

Faculty of Education, Language Studies and Social Work

**An examination of Csikszentmihalyi's concept of flow in Western
Australian school leaders' work and learning.**

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Declaration

To the best of my knowledge and belief this thesis contains no material previously published by any other person except where due acknowledgment has been made.

This thesis contains no material which has been accepted for the award of any other degree or diploma in any university.

Signature:

Date:

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The real danger of extended study is that it could be considered an anti-social act. Well, a solitary act to a large degree. My wife, Marie Jean MacNeill, has supported me, brilliantly, while I completed my PhD and then this EdD research. Marie, uncomplainingly continued to work as a classroom teacher, run the house and organise my life so that I received uninterrupted writing time.

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ABSTRACT

In many jurisdictions school leaders are being placed under increased accountability and stress, which then affects their ability to address the real issue of education- improving students' learning. Flow Theory, developed by the Hungarian-American psychologist Mihalyi Csikszentmihalyi appeared to have a high degree of relevance into the motivation and resilience of modern school leaders.

A purposive sample of school leaders (N=8) was interviewed about their Flow experiences, in-school and out-of-school situations. The nine dimensions of Flow (Jackson & Csikszentmihalyi, 1999) were used as a conceptual guide in the e-interviews. Each of the school leaders gave powerful descriptions of their memorable out-of-school deep-flow experiences, but their in-school experiences of Flow appeared to have far less personal impact. The data analysis showed that with this sample of school leaders only four of Jackson and Csikszentmihalyi's nine dimensions of Flow were clearly identifiable in their in-school experiences. The misfit of Csikszentmihalyi's dimensions of Flow is important, and needs further analysis in future research.

Interestingly, the moral dimension of the school leaders' job was identified by the respondents as the most important facilitator of Flow in both public and private schools, which may provide the future key to improved school leader resilience and motivation. A real concern is that the motivation that influences school leaders' job satisfaction remains elusive within the current job context, particularly in difficult schools.

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CHAPTER ONE

INTRODUCTION

Overview

This chapter commences with a brief explanation of the context in which the study is situated. This examines the traditional or dominant orientation of school leadership, and then suggests an alternative perspective drawing on the positive psychology movement is worthy of consideration. The objectives of the empirical investigation are presented and then significance and limitations of the study are discussed. This is followed by an explanation of the structure of the thesis.

The Managerialist Context for Modern School Leadership

The background to this investigation of the leadership of a small sample of principals is over 20 years of continued press by governments for reform of Australian public schools. Massive transformational change was visited upon school systems in the 1980s and 1990s in response to government perceptions about this country's lack of economic competitiveness in a changing economic environment. In Britain and Australia, this ideological push for change in government services became known as *New Public Management* (NPM) (Dunleavy, Margetts, Bastow & Tinkler, 2006; Gronn, 2003a, 2003b; Moos, 1999; Sachs, 2003), and in the United States, *Neoliberalism* (Hursh, 2007, 2008). The resultant changes had a tremendous impact on schools, and the roles of school leaders.

New Public Management was re-badged as *economic rationalism* in Australia by Pusey (1992, p.22). Pusey noted that economic rationalism brought much needed efficiencies, but he queried the cost: "The inherent problem lies instead at another level- with the criteria that define what counts as costs and benefits, with the loss of social intelligence, and with the number and range of potentially constructive

discourses that have been suppressed”. Supporting this thesis, Beeson and Firth (1998) also observed of Australian politics that:

... successive Labor governments have attempted to enlist the education system in its broader project of making Australia more economically competitive. More subtly, educational efficiency, has increasingly come to be defined in terms of narrow economic criteria, rather than the broader social and cultural agenda it formerly enjoyed. (p. 226)

Across the Western world, school leadership was moved by such managerialist demands for efficiency. Sachs and Logan (1997, as cited in Sachs, 2003) identified six precepts underlying these changes to the Australian public sector:

- Traditional structures, procedures and services are inefficient;
- There are a generic set of skills called management;
- Private enterprise management approaches are superior to other alternatives;
- Managerial and structural reforms guarantee revision to practice that results in increased productivity;
- Government services can be quantified for accountability purposes; and,
- Reform is management led. (p. 20)

A consequence, as Fink’s (2010, p. 34) research documented was that one British principal complained that the biggest change as a result of these changes was the increase in the amount of paperwork, and he now saw himself as an office manager.

