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Teaching Personal and Social Responsibility: Examining the application of a TPSR-based national secondary school assessment in

Aotearoa New Zealand physical education.

A thesis submitted in partial fulfilment of the requirements for a Masters of Sport and Exercise.

At Massey University, Palmerston North, New Zealand.

Sarah Elizabeth Copland Blaikie

Dedication

This thesis is dedicated to my father Geoff, my mother Adrienne and my brother Mackay, who have shown years of support and inspire me in my academic endeavours. It is also dedicated to my dear friend Rose, who is the most resilient and determined person I know.

Abstract

The Teaching Personal and Social Responsibility model designed by Professor Don Hellison is concentrated on the development of both personal and social responsibility behaviours in young people, through physical activity (Hellison, 2011). This mixed methods study investigates the implementation of a TPSR – based achievement standard in the Aotearoa New Zealand secondary school physical education context. The focus is placed on the true essence of this assessment and the effectiveness of it in respect to the development of responsibility behaviours related to the TPSR model. Quantitative data was obtained through the administration of a 31-item survey that was completed by 66 Aotearoa New Zealand secondary schools (256 schools invited, 25.8%), investigating the application of Achievement Standard 2.8 (A.S 2.8). Qualitative data was collected using semi – structured interviews, with three current physical education teachers, working at three different secondary schools, in Aotearoa New Zealand. The valuable personal accounts gathered through these interviews, in combination with the rich data collected from the 66 survey respondents, supported the utilisation of a mixed methods approach. The findings indicate that there are aspects of A.S 2.8 that contribute to its effective implementation, including teacher knowledge, professional development, the context in which the assessment is taught, the assessment strategies and the fidelity of the standard to the TPSR model. While a number of teachers expressed a positive judgement of the standard, there were a number whose experience had not been as favourable. This divided opinion among facilitators raises questions regarding the effectiveness of A.S 2.8 in respect to the development of student's responsibility behaviours. It is hoped that the findings presented in this study may act as a starting point for the future development and direction of the TPSR – based achievement standard.

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CHAPTER ONE

INTRODUCTION

1.1. Background

The Teaching Personal and Social Responsibility (TPSR)¹ model was developed by Professor. Don Hellison, and emphasizes values that represent aspects of both personal and social responsibility. Hellison originally developed this model for use with at-risk youth within physical activity contexts and in out of school programmes, as a way of teaching them to be more personally and socially responsible and becoming "better people". However, over time this model has been adopted more in the physical education classroom context and, as stated by Gordon (2012), has been promoted as an effective pedagogical approach and a valuable tool for student development. As is recognised by Van Der Mars (2020), Hellison's model essentially "gave to the world a student-centered way of working with students focusing on prosocial behaviours through the medium of physical education" (p. 322). The model achieves this via a set of prescribed behaviours and expectations that are associated with five different levels of responsibility (Gordon, 2012). These levels are presented in a loose progression, and are identified as 'respect', 'participation and effort', 'self-direction', 'caring' and 'transfer (of learning) outside of the gym'. Level 1 is focused on respecting the rights and feelings of others, while Level 2 aims to develop responsibility of students when it comes to participating properly and fully. Level 3 encourages goal – setting and students taking responsibility for their own learning, Level 4 promotes support and caring for others, and Level 5 is demonstrated by those students who can apply these behaviours outside of the classroom context (Hellison, 2011,

¹ Teaching Personal	and Social Responsibilit	y model will be referred to as	s TPSR throughout the thesis

Severinsen, 2014). In Aotearoa New Zealand², Hellison's model has found its place in the educational field and is more frequently being implemented by teachers and physical education programme practitioners.

The TPSR model is also taught in several universities in Aotearoa NZ, in both teacher education and teacher pre-service programmes, as a developmental programme for future secondary school physical education teachers to better understand the model as a pedagogical approach (Gordon, Thevenard & Hodis, 2012). The New Zealand Curriculum (Ministry of Education, 2007) also indirectly acknowledges the use of the TPSR model in physical education contexts, as similarities exist between the underlying philosophy of the TPSR model in Health and Physical Education. Gordon, Thevenard and Hodis (2011) summarised several parallels between the model and the curriculum, including the vision for education and a number of the key values and competencies, as outlined by the Ministry of Education (MOE).

Since the development by the MOE in 2011, a National Certificate of Educational Achievement (NCEA) achievement standard, which is the secondary school education assessment framework in Aotearoa NZ, was designed and implemented based on the TPSR model. The achievement standard has been available for several years and is a popular option when implementing the TPSR model (Gordon & Beaudoin, 2020). This achievement standard is offered at Level 2³ and aims to develop personal and social responsibility in students, through the use of physical activity, by teaching them Hellison's TPSR model and emphasizing the need to adopt more

² The Māori name for New Zealand, translated as 'Land of the Long White Cloud'. For this thesis the unified term of Aotearoa New Zealand is used albeit in the shortened form of Aotearoa NZ.

³ NCEA Level 2 is the second level of the New Zealand secondary school education assessment framework. At each level, students are required to achieve a certain number of credits to gain the NCEA certificate.

responsible behaviours (see NZQA)⁴. However, while an assessment framework is provided by NCEA only a brief description of requirements and an assessment structure for the purpose of the achievement standard exists little is known about the true essence of the standard and how effective it is in changing the responsibility behaviours of young people. There are also question around fidelity to the TPSR model, and whether or not the philosophical underpinnings of Hellison's model are at all acknowledged, either directly or indirectly. The focus of this thesis, therefore, lends itself to gathering and examining the perspectives of those who teach the achievement standard, in an attempt to address these questions.

1.2. Rationale

The goal of this thesis is to explore and examine secondary school Physical Education teachers' perspectives and experiences on the TPSR based achievement standard (A.S) 2.8.5 More specifically, these experiences will provide insight into levels of knowledge and understanding regarding TPSR, and levels of fidelity to the model. In order to do this, the perspectives and experiences of three Health and Physical Education teachers were gathered using semi-structured interviews and survey instruments. Before carrying out the study concerned with this thesis, it was necessary to gather substantial evidence that there is a need for this research project. Upon review, it was apparent that there is limited literature addressing the use of the TPSR model in Aotearoa NZ secondary school physical education. Furthermore, there is

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⁴ The New Zealand Qualifications Authority have a role in the educaton sector as ensuring quality and credible qualifications in order to support Aotearoa NZ learners in their endevours. They are responsible for the administration of the NCEA certificates at the secondary school level.

⁵ Achievement standard 2.8 is one of the achievement standards developed based on the objectives of the New Zealand Education Curriculum. It is a level 2 achievement standard, meaning those credits achieved as a result of completing the standard contribute to the NCEA Level 2 certificate.

limited examination of the TPSR model as it is used in A.S 2.8⁶, and the implementation of this standard within the Aotearoa NZ secondary physical education context.

In 2011, Gordon et al., distributed a national survey to the Aotearoa NZ secondary school physical education departments in an attempt to identify the degree to which the TPSR model has been adopted and how this model was being implemented in this context; this provided insight regarding levels of teacher confidence, knowledge and implementation fidelity of the model in practice. At this time, however, A.S 2.8 had not been developed and, therefore, was not considered in this context. So, while the initial work of Gordon et al. has identified that TPSR has been adopted and well established in Aotearoa NZ secondary school Physical Education, there is a need to address the introduction, development and current implementation of a new Achievement Standard 2.8. Furthermore, since Gordon et al., (2011), very little work has only been completed regarding the TPSR model and transfer of learning. Their study drew upon the literature to provide insight into the TPSR concept of transfer of learning and ways in which to help facilitate this in students (Gordon & Doyle, 2015). Severinsen (2014) also investigated the TPSR model and its use in the primary school context. The lack of further research in the Aotearoa NZ secondary school context, particularly in terms of implementation fidelity and perspectives of practitioners, suggests that the present study is justified, on the grounds that there is an observable gap in the literature regarding the overview of TPSR in this context. This study also attempts to provide an updated examination of TPSR within the Aotearoa NZ education context.

When it comes to A.S 2.8 and its place in the Aotearoa NZ secondary education, there is also a need to address the significant parallels and differences between the underpinning

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⁶ For this thesis, the shortened term of A.S 2.8 will be used to refer to Achievement Standard 2.8.

philosophies of Hellison's TPSR model, as its own entity, and the way the model is written into the achievement standard. At face value, an achievement standard is an effective method of teaching the values and principles associated with the TPSR model. However, the achievement standard is an "adaptation" of the model, and therefore it is important to consider the level of fidelity to the model. Essentially, for A.S 2.8 to effectively teach personal and social responsibility, it needs to be implemented in a way that reflects the intentions of the original model (Pascual, 2011). Hellison's original TPSR model includes core values, programmeleader responsibilities and underpinning philosophies, and while he acknowledges that the specific context in which the model is being used does influence the implementation process, an authentic implementation requires that the entire framework is recognised (Hellison, 2011). For this reason, this research aims to address the issue of implementation fidelity with A.S 2.8.

Therefore, the research question for this study is:

How is a Teaching Personal and Social Responsibility model-based achievement standard, at the Aotearoa New Zealand secondary school level, implemented and what are the implications?

Several specific research objectives were developed to capture the main research question:

- Establish the levels of knowledge that teachers of A.S 2.8 have of the philosophical underpinnings of the TPSR model.
- Identify the challenges and enablers that impact on teacher's ability to implement TPSR with a high level of fidelity to the model.

- Establish how A.S 2.8 is taught in Aotearoa NZ secondary school physical education programmes.
- Explore the perspectives of teachers implementing A.S 2.8.
- Identify the assessment strategies for A.S 2.8 and assess how these maintain fidelity to the model.

These objectives guided the agenda of this project.

1.3. Collating the experiences of secondary school's teachers who have taught A.S 2.8.

For the purpose of this study, gathering the experiences and perspectives of secondary school physical education teachers, who have taught A.S 2.8, was an effective method of data collection. As stated by Sánchez-Alcaraz, Gómez-Mármol, Valero-Valenzuela, Sanchez, Moreno-Murcia & Lochbaum (2019), teachers provide an important insight into educational programmematter, because they are "in the action" and always present in the physical education classroom where the model orprogramme being implemented, they have the opportunity to observe student behaviours and responses to the model or program, and should have the best understanding of how the model orprogrammeshould be working. Pascual et al., (2011) investigated the fidelity of a physical education based TPSR programmethrough the use of observations and interviews with the participating teachers, as it allowed for a unique insight into the programme implementation. Similarly, Llopis et al., (2011) assessed teacher's perceptions about model efficacy using semi – structured interviews. For the purpose of this study, using teachers' perspectives of the A.S 2.8 provides a valuable insight into the standard framework, implementation structure and the implications associated with the program.

Qualitative research is an effective method of gathering perspectives of participants, as it produces descriptive data that allows for the unique, personal outlook of the individual person (Corbin & Strauss, 2008). The association of this qualitative research, with quantitative research, which allows for a larger group of participants and a richer understanding of particular phenomena through statistical observation, can be an effective methodology for social research (Bergman, 2008; O'Dwyer & Bernauer, 2013). Therefore, utilizing a mixed methods research approach for this study was favourable for capturing the experiences of teachers who have taught A.S 2.8.

This mixed methods research approach led to the selection of two sets of participants. The first set of participants involved inviting 256 physical education teachers s who offered A.S 2.8 in their physical education NCEA curriculum (during the 2018 academic year). However, only 66 (25.8%) completed the survey. The second group of participants were interviews with three individual secondary school physical education teachers who were delivering A.S 2.8 located from three different regional areas of Aotearoa NZ.

1.4. Thesis structure

This thesis contains six chapters in total. This chapter has outlined the purpose and intent of the study, along with presenting the rationale for using a mixed methods approach for collecting and examining experiences of secondary school teachers regarding A.S 2.8. Chapter two reviews the literature related to the TPSR model and the implementation of this model in practice, particularly within the Aotearoa NZ education context. Chapter three details the methodology utilised for the study, including the justification for using a mixed methods approach, implementing case study, semi – structured interviews and survey data collection

techniques. Chapter four presents the findings of the study via a thematic approach for all data collection methods. These findings are presented by the five emerging themes which evoke a rich image of what A.S 2.8 looks like in practice. A number of findings regarding teacher knowledge, implementation context, perspectives of effectiveness and assessment strategies lay a foundation for the discussion in Chapter Five. Chapter Five discusses these findings in relation to the literature discussed in Chapter Two and demonstrates the important aspects of the TPSR model that should be considered for the implementation of A.S 2.8. Chapter Six summarizes the findings of the study, and outlines suggestions for considerations in terms of A.S 2.8 and its implementation. This chapter is concluded with proposals of possible areas for future research.

1.5. Chapter summary

The aim of this chapter was to outline the focus of the present study and introduce the relevant aspects of the research. A discussion of the knowledge and information relating to the TPSR model and its significance, in terms of the present research, provides a solid background for the study. The rationale for the research has outlined the justification for the investigation and data collection methods utilised, in terms of literature gaps and research required to contribute to the field. The rationale also identified the key aspects of Hellison's model that need to be acknowledged in terms of implementation fidelity and philosophy parallels. The importance of collating the experiences of secondary school physical education teachers for the purpose of this study has also been acknowledged. The framework for the thesis is outlined and provides a structure for the chapters to follow. The goal of Chapter Two is to outline the focus of the present study and introduce and review the existing literature relating to TPSR and the model in the secondary school physical education context.

CHAPTER TWO

LITERATURE REVIEW

2.1. Chapter Introduction

This chapter aims to introduce the focus of the research. It will outline the most relevant aspects of the research topic, specifically those that have been included as focus areas of the data collection described for this study. The literature review examines and discusses the existing research of the TPSR model and the connection and direct relevance in the Aotearoa NZ education curriculum and particularly A.S 2.8.

2.2. Teaching Personal Social Responsibility (TPSR): Origin, history and definitions.

The Teaching Personal and Social Responsibility (TPSR) model was developed by Professor Don Hellison in 1985, who identified that physical activity could act as an impetus to affect personal sociability change and promote positive citizenship for young people involved in atrisk behaviours (Gordon, 2012). As is outlined by Jacobs and Templin (2020), Hellison's passion for helping others, and his focuses seemed to concur with and support "societal, education and political events that focused on social reform" (Jacobs & Templin, 2020, p. 292). He believed in the importance of fostering "positive character traits" in youth, and children taking responsibility for their own behaviour, and being more socially aware of those around them (Hellison, 2011). This led to his committed work towards developing the TPSR framework. The beginnings of the model were described by Hellison as both a "survival strategy" and as a way of living out his passion of helping kids through his work (Jacobs &

Templin, 2020, p. 295). As Gordon, Thevenard and Hodis (2012) reflect, developing TPSR was Hellison's response to identifying a demand for more purpose, if the needs of today's youth were to be met. The model has a basic premise in that responsibility behaviours can be taught using a range of strategies, and these behaviours will assist youth to develop as competent and well-rounded adults (Escartí et al., 2012).

Initially, Hellison identified that when it comes to teaching physical activity to youth, whether that be in the classroom within a physical education context or physical activity focused after school, youth development or alternative school programmes, it is important to ask what is really worth doing. This question lends itself to reflecting on and making decisions regarding what leaders can realistically do to assist in the development of responsible behaviour in youth (Hellison, 2011). While the TPSR model itself is complex and encompasses a number of underlying core values, processes and components, Hellison has summarized or defined the framework as the teaching of kids "to take personal and social responsibility through physical activity" (Hellison, 2011, p. 25). Along with this definition comes the identification of several core values, including "putting kids first" and being "youth-centred", which outline that being a good person and helping kids to become better people is the key focus, outweighing the emphasis placed on being physically active and the focus on oneself as a leader. TPSR provides a framework for teaching kids to be responsible for their personal development, while also developing and encouraging dispositions to care, support and help others (Hellison, 2011).

It has also been acknowledged that at the core of the TPSR model is the principle of holistic self-development. As Hellison discusses, the framework aims to encourage the growth of not only the physical, but the emotion, social and cognitive aspects of development (Hellison, 2011). Therefore, when applying the model, it is important to see the end goal as being that of

"helping the whole person" (Hellison, 2011, p 19). Similar in this respect is Durie's Te Whare Tapa Wha model of Hauora. As described by Fitzpatrick (2005), the model depicts a four-sided house, the walls made up of the contributing elements of well-being Taha Tinana (physical well-being), Taha Hinengaro (mental and emotional well-being), Taha Wairua (spiritual well-being) and Taha Whānau (social well-being). In essence, the model is a representation of a Māori health philosophy and represents a holistic view of well-being as a means of promoting holistic development, comparative to aspects of Hellison's model. Finally, TPSR and its application should become a "way of being", rather than a way of teaching. The values and underlying principles should be shared by practitioners and instilled in kids by them (Hellison, 2011).

The TPSR model was designed as a framework which is made up of five levels or goals. These levels provide both TPSR facilitators and students an outline of what is required and where focus needs to be centred. As Hellison reflects, as TPSR is more than just developing behavioural changes which can be observed in students, the levels are there to generally define and outline the aim of TPSR and provide a loose progression of goals to work toward in terms of a combination of those observable behaviours and attitudes, values and beliefs (Hellison, 2011).

Level 1

Level 1 is focused on respect and concentrates on developing kids respect for the rights and feelings of others. Aspects of this include providing a psychologically and physically safe place for students, respecting their right to participate without being hassled and confronting those who need to deal with issues of self-control and respect. Hellison identifies three interrelated components that make up the essence of level 1, the first being self – control focusing on

promoting control over emotions and behaviours, so as to continue to respect others. Furthermore, developing self – control aims to teach students to be independent and not be ruled by the words or actions of others. The second component is related to peaceful conflict resolutions, which attempts to demonstrate to students the importance of resolving conflicts and negotiating with others. Thirdly, level 1 emphasizes that everyone has the right to participate, regardless of skill level, gender, race, ethnicity or sexual preference (Hellison, 2011).

Level 2

As defined by Hellison, level two addresses behaviours and attitudes related to demonstrating a level of effort and cooperation, particularly learning to get along with others and understanding why effort is important for self-improvement. Similarly, to level 1, level 2 is made up of several different components, including a focus on self-improvement, and exploring effort and trying new tasks. Primarily, level 2 is focused on helping students to take more responsibility for their own motivation as learners and participants, particularly through allowing students to take on responsibility in the classroom context such as during fitness activities or drills. This is followed closely by working on effort and encouraging students to understand the concept of trying things they have never experienced, and not giving up on new things. These ideas are emphasized in unification with developing personal definitions of success through trying new things (Hellison, 2011).

Level 3

Level 3, self – direction, aims to assist students in taking what they learnt through level 2 into taking more responsibility for their well – being. In doing this, this level of the model takes into consideration the diversity in students and acknowledges their talents, needs, and interests

by allowing for "reflective choice", and accepting all levels of self-direction goals. According to Hellison, the first step at level 3 is to move towards more on-task independence in students, which leads to more goal setting processes. The ability to be more self – driven also requires that students begin to understand their needs as an individual, rather than just what they're interested in or just want to learn. This level is most effective when adjusted to the age of students, as goal setting processes and reflection can be complex, but with the correct adjustment can be effective in developing students' behaviours associated with level 3.

Level 4

Like level 3, level 4 should also be adjusted for the students age and aims to promote genuine support and care for others, in addition to leadership skills (Gordon, 2010). Those students who display behaviours at level 4 are sensitive and compassionate, and recognise that other people have needs and feelings, and opinions that deserve to be acknowledged as much as their own (Hellison, 2011). There is also an emphasis placed on moving away from self-interest to contributing to the well-being of others.

Level 5

Level 5, transfer outside the classroom, interrelates to the previous four levels and integrates the responsibility behaviours learnt in the classroom with demonstrating a level of these behaviours in contexts outside the classroom (Alcala, Rio, Calvo and Pueyo, 2018). While the first four levels emphasize the need for demonstrating respect, effort, caring and selfless behaviours, it is important that students learn to apply these in community contexts outside the safe setting of the classroom (Hellison, 2011). Ultimately, when students perform at level 5, they become role models for others.

However, as Van Der Mars (2020) highlights, the TPSR concept was not intended to be structured as a "model", rather Hellison expressed his resolve for teachers to have the flexibility to "approach, adapt it and make it their own" (p. 325). Parker (cited in Van Der Mars, 2020) of the University of Limerick explains that Hellison "never believed in models" and, that as it became recognised more as a model of instruction, TPSR became less of a "way of being" and was rather a set of processes that had to be followed if the model was to be implemented successfully. Despite this, it did give facilitators "something to hold on to" (p. 235) and if the intentions of the implementation were in line with the underlying aspects of TPSR itself, no issues arose.

