally exposed on camera. However, as Brown (2012) also explains ‘vulnerability is the birth  
41 place of love belonging, joy, courage, empathy and creativity’ (p.28). The more confident  
42 coaches are in undergoing VSR the less these psychological issues will be barriers that stop  
43 them engaging in it.  
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52 VSR brings one’s self-representation to the forefront. As Sally’s comment highlights below,  
53 if coaches think they are good at what they do then they are not going to put that at risk:  
54

55 *...I also think there’s a bit of confidence there as well you know, as human beings*  
56 *perception is massive across all walks of life and I think your perception of you is*  
57 *generally positive and everything’s good and there’s nothing wrong. I think it’s the*  
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*confidence to actually watch that and to have the ability to constructively criticise what's going on and to reflect on what you're seeing... we have a perception of ourselves and we don't want to ruin that perception if it's rosy and all good. (Sally)*

This notion of not wanting to see or hear yourself may be also due to a feeling of susceptibility to negative self-conscious emotions (Tracy & Robins, 2004). VSR as a self-processes make it possible for self-evaluations, and therefore self-conscious emotions such as pride and shame to occur (Tracy & Robins, 2004). If coaches have a positive perception of themselves they are unlikely to want to put that at risk by becoming aware that they may not have lived up to what they expected.

What is interesting is that the one male participant (Tom) in my study did not have the same issue *"I think if I could be videoed for every single training and every single game, especially my trainings, then it would be awesome"*. It is important to note that this study only had one male participant compared to five female participants. It is therefore very difficult to make a fair comparison between the two comments further research between male and female coaches is recommended.

#### *Modern day vs. old school coaches*

The participants interviewed in this study perceived that there are two types of coaches, 'modern day' and 'old school' who express a contradicting mind-set towards VSR. The participants suggested that there were many coaches within their current coaching environment who held what they described as an 'old school' view towards the practice of coaching, self reflection and on-going coach development. The participants defined old school coaches as having an, 'I know what's best attitude', preferring a coach-centred approach, and appearing to had a reluctance to critically reflect and seek out new coaching strategies as part of their on-going development:

*I think because they (old school coaches) think they know it all, and there is a big train of them and they think they know what's best...this is how you do it, this is the right way and a lot of them have been around a long time and so they think that this is the only way to do it so they are quite guarded. Whereas actually they could do with having some time out and reflecting on their coaching and actually know there are other ways. It's not that their way is the wrong way there's just other ways of doing things. (Teresa)*

They explained that this is a contrasting perception to their own 'modern day' view. Similar to themselves modern day coaches were characterised as younger, more progressive and more

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3 open to innovative ways of learning. They also perceived that other modern day coaches had  
4 a similar view.  
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7 *...I think there's a lot of modern day coaches that will (search for new ideas and self-*  
8 *reflect), I think those older style coaches won't purely because they have the*  
9 *experience, they have the knowledge and they know what should be delivered. (Sally)*  
10

11 *I think the ones that are coming through, the younger ones are coming through and*  
12 *they get involved in something like [coach development programme] they'll get*  
13 *educated and they'll see the importance of it (self-reflection and on-going*  
14 *development) but you've got some (old school) coaches that are just stuck in the*  
15 *middle that will never change. (Teresa)*  
16  
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20 It is vitally important to understand that that this study has come from a modern day  
21 perspective due to the Sport NZ's CDF and its application to continued modernisation of  
22 coach development. The comments made are only the perception of the coaches interviewed.  
23

24  
25 Unlike themselves the participants perceived that old school coaches within their current  
26 coaching environment had a very different perspective of self-reflection and VSR. They  
27 described old school coaches as unaware of their behaviour and do not value the importance  
28 of critically reviewing their coaching.  
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31  
32 *I don't think the old-school coaches would necessarily sort of critique their delivery*  
33 *and I think that's why we still have coaches at the side of the parks, ranting and*  
34 *raving. (Sally).*  
35