The increased accountability and scrutiny of schools’ operations has meant that principals’ time for pedagogic and curriculum issues in schools became limited because they were overwhelmed by the expanding managerial and accountability demands on their time (Camburn, Spillane & Sebastian, 2010; Cranston, 2000, p. 126). Australian research (Barty, Thomson, Blackmore & Sachs, 2005) is showing that this is a developing problem in Australia, also:

Like their overseas colleagues, local scholars largely attribute the supply problem to declining teacher interest produced by changes in the amount and nature of principals’ work, and to inadequate succession planning. Both issues need attention, they argue, and we agree. The bulk of this international

and Australian research has been conducted at a system or state level. At this scale, the data provide convincing evidence that there is both a declining interest in principalship and also a strong probability that the situation will get worse, as younger teachers show low interest in school administration. (p.2)

Confirmatory research from Sweden (Lindberg, 2012, p. 168) identified the major stressor for principals engaged in such change as role ambiguity.

In Western Australia, the intended reform of the public school system was signalled by the release of the Beazley Report (1983). With the publishing of policy papers by the state Labor government, Western Australian schools began a reform aimed at the development of school-based planning, increased accountability and flatter district and central office structures. In 1987, *Better Schools in Western Australia: A program for improvement* (Ministry of Education, 1987) advocated self managing schools, maintaining educational standards, community participation in school management, equity, enhancement of teacher professionalism and responsiveness to change. *Managing for Balance: A Public Sector Management Strategy* (Government of Western Australia, 1992) supported and extended the 1987 push by reiterating the principles of reform: client focus, results through people, flexibility and responsibility, results focus, strategic orientation and a whole-of-government approach.

The managerialist transformation of education, while designed to enforce accountability through measurable standards, also facilitated the deconstruction of the curriculum into discrete, outcome-based packages that could be taught by a variety of methods, media, or service providers and Beare (2001) commented:

It is hardly surprising that the school effectiveness movement also coincided with the movement towards school and system restructuring, and towards the introduction of the new managerialism across all areas of government enterprise, which came with the same economic transition. Education policymaking was slipping out of the hands of the providers (schools, teachers, and educators) and increasingly falling into the hands of those on whom the economic transition was impacting, those who understood economics, politics and business. (p. 97)

O'Donoghue and Clarke (2010) also observed that in many school systems the influence of managerialism on school leadership was clear:

Indeed, there remains a paradox in many countries. On the one hand, governments are enthusiastically advocating educational leadership because of its crucial importance for learning. On the other hand, there is simultaneously a reluctance to change policies which tend to promulgate a restricted notion of learning and necessitate that school leaders are preoccupied with managerial responsibilities. In the end, it might well be the case that policy reform is the key to making the connection between school leadership and learning in a more authentic manner. (p. 52)

While it has been reported by Hood and Peters (2004) that NPM is now middle aged, other writers such as Dunleavy, Margetts, Bastow and Tinkler (2006) prematurely claimed that NPM is dead. The NPM model is both invasive and changeable, and it has successfully colonised bureaucratic modelling around the world. Examining the Australian context, Brennan (2009) concurred:

The first wave in the 1980s installed managerialism in public education by recentralizing curriculum policy, establishing 'self-managing' schools, and downsizing infrastructure. The second wave in the 1990s steered teachers' work through federal intervention into curriculum, and individualization of teachers' work in contexts of marketization; this wave consolidated a national political role in education. The third wave in the 2000s emphasized the codification of knowledge through establishment of standards and criteria for teacher employment and promotion. (p. 339)

Mather and Seifert (2011), studying education, agreed with Brennan's thesis and they labelled the current performance management in schools as Taylorist.