2.3. TPSR Implementation: A review of studies

A review of the current literature revealed that several earlier studies had been completed which addressed the significance of teacher responsibility when it comes to the implementation of the TPSR model and its effectiveness. Wright and Burton (2008) identified an existing gap in the literature at the time, as little work had been done investigating the implementation of a TPSRprgmmin the school context. While it had been shown that TPSR was an effective model in the extracurricular or out of school setting, physical education classroom settings had not been examined, giving momentum to Wright and Burton's work. The focus of their study was therefore to explore the implementation of a TPSR basedprogrammein a high school classroom setting, and the short-term outcomes of this program. The participants in the study were a selection of 35 students who were a part of a lifetime wellness course at a southern U.S state high school, however data was only presented from 23 of these students. The teacher of the course, and the school principal were also considered participants, as key informants. The lifetime wellness course was made up of health education and physical education

collaboratively, however the course described in this study was named "The Tai Chi Tiger" program, and was focused on tai chi as a physical activity through which to influence change in physical and mental health.

Over the course of 20 lessons, two per week for 10 weeks, theprogrammewas implemented with the students, focusing on TPSR strategies that promoted responsibility behaviours. Through the utilisation of several data collection methods, including interviews, observations, lesson plans, responsibility logs, written reflections. learner assessments and programme evaluations, the researchers were able to gather the relevant and necessary information to draw a conclusion regarding the effectiveness of the model in this context. The results from this data collection allowed the authors to conclude that the TPSR model utilised in the physical education context fostered a positive learning environment and was also a strong influence on student development. There were, however, aspects of the setting and programme that raised questions regarding the implementation of the model.

Firstly, the fact that a larger number of students in comparison to that of groups in out of school programmes meant that there were slight struggles with motivation and engagement, which is important when it comes to implementing the programme with students who are already at risk because of behavioural issues. Secondly, merging TPSR with Tai Chi may be an effective mould of both physical activity and the wider scheme of what the lifetime wellness course encompassed. However, there are aspects of tai chi that may not be appreciated by students, and therefore place little relevance on the model and all it encompasses. Essentially, it is important to consider the educational context in which the model is being taught, as "the point" may be missed if not.

In 2011, Pascual, Escartí, Llopis, Gutíerrez, Marín and Wright examined the implementation fidelity of aprogrammedesigned to implement the TPSR through a physical education course and investigate the impact this has on responsibility behaviour improvements in students. The authors identified the need to study implementation as a necessary element ofprogram me evaluation, as well as assessing fidelity when aprogrammehas been adapted from an original model. Many TPSR focused programmes use an adapted model or structure to that of the original, which lends itself to some investigation.

Using a qualitative, case study approach, two physical education teachers implemented a TPSR poarmewith their respective students. The two teachers participated in a 20-hour training program, which provided them with information on the theoretical and methodological underpinnings of TPSR. This was followed by a six-month implementation of the TPSR based program, during which the two teachers utilised the responsibility levels, specific learning objectives, the TPSR class format, and a number of pedagogical strategies that had been covered in their initial training. In order to gather the data, non-participant observations were carried out to gain insight into each teachers' efficacy in applying the program, as well as how the students behaved and how each TPSR level was adopted. Semi - structured interviews were also carried out with both teachers, two months into theprogrammeto gather insight into initial thoughts about implementing the programme and perceptions of the initial training, and at the end of the school year. The second interview was used to understand the teacher's perspectives on the model, and its effectiveness. The findings from the study suggest that implementation fidelity was different in both cases - high fidelity was linked to better shortterm outcomes with students and greaterprogrammeeffectiveness, and low fidelity was associated with lower levels of positive outcomes. It was also acknowledged from these findings that there should be a

strong focus on implementation fidelity, and there is a need for teacher training and teacher knowledge when it comes to the TPSR model and utilising it effectively.

Escartí, Pascual, Gutiérrez, Marín, Martínez and Tarín (2012) published an article outlining the different applications of the TPSR model in Spanish educational environments. The key findings from their research within three specific contexts were then presented, via these three contexts, with each context focusing on a specific research intention. The first context reports on the application of TPSR with at – risk youth, with a specific focus on the impact the model had on student's behaviour. The second context focused on applying the TPSR model in a physical educationprogrammeat the elementary or primary school level. The third context focused on implementing the TPSR model in all other areas of the school curriculum, rather than just in physical education.

Each of the studies discussed in the article presented learnings regarding the TPSR model and logistical, theoretical and managerial aspects regarding its implementation. More specifically, one of the initial conclusions that were drawn from the study results suggests that using the TPSR model as a pedagogical tool was effective in teaching responsibility behaviours, as it was understood well by the students and was taught well by trained teachers. It was acknowledged further that using the TPSR model in the classroom provides teachers with more structure when it comes to promoting the development of responsibility behaviours.

One of the more significant findings was that teacher training is key and necessary for those who are aiming to implement the TPSR model in their classroom and/or practices. Initial, effective professional development in tools and skills required to successfully utilise the TPSR model, as well as ongoing training would be beneficial. Implementation fidelity was also a key

focus in this study, and assessment revealed that, while some important strategies associated with the TPSR model were being utilised, there were also key elements missing, which brings to light the importance of assessing fidelity. For instance, the authors express that the fluidity of choice and therefore the personal decision to use or not to use particular strategies or tools is dependent on the teacher. Their skills, experience, personality and motivations influence both implementation and assessment fidelity. Finally, in regard to the effects of theprogrammeon the students personal and social responsibility, it was found that significant improvements were made with those who were involved in TPSR intervention groups, confirming the usefulness of the model itself in these contexts.

Regarding the importance of teacher training, Beaudoin (2012) identified that while a number of studies have identified the effectiveness of the TPSR model in impacting on students, there was a need for a greater understanding of how teachers could be better informed or educated in the TPSR area. Their study presented an alternative way of teaching the TPSR model to practicing physical educators and outlined the ways in which "responsibility-based strategies" could be used to empower those educators. Over a 6-month period, an action research project, following a self-supervision process, was carried out with two physical education teachers. The two participating teachers taught physical education at elementary school level but were based in different geographical areas. Initially, both teachers identified the reasons they wanted to implement the TPSR model, which included as a behavioural management strategy and as a learning tool for responsible behaviours and attitudes.

The data was collected through participant observations, semi - structured interviews, post teaching self-reflections and a researcher's log. This self – supervision process allowed the teachers to self – reflect on their teaching practices, and provides them with the opportunity to

observe, analyse and adjust their teaching in an attempt to better their students' learning experience. The findings from this research project show that for the two teachers, there was a significant difference in the implementation of the TPSR model. However, this came down to the experience and confidence of the respective teacher. Moreover, Beaudoin outlines that results from this study show suggest that using responsibility-based strategies to support the implementation of TPSR is effective.

Specifically, empowering educators through self-supervision, providing opportunities for success, setting expectations and nurturing a respectful relationship proved to be successful avenues for this support. However, this study also raised some questions regarding TPSR implementation. Firstly, there were concerns surrounding fidelity, especially as it pertains to teachers' intentions and concerns. Secondly, it was acknowledged that there may need to be a pre-requisite level of basic teaching skill before attempting to successfully implement the TPSR model. Thus, teachers should essentially have experience in practice, and have already mastered the confidence and ability required to teach responsibility to students.

Jung and Wright (2012) acknowledged the extension of the TPSR model beyond the educational context of the USA by describing the cultural translation of the model in the physical educationprogrammeof a South Korean middle school. As Jung and Wright recognise, the TPSR model has a widespread popularity among teachers in the USA, which indicates that the philosophical underpinning and core values resonate with the intentions of the physical education curriculum. However, while the application is successful in this context, there may be varying degrees of cultural translation that impact on the transferability of the model to all educational contexts. Using an action-research approach, a qualitative case study design was

implemented as a means of examining cultural issues and providing strong depictions of what programmes look like in practice.

The participants were six 8th grade students, who were purposefully selected for the study based on their problematic behaviours that put them at risk of academic failure. The students were taught using the TPSR model over the course of 20 class periods, and the lesson plans for these classes were developed based on both the TPSR model and the Korean National Curriculum. Theprogrammefocused on the first four responsibility levels primarily, and followed organisational structures, as outlined by Hellison, including awareness talks, group meetings and self-reflection time. The data gathered from this research was obtained through individual interviews with the students, where they were asked to reflect on their experience in the TPSR lessons and express their thoughts and feelings regarding the content. The perspectives of student participants were further complimented by researcher observations and the collection of documents that included teacher lesson plans, student assessment and written reflections.

The data from the study demonstrated that as the model was implemented with the students, improvements were shown in all participants relative to the core personal and social responsibility levels as outline in the TPSR model, even though the degree of these changes did vary. At Level One, the participants demonstrated developments in understanding the concept of respect and becoming more aware of their behaviour as this understanding increased. At Level Two, similar results were observed as the students gained an understanding of the importance of effort and hard work while they were engaged in activities specifically designed to promote effort and participation. Level Three saw the students demonstrated more responsible and self-directed behaviours in their learning, despite a limited understanding of the concept, and Level Four promoted the student's ability to consider the needs and feeling of

other people in the class, and not just their own. Essentially, it was shown that the TPSR model can be integrated successfully in East Asian countries and deliver similar results in terms of student improvement, and teaching at risk student's responsibility behaviours, as seen in previous TPSR studies.

In another study Lee and Choi (2015) identified that there was still an existing gap in the literature exploring professional development and its perceived responsibility to integrate model-based practice, more specifically in the practice of the TPSR model. Consequently, their studies investigated the impact of professional development on physical education teacher's implementation of the TPSR model. Furthermore, the research also aimed to identify the elements of professional development that impact on teaching practice and pedagogy. Lee and Choi (2015) purposefully selected six elementary school classroom teachers, who were both willing to implement TPSR for at least one year, and to attend monthly workshops. Additionally, they interviewed 12 students (2 from each class) to ascertain their narratives regarding their TPSR based physical education class. These students were again purposefully selected based on their ability to articulate their thoughts and feelings, and their level of responsibility and physical skills. The professional developmentprogrammethat was implemented for the purpose of this research was made up of university-based workshops and onsite school observations through which teachers received individual feedback and was run by two facilitators with strong TPSR experience. Data was collected through interviews with both teachers and students, lesson observations and teachers' reflective journals, and the data analysis presented a number of significant findings.

The first of these was that, by introducing a professional development program, there was an improvement in the implementation fidelity in terms of influencing structural adherence,

facilitating clear instructional delivery and student's responsiveness to the model. Secondly, the professional development allowed the teachers to better adapt the model, particularly by developing cultural differentiation strategies, modifying existing TPSR components, and extending the implementation of the TPSR model throughout other areas of school education. Finally, the specific characteristics of professional development that were identified as influential to the implementation of TPSR were giving teachers common goals, empowering them as "creators of knowledge" and providing a continuous and authentic learning experience. These findings would suggest that professional development is an effective tool when it comes to the successful implementation of the TPSR model in classroom education. However, it is also acknowledged that despite this, teacher's knowledge, motivations, beliefs and attitudes also have a strong impact on the adaptability of TPSR facilitators and, therefore, the implementation fidelity of the model in practice.

Romar, Haag and Dyson (2015) produced a study that explored the experiences of Finnish inservice physical education teachers using the TPSR model in practice. The premise for this research was a previously identified need to investigate and understand how the TPSR model is adopted and adapted in practice in the Finland education system, as the model extended itself outside the scope of the USA. Using an interpretive-qualitative methodology, the researchers gathered the perspectives of 8 teachers who were participating in a physical education professional development programme and had selected to teach TPSR to their students. As a part of this professional development, the teachers participated in two workshops related to instructional and curriculum strategies for improving physical education practice. The teachers were also introduced to TPSR, specifically the content of the model and ways in which the model could be implemented alongside the teachers own pedagogical practices. These perspectives were obtained through one on one, semi structured interviews with the

participating teachers, regarding their opinions on the professional development they were offered and the TPSR unit they delivered to their students. Following the analysis of the data, the results were categorised by three key findings, a) implementation, b) teachers' view of the model and c) student impact.

Firstly, it was identified that regular in-service teachers are able to implement the TPSR model in practice, and that this can be done most effectively through participation in professional development. Romar, Haag and Dyson acknowledge that it is necessary for teachers to have knowledge about the model and some prior experience in teaching, as well as an aligning philosophical underpinning in pedagogical practice with the model in order for successful implementation. Secondly, it was reported that it was easy for the participating teachers to adapt the model to their own teaching, and that some teachers stated it might be beneficial to introduce the model in other areas of school education. Furthermore, the teachers argued that the model is likely to be most useful in classroom settings where there is actually a problem to address, in terms of responsibility behaviours in students. Finally, in terms of the impact on the students, it was acknowledged by the teachers that an improvement did occur in student behaviour during and following the implementation of the TPSR model, as students became more aware of their actions and social competencies. The research further outlines the necessity of teacher knowledge of and experience with the TPSR model prior to implementing it with students. There is also an element of teacher responsibility when it comes to adapting the model to suit the needs of their students, while also maintaining fidelity to the underpinnings of the model itself.

In contribution to the collection of more recent studies, Filiz (2018) investigated the effectiveness of using the TPSR model in a volleyball federation high school to improve

leadership behaviours in athlete students. As acknowledged by Filiz, adolescents are at risk of having some quite dangerous behaviours influence their future experiences as members of society, and it is for this reason that positive youth development programmes are adopted. One of these programmes is the TPSR model, which is used in this youth development as well as in the educational context. In the context of this study, the goal was to teach responsibility to the participating students, as well as developing more awareness of leadership behaviours and therefore examining the effectiveness of the model.

A semi-experimental mixed methods design was used, and a total of 55 participants were included in the study, 28 in the experimental group and 27 in the control group. These participants were athlete students at the high school level, and the study was conducted over the period of two days a week for 8 weeks. Theprogrammelesson plans were designed based on Hellison's original model, as well as including activities that also covered leadership behaviours. For the first four weeks, the TPSR basedprogrammewas implemented with the students, outlining the levels of the model and the associated behaviours. For the last four weeks, the students were given tasks and the opportunity to develop their leadership behaviours through peer coaching and activities that allowed them to lead others. Data was collected through several avenues, including the personal and social responsibility behaviour scale, the leader behaviour description questionnaire, semi structured interviews with the participating students and field notes.

The findings from this research would suggest that the TPSR model was an effective learning tool for the participating students, as they made developments in their behaviours. These were recognised as actioned changes in taking responsibility, cooperation levels, making an effort, setting goals, making plans, solving problems and showing respect by leading their peers.

Furthermore, most of the students recognised that their awareness of leadership concepts and skills had improved following the implementation of the intervention program. Effectively, the programs was successful in developing those key behaviours and producing strong leaders.

Alcalá, Rio, Calvo and Pueyo (2019) stated that the TPSR model is one pedagogical approach that can assist teachers to influence improvements and developments in their students, however it is important to acknowledge the influence of context and the cultural environment in which the model is being implemented on these developments. As acknowledged by Jung and Wright (2012), there may be aspects of the model that are more difficult to understand when there are differences in cultural beliefs or values between the original version of the model and adapted versions in other countries. Alcalá et al., (2019) therefore have carried out their research in an attempt to both compare the impact of TPSR training on social goals, discipline strategies and autonomy support of future physical education teachers from Spain, Chile and Costa Rica, and assess participants perceptions of the country's social, cultural and curricular aspects that may influence the implementation of TPSR. The participants included 156 prospective primary education physical education specialist teachers, all enrolled in three different universities located in the three target countries, and who all participated in the same interventionprogrammebased on TPSR. Following a quasi-experimental design with mixed methods, three questionnaires were used to gather the quantitative information regarding the participants' perspectives and ideas on social goals, discipline strategies, autonomy support and the TPSR usefulness in their teaching. Furthermore, qualitative data was collected through three discussion groups with the participating students, which were conducted at the end of each intervention period as a method of gathering thoughts and feelings regarding their experience with the TPSR interventionprogramme and the applicability of the model in their educational context.

Through the extensive analysis of data, it was found that the prospective physical education teachers had different views on the effects of the TPSRprogrammeon social goals, discipline strategies and autonomous support. This was based on socio-cultural consideration of the physical education subject matter, each teachers' respective academic training and their "professional identity" as teachers. Of further significance was the acknowledgement that preservice or newly in-service teachers struggle to stray from traditional pedagogical approaches and embrace new teaching models such as TPSR, which is why they need to be involved in continuous professional development in order to make a shift and introduce something new. It would also appear that in terms of initial teacher training, there should be a focus on tools needed to successfully implement model-based pedagogies as a step towards developing teacher confidence and skills.

Also, in 2019 Sánchez-Alcaraz et al. explored teachers' perceptions of the effect of the TPSR model on personal and social responsibility behaviours in their students. Prior to carrying out their study, the authors identified the importance of assessing teachers' perceptions, particularly when it comes to matters regarding classroom or education matters. Thus, when exploring the effectiveness of the TPSR model in the classroom setting, considering teachers opinions has become highly valued.

Using a quantitative quasi-experimental approach, the authors implemented the Personal and Social Responsibility Questionnaire with 16 physical education teachers, from a range of different schools and school levels (8 primary schools and 8 secondary schools). After the 16 participating teachers had been selected, all were provided with 30 hours of training, providing them an opportunity to gain tools and skills for teaching and utilising the TPSR model in their classrooms. This training was followed by a 4-month period in which the teachers implemented

TPSR and followed a daily format, as outlined Hellison. The quasi — experimental methodology also called for control groups, in which the teachers implemented their standard physical education curriculum with their students. Perceptions of responsibility behaviours were gathered both prior to the implementation of the program, and following the implementation of the program, using the questionnaire. The results of the study suggest that, as originally hypothesised, the TPSR model is an effective model for improving both personal and social responsibility behaviours in students. Furthermore, the significance of the teacher's role was outlined, as they play a big part in the successfully implementation and consequential learning of the TPSR model and its associated behaviours.

In 2020, a special edition of the Journal of Teaching in Physical Education was published as a celebration of Don Hellison's life and legacy. Within the scope of this research, several pieces of the literature presented relevant discussions on Hellison and the TPSR model. Richards and Shiver (2020) aimed to investigate the development of the TPSR model from the original model proposed and developed by Hellison, to what the model looks like in current practice. In order to do this, the authors utilised a qualitative histography with both primary and secondary sources including books, book chapters, journal articles and doctoral dissertations focused on TPSR and the growth of the model. From these sources, three main categories were identified; i) books written by Don Hellison about the model and its evolution, ii) sources that discussed the evolution of TPSR and iii) supplemental texts that contribute to the TPSR literature but were less important when tracing the evolution of the model. These materials were all examined, and the authors identified the four "key turning points" in the evolution of TPSR.

The first two stages were firstly, setting the stage for a humanistic approach through practical inquiry, and secondly, moving beyond balls and bats to developing a model focused on the

affective domain, which essentially encompassed Hellison's passion for helping underserved and "problem kids", his application of a humanistic focus to a field that had become narrowly determined on physical development, rather than on holistic growth, and the development of goals and processes that are now included in the TPSR model (Richards & Shiver, 2020, p. 302). The third and fourth stages, were further defining humanistic goals and teaching strategies (stage three), and stage four, continuous tinkering in the context of a living model, involved the constant development by Hellison of teaching strategies, processes, and structures that embraced a humanistic approach to physical activity and physical education, as well as the development of the TPSR framework.

In providing this timeline, Richards and Shiver were able to recognise the growth of the TPSR model overtime and essentially reflect on Hellison's process and commitment to the cause. As the authors conclude, the TPSR model is more than just a pedagogical approach, it is more of a "way of being" and therefore should be understood and implemented as such (Richards & Shiver, 2020, p. 308).

Dunn and Doolittle (2020), published an article that aimed to review what is currently known about how teachers and other physical activity professionals learn about TPSR and how to implement it. In order to do this, the authors explored the relevant literature and research that outlined how practitioners have learned TPSR, whether that be through informal, independent learning, formal preservice education or through avenues such as professional development and staff training. This exploration was followed by a summary of the barriers that arise in the process of learning and implementing TPSR and the recommendations for optimising the value of both formal and informal ways of teaching TPSR, and suggestions for the future direction of TPSR professional development research (Dunn & Doolittle, 2020).