36 *I think a lot of old school coaches don't think to reflect...They don't sort of think of it*  
37 *actually as being a really important part, they just think oh well just do a quick, you*  
38 *know, think back of what happened and note it down and that's it. (Teresa)*  
39  
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41  
42 Bourdieu (1977) argued that the body is a site of social memory and characterised this as  
43 habitus (Brubaker, 1995; Wacquant, 1998). Coaches thus come to see and interpret future  
44 coaching events and observations on the basis of their early experiential foundation (Cushion,  
45 2010; Jones, Armor & Potrac, 2004). Such formative experiences carry far into a coach's  
46 career and provide a continuing influence over perspectives, beliefs and behaviours. Old  
47 school coaches have most likely experienced a formal accreditation system to coach  
48 education where there was little emphasis on on-going coach development. If these old school  
49 coaches had an unsatisfactory experience while attending these courses and there was little  
50 emphasis on on-going learning then there would be a strong reluctance to engage in future on-  
51 going coach development opportunities. In other words due to habitus and poor experiences  
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3 of coach development courses old school coaches may not value on going coach development  
4 opportunities in the same way modern day coaches do. It is this reluctance that seems to  
5 underpin old school coach's perception of self-reflection and VSR.  
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9 The findings of this study suggested that the participants perceived modern day coaches  
10 (similar to themselves) to have a 'progressive view' of written self-reflection and on-going  
11 coach development compared to the views of old school coaches, who they perceive to have a  
12 reluctance to seek on-going development opportunities. Kidman and Penny (2013) explained  
13 that any learning that is developed is dependent on the individual's mental model. Coaches'  
14 learning therefore is dependent on their motivation to learn and to see relevance in relation to  
15 their own coaching and is based around their own social constructed learning experiences.  
16 Knowles, Gilbourne, Borrie & Nevill, (2001) acknowledged that "coach educators cannot  
17 therefore assume that the development of reflective skills will be naturally occurring  
18 phenomena that runs parallel in increasing coaching experience" (p.204).  
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21  
22 Even though Sport NZ has adopted an 'on-going learning' environment, the participants  
23 perceived, within their current coaching environment, there were a number of coaches who  
24 have not been exposed to and indeed do not value this philosophy. The finding suggest that  
25 the participants perceive that there are some old school coaches in their current environment  
26 that may have minimal understanding of how VSR could enhance their learning and personal  
27 development as a coach and thus will be harder to get 'buy-in' from them. To build a greater  
28 understanding of how VSR fits within on-going coach development in New Zealand, it is  
29 crucial to recognise and understand the existence of this old school mentality.  
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### 39 **Limitations and implications**

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41 There were several limitations in the present study. The first limiting factor of this study was  
42 the number of participants who took part. However, the purpose of a qualitative study is not  
43 to generate findings which are generalisable to a wider population, rather the focus is more on  
44 depth of the data provided (Patton, 1997). Secondly, the demographic range of participants  
45 was rather narrow. All participants considered themselves modern day coaches and are all  
46 relatively young (under the age of 40). There is potential for further development looking at  
47 these old school coaches the participants refer to in more depth. Future research can explore if  
48 there are any similarities or differences between how the participants perceived school  
49 coaches view VSR compared to their actual perception. Thirdly, all participants came from  
50 coaching team sports. Only four sports were selected as part of this study (rugby, netball,  
51 football and basketball). Future research could look to compare perceptions and barrier  
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3 between coaches of teams and individuals. Finally a potential area for future research is to  
4 look at gender differences in coaching. This study had one male and five female coaches. One  
5 female participant discussed female insecurity in watching herself. It would be interesting to  
6 see if there are differences in female and male coaches and the barriers that they see in  
7 performing VSR.  
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### 11 12 **Conclusion**

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14 The aim of this study was to explore how VSR as a tool for learning could enhance coach  
15 development in New Zealand. By understanding how performance coaches perceived VSR as  
16 a tool for on-going coach development, and any barriers that would stop their engagement the  
17 results of my research could be used to enhance future coach development strategies in New  
18 Zealand and beyond.  
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25 It was clear that all participants initially had a very positive perception about the benefits of  
26 VSR and its ability to enhance the reflection process. However, while participants shared a  
27 common desire to better themselves as a coach, several barriers meant that VSR is not  
28 currently used as part of their on-going development. Factors such as time, logistics, and self-  
29 confrontation are the specific areas that warrant further attention. Furthermore, participants  
30 perceived that within their current coaching environment there are a number of old school  
31 coaches who may have a contrasting negative perception of self-reflection.  
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38 While Sport NZ's coach development framework promotes the use of self-reflection,  
39 participants were engaged in written reflective strategies and were aware of the benefits of  
40 VSR, however the barriers reported meant that none of the participants are engaged in VSR as  
41 part of their coach development. A summary of the key issues to the engagement of VSR are:  
42 1) coaches do not value VSR enough to pursue it over and above written reflection; 2)  
43 coaches do not prioritize VSR in their weekly schedule claiming lack of time; 3) VSR is  
44 considered to difficult to administer due to the challenges of getting high quality footage  
45 through a tripod and/or finding someone to film; 4) some coaches do not like watching  
46 themselves as it creates a sense of vulnerability and/or self-confrontation; and 5) modern day  
47 coaches perceive that old school coaches do not value the self-reflection process due to their  
48 habitual nature.  
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56 This study answered its research question suggesting that performance coaches have a  
57 positive perception of VSR as a tool for learning, however this perception did not translate to  
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3 prioritisation of time. The barriers listed above need to be addressed before VSR can become  
4 a habit and part of everyday coaching practice. It is therefore up to National Governing  
5 Bodies (NGB's) and NSO's to address these issues. In summary, it is clear that regular use of  
6 VSR in coach development can enhance the value coach's place on the process, leading to  
7 more coaches using VSR more frequently. Thus increasing the quality of performance  
8 coaching in New Zealand and around the world.  
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