In the educational context, powerful voices warned of the direct and indirect consequences of the NPM impact on Australian education. Caldwell (2011, p. 17) proposed 10 points for a 10 year strategy to transform the current unsatisfactory situation in schools, which included widening the educational community, innovative approaches to governance, higher levels of school ownership and higher levels of school autonomy. Elsewhere, Caldwell and Vaughan (2012) drew attention to the problems associated with excluding the arts in the narrowed curriculum.

This brief examination of the changing political, organisational and educational environments in which school principals function, could be construed as a perspective on leadership that emphasises business-derived models of leadership focussed on depersonalisation and compliance of individuals. It appears that such an approach is restrictive in that the theoretical models it draws from limit the resultant outcomes achieved in schools and education systems. It is timely to apply alternative conceptions of school leadership that are rooted in the emergent positive psychology movement rather than on deficit models with focus on organisational dysfunction. This observation is developed further in Chapter Two which explores the potential of Flow Theory to explain aspects of school leadership motivation.

The Research Investigation

This research examines the school leaders' roles and motivation in increasingly complex situations. In Chapter 2 the phenomenon known as *Flow*, which appears to be relevant in the work and motivation of school leaders, is examined. The Hungarian-American psychologist, Csikszentmihalyi, developed the concept of *Flow* to describe the psychological state experienced during and after optimal performance. Other writers use the term *the zone* (Palmer, 2006; Robinson, 2009), to explain a part of the Flow phenomenon. Deep-Flow was found mainly in physical activities (rock climbing, golf, canoeing) and there was a dearth of material relating to Flow in schools. Basom and Frase (2004) observed:

According to Csikszentmihalyi, the mid-1990s marked the beginning of research on teacher flow experiences. Based on our review of the literature, we conclude that there have been fewer than 10 studies directly investigating the existence and nature of teacher flow experiences. (p. 244)

However, the specific study of Flow, in relation to school leaders' performance cannot be found in the literature, which makes this research original, and helps to define the research questions.

Research Questions

This research examines the applicability of Flow Theory in understanding the work of a small sample of school leaders. Specifically:

- What is the nature of the Flow experiences of the eight school leaders in this sample?
- Can the school leaders identify micro- and the deep, macro-Flow experiences?
- What effect did Flow experiences have on the school leaders' work motivation?
- Does the experience of Flow in non-work situations influence the work of school leaders?

Significance of the Study

This research develops three significant aspects of the effect of Flow Theory in the work of school leaders. First, the research conducted by Csikszentmihalyi on Flow is claimed to be applicable in a variety of work and leisure pursuits. This is the first recorded research that specifically examines Flow Theory and the work of school leaders. Second, Flow Theory is claimed to have a universal application, and the nine dimensions of the Flow Model need to be tested against to work of school leaders. Third, the role of school leadership is under mounting pressure at the present time, and jurisdictions across the Western World are having problems recruiting new school leaders, which makes research into school leader job satisfaction and resilience strategically relevant.

The findings will be important at the international and personal levels for everyone involved in, or affected by, the operation of schools. Importantly, this research may generate a raft of studies examining the key issues of school leaders' motivation and resilience.

Limitations of the Study

As with all research there is a set of limitations that must be acknowledged.

First, this purposive sample (N= 8) is drawn from leaders who were known to have served in tough, low socio-economic schools. Any generalisations to a wider group of school leaders would be erroneous.

Second, a prerequisite for taking part in the research was that the respondents had to have experienced Flow. Such is the nature of purposive sampling that there was no point in selecting respondents who had not experienced the Flow phenomenon in their private and professional lives. Again, any generalisation may only be relevant to school leaders who have experienced Flow.

Third, the school leaders in this sample were all successful in their jobs, and in their private lives they were also seen as successful people. It was noted that several of the respondents had been successful in sport at state and national levels. Generalisation to a wider audience of school leaders should be considered carefully.

Organisation of the Thesis

This thesis contains six chapters.

Chapter 1 (this chapter) introduced the necessary contextual background to the study of a perceived problem that needed to be investigated, namely the changing school environment characterised by some public dissatisfaction.