Through the process of this review, the authors revealed a number of conclusions regarding the learning of TPSR. Firstly, there are two learner types in respect to how facilitators learn about TPSR. The first are those learners motivated by their own individual interest in the model, such as teachers or coaches. The second is a more institutionalised group, including universities or institutions intending to provide teacher education or professional development. The second key finding was the wide selection of avenues and materials that appear to have assisted or assist practitioners in acquiring knowledge regarding TPSR. Independent learning, which stems from a personal interest in Hellison's model and TPSR. Hellison's work is also widely published and discussed in books, articles and at conferences. This personal communication was one of the more "powerful" methods of inspiring and encouraging teachers to learn and engage in TPSR. In addition to this, apprenticeships, workshops, university - school orprogrammecollaborations, formal or institution teaching, university teacher education, service learning, graduate programmes and professional development are all identified as means of gaining knowledge in TPSR (Dunn & Doolittle, 2020). The authors also explain that the literature suggests the learning and implementation of TPSR is not a straightforward process. A number of barriers were revealed, including values conflict, the transfer of learning from teaching to behaviour development, and the need for professional support when introducing TPSR into teaching and coaching.

In essence, the conclusion that can be drawn from this review is that while TPSR has become an influenced pedagogical strategy for many teachers and practitioners, it is not an easy process and therefore requires the development of "meaningful strategies" to assist those implementing the model. Moreover, while these difficulties exist, there remains a strong value in content specific professional development and providing that support to those facilitators of TPSR.

Also published in 2020 was Gordon and Beaudoin's review of the geographical spread of TPSR and the consequential range of new cultures and populations Hellison's model is implemented in. The authors reasoned that in providing an insight into the "historical journey" of TPSR, gives a clear picture of where the model is currently at, and those facilitating the model will gain a better understanding of the potential of the TPSR in current programmes (Gordon & Beaudoin, 2020, p. 337). This investigation was also focused on the important concept of fidelity, because of the increasing number of practitioners implementing theprogrammewho hadnever met Hellison himself or been introduced to the original model.

In the investigation, a number of sources were utilised as a means of gathering the relevant information, including research articles, dissertations, professional articles and programmed escriptions. These sources were analysed using a format designed for assessing programme fidelity, which identifies five key areas; the nature of the program, how it is delivered, to whomand where is the programmed elivered and who delivers it.

A number of findings emerged from the work of the authors. Firstly, it was identified that Hellison's TPSR model has been spread among many countries and is now implemented in a wide range of contexts world-wide. With the model originating in the USA, there is an understandably strong and well-established presence of the model in both academic sectors and in TPSR based programmes. The review of the literature, however, recognised countries including Spain, and those within Europe, the Asia-Pacific and the Americas having developed a TPSR presence. Moreover, New Zealand was identified as having a "long history" in implementing TPSR as a pedagogical model in the secondary school physical education curriculum.

The second significant finding was that, with this wide spread of the model across a number of countries and therefore cultures, comes the issue of fidelity of implementation. As is acknowledged by Gordon and Beaudoin, when a TPSRprogramme is implemented within culturally different contexts, questions are raised regarding what should and should not be included within the scope of the specific contexts traditionally recognised values and beliefs. The result of this is an understandable difficulty to ensure fidelity to the original model and the underlying philosophies and core values established by Hellison.

From these findings, the authors concluded that as TPSR continues to evolve and spread, fidelity will be a lasting challenge. This supports the call for all programmes implementing the model to be evaluated for fidelity, as a means of ensuring it is reaching its full potential in developing responsibility behaviours and giving direction to practitioners about alterations that should be made to improve this. Furthermore, there is value placed on quality, content specific professional development as a way of supporting those programmes and those that facilitate them(Gordon & Beaudoin, 2020).

2.3.1. Comparison of studies

Through completing the process of reviewing the TPSR focused studies, a number of parallels are able to be drawn. These similarities present in both the research processes and the focuses of the studies. The application of Hellison's TPSR model is the focus of all the relevant studies, however there is also a shared emphasis placed on the effectiveness of this implementation in respect to the development of responsibility behaviours in the participating students. The majority of the research recognises that positive developments in both personal and social responsibility behaviours can be a progressive outcome of the implementation of a TPSR based programme (Escartí et al., 2012; Filiz, 2018; Jung & Wright, 2012; Pascual et al., 2011; Romar

et al., 2015; Sánchez-Alcaraz et al., 2019; Wright & Burton, 2008). While several aspects of implementation have been identified as important to the value of such a programme (specifically teacher training or duration and context of implementation (Pascual et al., 2011)), changes in student behaviour and fostering positive responsibility development are a common theme among the current literature.

Another similarity that emerges among these studies is the focus placed on the fidelity of the TPSRprogrammeimplementation. In addition to investigating the effectiveness of the model in practice, several of the previous studies explored and highlighted the importance of implementing a TPSRprogrammewith high fidelity to Hellison's original model (Beaudoin, 2012; Escartí et al. 2012; Gordon & Beaudoin, 2020; Lee & Choi, 2015; Pascual et al., 2011; Romar et al., 2015), it's philosophical underpinning and core values. These studies acknowledge that there are several elements of implementation that will contribute to this fidelity, including teacher training andprogrammedesign, and therefore should be considered in the application of a TPSR model.

Furthermore, the importance of teacher training and participation in content specific professional development is acknowledged across the majority of the previous studies. As is recognised by this literature, the role of the teacher is significant in the implementation of a TPSR based programme, including but not limited to the personal adaptation of the model to suit their students, the design of the programme and the consequent fidelity to the original TPSR model (Alcalá et al., 2019; Beaudoin, 2012; Dunn & Doolittle, 2020; Escartí et al., 2012; Lee & Choi, 2015; Romar et al., 2015; Sánchez-Alcaraz et al., 2019). The equivalences that are drawn from the current literature highlight the important aspects to be considered when exploring the TPSR model and its implementation in the physical education classroom.

While parallels can be drawn amongst these previous studies, there are also differences that provide insight into important aspects of research in this area. Most of the studies applied a mixed methods research approach, which meant that the researchers employed both quantitative and qualitative data collection methods. However, the combinations of these methods, and the research design differ across the literature. There are a number of studies that have utilised a method of interviews or discussion groups as a means of collecting data, whether that be as a standalone technique or in combination with other data collection methods (Alcalá et al., 2019; Beaudoin, 2012; Filiz, 2018; Jung & Wright, 2012; Lee & Choi, 2015; Pascual et al., 2011). In the context of these relevant studies, the data being collected was of a qualitative nature (teacher or student perspectives) and called for a more personable approach. As was acknowledged by Pascual et al., (2011), using interviews as a method of collecting data allows the researcher to ascertain participant experiences and perspectives.

In addition to this, there was a selection of only four studies that included the use of reflective material as a means of collecting data (Beaudoin, 2012; Jung & Wright, 2012; Lee & Choi, 2015; Wright & Burton, 2008). While some researchers utilised this in conjunction with other methods of data collection, reflective material such as logs, and journals were not utilised across the majority of the studies. This may have been as a result of the nature of the study, but still brings into question the relevance or value of these resources when investigating the implementation of a TPSR program. Furthermore, the use of questionnaires and surveys as a method of data collection was only introduced by the researchers who have investigated TPSR based programmes in recent years, which may highlight new value granted to this technique of data collection in this area of research (Alcalá et al., 2019; Filiz, 2018; Sánchez-Alcaraz et al., 2019). These differences in research design are a strong indicator of the importance of selecting

the most relevant methodology for the study in question and evaluating the value of techniques in respect to the research question and objectives.

The other significant difference that became evident from the review of the relevant literature was the time in which the TPSR programme was implemented. While one study implemented aprogrammefor an entire academic year (Wright & Burton, 2008), others ranged from periods of only 8 weeks, 10 weeks or 12 weeks, up to 6 months (Filiz, 2018; Jung & Wright, 2012; Pascual et al., 2011; Sánchez-Alcaraz et al., 2019). Similar outcomes presented from these studies regarding implementation effectiveness, but it is an important aspect that should be consideredwhen investigating TPSR programme application.

2.4. The Aotearoa New Zealand Context

As previously stated, the TPSR model has been introduced into Aotearoa NZ education and is now implemented in several of different educational contexts. As a result of the consequential development of this model throughout both primary and secondary school classrooms, several investigative studies have been carried out. Severinsen (2014) explored the implementation of the TPSR model in an Aotearoa NZ primary school. The study was focused on a junior school classroom teacher, who had previously decided to attempt an implementation of the TPSR model as a result of previous master's education. This decision was based on a personal belief that children are capable of accepting responsibility for their behaviour from a young age, and therefore responsibility needs to be specifically taught.

Over the course of one year, an adapted model of Hellison's TPSR model was implemented and taught to the participating students. The levels of the model were adjusted specifically to the age of the students but continued to represent the core values of the original TPSR model. Severinsen acknowledges that while these levels are "social constructs", and can be modified, it is important to stay true to the underlying principles of the model. These adapted levels were i) Respect, ii) Participation, iii) Self – Direction and iv) Transfer. They were introduced to the students one at a time, and expected behaviours for each level were outlined, focused on and frequently revisited. The participating teacher also made sure the learning environment was suitable for the development of responsibility by setting up the classroom to allow for regular opportunities for students to display these behaviours.

The findings after a year show that by implementing the model, an improvement in self—control was recognised in the students, in addition to effort and perseverance, responsibility, communication and a willingness to help others around them. Another finding that Severinsen acknowledges is the ease to which the TPSR model fits in with the Aotearoa NZ curriculum and its key competencies. While it was concluded that the TPSR model was a practical tool at the junior school level, challenges were also observed, particularly with the context in which the model was being implemented. Other teachers in the school observed time and pedagogical challenges the teacher struggled with while implementing the model, which was met with the further acknowledgment that while TPSR may not suit every teacher, it does align with many teaching philosophies and school cultures. Furthermore, outlined was the importance of teacher knowledge regarding TPSR and its underlying principles, and the consequence of not having flexible teaching practices or familiarity with the model.

In reference to the secondary school context in Aotearoa NZ, Gordon (2010), used a mixed methodology research approach in an attempt to explore the implementation of the TPSR model over a six-month period. The premise for this study was that there are limitations in

implementing the TPSR model in a pedagogical context, and therefore was focused on addressing these limitations and reflecting on the reality of TPSR in practice. The mixed methods methodology involved a case study, and a quasi-experimental research method. The case study was developed in examining two classes in which the TPSR model was integrated into the physical education course. In introducing a quasi-experimental method, two comparison classes were also included where physical education was taught conventionally without the TPSR intervention programme. All four classes were taught by the same one physical education for validity purposes, as well as all classes being selected from the same year group (13 – 15 years of age) and academic stream. Both the teacher and the participating students were asked to reflect on their experiences, particularly regarding the effectiveness of the TPSR model implementation. These reflections were collected before, during and after the six-month implementation of the model, using interviews, and reflection sheets. All four classes were also observed by a non-participant on a regular basis.

Gordon (2010) found that, following the implementation of the program, an improvement in self – control, self – direction and willingness to help others was recognised in those students who participated in the TPSR based program, in addition to an increased understanding of the concepts of both personal and social responsibility. A development in positive attitude and behaviour during class in comparison to those students taught by a traditional pedagogical approach, as well as a higher engagement with the physical education curriculum was also acknowledged (Gordon, 2010). There were, however, questions that arose from this study, particularly in terms of level progression, the impact of the TPSR model on learning in other areas of a student's life, and whether or not the TPSR model is at the core of the present positive developments. It raises the question of how important the model itself is, especially if the same decision making and responsibility behaviours were put at the forefront of a physical education

program, but the TPSR models' principles and core values did not underpin it yet the same developments occurred.

In a later study Gordon, Thevenard and Hodis (2012) distributed a national survey to the Aotearoa NZ secondary school physical education departments (n=370), in an attempt to identify the degree to which the TPSR model has been adopted, and how the model has been implemented in this context. It was identified prior to this study that gaps existed in TPSR model knowledge, which led to the design of a survey that would grasp the scope of the true implementation of the TPSR model in Aotearoa NZ secondary school physical education, and the opinions of those who teach it. Of 148 schools that responded to the survey, the study found that 79 of them implement the TPSR model in their physical education programmes. In addition to this, a significant number of teachers personally used the TPSR model as a pedagogical tool in their teaching practices. While a number of these teachers were working in departments where the TPSR was a mandatory part of the physical education course, there were also thoseteachers that taught the model by choice.

In gathering perspectives from the teachers, it was also found that the level of confidence and knowledge, when it came to teaching the TPSR model, was strong. It was also recognised by the majority that TPSR promoted better and more supportive behaviour, students became more self – directed learners, and responded better to the physical education curriculum. There was also transfer occurring in students. While positive outcomes for the future of the TPSR model were prevalent, limitations that presented from this study were regarding the length of time the model was implemented, and the ways in which it was taught varied, which the authors have suggested may raise questions regarding the fidelity of the model in practice. TPSR has become well established in the Aotearoa NZ secondary school physical education context. However, it

was acknowledged by the authors that survey research also has its limitations, and that a better understanding of the reality of TPSR in Aotearoa NZ secondary school contexts could be gained by research that explored teachers' TPSR implementation in the classroom.

2.4.1. TPSR implementation in the Health and Physical Education Aotearoa New Zealand curriculum

In the Aotearoa NZ education curriculum, the TPSR model is not directly acknowledged, however philosophical similarities do exist between the two. The underlying philosophy of the TPSR model is highlighted through the vision for education within the curriculum for developing young people into confident, connected, actively involved, life-long learners (Ministry of Education, 2007, p. 7). Integrity and respect, as values that underpin the curriculum, also parallel closely to a number of the goals for development in the TPSR model, along with three of five key competencies outlined in the curriculum, relating to other, managing self and participating and contributing (Ministry of Education, 2007, p. 12).

Within the Aotearoa NZ education curriculum, there are eight learning areas; English, The Arts, Learning Languages, Mathematics and Statistics, Science, Social Sciences, Technology and Health and Physical Education (HPE). Within the HPE learning area, the underlying learning foundation and goal is acknowledged as "through learning and by accepting challenges in health related and movement contexts, students reflect on the nature of well-being and how to promote it" (Ministry of Education, 2007, p. 22). While this does not outwardly mention the TPSR model, the underlying aim of developing qualities in students related to personal and social responsibility behaviours, as well as resilience and selflessness reflects those goals at the core of the model. There is, however, an achievement standard that comes

under the national certificate of educational achievement which aims to educate students on, and develop their behaviour's relating to the TPSR model.

2.4.2. What is NCEA?

In Aotearoa NZ, the National Certificate of Educational Achievement (NCEA) is the primary qualification that can be attained by secondary school students and is recognised by employers and by university and other higher education institutes both in Aotearoa NZ and internationally (NZQA website). NCEA can be gained at Levels 1, 2 and 3, and are achieved by accumulating a minimum of 80 credits at each level. As outlined by the New Zealand Qualifications Authority (New Zealand Qualifications Authority, 2019), students at the secondary level complete a number of *subjects* or *courses*, which are taught in accordance with the Aotearoa NZ education curriculum and Te Marautaunga o Aotearoa (the Māori-medium curriculum), in order to gain these credits. Within each subject or course are a number of *standards*, which are used to assess students' skills and knowledge. These can either be unit standards, which are assessed only internally, or achievement standards, which can be assessed internally or externally (New Zealand Qualifications Authority, 2019). Each of these standards have a specific criterion that must be met in order to be achieved, as well as a pre-set credit value, which will be gained when the student has met the criteria and completed the standard. Standards are assessed by either internal or external assessments, or a combination of both. Internal assessments are essentially used to assess students on a skill or knowledge that cannot be assessed in an examination context, for example, a speech or a research project. External assessments are usually by an examination at the end of the academic year, and work is assessed by NZQA. In the physical education field, the majority of standards are assessed by internal assessment, as it is difficult to evaluate physical skills and knowledge through an exam.

Each standard is assessed against a grading schedule, which outlines to which level a student has achieved the standard to. Not achieved (NA), Achieved (A), Merit (M) and Excellence (E) are the four possible grades. Within the Aotearoa NZ curriculum, Health and Physical Education is an identified learning area. Physical Education is offered at all three levels of NCEA and is made up of a number of different standards used to assess a range of skills and knowledge areas within the realm of Health and Physical education. At level 1, there are 11 possible standards (unit and achievement) to be offered. At Level 2, there are 16 and at Level 3, 35. All of these standards are identified using a standard number, for example the achievement standard in question in the present study is identified as AS91334 by NZQA. Teachers and students can use this standard number to find resources and exemplars of past work relevant to the course content. These standards are also given a subject reference, for example achievement standard AS91334 is also identified as Physical Education 2.8. For the purpose of the present study, AS91334 will be identified as Achievement Standard 2.8 (A.S 2.8).

2.4.3. Achievement Standard 2.8 (A.S 2.8)

A.S 2.8 is an NCEA achievement standard offered at NCEA Level 2 and is worth three Level 2 credits. It is an internal assessment, meaning it is assessed within the context of the physical education 'classroom' rather than through an external examination of work. The aim of the standard is to encourage students to "consistently demonstrate social responsibility through applying a social responsibility model in physical activity", which is driven by Hellison's Social Responsibility Model. Essentially, the standard has been designed based on the TPSR model, and intends to utilise the pre-determined framework, as established by Hellison, as a structure for the assessment of student's responsibility. Within the achievement standard

description, NZQA outlines their definitions for key phrases, including *Social responsibility*, *Social responsibility model* and *Physical activity*. It also outlines what is required from the students in terms of achieving the standard at either an Achieved level, Merit level of Excellence level.

In order to achieve this standard, students must be consistently demonstrating social responsibility, which involves "applying self – direction and using ongoing reflection within a social responsibility model in physical activity". Merit will be achieved if the student achieves this, as well as "helping others in leadership within a social responsibility model in physical activity". For Excellence, students will demonstrate all of this, as well as taking it into other aspects of their lives. The behaviours that underpin the definition of "social responsibility" and the related components, such as self – direction, reflection and transfer are outlined through the TPSR model, which are then used as a method of assessment.

NZQA provides teachers with a level of flexibility that allows them to design some elements of the achievement standard. For instance, the physical activity through which students must demonstrate social responsibility behaviours can be selected at the discretion of the teacher, as other structural considerations for the academic year may influence what physical activity is best suited. Time frames are also flexible, as some teachers may choose to offer the achievement standard for an extended period such as two or three terms, whereas some may choose to offer it for six to eight weeks. It is for this reason that across educational organisations, A.S 2.8 can be offered in different contexts. However, with these various structures comes a seemingly consistent assessment structure. The majority of schools will assess the achievement standard based on the five levels of Hellison's TPSR framework, with

each level corresponding to an achievement level associated with NCEA (i.e., Non-Achieved (NA), Achieved (A), Merit (M) or Excellence (E)). This assessment structure includes level of self-assessment and peer-assessment from the students, and assessment from the teacher in terms of demonstration of responsibility behaviours.

An element of this assessment structure is self-reflection carried out by the students in respect to their opinions of their own responsibility and to what extent they believe they demonstrated the necessary behaviours in order to achieve certain levels. In most cases, this is completed in a journal format. Peer – assessments are also utilised as a means of using other students' observations and opinions of a student's behaviour to assess the level at which they are demonstrating personal and social responsibility. In some cases, those students who demonstrate a level of responsibility beyond the classroom are given the opportunity to be assessed in an out-of-school context, such as in an extracurricular sport, by their coach, manager or someone of similar authority. This assessment is the responsibility of that person and is reported back to the teacher upon completion so that it can contribute to the student's overall grade. Overall, the students final grade is determined by the teacher, and therefore the teacher assessment is a combination of both the self and peer assessments, the out-of-school assessment, and the teacher's own observations of the student throughout the implementation of the 2.8 standard. A.S 2.8 is well established, but it is important to acknowledge the limitations that may stem from an adapted TPSR model, particularly in terms of implementation fidelity and true results from teaching responsibility behaviour.

2.5. Chapter Summary

The aim of this chapter was to provide an introduction to the main focus of this study, specifically outlining the definition of the TPSR model and giving a description of the key underlying principles and core values. This was followed by an in-depth overview of the current literature in this field, allowing for clarity in terms of research gaps and key focus points for the present study. Specific Aotearoa NZ studies are also discussed, along with acknowledging the current place that the TPSR model holds in the Aotearoa NZ education system. The goal of Chapter 3 is to describe the research process, including the research methodology, data collection methods and data analysis methods.