Chapter 2 contains a comprehensive literature search on the key issues of the research and it acknowledges Csikszentmihalyi's development of the concept of Flow, which was influenced by the developments of Bandura and Maslow's contemporary research. The research questions that direct the research are developed here, and the significance of the research explained.

In Chapter 3 the methodology and methods used in this research project are examined. The case study format used falls clearly within Yin's (2009) paradigm of embedded case study and the rich data generated in the e-interviews were analysed using NVIVO 9.

The case study material is recounted in Chapter 4 and the respondents' responses in the e-interviews reported.

Chapter 5 presents the analyses of the case study transcripts from this research.

In the final chapter (Chapter 6) the analyses are discussed, and the implications of the research considered. Finally, the need for further research is explored.

Summary

This chapter introduced the study by providing contextual information, specifying the research questions, establishing their significance, and recognising the limitations of the empirical investigation. .

The following chapter, Chapter Two, provides an extensive overview of the literature that relates to the changed role for school leaders, and Csikszentmihalyi's Flow Theory. Flow Theory sits within a rich context of related theories (efficacy, peak performance and peak experience), which support and extend the concept of Flow.

CHAPTER 2

Literature Review: Flow Theory

Introduction

As a consequence of unrelenting change, increasing demands, more explicit accountability and enhanced community empowerment, the school leaders' jobs have become more complex. As a result, there is a growing belief that the principals' job is too big for one person (Grubb & Flessa, 2006). With the school leadership under heavy pressure, job satisfaction is at risk, and problems of recruiting the next generation of school leaders become obvious in many jurisdictions. Australian research by Barty, Thomson, Blackmore and Sachs (2005) found:

... that there is a reduction in the numbers of applicants for principal positions, but this shortage is not evenly distributed across the state systems. It is virtually impossible to depict, in a definitive way, the decline in interest in school leadership. It is not a simple, quantifiable matter. A decline in applications does not necessarily mean a decline in interest in leadership. While there have been, and continue to be clear deterrents for people to take on the principalship, there are multiple factors at work, in any vacancy, that may cause a small number of applications to be lodged. (pp. 14-15)

The conclusions drawn from this research showed that Australian principals make choices about applying for positions. However, this parlous situation was summed up by Topsfield (2012) who reported that in Victoria: "... schools are struggling to attract principals, with 60-hour weeks, 'helicopter parents', lack of support and insufficient pay deterring people from applying for leadership roles."

Stress is impacting on school leaders across the world and they are facing higher rates of burnout. Whitaker (1996) said of educational leadership in America:

These principals are competent, hard-working professionals who are experiencing frustration on the job and are having second thoughts about remaining in their roles as principals. Many frustrations are related to sheer role overload, unable to accomplish the many tasks and responsibilities assigned to the role of principal. Other frustrations experienced by principals include site-based management and shared decision making, declining resources, increased paperwork, and greater expectations from the public and central administration for higher student standards. (p. 60)

Furthermore, research by Loeb, Kalogrides, and Horng (2010) clearly showed that experienced principals are abandoning the “difficult” schools:

Principals’ stated preferences and their behaviours demonstrate an aversion to leading schools with many poor, minority, and/or low-achieving students. Although these patterns may be driven, not by a distaste for certain students, but more so by a desire to serve a school with a positive climate and good working conditions, the result remains: higher turnover in schools serving more poor, minority, and low-achieving students. (p. 227)

Grant (2007, p. 24) likened the situation faced by many principals to “a paranoid dream caused by watching too many reality TV shows”. A major problem in education has been the myth of the hero leader, and a belief that the “power of one” is the singular measure of good leadership. MacNeill and Silcox (2006, p.11) warned, “In reality, the long-term prospects of the mythical, singular, martyr principal was similar to the fate of Man in Hobbes’s *Leviathan*: ‘... solitary, poore, nasty, brutish and short’, which is why distributed leadership is so important in schools”. Supporting this position, Fink (2010, p. 35) described principals as being overburdened, overworked and overwhelmed.