CHAPTER THREE

METHOD AND METHODOLOGY

3.1. Chapter Introduction

This chapter aims to introduce and describe the research methodology and data collection methods of this study. Succinctly, a mixed-methods approach was used to explore the implementation of a TPSR based Physical Education achievement standard, at the secondary level of education in Aotearoa NZ. The objectives of this project are to:

- Establish the levels of knowledge that teachers of A.S 2.8 have of the philosophical underpinnings of the TPSR model.
- Identify the challenges and enablers that impact on teacher's ability to implement TPSR with a high level of fidelity to the model.
- Establish how A.S 2.8 is taught in Aotearoa New Zealand secondary school physical education programmes.
- Explore the perspectives of teachers implementing A.S 2.8.
- Identify the assessment strategies for A.S 2.8 and assess how these maintain fidelity to the model.

The mixed methods approach employed allowed for a deeper investigation into the true fidelity of A.S 2.8 of the TPSR model and the implications of this, while also providing a method for gathering and further understanding the opinions of educators who are delivering this

achievement standard to students. The applicability of a mixed methods methodology approach for this study is explained and includes a description of the methodology, participants, procedures, analysis techniques and ethical concerns of the study.

3.1.1. Mixed Method Research

This research comprises two separate, yet associating components; quantitative and qualitative approaches and is therefore categorised as a mixed-methods study. The quantitative approach involved the dissemination of an online survey. The qualitative approach involved in-depth interviews with three secondary school physical education teachers and thematised within the survey information to give added insight into the ways in which TPSR has been experienced and interpreted in secondary school contexts in Aotearoa NZ.

It has been acknowledged by Tashakkori and Creswell (2007), that the conclusive research questions are essentially formulated based on the purpose of the study, which then call for the selection of methods and designs for the collection of data. Studies with research questions that demand the utilisation of qualitative methods, as well as quantitative methods will in turn use a mixed-methods research approach (Tashakkori and Creswell, 2007). According to Creswell, Clark, Guttman and Hanson (2007), mixed methods research involves the collection and analysis of both qualitative and quantitative research data. Both the qualitative and quantitative research methods are combined into a single study, and the collected data is merged and presented together for the purpose of answering the research question. This synthesis of both qualitative and quantitative data allows for depth within the study, as well as a stronger description and broader understanding of the final conclusions (Johnson, Onwuegbuzie and Turner, 2007).

Within the social science field, there have been long-standing opposing views about the value and relevance of both qualitative and quantitative research. Osborne acknowledges that those who favour qualitative research believe that quantitative research methods do not accurately represent or capture the participants' opinion's or voice's, while quantitative researcher's do not see qualitative research as a means of scientific examination (Osborne, 2008). It is for this reason that mixed-methods research has become a popular resolution. Social researchers now tend to combine and mix methods of research and do so in acknowledgement of both the strengths and weaknesses of the two methods.

Qualitative research produces data that is descriptive, including "people's own written or spoken words and observable behaviour", and therefore offers some strengths during data collection (Taylor, Bogdan and DeVault, 2007, p. 7). As Corbin and Strauss (2008) explain, qualitative data collection weights some demonstration of empathy and identifying with people, which allows for a better understanding of and about the meaning people give to things in their life, and the capacity to view reality from the perspective of the participant. However, the weakness of this type of research presents itself in the fact that it is very data intensive, and does not lend itself to generalisation (Osborne, 2008).

In contrast, quantitative research is the more scientific method of research, using the collection of quantifiable data and investigating particular phenomena through statistical and mathematical observations (O'Dwyer and Bernauer, 2013). Utilising quantitative research methods allows for the investigation of various factors that may be linked or influence each other, which can then be analysed and related back to the research question (McCusker and Gunaydin, 2014). Furthermore, quantitative research can reach a much larger number of participants, and the statistical data can be generalised (Osborne, 2008). With this, the synergy

of the two methods becomes an effective and favoured approach to social research. As aforementioned, investigations with research questions that can be answered best using a mixed methods approach will be best investigated using a combination of qualitative and quantitative methods and produce a result that is beyond the separate entities (Bergman, 2008).

This study was best undertaken using a mixed methods approach, as there were separate components to the research question that each required a different method of investigation. In order to reach the research objectives and subsequently answer the research question, it was first necessary to gather the opinions of secondary school physical education teachers on the implementation of A.S 2.8. This particular inquiry lent itself to a qualitative approach. Using semi-structured interviews allowed for the collection of true perspectives and a conversation with participants that could produce valuable data. The research question for this study also called for a quantitative research approach, as reaching a larger group of participants would provide strong data for appreciating a general perspective and understanding the wider scope of the implications of A.S2.8. A widespread survey was utilised as a quantitative measure to reach those teachers and schools that were identified as having used achievement standard in the previous year in order to gather general perspectives about the implementation of A.S 2.8.

3.2. Participant Selection and Description/ Setting and Sampling

There were two sets of participants selected for this study. The quantitative research sample was drawn from the teachers who offer or have offered A.S 2.8 within their Level 2 Physical Education curriculum. This group of HPE teaching professionals was identified through requests to the New Zealand Qualifications Authority (NZQA) and New Zealand Ministry of Education (MOE), where participation data was likely to be stored. The resulting responses

produced a formulated list of those schools or educational organisations who had been *consented* to offer A.S 2.8 in the 2018 academic year, and a list of those who *assessed* A.S 2.8 in the 2018 academic year. This list also included email contact details for each school. In order to recruit the participants, the researcher sent a detailed email requesting the participation of the Physical Education Head of Department (or someone with a similar working title), outlining the purpose of the study and what participation would involve with an attached information sheet as shown in Appendix A. Provided the targeted teachers agreed to participate following their reading of the information sheet, a link to a short online survey was also attached to the email. Of the 256 schools identified as having assessed A.S 2.8 in the 2018 academic year, 66 teachers followed the link and completed the survey, thus making up the final sample for the quantitative research component.

The participants for the qualitative data collection were recruited through the researchers existing professional network connections with educational organisations in different regions of Aotearoa NZ. The researcher contacted three teachers, via email, who were known to be teaching A.S 2.8 and requested their participation in a short, semi – structured interview regarding A.S 2.8 and its implementation. Attached to the email was an information sheet, as shown in Appendix B, specific to the interview process that outlined the purpose of the study and what was involved. As all three teachers agreed to participate in the interview process, they were also asked to provide, at their discretion, a hard copy of their educational resources, including achievement standard outlines, assessment structure and information, and any other relevant material as selected by the teacher. The three teachers who participated in the short, semi – structured interviews and provided resources made up the final sample for the qualitative research component. The combination of the rich qualitative data collected through

the interviews, and the resources provided by the participants, as aforementioned, offered a much clearer understanding of the use of A.S 2.8 in context.

3.3. Semi Structured Interviews

Semi structured interviews were utilised in the present study as the data collection method for the qualitative research component. Semi structured interviews are designed with both open – ended questions and theoretically driven questions, which allows for the collection of both data that captures the personal experience of the participant and data that is driven more by the particular discipline or phenomenon that is the focus of the research (Galleta and Cross, 2013). Although the researcher will prepare a set of questions to be asked, the manner of the interview becomes more conversational and informal, leading to the gathering of varied yet rich data individualised to the participants (Dunn, 2005). For the purpose of this study, semi structured interviews were utilised in an attempt to collect relevant and personal data from each of the participants. The research question and subsequent objectives required a personal account from those who participated in the qualitative component of the study, so that the implications and effects of implementing A.S 2.8 could be understood in a range of contexts, through a range of perspectives. Open ended questions were likely the most effective method of initiating a dialogue that lent itself to personal expression and opinionated responses, while those questions that were focused more on the theory of the achievement standard itself maintained direction and focus for data collection.

The interviews were conducted following an interview schedule (see Appendix A) designed by the researcher in accordance with the research objectives. The interviews were initiated by questions regarding the participants knowledge of the TPSR model and its philosophies, followed by questions that addressed challenges and enablers impacting on the fidelity to the model. Open – ended questions were then used to discuss how A.S 2.8 is taught in practice, perspectives of effectiveness of the TPSR model and how assessment for A.S 2.8 is structured and utilised. While this structure of the interview was upheld for all three participants, the informal tone of the interviews meant that participants discussion points varied and led to a richer account of their experiences. Each interview was recorded, and then transcribed by the researcher. These transcriptions were shared with the participants before being analysed and shared within the context of the research report. The participants were each interviewed in a single interview session, and no interview was carried out without either the written or verbal consent of the participant.

3.4. Survey

According to Marsden and Wright (2010), surveys are one of the most important research methods being utilised in the social science field of research. They are inherently quantitative methods of data collection, and the data can be generalised, giving it value when attempting to find information on a specific issue, from a large group of relevant participants. The present study utilised an online survey, which allowed for the collection of data from a large sample of physical education teachers. The population who were targeted were those who have assessed A.S 2.8, and therefore have some level of knowledge and opinion about the implementation and structure of the achievement standard. Similar to the semi - structured interviews, the survey was designed based on the research question and the research objectives, with the aim of generating the strongest chance of collecting the necessary data and subsequently answering and meeting these.

An initial version of this survey was designed as an adaptation to Gordon's (2012) survey as administered to Aotearoa NZ secondary schools in 2010. There was also an element to the design that was based on previously identified significant aspects of implementing A.S 2.8 and the TPSR model. The survey was then trialled with two secondary school physical education teachers, who had in the past implemented A.S 2.8 and were knowledgeable of the focus of the present study. Following this, small adjustments were made to language and wording in questions as per suggestion in order to improve clarity and understanding. The final survey was made up of 31 questions, under 4 sections based on the research objectives. Section one and two explored the profiles of the schools, as well as the knowledge and professional development of the A.S 2.8 facilitators. Two questions were implemented in the survey to gauge the knowledge regarding Hellison's TPSR model; i) On a scale of 0 to 9, where 0 = Noknowledge and 9 = Excellent level of knowledge, please rate your level of knowledge of the TPSR Model and ii) On a scale of 0 to 9, where 0 = Not confident at all and 9 = Extremelyconfident, rate your level of confidence in using the TPSR model in your teaching. Two closed questions were then included to gauge the number of A.S 2.8 facilitators who had participated in professional development. Section three explored the perceptions of A.S 2.8 in regard to fidelity to the TPSR model and the assessment strategies, with 7, 0-9 Likert scale continua questions. The final section focused on how A.S 2.8 was implemented in practice, with 2 openended questions allowing participants to answer with a personalised comment, while the remainder of the questions were closed and required either a yes or no answer, or a response using a 0-9 Likert scale continua (see Appendix B)

3.5. Data analysis, validation and reliability.

As defined by Joppe (2000), reliability is essentially the consistency of results over time, and the ability of said results to be reproduced under similar research conditions in the future. The data collected through the survey was mostly quantitative, and results were not subject to a high level of interpretation by the researcher during data analysis. Pre-determined subjects were used as drivers of analysis, therefore removing the element of interpretation. The researcher believes that if the survey instrument were to be used in future research endeavours, similar conclusions would be drawn from the data. The educational resources provided by the participating teachers were also straightforward in the information they contained, and no subjective interpretation was required from the researcher.

Within the scope of the qualitative data collection, however, the interview data was open to a certain level of interpretation by the researcher. This data was analysed using background knowledge of the important aspects of both implementing the TPSR model and A.S 2.8, as a precaution for straying from the research objective. Transcripts were also sent through to the researchers supervising professionals to determine whether or not the themes identified by the researcher could be identified by them also.

3.6. Ethical considerations

The researcher ensured that ethical considerations remained a top priority in the study. Ethical approval was sought from the Massey University Human Ethics Committee by submitting an ethics application outlining the purpose of the study and what would be involved. As the research was judged to be "low risk", the researcher became responsible for the ethical conduct

of this research (see Appendix C). The low risk nature of the present study meant that the risk to the participants was minimal, and the ethical concerns were associated more with consent, privacy and confidentiality, voluntary participation and the right to withdraw at any time. Interviewees were given adequate information regarding what participation would involve, and not data collection was conducted without either written or verbal consent. The teachers were also informed that they would be sent a copy of the transcribed interview, and also had the right to withdraw from the study at any time. It was also voluntary to provide the educational resources requested by the researcher (see Appendix D). Survey participants were informed that their completing the survey was considered a written declaration of their consent. Participation was entirely voluntary and, similar to the interviews, participants had the opportunity to withdraw from the study at any time. The data collected from the interview process and survey process was not shared outside of the researcher and the supervisors, and personal names and school names were not used (see Appendix E).

3.8. Chapter summary

The aim of this chapter was to outline the methodology and methods used in the present study in order to answer the research question. A discussion of the research methods, including both a mixed methods approach and a case study approach, the participant selection and sampling methods and data collection procedures provides an overview of the structure of the study. Summarising the design and structure of both the interview schedule and the survey questions also provides transparency regarding what the goals were in terms of meeting research objectives and in turn, answering the research question. Chapter 4 provides the findings from the study and discuss the emerging themes from both the case study and survey data.

CHAPTER FOUR

FINDINGS

4.1. Chapter Introduction

This chapter aims to outline the findings from both the quantitative and qualitative data collection processes. These were carried out to answer the research question:

How is a Teaching Personal and Social Responsibility model-based achievement standard, at the Aotearoa New Zealand secondary school level, implemented and what are the implications?

The quantitative survey data is presented by way of assessing the descriptive statistics, followed by the analysis of the other aspects of the survey associated with the emerging themes of the research process. The qualitative data is presented by way of thematic analysis, which is then summarised with the emerging themes. Namely, these themes are presented under the following headings;

- i) Knowledge of philosophical underpinnings;
- ii) Challenges and enablers for high fidelity implementation;
- iii) A.S 2.8 in practice;
- iv) Effectiveness of A.S 2.8 in developing personal and social responsibility behaviours; and,
- v) Assessment strategies and fidelity to the model.

4.2. Quantitative Approach: Survey data

4.2.1. Participant description

256 Aotearoa NZ secondary schools originally identified as having assessed A.S 2.8 in the 2018 academic year. These schools were identified by NZQA and the MOE official records. Of these 256 schools, 66 teachers who used A.S 2.8 in 2018 completed the survey. Of these 66 teachers, 40.9% identified as female, 50% as male and 9.1% preferred not to answer. Presented below are also the area classification and gender of students of the participating schools.

Table 1. Area classification and gender of students

Area	Number of schools				
Urban	24 (36.4%)				
Rural	42 (63.6%)				
School					
Boys only	10 (15.2%)				
Girls only	10 (15.2%)				
Co - educational	46 (69.7%)				

The teaching experience among the respondents varied, with an average of 14.8 years of teaching experience. 25 of the teachers had less than 10 years of experience, while 17 had over 20 years of experience. The time that the teachers had been teaching A.S 2.8 also varied. The number of years that A.S 2.8 had been implemented averaged at 5.8, with some teachers having taught it starting the year it was introduced as an achievement standard, but the majority having only taught it for 2 years or less (28.8%).

4.3. Qualitative Approach: Interview data

4.3.1. Participant description

The participants in the qualitative data collection included 3 male physical education teachers, employed and working at 3 different Aotearoa NZ secondary schools. School one and school three were co – educational environments, while school two was a single sex school. Participant teacher one Mike⁷ had 15 years of teaching experience and holds a teaching position in the Physical Education and Health department. Participant teacher two Henry⁸ had 16 years of teaching experience and holds a position of leadership within the respective Physical Education and Health department. Participant teacher three Kevin⁹ had 8 years of teaching experience in Physical Education and Health Education and holds the position of house dean and the head of the "gifted and talented" programme within the school.

The responses of the 66 survey participants in collation with the responses of the three interviewees are presented in these five sections:

- 1. Knowledge of philosophical underpinnings,
- 2. Challenges and enablers for high fidelity implementation,
- 3. A.S 2.8 in practice,
- 4. Effectiveness of A.S 2.8 in developing personal and social responsibility behaviours and
- 5. Assessment strategies and fidelity to the model.

⁷ For the purpose of this thesis, participant teacher one will be referred to as "Mike" under a pseudonym.

⁸ For the purpose of this thesis, participant teacher two will be referred to as "Henry" under a pseudonym.

⁹ For the purpose of this thesis, participant teacher three will be referred to as "Kevin" under a pseudonym.

4.4. Knowledge of philosophical underpinnings

The participating teachers indicated on the Likert 10 point scale that they showed a reasonably strong level of knowledge about Hellison's TPSR model, with an average of 7.1. Of the 66 respondents to the survey, 78.7% believed they sat between a 7 and a 9 on the Likert scale, suggesting that they had a reasonably strong level of knowledge about Hellison's TPSR model. Furthermore, when asked about their level of confidence in teaching the model, 68% again believed they sat between a 7 and a 9 on the Likert scale, suggesting their confidence in teaching was also reasonably sufficient.

Table 2. Percentage responses for question 9 and question 10.

Question	0	1	2	3	4	5	6	7	8	9
On a scale of 0 to 9, where 0 = No knowledge and 9 = Excellent level of knowledge, please rate your level of knowledge of the TPSR Model.	0%	0%	0%	1.50%	3%	4.50%	9.10%	39.40%	30.30%	12.10%
On a scale of 0 to 9, where 0 = Not confident at all and 9 = Extremely confident, rate your level of confidence in using the TPSR model in your teaching.		0%	0%	1.50%	1.50%	3%	15.20%	30.30%	34.80%	13.60%

Table 3. Average response value for question 9 and question 10.

Question	Average response value
On a scale of 0 to 9, where $0 = No$ knowledge and $9 =$	
Excellent level of knowledge, please rate your level of	
knowledge of the TPSR Model.	7.21
On a scale of 0 to 9, where $0 = Not$ confident at all and	
9 = Extremely confident, rate your level of confidence	
in using the TPSR model in your teaching.	7.3

While the average response for these two questions sat at the higher end of the scale, some teachers reported that their level of knowledge and confidence regarding Hellison's TPSR model was not strong (Table 2). This is important to consider in terms of implementing A.S

2.8 with a high fidelity to Hellison's TPSR model and producing results in student responsibility zbehaviour, as those teacher's with lower levels of knowledge and confidence are likely to show less capability in teaching A.S 2.8.

In terms of the knowledge of the philosophical underpinnings of Hellison's TPSR model, several common conclusions were also drawn from the interview data collection. All three of the participating teachers acknowledged that prior to teaching A.S 2.8, their knowledge of Hellison's model was minimal and very generalised. In addition to this, the knowledge that all three of the teacher's had at the time of the data collection had been developed as a result of their facilitation of A.S 2.8 during their time teaching.

When asked what his level of knowledge was regarding Hellison's TPSR model, Mike acknowledged he knew it was a social responsibility model focused on developing socially responsible behaviours in physical activity. Furthermore, the model allows for the teacher to facilitate the development of these behaviours for each individual student.

"By having the social responsibility model, we have some teachings around what good social responsibility looks like and try and find the right balance for those competitive ones to still try hard and give their best but not exclude others and not cheat to ensure they win. And also, for, those that aren't so engaged to try and ensure they are doing their part for a team, or to achieve the task so they can all work together."

This knowledge, however, was minimal and generalised prior to the teaching of A.S 2.8. Mike agreed when asked if he thought A.S 2.8 had assisted in the development of knowledge around the model.

"Yeah, I did know a little bit but I gained a lot of my knowledge, again, reconfirmed or sort of refreshed what I did know anyway (by teaching A.S 2.8)."

Henry outlined his level of knowledge as being reasonably generalised and basic, with the acknowledgement of the progressive nature of the model and the difference in behaviours that would be demonstrated at the various levels within the model.

"I know that it's a progress model, so goes from level 0 through to 4 based on basically the behaviour and social skills of students in the class at the time. So, yeah for students who are really disruptive and uncooperative and not really into the lesson, they would be down at the lower end of the continuum at 0, whereas if they're highly independent and effectively managing themselves showing leadership then they would be up at the 4 end of the model."

When asked if teaching A.S 2.8 had helped Henry to develop his knowledge, he agreed. Prior to teaching A.S 2.8, Henry had the model mentioned at university during his teacher education and in some other classes as he began to teach physical education, but it was introduced as more of a "philosophy of teaching" than as a model for developing behaviours in personal and social responsibility.

"So I had it mentioned in some classes but as an actual teaching model I hadn't really used it myself much."

Henry also acknowledged that as his knowledge of Hellison's model has developed through teaching A.S 2.8, he has also become more aware of the changes occurring around the traditional methods of teaching P.E and including students more in their development.

"Absolutely. I mean the traditional way of teaching P.E is changing for the better in terms of the teacher being in front of the class and worried about the skill set of the students it's more going towards the social side of things and actually making student's more aware of their behaviour and how they can change that, so, definitely."

The knowledge Kevin had of Hellison's model was similar to that of Mike and Henry, with a basic concept of the progressive nature and different levels judged based on responsibility behaviours. He also acknowledged the fact that the model is adaptive and therefore there are different interpretations of the structure and content.

"I've probably learnt about it over the last 7 years, what I know about it is that, maybe there's different adaptations to it, the ones that we use we look at, we usually have about 5 different levels I think, or 6 different levels starting at level 0, all based around someone's actions and the way that they, like their attitude to their actions I guess."

In contrast to the opinions of both Mike and Henry Kevin acknowledged that his knowledge of the model had not developed much as a result of teaching A.S 2.8. While teaching A.S 2.8 has allowed Kevin to become more aware of it and use it more frequently, working with the NZQA assessment has not advanced a detailed understanding of the model itself.

"...it's made me more aware of it I think. But, like the detail of the model probably, my knowledge around that hasn't grown. I would say the probably the assessment run through NZQA has developed my knowledge more, you know looking at level four's leadership and leading by example and expressing the right attitudes and stuff, you know and then level 5 is doing that stuff outside the classroom or in unexpected settings, not necessarily in the class setting, but yeah, my depth of knowledge of the model hasn't improved."

4.5. Challenges and enablers for high fidelity implementation

95.5% of the participating teachers acknowledged that for them to start teaching using Hellison's TPSR model, they were not required to complete any professional development or content specific training. Furthermore, when asked if they had participated in any professional development or content specific training regarding Hellison's TPSR model, despite its non-mandatory nature, only 25.8% of the participants answered "yes".

Table 4. Percentage of teachers' responses regarding professional development.

Question	Yes	No
Does your teaching 2.8 require you to participate in any professional development related to the TPSR model?	4.50%	95.50%
Have you participated in professional development related to the TPSR model and its core values/philosophy?	25.80%	74.20%

In addition to these findings were the experiences of the interviewed teachers. While A.S 2.8 provides an avenue through which personal and social responsibility can be taught in the

physical education classroom, it was outlined by the participating teachers that there are a number of challenges and enablers that may impact on the fidelity with which this occurs.

When asked if there was compulsory professional development or training that was required for the teaching of A.S 2.8, Mike outlined that prior to his personal teaching of the standard he did not have any training specific to the delivery or process. However, he and fellow educators within his school were offered non-mandatory assistance from Dr. Barrie Gordon at different stages of the implementation of A.S 2.8.

"I wouldn't say we had to participate in it but Barrie Gordon through Victoria University lives locally so he's come into our school quite a lot which we are really fortunate for so he's come and taught lesson's on how to teach TPSR and the different stages you go through in a lesson... it was voluntary. So before teaching 2.8 I didn't have to have any specific training, it was just a matter of that we had Barrie in this area and he was willing to come in and actually show us how to go through the process and show us how to use it."

Additionally, Mike outlined that other educators had discussed Hellison's model at Physical Education New Zealand (PENZ) conferences and other staff-lead professional development sessions, however, these had not been as beneficial as the work completed with Dr. Gordon.

Henry also acknowledged that he had never had any specific training before beginning his teaching of A.S 2.8, and essentially began teaching using the generalised knowledge he had prior to becoming a facilitator of the standard. When asked if he believed some form of professional development or specific training would assist with his implementation of the

standard, he agreed and outlined that any professional development in any area should be beneficial for educators.

"Yeah I guess any professional development in any area can be of benefit especially when things have been running for a while like there might be better ways to do it or um look at it or what we utilise."

In terms of the fidelity to which the model was being represented within the delivery of A.S 2.8, Henry also agreed that having completed some content specific professional development would allow for the underlying principles and fundamental aspects of the model to be taught. Aspects of this professional development may also allow for teachers to better understand the ways in which the content should be delivered and keep them on track with that should and shouldn't be the focus.

Similarly, to both Mike and Henry, Kevin had not participated in any form of training or professional development that related to Hellison's TPSR model or A.S 2.8. Kevin explained that not many of the physical education teachers at his school had gone on subject specific professional development and had only heard the model mentioned at PENZ conferences and other teacher led training sessions.

"At (school) not a lot of the teachers have gone on subject specific PD around P.E, I don't know if that's our fault for not like finding it and saying hey this is what we want to go on because (suppressed name), the deputy principal is quite lenient by saying yep this is our budget, find some PD and go on it. So perhaps it is our fault for not finding PD around it, but yeah other than PENZ, which is like a big national P.E conference, I

haven't really heard of any subject specific PD which is probably where you would find out about specific assessments and things like that.

When asked if he thought some training or professional development would be beneficial in terms of delivering A.S 2.8 with high fidelity to the TPSR, Kevin confirmed that it would help him become more aware of the structure of the model and the ways in which it should be delivered. As a teacher, he expressed that while his interpretation of the model and what needs to be taught is probably effective enough, he would personally like to teach more specifically to the model.

"Yeah, I would like to teach more to the model, I guess. This year being like my third year that I've taught 2.8, I've tried to have those socially responsible behaviours ingrained in the kids a bit more."

It is noteworthy that such a small number of teachers have participated in any professional development of content specific training related to A.S 2.8, let alone Hellison's TPSR model. It raises questions specifically around the ability for teachers to implement A.S 2.8 with high fidelity to the TPSR model when they have not received a substantial amount, if any, assistance or guidance regarding goals, themes and/or structure. Furthermore, while all three teachers who were interviewed have been able to teach A.S 2.8 without any professional development or content specific training, they have also acknowledged that some professional development would not go amiss when it comes to representing the model to the highest fidelity and essentially reaching the standards full potential with the resulting developments in student behaviour.

4.6. A.S 2.8 in practice

What A.S 2.8 looks like "in practice" was also an important aspect of implementation to be addressed. There are a number of different elements that contribute to the implementation of the achievement standard, including the students who are being introduced to the TPSR model, the duration of implementation, and the context in which the standard is applied.

4.6.1. Context

Of the participating teachers, 62.1% confirmed that they only used Hellison's TPSR model within the context of the physical education classroom and A.S 2.8, and did not implement it in other areas of the students learning. The majority of those teachers who did implement TPSR in other contexts alluded to the use of the model with their junior physical education students. One teacher acknowledged that this was as a method of behavioural management, while others were more inclined to introduce it to their junior students as a foundation for the following years in physical education. On a broader scale, 5 of the teachers also outlined that TPSR had become an underlying aspect of their "pastoral curriculum", contributed to their "faculty guiding values" and set expectations for all aspects of physical education and school wide behaviour.

Table 5. Percentage of schools using TPSR in contexts outside of physical education.

Use TPSR in contexts outside of P.E	Number of schools
Yes	25 (37.9%)
No	41 (62.1%)

Table 6. Percentage of schools using TPSR in specific contexts outside of physical education.

Context	Number of schools
Junior school	16 (24.2%)
"School - wide"/ curriculum	5 (7.6%)

Physical Education Context

The teachers were also asked to describe the context or contexts in which they implemented A.S 2.8. Table 5 outlines the different categories of activities, sports or general physical education contexts in which A.S 2.8 was implemented by teachers in 2018. 3Thirty one of the teachers (47%) acknowledged that their students completed A.S 2.8 by participating in various activities throughout the course of the year. This included completing other achievement standards at the same time and essentially makes A.S 2.8 an underling aspect of the physical education curriculum delivery for that year. Eight of the teachers (10.6%), in their description, mentioned volleyball or other team sports specifically, including cricket, tennis, netball and

hockey. Moreover, 12 teachers recognised the implementation of A.S 2.8 within both Outdoor Education and Adventure Based Learning, which take students outside of the classroom and into contexts that challenge their teamwork, leadership and resilience. Furthermore, 6 teachers said that they implemented A.S 2.8 as a means of assisting students in learning and developingleadership and coaching skills.

Table 7. Various contexts in which A.S 2.8 is implemented.

Context	Response value
Wide range of activities, over the course of the year and/or including other achievement standards	31/66 (47%)
Volleyball or other team sports	8/66 (10.6%)
Outdoor Education and/or Adventure Based Learning	12/66 (18.2%)
Assist students in learning leadership and coaching skills	6/66 (9.1%)
Other contexts	9/66 (13.6%)

The context in which A.S 2.8 is delivered and assessed also differs between the three schools where the interviewees taught. However, while the context does differ, the common theme among the schools is the number of different settings or activities in which students are required to display those behaviours.

Mike stated that A.S 2.8 is not specifically based around any particular sports and is rather taught and assessed in a variety of physical activities, depending on what the class focus is and what the activity is in each class.

"No, it's not specifically based around a sport, I mean it's just across the P.E lesson and a variety of sports."

Henry implemented a similar course design by which the students are required to display the personal and social responsibility behaviours in a range of sporting contexts. When asked in what contexts A.S 2.8 is implemented, Henry outlined that the majority are a result of training for other achievement standards, including a Run-Swim-Run event for A.S 2.4. In addition to this, a number of Adventure Based Learning (ABL) activities and trust exercises are used.

"ABL activities so yeah different challenges, we do some trust stuff and blindfold so we do blindfold mazes so just a whole heaps of P.E kit, so like balls and cones and chairs and they have to get up and around it and all those sorts of things blindfolded led by mates, and probably one of the ones which, blindfold soccer, it's carnage but by the end of it there's a whole lot of trust and yeah they're being led around and peoples boots flying and people running people into others or into walls like there are so many good teaching points."

As Henry acknowledges, these activities provide ample opportunity for demonstrating responsible behaviour, not only for the students personally but for the people around them, including their peers, teachers and people outside of the classroom context. Along with this, the students are unsupervised at some stages and need to make the personal decision to demonstrate these behaviours. Students at Henry's school also participate in a 10class programme in which children from a local day-care come into the school.

"We maybe get 10 sessions with them through the year where they have to instruct or run sessions which looks at, so they're out on the courts for like 20 minutes running around kicking balls hitting balls and then into the gym, where they've set up an obstacle course and so in small groups they're looking after these kids so they're showing leadership

they're working together, they're trying to form relationships doing something different."

Similarly, to Mike and Henry, Kevin also initiated A.S 2.8 in a range of sporting/physical activity contexts which comes as a result of maintaining the teaching of the standard while introducing other achievement standards. Kevin explains that by doing this, the students participate in a number of sports, some individual, some team sports and some activities intended to "get people out of their comfort zone". The activities described by Kevin ranged from introductory activities that explained the model, to sports such as ultimate frisbee, turbo touch rugby, water polo, squash and tennis. By putting the students in these diverse settings, they are more likely to "show their true colours" by doing things that are unfamiliar to them and require that extra level of effort.

"You know you might assess someone on 2.8 in touch rugby, and if they're a really good touch player they're going to show leadership and teach people how to do it and have that confidence."

Furthermore, the students are continuously working on other achievement standards, and therefore need to demonstrate these behaviours during those sessions. For example, A.S 2.9 requires students to run their own activity and demonstrate a level of leadership, while A.S 2.4 involves running training for the "Tough guy, Tough girl" event, where students are put through physical challenges and need to show support for others around them.

"Putting them sprinting up hills and stuff you see their true colours a little bit about who's actually going to support their mates or who's going to bring their mates down and stuff like that,"

While the students at all three schools are required to demonstrate these behaviours in a number of different contexts, those students at school two and three are given more time to work on and develop those behaviours into autonomous actions, through a more varied range of activities. The flexibility given to teachers in respect to the context through which they choose to implement A.S 2.8 may be an effective strategy in allowing students to learn through a number of different avenues, however there may be contexts in which the development of personal and social responsibility behaviours may be supported, and others in which it is not.

4.6.2. Time

The teachers were asked in the survey to outline the time frame that A.S 2.8 was implemented in at their school. Table 6 shows the varied responses among the participating teachers. The majority (34.8%) implemented A.S 2.8 over the course of the full academic year, while 18.2% for half a year and 33.3% for a term at a time.

Table 8. Length of time A.S 2.8 implemented by teachers.

Time	Number of teachers
A few individual lessons	1 (1.5%)
Units of up to one month	8 (12.1%)
A term at a time	22 (33.3%)
Half a year	12 (18.2%)
A full year	23 (34.8%)

It is interesting to note that while A.S 2.8 affords a level of flexibility for facilitators, in terms of implementation time, there is a reasonable amount of personal opinion and interpretation required.

The implementation of A.S 2.8 also contrasted between the three teachers, which is again a result of this flexibility. While there are definitive instructions regarding assessment definitions and the general focus of the A.S, facilitators are given room to interpret and decide for themselves the duration and context in which they wish to implement and assess the A.S. 2.8 at Mike's school. A.S 2.8 is introduced at the start of the year, where the model is explained, and the behaviours required from the students are outlined.

"So, I it at the start of the year to sort of set the standard for how I want them to behave for the year."

Following the introduction of the standard, it is run over the ten weeks that make up the first term of the academic year. This results in ten weeks of teaching and assessing A.S 2.8 and facilitating opportunities for the students to display the expected and required social and personal responsibility behaviours. However, in the opinion of the teacher, ten weeks is a "brief timeframe", and A.S 2.8 may be facilitated more effectively over a longer implementation period. This outlook comes as a result of the element of continuity associated with the development of autonomous personal and social responsibility behaviours.

"Yeah I think that (implementing A.S 2.8 over the academic year) would be more ideal because it's more of an ongoing thing than just doing it for a term...they can just forget about it and not show that behaviour again."

Conversely, Henry implemented A.S 2.8 for the majority of the academic year. The standard is introduced at the start of the year towards the beginning of the first term, and is then run through terms one, two and three. Additionally, the A.S is assessed at the same time as other achievement standards included in the course curriculum.

"Yep, so 2.8 is introduced right at the start of the year, because as I said it's some of our less academic students but they love practical so there is a heavy practical component and it runs through the course of the year, terms 1, 2, 3 sorry."

Term four at Aotearoa NZ secondary schools is associated more with external examinations, which limits teaching time and is the practical reason A.S 2.8 is completed before the end of the third term. Twenty classes throughout the year are focused on teaching and assessing the associated personal and social responsibility behaviours, and as Henry acknowledges, this results in the participating students getting "plenty of opportunities" to display the required developments in the behaviours associated with achieving higher grades.

Similarly, Kevin also runs A.S 2.8 over the full academic year. The A.S is therefore introduced in term one and is carried on until the end of term three/beginning of term four. As Kevin outlines, the flexibility given by NCEA in the standard outline means that requirements for implementation, or better methods for implementation are unclear. However, it was decided by school three to use A.S 2.8 as an underlying driving force for the teaching of the course material and is therefore assessed at the same time as other achievement standards.

"... I run 2.8 like throughout the year. I don't know if that's how it's supposed to be run but as like a, reflect on different units at different times it's sort of like an um, you don't

complete it as a unit over 4/6/8 weeks but you do it for one lesson here and then a couple of weeks later you pick it back up again...so trying to just hope that those attitudes for the kids will come out throughout the year."

As is done at school two, school three also assesses the development of these behaviours during a number of classes and, through providing a number of opportunities to display these behaviours, it is possible to holistically assess behaviour over the course of the year.

While the flexibility given to teachers, as allowed by the NCEA achievement standard outlines, may make the implementation of A.S 2.8 easier for teachers, it raises the issues of commitment, and whether the programme is able to produce the same or any results within the various time frames.

4.6.3. Class format

One section of the survey was focused on the five aspects that are outlined within the TPSR model in terms of classroomprogrammeformat. The results demonstrate that while the responses varied, a large percentage (between 40 and 65%) of the teachers included all five aspects in most of their classes. Gordon (2012) acknowledged that three of these aspects – awareness talks, group meetings and reflection time - require a "structural commitment" and may therefore be utilised less. However, the results from this survey show a consistent commitmentacross all five.

Table 9. Percentage of teachers who implemented the various aspects of the daily teaching format.

Question	Never	Occasionally	Usually	Most Classes	Every Class
I consciously ensure that I have individual conversations with students during lessons to help establish personal relationships.	0%	12.10%	15.20%	40.90%	31.80%
The class has an "awareness talk" or an equivalent process to focus students on the goals of the TPSR model at the beginning of the lesson.	1.50%	21.20%	25.80%	45.50%	6.10%
The physical activity component of the lesson is taught in a way that helps meet the outcomes of the TPSR model.	1.50%	3%	16.70%	62.10%	16.70%
A group meeting is held towards the end of the lesson to discuss events related to what has happened during the lesson.	4.50%	15.20%	21.20%	50%	9.10%
The class has reflection time set aside at the end of the lesson for students to reflect on their behaviour during that session.	4.50%	12.10%	18.20%	47%	18.20%

While a number of teachers consistently include these aspects of the daily format, between 12 and 22% of the teachers only occasionally implemented any or all of these aspects. It is important to note that this may generate issues regarding implementation fidelity, especially when A.S 2.8 has been designed based on Hellison's TPSR model and is intended to produce results in regard to aspects of this model.

4.6.4. Themes

Along with the daily format aspects associated with the TPSR model, the teachers were also asked to reflect on the impact that the underlying themes of the TPSR model had on their teaching of A.S 2.8. The results, as shown in Table 8, demonstrate that for most classes or all classes, the majority of the teachers (50% - 90%) acknowledged the influence of the underling

themes of TPSR within their implementation of A.S 2.8. A very small percentage of teachers maintained these themes never impacted on their teaching (< 3%), as well as only 10-25% claiming their influence only occasionally.

Table 10. Percentage of teachers who acknowledged the impact of TPSR themes on their teaching.

Question	Never	Occasionally	Usually	Most Classes	Every Class
Incorporating the TPSR model has had an impact on how the physical education subject matter has been taught.	1.50%	21.20%	22.70%	48.50%	6.10%
Decisions on how the physical education subject matter will be taught have been directly influenced by the need to shift control and power from the teachers to the student.	3%	15.20%	21.20%	43.90%	16.70%
Students are specifically taught in class that learning about personal and social responsibility can be applied to contexts outside of physical education.	1.50%	13.60%	19.70%	47%	18.20%
The relationships I have with students in classes taught using the TPSR model are positive and respectful.	0%	0%	9.10%	51.50%	39.40%
I consciously ensure that I model behaviours that are aligned with the philosophy of the TPSR model.	0%	0%	6.10%	47%	47%

These results indicate that the delivery of A.S 2.8 by teacher's is influenced by the way in which they implement the physical education curriculum. Indeed, it could be that teachers integrate the PE curriculum constructed upon the fundamental aspects and outcomes stipulated by Hellison's TPSR model.

4.6.5. Students

In terms of the students who are being introduced to the model, the survey participants were not asked to describe the course they taught or the academic level of their students. However, the number of students that completed A.S 2.8 and their gender were revealed. The results, as

shown in Table 9, demonstrate that 15.9% of the schools taught A.S 2.8 to females only, 18.3% to males only and 65.8% to mixed gender classes. In addition to this, a range of student numbers were also reported. As is shown in Table 10, over half of the schools were teaching A.S 2.8 to between 0 and 40 students (71.7%), while the remaining schools were teaching it to 41 students or more.

Table 11. Gender of students participating in A.S 2.8.

Gender	Number of schools
Female	13 (15.9)
Male	15 (18.3%)
Mixed	53 (64.6%)
Other	1 (1.2%)

Table 12. Number of students participating in A.S 2.8.

Number of students	Number of schools
0-20	23 (34.8%)
21-40	20 (30.3%)
41-60	16 (24.4%)
60 >	7 (10.6%)

In respect to those schools in which the interviewees worked, the students and classes were described in depth by all three teachers. Mike uses A.S. 2.8 in a Level 2 alternative and non – mainstream course, Physical Education Studies, designed for those students who "prefer the practical side of P.E." and contains three practical sessions, and one theory session. In addition to this, another Level 2 Sports Leadership course also implements A.S 2.8, but is taught by another teacher and therefore was not described in detail during the interview.

"We've got a class called 12 PES which is an alternative, not mainstream class for students that prefer the practical side of P.E so they get 3 practical's a week and one theory...We do have sport's leadership course at our school where the students go to primary schools and sort of teach basic primary school games and those guys are using the 2.8 as well. I suppose they're the 2 main courses where we're using it."