While the research into educational leadership has examined the increasingly complex world of schooling, it should be remembered that school leaders exist within social structures, which are also influenced by change. It is easy to identify the job stressors, but the real challenge for education, as a profession, is to make the same change as psychology when it moved from a deficit model toward the more positive view of psychology: Positive Psychology.

The Complementary Contextual Dimensions of Flow: Maslow, Bandura and Hanin

The development of the concepts of Flow, Positive Psychology and self-efficacy were synchronous and there was a cross-fertilisation of ideas between the authors. Primeaux and Vega (2002) observed the complementary nature of Maslow and Csikszentmihalyi's theory:

Csikszentmihalyi is providing a way or method of translating Maslow's integrative attitude and perspective into action. He does so by recommending a focus of attention, at any given time or place, on that which each person discerns as both meaningful and enjoyable. Csikszentmihalyi extends Maslow's integrative attitude and perspective, his proposed "centering point," by providing a concrete means for achieving it. Together they are providing motives and objectives, and ways and means, for the development of an integrative ethics grounded in business realities. (p. 103)

The linkages between self-efficacy and Flow, too, have always been evident, and Rodriguez-Sanchez, Salonova, Cifre, and Schaufeli's (2011) research examined:

... how efficacy beliefs (i.e., self-efficacy) influence flow experiences (i.e., absorption and enjoyment) both directly and indirectly, through their impact on challenge and skills over time. Therefore, we assume that self-efficacy predicts flow experience not only directly, but also indirectly through the challenges and skills combination over time in a kind of virtuous circle. (p. 427)

Interestingly, these researchers saw an ethical link that they called a "virtuous circle".

In terms of ethics, all Australian school leaders receive pre-service education as teachers, and therefore the three main reasons for choosing teaching as a career, developed by Kyriacou and Coulthard (2000), still influence how school leaders think of education and their leadership:

- (1) *altruistic reasons*: these reasons deal with seeing teaching as a socially worthwhile and important job, a desire to help children succeed, and a desire to help society improve;

- (2) *intrinsic reasons*: these reasons cover aspects of the job activity itself, such as the activity of teaching children, and an interest in using their subject matter knowledge and expertise; and
- (3) *extrinsic reasons*: these reasons cover aspects of the job which are not inherent in the work itself, such as long holidays, level of pay, and status. (p. 117)

The altruistic and intrinsic reasons for selecting teaching are moral in nature, and they hold regardless of whether the educator is a teacher or principal. Moral reward appears to be a key factor in both teacher and principals' motivation, accompanied by the development of personal concepts of self-efficacy.

Supporting the moral nature of teachers and principals' entry into teaching, the purpose statements of schools are typically comprised of four moral intents or obligations:

- The school will optimise students' learning.
- The school will facilitate students' transition to the next stage of learning (high school or work).
- The school will create a happy and productive learning environment.
- The school will ensure that students have the necessary skills and understanding to contribute to a democratic society.

These four moral intentions cover the six purposes of education found in Canadian schools: social adaptation; social reconstruction; personal development; career development; academic development; and cognitive development (Leonard, 1999, p. 223).

Likewise, in relation to school leadership, four levels of moral purpose were identified by Fullan (2002, 2003):

- making a difference in the lives of students;
- committing to reducing the gap between high and low performers within your school or district;
- contributing to reducing the gap in the larger environment; and

- transforming the working (or learning conditions) of others so that growth, commitment, engagement and the constant spawning of leadership in others is being fostered.

O'Donoghue and Clarke (2010, p. 59) agreed with this position, noting that moral leadership is like transformational leadership, "but with a stronger value base".

Examining teachers' work van Kan, Ponte, and Verloop (2010) identified the inherently moral nature of teaching when teachers acted in the best interests of the children (not the best interests of the students). Starratt (1998) concurred with this position, arguing that teacher and student learning are intrinsically moral activities that are culturally biased and cannot be sustained unless the learning takes place in the formal situation of a school or some other society approved situation. He stated:

If, as educators, we can understand that the nature of learning itself is intrinsically a moral activity, then the involvement of teachers in that activity partakes of that intrinsically moral character. Leadership within that morally charged environment then involves educators necessarily in attending to the moral character of what the community is called to do. Unfortunately, the work of learning and teaching is all too often defined in technical terms, not moral terms. (p. 244)

A key issue for the principalship remains that the school community expects the principal to be the "personification and embodiment of the values of the school or community" (West-Burnham, 2009, p. 65). While supporting this long-held proposition, Goodlad (2004, p. xii) warned that in a context of incessant change, "It is not easy ... for our schools to be places of joy, learning and integrity to moral purpose".