Similarly, it was revealed that Henry's students completing A.S 2.8 are those who do not pass Year 11 (Level 1) Physical Education studies, or are new to the subject, and are placed in a course that has been specifically designed to incorporate both Level 1 and Level 2 NCEA standards. Comparable to the course implemented by Mike, this course also utilises a heavy practical component, favouring participation in physical activities rather than time in the classroom completing theory work. As Henry acknowledges, the students in this course are not as academically inclined, and therefore A.S. 2.8 is a unit that fits.

Finally, Kevin implements A.S 2.8 with a more academically focused group of students in a Level 2 Physical Education class. While A.S 2.8 is implemented with this class, Kevin acknowledged that there is a less academically, more practical focused course, Sports and Leisure studies, which he believes should also be including A.S 2.8 in the course curriculum, as it would be an effective behaviour management tool.

"I don't actually know why we don't do 2.8 with that class as well, because that perhaps could be a more effective class to do it with and seeing a change from poor behaviour or the low academic kids, just trying to improve their behaviour or enhance their behaviour."

It is important to consider that the students who are completing A.S 2.8 have learning and behavioural development as specific foci. Certainly, the specific needs of the student cohort has a significant impact on the delivery and effective execution of A.S 2.8.

4.7. Effectiveness of A.S 2.8 in developing personal and social responsibility behaviours

A.S 2.8 had been designed on the basis that it will teach and develop students personal and social responsibility behaviours. Therefore, part of the survey asked the participating teachers to reflect on their opinions in respect to the effectiveness of A.S 2.8 in achieving this goal. Approximately 70% of the teachers agreed that A.S 2.8 in its design validated the essence of Hellison's TPSR model and represented the underlying principles of Hellison's TPSR model (Table 11). However, approximately 25% of the teachers were neutral, and between 4 - 6% of the teachers did not agree. Due to this fact, the findings raise the question of whether or not the actual implementation of A.S 2.8 accurately reflects these aspects of the model, especially when the facilitators do not necessarily believe that the assessment itself does.

Two further questions asked the teachers if they saw A.S 2.8 as an effective system through which students' behaviours related to both personal responsibility and social responsibility can be developed. The majority of the participants (75-80%) agreed with these statements, confirming their confidence in A.S 2.8 and the results its implementation set out to produce. While this is true, there were also teachers that again, did not agree or were neutral.

Table 13. Percentage of teachers' opinions regarding aspects of A.S 2.8 effectiveness.

Question	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
I believe that A.S 2.8 validates the essence of the TPSR model.	0%	6.10%	24.20%	59.10%	10.60%
A.S 2.8 accurately represents the underlying principles of the TPSR model.	0%	4.50%	27.30%	59.10%	9.10%
I believe that A.S 2.8 is effective in improving students' behaviours relating to social responsibility.	0%	1.50%	24.20%	56.10%	18.20%
I believe that A.S 2.8 is effective in improving students' behaviours relating to personal responsibility.	0%	1.50%	19.70%	62.10%	16.70%
I believe that A.S 2.8 can effectively assess improvements in students' personal and social responsibility.	0%	6.10%	36.40%	53.00%	4.50%

The final question in this section of the survey asked teachers if they thought A.S 2.8 could effectively assess improvements in student's responsibility behaviours. The majority (57.5%) of the teachers agreed, while the remaining participants either sat neutrally or disagreed. Ultimately, A.S 2.8 is an "assessment", and therefore needs to be able to assess an increase or decrease in student development that relates to the purpose of the content being taught.

This survey data is reinforced by the responses of the three interviewed teachers, who identified that the 2.8 achievement standard is the most significant application of Hellison's TPSR model to their secondary school curriculum. However, the findings from the interview data collection suggest that the three participating teachers have differing opinions about how effective A.S 2.8 is.

When asked whether or not he agreed that A.S 2.8 was an effective method of teaching those responsibility behaviours, Mike explained that he was in two – minds about it and gave reasons for this opinion. Firstly, it was acknowledged that if you want students to display particular behaviours, you have to explain those behaviours to them and be suggestive about what needs to be done in order to achieve the desired grade. This then raises the question of whether or not

the students are actually learning to autonomously demonstrate the behaviours or showing it when they think they need to for the final grade.

"You can sort of guide them towards it so whether it's actually them learning to show that behaviour as opposed to just showing it when they think they need to, so probably 50/50 on how effective it is at times."

Secondly, it was expressed that while the A.S calls for the "consistent" demonstration of these behaviours, it always comes down to what the teacher believes to be the definition of "consistent". With the flexibility given by NCEA, in terms of implementation periods and contexts, there are many ways to interpret the concept of consistency, which impacts on the short- and long-term effectiveness of the work.

"If it was ongoing over the whole year, as opposed to just in one term, I think it would probably be more beneficial... Yeah it comes down to what your definition of consistent is, I suppose. Across how many hours or weeks."

Henry was also unsure of the effectiveness of A.S 2.8 in teaching responsibility behaviours. Initially, he acknowledged that the students at his school are very "credit-focused", meaning there is a strong overall focus on earning NCEA credits rather than the content being delivered. Along with this, he also believes that the structure of A.S 2.8 rewards well behaved students for the type of people they are, while the less well-behaved students have to put in the effort just to meet the minimum criteria:

"You have some, good kids are always going to be good kids, and say this is a standard that they can just, like they are socially responsible, and they are rewarded for that. Others have to try while they're in class, so in regards to do they learn or are they learning to play the game, but I think that is a learning in itself, like because there are lots of things you have to learn and ways to act and be."

Henry recognises that in a student's day to day life outside the physical education classroom, there are a lot of obstacles and hindrances that may impact on their ability to participate to their fullest extent in the classroom.

"Yeah, and you know also in a young person's life there are lots of ups and downs and changes and like you actually see that looking at it, and as a side like the partial side of things. You say, you know, you find out why things are changing, what's happened and if there's anything to do about it."

Therefore, while there may be some learning in teaching the A.S 2.8 content, the fact these students have external influences on their lives and behaviours is likely to have an impact on the observable outcomes or changes that result from these teachings.

Kevin explained that his view on the effectiveness of A.S 2.8 in teaching responsibility behaviours is focused on the concept of honesty. While the content within the 2.8 standard is concentrated on Hellison's model and developing those personal and social responsibility behaviours, there is always an element of honesty that is required when it comes to participating in and leading self – driven tasks or games. Therefore, Kevin tends to focus on reiterating the importance of honesty with his students rather than re-teaching the required behaviours.

"Throughout my teaching I do try and not really teach the behaviours but probably acknowledge some of the behaviours that are more prevalent in particular activities. You know like a self-driven task, there's going to be a lot of honesty involved in it, or a game that doesn't have a referee involved there's going to be a lot of honesty in it."

To the same point, Kevin also acknowledges that A.S 2.8 does not necessarily teach students the concept of honesty within this context, which brings into question the effectiveness of actually teaching responsibility to the students.

"But it's still not teaching them honesty, you know it's not saying what are the consequences if you don't be honest, or what are the consequences if you are honest, and what does it feel like to be honest, and what are your friends or your peers going to be like if you're honest."

Kevin also acknowledges the concept of intrinsic motivation, and suggests that while A.S 2.8 may be focused on developing responsibility behaviours, there is little to be taught if students are already driven and have the opportunity to learn those behaviours in a context outside of the physical education classroom. These students are in line to become a part of the executive team, and it brings into question how much of their ability to demonstrate leadership and responsibility skills is a result of A.S 2.8 teachings or just an autonomous behaviour resulting from their own personal development.

"I think those people were, I guess, always destined, you know they've got that intrinsic motivation and they're always going to do well and look to move forward and take up

various opportunities... they're becoming our leaders of next year and I don't know how much of that was sort of my doing or 2.8's doing."

The effectiveness of A.S 2.8 in teaching and developing student behaviours is an important issue to address, as it then brings into question the fidelity to Hellison's TPSR model itself and whether or not the model is fitting for the purpose of A.S 2.8.

4.8. Assessment strategies and fidelity to the model.

The participating teachers were also asked their opinion on the effectiveness of the specific A.S 2.8 assessment strategies, as the assessment may have an impact on the ability to produce and measure results in terms of student development in responsibility behaviours. Two questions invited teachers to reflect on these assessment strategies, the first focused on the general effectiveness of the assessment schedule and the second on whether or not the assessment provides enough information for the assessment. Approximately 70% percent of the teachers agreed or strongly agreed that A.S 2.8 assessment is able to be an effective method of evaluating developing personal and social responsibility behaviours. A large percentage of the teachers (63.60%) also agreed or strongly agreed that the assessment strategies provided enough information in order to effectively assess improvements in student behaviour as a result of A.S 2.8 (Table 14).

Table 14. Percentage of teacher responses regarding effectiveness of assessment strategies.

Question	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
I believe that the assessment strategies for A.S 2.8, including student, peer and teacher evaluations, can provide enough information to effectively assess improvements in students' personal and social responsibility.	0%	16.70%	19.70%	53%	10.60%
I believe that the assessment schedule for A.S 2.8 can be an effective evaluation of personal and social responsibility learning.	0%	10.60%	22.70%	59.10%	7.60%

While a large portion of the teachers seemed supportive of the current assessment strategies, for both questions 19-25% of the teachers sat neutrally on the issue and 10-17% disagreed. This suggests that a number of teachers implementing A.S 2.8 do not see the assessment as effective and question the realistic capacity of these strategies to reflect any developments in student responsibility behaviours.

The teachers who were interviewed were also asked to consider their opinions regarding the effectiveness of these strategies and the ability for them to examine responsibility behaviours with the highest fidelity to the model.

When asked about his opinions regarding the effectiveness of A.S 2.8 assessment strategies, Mike outlined that while his students were not very academically inclined, a more effective assessment may be for them to complete a more comprehensive written reflection.

"...maybe more of a written reflection in their own time as opposed to at school so they can try and bring in other aspects that they've actually shown as well. And like transfer."

The overall view by Mike was that the assessment structure for A.S 2.8, as it is, is sufficient but could be made more effective, particularly with the application of significantly more evidence of the student's behaviour throughout the implementation of A.S 2.8. This evidence may be collected from external individuals who are able to see the student behaving in contexts outside of the physical education classroom.

"Yeah, just more of a reflection in their own time, and maybe evidence, more evidence would probably help as opposed to them just saying I think I was this today, I guess a teacher could have more input into it maybe and maybe parents at home could say that they've seen it at home as well."

The opinion of Henry, in regard to the effectiveness of the assessment strategies carried out for A.S 2.8, was similar to that of Mike. The driving force for this attitude was the idea of honesty, and how much student and teacher honesty contributes to the assessment of student's behaviours over the course of implementation. While the teacher observes the class and the students individually, particular behaviours and/or actions may be missed, which leaves it up to the students and their peers to be truthful in their personal reflection.

"like the peers are pretty honest and sometimes, like you don't see everything but you disagree anyhow, and say oh you've actually scored him fairly low when he has done these things as well, so and the boy says in his personal reflection oh well I disagree because I did this and this, and then you can say well I agree with what you've written there because I saw you do that as well. And so, there is three sets of eyes so yeah their peers and themselves, and yeah they're pretty honest... I think you do get a pretty good gauge and it's a good way to assess it."

Henry ultimately sees the assessment strategies as a sufficient method of assessing responsibility behaviours, but is dependent on honesty from the students, their peers and the teacher. When asked if there was any other way that he saw the assessment being more effective, he concluded that he was not aware of a more applicable strategy, but that there are definitely aspects of student development that go unnoticed.

"Yeah, this is a bit of a tricky one. I would struggle to see another way of assessing it effectively, like as I said there are already three sets of eyes for the grade. Some of it is, goes unnoticed but yeah I think it's pretty good."

Similarly, to Henry, Kevin had strong opinions regarding the place of honesty when it comes to representing the true development in student responsibility behaviours. Kevin explained that if the students are accurate and truthful with their self and peer assessments, the application of the current assessment strategies can be effective.

"Like if the kids were true with their reflection and if their peers were true with their opinions and stuff as well then, I think it is effective."

While students need to be honest, it is also important for teachers to be honest and to make a fair judgement of the student's improvements throughout the implementation of A.S 2.8. There is external pressure for teachers to produce results and the strategies in place for assessment give flexibility to teachers to stray from accurate observations in order to do this.

"I think the way the assessment is laid out, so long as a teacher is honest I guess, like there is a lot of honesty required in it you know if you sit back and say like look, I've got all this evidence that I've compiled, a lot of it has been done by me you know without necessarily video evidence, it's more just what you've seen. And then at the end of the year you sort of say well my kids are, you know there's pressure on me to get merits or excellences, I feel teachers could rig it if they aren't going to be honest."

He also believes that NCEA is based on the concept of extrinsic reward, which results in behaviours that are driven by students wanting to complete standards and receive a grade that is a good reflection of their abilities. It is difficult to extract genuine developments from behaviours demonstrated in order to gain a better grade.

"It comes down to honesty though. Because NCEA is based on this idea of extrinsic reward, they just do what they have to, they might not necessarily have the skills but they know how to manipulate it to make it seem like they do."

While there are aspects of A.S 2.8 that promote the development of responsibility behaviours, Kevin also questions whether or not A.S 2.8 actually teaches them to be better people and how this can be accurately assessed when it is such a personal development.

"But then, on the flip side of that I don't know if the 2.8 unit necessarily teaches them how to be better people. You know how do you move from a level 3 to a level 4, how do you gain confidence enough to tell someone how to do something, or to give someone else encouragement when you're not confident enough in yourself or encouraging yourself."

The varied responses to the assessment issue raise questions in terms of how those who implement the A.S can observe and consequently assign a letter grade to any personal development's students may have made during their participation in the A.S.

4.8.1. Assessment strategies

Another aspect of the delivery and implementation of A.S 2.8 is the assessment strategies that are utilised as a measure of improvement in personal and social responsibility behaviours. While the survey did not require teachers to specify their assessment strategies, it was able to be discussed more comprehensibly through the interviews.

At Mike's school, the assessment strategies for A.S 2.8 follow a structure of self, peer and teacher assessments. Self and peer assessments are completed at the conclusion of the content specific classwork and reflect how consistently the students have demonstrated the required responsibility behaviours. The class that the participating teacher works with is at a lower academic level and therefore these reflections are reasonably well-structured and do not require a lot of writing.

"...the class I teach is very scaffolded they just have to choose words and fill in the gaps so it's quite structured for them and easy."

He continues to explain that because of the academic level of his class, some students are assessed verbally and are given the opportunity to speak about their behaviours and provide their reflection that way.

"...we do verbal assessments sometimes in P.E for students that aren't very good at writing, so we just get them to speak about it...we've found that verbal assessments have been effective for the lower end kids quite a lot. Like if you stop them in the middle of a lesson and get them to record themselves on an iPad straight away there when you see something you can just talk about it."

Mike further acknowledges that, while the students do complete their self-assessments and peer assessment, the final grades that students receive after completing the standard are decided by the teachers. This comes as a result of different perspectives shared by students and teachers and the fact that NCEA has specific demands for what students need to do in order to attain grades.

"Obviously at the end of the day what they write, their perception of what their behaviour has been like in a lesson might be quite different to mine so, at the end of the day it's the teachers' overall decision but we still want them to have input into it and what their peers think as well."

Henry also follows a three-level assessment structure, with self and peer assessments coming from the students, and teacher assessment from the observing facilitator of A.S 2.8. Over the course of the year, the students keep a total of 20 logs, which are made up of both the self and peer assessments that follow the completion of classwork (focused on A.S 2.8 content). Each individual assessment requires the students to review their own responsibility behaviours during class time, which is then combined with a peer review of their responsibility behaviours during class time. The teacher then evaluates the two initial assessments, and decides whether

or not they agree with it, and includes any extra observations that they made. These behaviours are assessed based on the Hellison's TPSR model levels.

"Yeah so each lesson well they have to keep 20 logs throughout the year, and that's peer assessed so a peer will say look this is what I think the grade is and then they do a self-reflection and say I agree or I disagree and then the teacher will sign that off, or so I will sign that off to say this is, yep well done and then that is a tracking thing for myself where I can say any extra observations."

Unlike school one, school two assesses for the transfer of TPSR learning outside of the physical education classroom context. In order to do this, the teacher takes into consideration the student's behaviour in other school classes, which is assessed based on their school reports. Furthermore, those students who are involved in coaching sports teams or have taken on leadership roles with the junior students are able to use this as a way of demonstrating transfer. A letter is sent home to coaches and managers to assess and sign off the student's responsibility behaviours during their extracurricular activities.

"...to get excellence it's, it has to go beyond the classroom so we take into consideration their reports, what they're doing in other classes so if they have a B attitude or better, um average, then that's, I'd say they're being socially responsible elsewhere. We, some of them are involved coaching other sports teams or some leadership roles with juniors so there's a letter that I give to them to give to their coach to say yep, this person is doing these things."

The combination of the four assessments allows the teacher to receive as much information as possible regarding the constituent demonstration of responsible behaviour by the participating students.

Kevin employed assessment strategies that are similar to those at school one and two. While the final grade decision is ultimately up to the teacher, self and peer assessments are used in an attempt to provide more information about the consistency of these behaviours. However, school three amended their self and peer assessment strategies to give the students more time in the classroom. Instead of including a comprehensive reflection after every lesson, the assessment was truncated into a small, one-line statement filled out at the beginning of the lesson, which outlined the activity and what area it was that they were going to focus on. At the conclusion of the lesson, the students then reflected on whether or not they followed through, provided an example and then got it signed off by a peer.

"...it kind of changed part way through the year to be fair. So, I did one quite comprehensive self-assessment and peer assessment early on in the year, and then later on down the track I thought well actually this is a little bit pointless...so partway through the year I changed it then just tried to get them, because I thought it was effective to get half a dozen, name, something to work on, did you achieve it and get it signed off by your peer. So that kind of came through thick and fast at the end, but as I said I think it was a better reflection for them and better evidence for me to justify my results."

This came as a result of Kevin finding he was given a better reflection of where students were sitting in respect to their grade. These assessments were also followed up by a small number of more comprehensive assessments throughout the year, as well as letters sent home to

coaches, managers or adult assessors in an attempt to assess for transfer of learning outside the physical education classroom. Similarly, to school two, the combination of all four assessments allows the teachers to make a final judgement call regarding how students have improved and what grade they receive after completing the standard.

4.9. Chapter summary

The aim of this chapter was to present and describe the findings from the present study. Discussed first were the findings and respective evidence resulting from the collection of quantitative data, through the application of a short, online survey. Secondly, the findings from the qualitative data were presented, with evidence from the short, semi-structured interviews carried out with the three participating teachers. The aim for Chapter 6 is to discuss these findings and their significance in respect to what is already known about the research question. Furthermore, any new understandings or knowledge presenting from the current study's findings will be explained.

CHAPTER FIVE

DISCUSSION

5.1. Chapter Introduction

The application of the TPSR-based achievement standard is a significant feature of the physical education curriculum being offered in Aotearoa NZ secondary school education. However, the framework provided by NCEA provides only a brief description of the assessment and what it demands of its facilitators and students, leaving many aspects of the implementation in question. As outlined by the current literature, there is little known about the application of A.S 2.8 in practice, but there are aspects of the implementation of a TPSR-based model that need to be considered in order to make this effective. The research findings from the current study summarised the current application of A.S 2.8 within Aotearoa NZ physical education classrooms and confirmed that there are particular aspects of this A.S that need to be reflected upon for the improvement of producing results.

This chapter presents a critical discussion of the findings outlined in Chapter 4. This discussion focuses on the emerging themes that followed the analysis of both the quantitative and qualitative data, as well as linking the findings to the existing literature. Parallels between the presented findings and the existing literature are drawn and discussed at length in an attempt to demonstrate the relevance of the current study in the specific field.

5.2. Discussion

5.2.1. Knowledge

The findings from both the qualitative and quantitative data collection processes emphasised the fact that most facilitators of A.S 2.8 had a reasonable level of knowledge regarding Hellison's TPSR model. The responses to the quantitative survey confirmed that, of the participating teachers, a strong 78.7% and 68% had an above average knowledge and confidence of and in teaching Hellison's TPSR model, respectively. The three teacher interviewees also outlined that their knowledge of Hellison's TPSR model was basic yet at a reasonable level. These findings are also consistent with those presented by Gordon et al., (2011), following their 2011 national survey. In 2012, the majority of the participating teachers acknowledged that they also had a strong level of knowledge and confidence when it came to Hellison's TPSR model (Gordon et al., 2012). These outcomes are encouraging, as they suggest that the implementation of A.S 2.8 could be done with a high level of fidelity to the model considering a reliable level of knowledge. A consistent level of knowledge is important, as supported by Romar et al., (2015) who found in their 2015 study that the successful implementation of TPSR model-based curricula is more often than not the result of both prior knowledge of the model, and the consistent and on-going development of knowledge.

While the three teachers who interviewed with the researcher confirmed their knowledge of Hellison's TPSR, their narratives indicated that it was at a basic and very generalised level, in terms of the philosophical underpinnings including the core values and principles that the model contains. In their interview responses, all three of the teachers described the structure of the model itself but did not allude to the fact that the TPSR model is more than just a scaffold.

In the quantitative survey it was also revealed that of the participants, 6% believed that they did not have a suitable knowledge of TPSR, and 9% that their confidence in teaching Hellison's TPSR model was not strong. This raises questions about how effective A.S 2.8, a TPSR-based achievement standard can be in terms of teaching with high fidelity to the model. As supported by Pascual et al., (2011), the differences in TPSR programme implementation success come as a result of the contrasting knowledge and levels of understanding among facilitating teachers. Those teachers with greater pedagogical knowledge, the ability to apply specific TPSR strategies to their teaching and understand the philosophy behind them are more likely to be effective in their delivery of TPSR content. Furthermore, Romar et al., (2015) acknowledge that with this knowledge teachers can become more reflective practitioners, and rather than focusing on their delivery they have more time to put the students first, which is consistent with the underpinning philosophy of the TPSR model itself (Hellison, 2011).

In regard to the theme of knowledge, the interviewees also shared the belief that the majority of their knowledge of the TPSR model had actually come as a result of teaching A.S 2.8, rather than as a pre-requisite. This common opinion among the three teachers raises questions about the importance of truly understanding the TPSR model before attempting to implement it in any education context, for the purpose of developing student responsibility behaviours. As Hellison (2011) describes, the premise of teaching TPSR to students is having the model become a "way of being" rather than a way of teaching, and it is unlikely that without prior knowledge of the model before teaching A.S 2.8, teachers could aim to tackle all of the core values and underpinnings philosophies the model encompasses. Romar et al., (2015) acknowledges that while the former is true, some teachers learn more as they work with the model, and this has an impact on their overall pedagogical knowledge. However, prior knowledge of the model and experience in the model is favoured. In regard to the findings from

this study, it is important to acknowledge that this focus on knowledge may lend itself to further discussion considering the place for pre-service teaching and knowledge building in respect to Hellison's TPSR model.

5.2.2. Challenges and Enablers

Within the scope of both the quantitative and qualitative data, it was revealed that for the majority of the participating teachers, professional development specifically related to the teaching of Hellison's TPSR model was not mandatory and therefore had not been undertaken. Only 25.8% of the survey respondents had participated in TPSR content specific professional development. The results from the quantitative survey also demonstrate that any professional development that had been completed by this small percentage of those teachers implementing A.S 2.8 was voluntary in nature. Almost all (95.5%) of the participants confirmed that there was no requirement for them to participate in professional development related to TPSR in order to teach A.S 2.8. The teachers who were interviewed also outlined that they did not have to participate in any professional development related specifically to TPSR or teaching A.S 2.8, and that any professional development that had been participated in was s physical education subject based.

It is interesting to note that while A.S 2.8 is an NCEA standard, and therefore secondary level teachers are skilled in their pre-service training to be able to offer any achievement standard to their students, there is no compulsory preparation needed to be able to teach TPSR-based content. While those participants who were interviewed acknowledged that they had not participated in TPSR specific professional development, it was suggested by all three teachers, as facilitators of A.S 2.8, that it may have been valuable. The teachers acknowledged that they

may benefit from participating in TPSR content specific professional development, which is supported by Lee and Choi (2015), who outline that the successful implementation of a model-based programme is upheld by those teachers who undertake professional development and acquire specific pedagogical knowledge "necessary to plan, organise and assess TPSR implementation" (Lee and Choi, p. 620).

Escartí et al., (2012) support that a high percentage of those teachers facilitating TPSR model-based programmes do not have the sufficient training that would allow them to implement with a high level of fidelity to the model. By participating in professional development that focuses on the implementation of TPSR content, teachers are able to achieve not only a strong level of commitment to the model and facilitating it with a high level of fidelity, but also the confidence to deliver a TPSR-basedprogrammeand foster the positive development of the students involved (Lee and Choi, 2015). Beaudoin (2012), also supports the necessary nature of professional development, as it takes teachers to be fully convinced of the importance of the goals and aims of the TPSR model in order to successfully teach and nurture those behaviours of personal and social responsibility with students. Professional development especially holds value with practitioners who never had direct contact with Don Hellison or the original model, as it is the most effective method of distributing knowledge and support for the implementation of TPSR(Dunn & Doolittle, 2020).

It is also interesting to note that while Hellison's TPSR model has a number of underlying values and principles that drive its implementation, there is also room for interpretation and adjustment in order to meet the specific needs of the students or match the cultural expectation of the context. However, without the guidance that professional development provides in regard to adaptations and opportunities to share, learn and apply different methods in practice,

questions are raised about fidelity to the model (Lee and Choi, 2015). As the interviewees acknowledged, there may be a place for introducing mandatory professional development to those teachers offering A.S 2.8 in an attempt to bring consistent interpretations of the TPSR model and the opportunity to develop knowledge and teaching methods for high fidelity implementation.

5.2.3. A.S 2.8 in practice

Daily format

Another of the themes that emerged from this study was that of what A.S 2.8 looks like in practice, particularly the educational context, the structure of the programme and the duration of implementation. Hellison (2011), proposes a daily format through which TPSR content can be most effectively delivered, and the current findings would suggest that those teachers who offer A.S 2.8 are more often than not following the proposed structure and applying all five of the included elements. Between 40% and 60% confirmed that they implemented the various aspects of the daily teaching format, including individual conversations with students, awareness talks, physical activity plan, group meetings and reflection time. As is acknowledged by Hellison (2011), the daily format is an important factor in implementing TPSR programmes with a high level of fidelity to the model, as each stage address's particular aspects of the model that need to be included in order to see the envisioned developments in responsibility behaviours with students. Several previous studies have included the specified daily format in their pre-service educating of the TPSR model with the teachers who were to go on and implement the TPSR programmes, focusing on the importance of this structure when it comes to meeting the goals of the TPSR model.

In the 2011 survey, Gordon et al., (2012) found that the majority of those teachers offering TPSR programmes were following the daily format, but that in the same instance some of these teachers were not implementing all five of the elements. The three elements of this daily format that required a "structural commitment" were followed less frequently than the other two. However, in the current study, those teachers who claimed to follow the daily format were consistent across all five, and those who did not were also consistent with not following any of the proposed stages. While the results of this study suggest that there is a more consistent application of the daily format elements, questions are still raised about commitment to the delivery of a TPSR-based programme, and about whether or not the level of knowledge the facilitating teachers have about the TPSR model and all it encompasses.

Context

The context in which A.S 2.8 was implemented by the participating teachers varied and spanned across several contrasting educational environments.

The first question that was asked of the participating teachers related to their application of A.S 2.8 and therefore the TPSR model within the physical education classroom. While the responses varied, there were similarities among them, and it was evident that with the majority of the teachers the application of A.S 2.8 in particular contexts was purposeful. The majority of the participants acknowledged that their implementation of A.S 2.8 was not restricted to one sport or physical activity, and rather gave flexibility to decide where and when to apply and assess the standard. 47% of these teachers implemented A.S 2.8 in a "wide range of activities", over the course of the year which therefore also included other achievement standards.

In addition to this, a number of teachers acknowledged their application of A.S 2.8 to specific sports including volleyball and other team sports, and in other specific areas of physical education, namely outdoor education and/or adventure-based learning. One of the interviewees outlined a number of activities through which he implements A.S 2.8, including ultimate frisbee, turbo touch, water-polo, squash, tennis and a tough guy – tough girl challenge that includes a number of outdoor activities. The premise for his deciding to implement A.S 2.8 within various activities means students participate in "things that get people out of their comfort zones" and teaches aspects of responsibility including leadership, team-work and self-management.

This implementation within physical education contexts is supported by the outline of the TPSR model itself. As Hellison outlined, the ultimate goal of the TPSR model is to teach the students and promote their development in responsibility behaviours, and physical education is the medium best used to do that (Van Der Mars, 2020). The premise is to teach the responsibility behaviours through physical activity and sport, and the model, applied in physical activity contexts, enables a "vehicle to teach life skills and promote responsible behaviours" (Hellison, 2011; Wright and Burton, 2008, p. 139). The implementation of the model within the physical education context has been extensively investigated and supported, as the curriculum lends itself to working through physical activities and sports while also supporting the development of responsibility behaviours in students through careful planning (Gordon, 2010; Romar et al., 2015). Supported further by the definition of the TPSR model itself is the application of the TPSR-based achievement standard within a number of different physical activities. Hellison acknowledges that the teaching of responsibility behaviours can be done in essentially any physical activity context, contingent on the idea that it fosters the development of youth or students (Hellison, 2011). The existing literature, in respect to the

implementation of TPSR in different contexts, also outlines that a number of different activities (within the physical education context) can support the goals of the TPSR model (Escartí et al., 2012; Filiz, 2018; Gordon, 2010; Wright and Burton, 2008).

The second question, regarding context, addressed the implementation of the TPSR model itself outside of the physical education classroom and in contexts in other areas of the students' education or outside of school entirely. The TPSR model itself calls for the transfer of responsibility learning outside of the classroom at level 5, which in turn means that A.S 2.8 requires this transfer in order for students to achieve the highest grade. Therefore, the most significant instance in which the participating teachers implemented the TPSR model outside of the physical education classroom was requiring their students to demonstrate a level of this transfer and be assessed on it. As Gordon (2010) acknowledges, it is important that facilitators of TPSR model-based programmes provide opportunity for students to transfer their learnt responsibility behaviours. Furthermore, Beaudoin (2012) supports the place for teachers to encourage the implementation of TPSR outside of the classroom, as it promotes students to be more responsible in their behaviour and attitudes in other aspects of their lives.

In addition to this concept of transfer, 37.9% of the participants also acknowledged that the TPSR model may also be an aspect of other school classes or curriculum activities and have an influence on the students' responsibility learning. Within the scope of the current study, it is supported by previous studies that the use of the TPSR model in other areas of education besides the physical education classroom can be effective and is something that should be considered upon further learning in the specific area and how it can benefit schools as a whole (Escartí et al., 2012; Lee and Choi, 2015; Wright and Burton, 2008). It is important to consider, however, the fidelity of such an attempt in applying the model outside of the physical education

classroom, as the underlying foundation of Hellison's model is to pointedly teach these responsibility behaviours through physical activity for the benefit that such an environment provides for fostering behaviour development in students (Hellison, 2011).

One of the interviewees acknowledged that within his school, focus had been placed on the TPSR model as a vehicle for teaching junior school students responsibility behaviours and values before entering the senior school. Additionally, 24.4% of the survey participants also acknowledged the weaving of Hellison's TPSR model into the junior school educational context. Severinsen (2014), also suggests that while the TPSR model has been recognised at the secondary school level as an effective tool, there is a place for it at the junior level and that younger children are capable of accepting and learning responsibility for themselves, so long as the environment is designed to support this. Those schools that choose to take the TPSR model outside of A.S 2.8 and into other areas of the school curriculum are likely to be taking an effective step in promoting the development of responsibility behaviours, conditional on the level of commitment displayed and the organisation that ensues.

Five of the survey participants also specified that TPSR was being implemented as an aspect of the overall school values. The underlying values of the model that encourage the improvement of students in their behaviours related to responsibility, as well as promoting their development into becoming a good person aligns on numerous levels with the focus of the Aotearoa NZ education curriculum (Hellison, 2011; Ministry of Education, 2007). Therefore, while the implementation of the TPSR model as an umbrella direction for the curriculum may not directly develop responsibility behaviours in students, it provides an aligning structure for the promotion of specific behavioural goals.

It is also important to acknowledge that a 9.1% of the survey participants also implemented the TPSR model, both within the capacity of A.S 2.8 and in its own right as a strategy of developing leadership and coaching qualities, as well as managing behaviour in students. As Beaudoin (2012) acknowledges, the original intent of the model is not for it to be used as a behaviour management tool, as it brings into question the fidelity to the model and what the focus is in the facilitating teachers. However, as Gordon et al., (2012), the implementation of the TPSR model within the physical education classroom intends to develop better behaviour among students, and if this occurs, behaviour management may become a resulting benefit. In addition to this, using TPSR as a means for improving leadership and coaching skills aligns again with the underpinning philosophy of the model itself, and is therefore supported dependent on the facilitator's commitment (Hellison, 2011; Romar et al., 2015)

Duration

It is evident from the findings that the duration of implementation for A.S 2.8 also varies among those teachers facilitating it. A.S 2.8 was implemented by 68.1% of the teachers either for the full academic year or for a term at a time, which shows a level of commitment to the programme and the integral goals and standards that need to be met. Other teachers, however, implemented A.S 2.8 for only half a year (18.2%), or as short a time as units of up to one month or just a few individual lessons (13.6%). The three teachers who were interviewed also outlined that their implementation time varied, with two teachers using it for the full year, while the third implemented it for only 10 weeks in the first term. However, this teacher did acknowledge that this was a brief timeframe for the content being taught, and that he believed a longer implementation time would be more accommodating of its "ongoing" nature.

NCEA standards are designed with an element of flexibility which grants teachers the ability to plan their teaching year to suit their students and them as educators, while at the same time teaching the curriculum and meeting the goals of each standard. The objective is for teachers to assist their students in reaching the competency levels that grant them either an achieved, merit or excellence grade for each standard, and as long as this is happening a timeframe for implementation is not necessarily relevant. Nevertheless, while this is the approach taken for NCEA standards generally, the flexibility granted to implementing A.S 2.8 brings into question the fidelity to Hellison's TPSR model and how effectively those responsibility behaviours can be taught and developed. As Gordon and Beaudoin (2020) outline, while the model grants teachers a certain level of flexibility, it is also vital that the essence of TPSR is maintained. This is supported by Gordon et al., (2012), who in their national survey also found that the teachers implemented their TPSR programmes for varied lengths of time and argued that it raises concerns about their commitment to the model. While it does not necessarily mean the TPSR content is being taught incorrectly or in ways that contradict the underpinning philosophy or values of the model, those who teach it quickly may not see the results in terms of responsibility behaviour development that those who teach it for extended periods do (Gordon, 2012).

Effectiveness

Fidelity is an important issue that is raised when investigating and discussing those programmes that encompass and take on a pedagogical model and adapt it to suit the goals and intended outcomes of the programme itself. As Pascual et al., (2011) acknowledge, within the scope of Hellison's TPSR model it is important to pull focus to how closely a TPSR-based programme such as A.S 2.8 meets the intended outcomes of the original TPSR framework, as

it can have an impact on the effectiveness of said programme. Within the scope of the quantitative survey data, approximately 70% of the participants regarded A.S 2.8 as both a true validation of the "essence" of TPSR, and an accurate representation of the underlying principles of the TPSR model. However, it is important to consider that a number of participants sat neutrally or did not agree (30%), bringing into question the fidelity with which A.S 2.8 represents TPSR. Escartí et al., (2011) highlight that even when a programme is designed with the intention of representing a model, key elements tend to be missed purely as a result of human nature and the ease with which facilitators can decide to include or not include certain relevant aspects or strategies to suit their own teaching. The effective implementation of TPSR requires that teachers can facilitate in a way that compliments and encompasses the essence of the model (Gordon & Beaudoin, 2020). Furthermore, when those facilitating the programme are not convinced of the accuracy with which the model is being represented, questions are raised regarding teacher motivations and there is likely to be fewer positive outcomes resulting from the programme implementation (Beaudoin, 2012; Pascual et al., 2011). These statements support the argument that in the case of A.S 2.8, it is unlikely that those who draw few parallels between the standard and the TPSR model will be entirely committed to teaching the programme accurately or with commitment to the objectives.

This issue of fidelity also brings into question the overall effectiveness of A.S 2.8, specifically in terms of improving and developing personal and social responsibility behaviours in students. As supported by several previous studies, the implementation of TPSR based programmes most frequently results in advances in responsibility behaviours (Beaudoin, 2012; Escartí et al., 2012; Sánchez-Alcaraz et al., 2019). Specifically, within the Aotearoa NZ education curriculum, Gordon et al., (2012) reported that those teachers who currently taught TPSR in

their secondary school physical education curriculum saw these improvements in their students' behaviours and supported its implementation as a tool to promote this.

With regards to A.S 2.8, approximately 80% of the participants agreed that the standard was effective in improving their students' behaviours with respect to both personal and social responsibility, as well as all three of the interviewees who outlined their support for the standard in this behaviour development. The small number of teachers who did not agree on the effectiveness of A.S 2.8 in developing these behaviours (20-25%), however, raises questions about whether or not the standard is worth teaching. A.S 2.8 has been designed based on the TPSR model, where the goal is to promote developments in responsibility behaviours. As stated by Beaudoin (2012), teachers need to be entirely convinced of a TPSR programme's effectiveness if they are to commit to implementing such a multifaceted model within their curriculum. Therefore, if those teachers who implement A.S 2.8 are not convinced entirely of the value of the standard for those behaviour developments, there is little chance of those changes actually occurring as a result of the implementation standard.

In terms of effectiveness, it was also acknowledged by all three of the interviewees that it can be difficult to draw a line between behavioural changes that have occurred as a result of participating in a TPSR based programme, and those that come from student's personal development. This opinion, if shared by many or all of those facilitating A.S 2.8 may also have an impact on how committed teachers are in implementing the programme appropriately and with a strong belief in the possible positive outcomes.

Assessment strategies

The five levels that Hellison defined in his TPSR structure provide an outline for the behavioural developments that teachers should expect to see in their students as a result of implementing the model. As was outlined by the participating teachers, the assessment structure for A.S 2.8 follows the framework as shaped by these five levels and evaluates students' abilities to demonstrate certain aspects of both personal and social responsibility behaviours. It was found that 57.5% of the survey respondents agreed that A.S 2.8 can effectively assess these developments in responsibility behaviours. A.S 2.8 and other NCEA achievement standards have certain criteria that must be met in order to achieve particular grades across all schools and all students, however they also lend a certain level of flexibility to teachers in terms of how they assess their students and leaves the most effective methods in question. All three of the interviewees recognised their use of reflection in the form of self-reflection, peer-reflection and teacher-reflection as their main source of assessment information. While some teachers may use other assessment tools, the findings suggest that there is a shared acceptance of reflection strategies among those facilitating A.S 2.8.

These methods of assessment are supported by previous studies measuring the effectiveness of TPSR within physical education utilised a range of different strategies for their assessment, which have essentially established a framework for the most applicable methods of assessing improvements in responsibility behaviours in students. Within these is a number of reflective strategies, specifically for their success in gathering perceptions and personal opinions regarding any improvements or not that teachers or students observe in behaviour (Sánchez-Alcaraz et al., 2011). Utilising strategies that call for reflective personal thought, such as journal entries and purposeful pre- and post- implementation reflections, provides a certain

level of rich data for understanding and acknowledging the development of new or enriched responsibility behaviours (Romar et al., 2015; Wright and Burton, 2008). It is important to note, however, that when questioned about the effectiveness of these strategies, the interviewees raised concerns. Two of the teachers made specific reference to the importance of honesty in both the students and the teachers when it comes to reflective assessment strategies. While ongoing reflections are an effective method of assessing changes over time, students and teachers are not necessarily transparent in their responses unless monitored closely and consistently.

The overall effectiveness of A.S 2.8 as an assessment of developments in personal and social responsibility behaviours in students was also considered. Approximately 70% of the survey participants agreed that A.S 2.8 provides a framework that allows teachers and facilitators of the TPSR model to effectively assess students' behavioural changes, as well as being an effective evaluation of responsibility learning. However, 16.7% and 10.6% did not agree that the framework or the evaluation was effective, respectively. This again brings into question the motivations of those facilitating A.S 2.8 and their commitment to observing and discerning any personal developments that their students have made during their participation. There is a very significant element of teacher responsibility related to implementing TPSR based programmes successfully and with results, and without a belief in the framework or the design of the achievement standard this is unlikely to occur with A.S 2.8 (Beaudoin, 2012; Romar et al., 2015).

5.3. Chapter summary

The aim of this chapter was to discuss the findings from the present study, including outlining the emerging themes and the relevance of them within the scope of the field. The discussion also intended to draw parallels between these findings and the existing literature, in an attempt to provide an element of transparency when it comes to how the current study contributes to the field. Additional discussion was also given regarding how this study has prompted other questions for future research. Chapter 6 provides a conclusion for the current study.

CHAPTER SIX

CONCLUSION

6.1. Overview of the study

This study was designed for the purpose of investigating the original research question and objectives as outlined below:

Research question:

"How is a Teaching Personal and Social Responsibility model-based achievement standard, at the Aotearoa New Zealand secondary school level, implemented and what are the implications?"

Objectives:

- Establish the levels of knowledge that teachers of A.S 2.8 have of the philosophical underpinnings of the TPSR model.
- Identify the challenges and enablers that impact on teacher's ability to implement TPSR with a high level of fidelity to the model.
- Establish how A.S 2.8 is taught in Aotearoa NZ secondary school physical education programmes.
- Explore the perspectives of teachers implementing A.S 2.8.

 Identify the assessment strategies for A.S 2.8 and assess how these maintain fidelity to the model.

6.2. Summary of the data

The findings indicated that while A.S 2.8 has been implemented in the physical education context for a significant period of time, there are both encouraging and unfavourable opinions among the facilitating teachers regarding important aspects.

Research objective 1

The majority of the teachers who were implementing A.S 2.8 shared a reasonably strong base of TPSR knowledge in terms of the philosophical underpinnings of the model, as well as a strong level of confidence in implementing the programme. It is, however, those teachers who did not share this knowledge or confidence that raise questions regarding how successful the implementation of a TPSR based programme can effectively be in this case.

• Research objective 2

Content specific professional development was identified largely as a very likely enabler of more effective or more confident implementation of the A.S 2.8. Although knowledge and confidence were typically strong among the teachers, they found it challenging to implement A.S 2.8 without first learning more about the model through professional development, which has been outlined as a successful tool when facilitating a TPSR model-based programme.

Furthermore, the knowledge that they did have had come as a result of their teaching A.S 2.8 and learning through their practice.

• Research objective 3

It became evident from the findings that the way A.S 2.8 was taught in practice varied among the teachers, in essentially all aspects. The duration of the programme spanned between a few individual lessons to the entirety of the academic year, which raised questions concerning the ability for teachers to effectively implement a TPSR programme over a short period, in comparison to an extensive, in depth time frame. The context was also diverse, with a number of physical activities and physical educational contexts being utilised as avenues for A.S 2.8 content to be taught. There was also mention from several teachers that TPSR was also being utilised in other areas of the students' education curriculum outside of the physical education classroom. Finally, it was acknowledged that the daily format as outlined by Hellison (2011) was being followed by the majority of the teachers but may not be entirely understood by those teaching the achievement standard with little knowledge of the TPSR model.

Research objective 4

A.S 2.8 may have been identified as being an effective tool in facilitating developments in responsibility behaviours, but there were some questions raised among the teachers as to how accurately A.S 2.8 represents TPSR and therefore how effective the programme is. While the teachers of A.S 2.8 agreed that on some level, the programme had encompassed the essence of the TPSR model and its underpinning philosophies, it is important to consider the level of fidelity with which the TPSR model has been embodied in A.S 2.8. In addition to this, the

capacity for A.S 2.8 to have a positive effect on developing student's responsibility behaviours was also an important aspect of the implementation of the standard. Investigating the effectiveness of A.S 2.8 brings into question what its true value is within the curriculum, because if it cannot produce the intended results it is unlikely to procure many other benefits.

• Research objective 5

Reflective assessment strategies are an effective tool when it comes to assessing improvements or developments in behaviours, over a period of time. While complemented with a level of flexibility and room for interpretation when it comes to implementation and assessment tools, A.S 2.8 has been assessed most frequently through the use of self-reflection, peer assessment and teacher assessment. Opinions of positive value in regard to these assessment strategies are also shared among the majority of the A.S 2.8 facilitators. However, it is evident that some of the teachers did not agree with this assessment approach and its effectiveness in assessing changes in relation to TPSR behaviours, and it is these conflicting opinions that raise concerns about how A.S 2.8 has been designed and if there are changes that could be made in order to resolve those concerns.

The collection and analysis of the data provided plentiful information that was able to be used to effectively answer the research questions. Significant elements of the implementation of A.S 2.8 became transparent through the findings, while the implications that may result from this implementation were also revealed.

6.3. Recommendations for further research

While the researcher was able to answer all of the research objectives and respond appropriately to the research question, there are areas of the study that could be researched further to provide more detailed information about the quality of A.S 2.8 and its place in the Aotearoa NZ physical education curriculum. Regarding the knowledge of those teachers who implement A.S 2.8, further investigation needs to be made into how significant of an impact a lack of knowledge about TPSR has on the effectiveness of the achievement standard and the reality of obtaining the objectives. In addition to this, professional development was presented as a potentially significant contributing factor in the effective implementation of A.S 2.8. It is also important to consider that despite all of the themes that emerged from the current study, there is remarkable value in investigating the reality of preserving the achievement standard based solely on its ability to truly promote behavioural developments in students and whether or not there are realistic adjustments that can be made in order to improve it.

There were also limitations to the research that became evident in the reflection of the effectiveness of the study. While gathering the perspectives of those teachers implementing A.S 2.8 was an effective process of understanding the place of the achievement standard within the Aotearoa NZ physical education curriculum and how it is implemented,, the knowledge of three teachers cannot be used to generalise across the population of 'all' Health and Physical Education teachers who deliver A.S 2.8. Nonetheless all three interviewee participants highlight that little is still known of the true hurdle's teachers face in executing it within their classroom. A longitudinal study through which the researcher can observe the implementation of A.S 2.8 overtime and understand the implications that differing levels of knowledge, confidence and commitment have on its effectiveness in developing student's responsibility

behaviours. Furthermore, there is also likely to be some benefit in investigating the effect of content specific professional development interventions on the implementation effectiveness of A.S 2.8.

6.4. Concluding statement

The work that has been presented in this thesis has established a strong outline of how Hellison's TPSR model has been further implemented within the Aotearoa NZ secondary school physical education curriculum. A.S 2.8 had not been investigated prior to this work, giving the research and findings presented here value in respect to its contribution to the field. The benefit of talking to teachers about their own work and investigating the usefulness and implications of pedagogical tools and models through this avenue was also displayed. The information is, however, still only the starting point for an important area of research which could effectively provide direction for the successful implementation of a TPSR based programme in this context.

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APPENDIX A: Interview Schedule

Knowledge of philosophical underpinnings of the TPSR model

- What do you know about Hellison's teaching personal and social responsibility model?
- Before you started teaching achievement standard 2.8, what would you say your level of knowledge about the TPSR model was?
- Has teaching achievement standard 2.8 helped you to develop your knowledge of the TPSR model?

Challenges and enablers impacting on teacher's ability to implement TPSR with a high level of fidelity to the model

- To teach achievement standard 2.8, did you have to participate in any form of training or PD relating to the TPSR model?
- Have you ever participated in any professional development related to the TPSR model?
 - o (**If yes**) What did this involve?
 - o Do you feel as though it was beneficial, and helps you to teach A.S 2.8 now?
 - o (If no) Do you feel as though some professional development in this area may be beneficial to you?
 - Do you feel that you would be able to teach achievement standard 2.8 with a higher level of fidelity to the model if you had the opportunity to participate in PD?

Based on what you know about the TPSR model, do you think achievement standard
 2.8 is an accurate representation of the model?

How 2.8 is taught in education programmes...what does it look like in practice?

- How do you implement 2.8?
- What is the timeframe?
- What context do you implement it in?

Perspectives of effectiveness of TPSR in relation to developing personal and social responsibility.

- Do you think that A.S 2.8 is an effective way of teaching personal and social responsibility?
- Have you seen changes in your students' responsibility behaviours during and after completing A.S 2.8?

Identify the assessment strategies and assess fidelity.

- How do you assess 2.8?
- Do you think that those assessments are effective?
- Do you think there are any other strategies that might assess 2.8 better?

APPENDIX B: Survey Questions

	Section A
1.	Urban or rural school
	□ Urban □ Rural
2.	School
	☐ Single Sex☐ Boys only☐ Girls only
3.	Gender of students completing Achievement Standard (A.S) 2.8
	☐ Female ☐ Male ☐ Other ☐ Mixed
4.	Number of students completing A.S 2.8 (Please write the approximate number below)
	students
	Section B
C	To be completed by those teachers who are teaching or have taught Achievemen Standard 2.8.)
5.	Gender
	☐ Male ☐ Female ☐ Other
6.	I have been teaching physical education foryears
7.	I have been teaching A.S 2.8 for [how many]
	yearsmonths

8.	On a scale knowledge circle the	e, plea	se rate	your lev		_			v	se
K	No Inowledge									lent leve nowledge
	0 1		2	3	4	5	6	7	8	9
9.	On a scal rate your circle the	level o	of confid	dence in						
No	ot confident at all								Ex	tremely
	0 1		2	3	4	5	6	7	8	9
11	related to . Have you its core va	Yes partic	ipated i	No n profes	sional dev	elopme	nt relate	d to the T	TPSR mo	odel and
		1 03		110						
				,	Sectio	n C				
	ne following the TPSR	_		_	_	_		_	•	•
12	. I believe	that A.	S 2.8 va	alidates	the essenc	e of the	TPSR n	nodel.		
=	Strongly disagree]	Disagre	e	Neutral	A	Agree	Stro agr	ongly ee	
	1		2		3		4		5	

13. A.S 2.8 accurately represents the underlying principles of the TPSR model.

Strongly	Disagree	Neutral	Agree	Strongly
disagree				agree
1	2	3	4	5

14. I believe that the assessment schedule for A.S 2.8 can be an effective evaluation of personal and social responsibility learning.

Strongly	Disagree	Neutral	Agree	Strongly	
disagree				agree	
1	2	3	4	5	

15. I believe that A.S 2.8 is effective in improving students' behaviours relating to social responsibility.

Strongly disagree	Disagree	Neutral	Agree	Strongly agree
1	2	3	4	5

16. I believe that A.S 2.8 is effective in improving students' behaviours relating to personal responsibility.

Strongly	Disagree	Neutral	Agree	Strongly
disagree				agree
1	2	3	4	5

17. I believe that A.S 2.8 can effectively assess improvements in students' personal and social responsibility.

Strongly	Disagree	Neutral	Agree	Strongly
disagree				agree
1	2	3	4	5

18.	I believe that the assessment strategies for A.S 2.8, including student, peer and
	teacher evaluations, can provide enough information to effectively assess
	improvements in students' personal and social responsibility.

Strongly	Disagree	Neutral	Agree	Strongly	
disagree				agree	
1	2	3	4	5	

	Section D
	19. Does your school use the TPSR model in contexts outside of physical education and/or A.S 2.8?
	□ Yes □ No
	(If yes, please comment on how the TPSR model is used in these contexts)
0.	Over what time period is A.S 2.8 implemented: (Please tick all statements that apply to you)
	A few individual lessons
	Units of up to one month
	A term at a time
	Half a year
	The full year

21. What context do you use to implement A.S 2.8 (i.e a specific sport or activity): (*Please comment*)

The following section seeks to explore the ways that the TPSR model is implemented in practice. (Please circle the appropriate number for each statement)

22. I consciously ensure that I have individual conversations with students during lessons to help establish personal relationships.

Never	Occasionally	Usually	Most classes	Every class
1	2	3	4	5

23.	The class has an "awareness talk" or an equivalent process to focus studen	its on
	ne goals of the TPSR model at the beginning of the lesson.	

Never	Occasionally	Usually	Most classes	Every class
1	2	3	4	5

24. The physical activity component of the lesson is taught in a way that helps meet the outcomes of the TPSR model.

Never	Occasionally	Usually	Most classes	Every class
1	2	3	4	5

25. A group meeting is held towards the end of the lesson to discuss events related to what has happened during the lesson.

Never	Occasionally	Usually	Most classes	Every class
1	2	3	4	5

26. The class has reflection time set aside at the end of the lesson for students to reflect on their behaviour during that session.

Never	Occasionally	Usually	Most classes	Every class
1	2	3	4	5

27. Incorporating the TPSR model has had an impact on how the physical education subject matter has been taught.

Never	Occasionally	Usually	Most classes	Every class
1	2	3	4	5

28. Decisions on how the physical education subject matter will be taught have been directly influenced by the need to shift control and power from the teachers to the student.

Never	Occasionally	Usually	Most classes	Every class
1	2	3	4	5

29.	Students are specifically taught in class that learning about personal and social
	responsibility can be applied to contexts outside of physical education.

Never	Occasionally	Usually	Most classes	Every class
1	2	3	4	5

30. The relationships I have with students in classes taught using the TPSR model are positive and respectful.

Never	Occasionally	Usually	Most classes	Every class
1	2	3	4	5

31. I consciously ensure that I model behaviours that are aligned with the philosophy of the TPSR Model.

Never	Occasionally	Usually	Most classes	Every class
1	2	3	4	5

APPENDIX C: Ethics Confirmation

From: humanethics@massey.ac.nz

Subject: Human Ethics Notification - 4000021485

Date: 25 September 2019 at 1:26 PM

To: Sarah.Blaikie.3@uni.massey.ac.nz, B.Erueti@massey.ac.nz

Cc: humanethics@massev.ac.nz

HoU Review Group

Ethics Notification Number: 4000021485

Title: Exploring the implementation of a Teaching Personal and Social Responsibility model based achievement standard, at the New Zealand secondary school level.

Thank you for your notification which you have assessed as Low Risk.

Your project has been recorded in our system which is reported in the Annual Report of the Massey University Human Ethics Committee.

The low risk notification for this project is valid for a maximum of three years.

Please note that travel undertaken by students must be approved by the supervisor and the relevant Pro Vice-Chancellor and be in accordance with the Policy and Procedures for Course-Related Student Travel Overseas. In addition, the supervisor must advise the University's Insurance Officer.

A reminder to include the following statement on all public documents:

"This project has been evaluated by peer review and judged to be low risk. Consequently it has not been reviewed by one of the University's Human Ethics Committees. The researcher(s) named in this document are responsible for the ethical conduct of this research.

If you have any concerns about the conduct of this research that you want to raise with someone other than the researcher(s), please contact Professor Craig Johnson, Director (Research Ethics), email humanethics@massey.ac.nz."

Please note that if a sponsoring organisation, funding authority or a journal in which you wish to publish require evidence of committee approval (with an approval number), you will have to complete the application form again answering yes to the publication question to provide more information to go before one of the University's Human Ethics Committees. You should also note that such an approval can only be provided prior to the commencement of the research.

You are reminded that staff researchers and supervisors are fully responsible for ensuring that the information in the low risk notification has met the requirements and guidelines for submission of a low risk notification.

If you wish to print an official copy of this letter, please login to the RIMS system, and under the Reporting section, View Reports you will find a link to run the LR Report.

Yours sincerely

Professor Craig Johnson Chair, Human Ethics Chairs' Committee and Director (Research Ethics)

APPENDIX D: Interview Information Sheet



THESIS TITLE: Exploring the implementation of a Teaching Personal and Social Responsibility model based achievement standard, at the New Zealand secondary school level.

INFORMATION SHEET

Introduction

My name is Sarah Blaikie and I am currently completing my Masters of Sport and Exercise at Massey University. My thesis project will examine the implementation of Achievement Standard 2.8 in Aotearoa New Zealand secondary school Physical Education, and its fidelity to the Teaching Personal and Social Responsibility Model. I am inviting you to participate in my project as your school was listed in the NZQA records as having offered, or still offering achievement standard 2.8. The following information outlines the parameters of my study and your participation. Please read it carefully.

Project Description and Invitation

Hellison's Teaching Personal and Social Responsibility (TPSR) model was developed to teach youth to be more personally and socially responsible, through physical activity, particularly within physical education curricula to improve the responsibility behaviours of students. In New Zealand, TPSR has been introduced into primary and secondary school education and in the last 10 years, has been implemented as a year 12 Physical Education Level 2 NCEA achievement standard. However, the notion of fidelity when implementing the TPSR model is essential to the model's core values and philosophy. This project will examine how the model has been designed, adapted and implemented within Achievement Standard 2.8, and attempts to give insight into its relevance and effectiveness.

Interview Participation.

If you choose to participate in this study you will complete a 20-30-minute interview with me as the researcher to ascertain your thoughts of Achievement Standard 2.8 and its

implementation. The interview will be recorded and transcribed and your anonymity will be maintained. If you decide to participate, you have the right to:

- decline to answer any particular question;
- withdraw from the study (specify timeframe);
- ask any questions about the study at any time during participation;
- provide information on the understanding that your name will not be used unless you give permission to the researcher;
- be given access to a summary of the project findings when it is concluded.
- ask for the recorder to be turned off at any time during the interview.

Your acceptance to this email implies that you have consented to the conditions aforementioned.

Data Management

As indicated earlier, your interview will be transcribed, it will then be analysed and organised into themes to extrapolate your interpretations of how the implementation of Achievement Standard 2.8, to assist in evaluating the fidelity teachers and students have of the TPSR model. Once the data has been organised you will receive a copy of the research findings. The transcripts and recordings will be stored in a locked and secured cabinet in my supervisor's office, or in a secure, personal network for a period of five years before being disposed of appropriately.

If you have any questions or concerns, please do not hesitate to contact myself or one of my supervisors.

Yours sincerely,

Sarah Blaikie

Masters of Sport and Exercise Candidate

Massey University

E: sarahelizabethcopland@gmail.com

Dr. Bevan Erueti

Associate Dean Māori/Senior Lecturer School of Sport, Exercise and Nutrition Massey University

E: B.Erueti@massey.ac.nz

This project has been evaluated by peer review and judged to be low risk. Consequently it has not been reviewed by one of the University's Human Ethics Committees. The researcher(s) named in this document are responsible for the ethical conduct of this research.

If you have any concerns about the conduct of this research that you want to raise with someone other than the researcher(s), please contact Professor Craig Johnson, Director (Research Ethics), email humanethics@massev.ac.nz.

APPENDIX E: Survey Information Sheet



THESIS TITLE: Exploring the implementation of a Teaching Personal and Social Responsibility model based achievement standard, at the New Zealand secondary school level.

INFORMATION SHEET

Introduction

My name is Sarah Blaikie and I am currently completing my Masters of Sport and Exercise at Massey University. My thesis project will examine the implementation of Achievement Standard 2.8 in Aotearoa New Zealand secondary school Physical Education, and its fidelity to the Teaching Personal and Social Responsibility Model. I am inviting you to participate in my project as your school was listed in the NZQA records as having offered, or still offering achievement standard 2.8. The following information outlines the parameters of my study and your participation. Please read it carefully.

Project Description and Invitation

Hellison's Teaching Personal and Social Responsibility (TPSR) model was developed to teach youth to be more personally and socially responsible, through physical activity, particularly within physical education curricula to improve the responsibility behaviours of students. In New Zealand, TPSR has been introduced into primary and secondary school education and in the last 10 years, has been implemented as a year 12 Physical Education Level 2 NCEA achievement standard. However, the notion of fidelity when implementing the TPSR model is essential to the model's core values and philosophy. This project will examine how the model has been designed, adapted and implemented within Achievement Standard 2.8, and attempts to give insight into its relevance and effectiveness.

Survey Participation

This study will require you to complete a short survey which raises questions regarding

Achievement Standard 2.8 and its implementation. The questionnaire will take approximately

5 minutes to complete, and is completely confidential. If you choose to participate in this

project, please answer all questions as honestly as possible and return the completed

questionnaires promptly.

The completion and return of this survey imply that you have consented to the conditions

aforementioned.

Data Management

The data collected from the surveys will be analysed and organised into themes to extrapolate

your interpretations of how the implementation of Achievement Standard 2.8, to assist in

evaluating the fidelity teachers and students have of the TPSR model. Once the data has been

organised you will receive a copy of the research findings. The transcripts and recordings will

be stored in a locked and secured cabinet in my supervisor's office, or in a secure, personal

network for a period of five years before being disposed of appropriately.

If you have any questions or concerns, please do not hesitate to contact myself or one of my

supervisors.

Sarah Blaikie

Masters of Sport and Exercise

Massey University

E: sarahelizabethcopland@gmail.com

Dr. Bevan Erueti

School of Sport, Exercise and Nutrition

Massey University

E: B.Erueti@massey.ac.nz

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