Self Efficacy

Early research on school-related efficacy is now over three decades old. The pioneering work of Amor et al. (1976, p. 23) examined minority students' reading ability in Los Angeles, and they found that, "The more efficacious the teachers felt, the more their students advanced in reading achievement". Self-efficacy is also a key factor in leadership, and students' learning. However, self-efficacy is a belief in one's own ability, not actual ability, to perform a task or achieve a goal (Leithwood & Jantzi, 2008, p. 497). The essential work of schools is socio-cognitive learning,

and as Goddard, Hoy and Hoy (2004, p. 3) observed there are three levels of efficacy beliefs in schools, all of which influence students' learning. The first level of efficacy beliefs related to the students and there is a growing corpus of research showing the importance of students' efficacy belief to their learning. The second level examines teachers' efficacy beliefs (Tschannen-Moran, Hoy, & Hoy, 1998). The third level and most recently developed area, is that of teachers' collective efficacy beliefs (Goddard, Hoy, & Hoy, 2004).

Self-efficacy is of vital importance at the three levels in education, and Reeves (2008, p. 4) commented, "The data from our studies suggests that where there is a high degree of teacher and leadership efficacy, the gains in student achievement are more than three times greater than when teachers and leaders assume that their impact on achievement is minimal". Similarly, the effect of the development of self-efficacy on students' self-image and learning cannot be ignored as Gettingen's (1999) cross-cultural, education studies in pre-unification Germany showed.

This research will examine a fourth level of self-efficacy, that of school leaders, because there is now a developing research base that shows school leaders influence students' learning. Indeed, as Leithwood et al. (2004) observed:

While the evidence shows small but significant effects of leadership actions on student learning across the spectrum of schools, existing research also shows that demonstrated effects of successful leadership are considerably greater in schools that are in more difficult circumstances. Indeed, there are virtually no documented instances of troubled schools being turned around without intervention by a powerful leader. Many other factors may contribute to such turnarounds, but leadership is the catalyst. (p. 5)

In tough situations, the principals' knowledge, skills, efficacy, resilience and motivation are all influential factors in turning around schools' operations, and students' learning.

Bandura's model of self-efficacy.

Personal efficacy, Bandura (1977, p. 191; 1999, pp. 3-4) hypothesised, is based on four factors: "In the proposed model, expectations of personal efficacy are

derived from four principal sources of information: performance accomplishments, vicarious experience, verbal persuasion, and physiological states. The more dependable the experiential sources, the greater are the changes in perceived self-efficacy”. Self-efficacy is a complex mix of personal beliefs about one’s personal abilities, and as Helterbran (2007, p. 12) observed, “Self efficacy, the perceived belief in one’s abilities to organize and execute a learning task, also involves issues of competence and control”. Bandura’s (1977, p. 195) examination of the four sources of efficacy expectations are developed in the four inputs model of self-efficacy, and Betz (2007, p. 409) explained, “It is these learning experiences—performance accomplishments, vicarious learning, social persuasion, and physiological arousal—that therefore should guide the development of efficacy-theory-based interventions”.

Self-efficacy is of critical importance in the development of human agency, and Bandura (1982) found:

Perceived self-efficacy helps to account for such diverse phenomena as changes in coping behavior produced by different modes of influence, level of physiological stress reactions, self-regulation of refractory behavior, resignation and despondency to failure experiences, self-debilitating effects of proxy control and illusory inefficaciousness, achievement strivings, growth of intrinsic interest, and career pursuits. (p. 122)

Students’ self-efficacy is a key determinant in occupational choice: “Children’s perceived efficacy rather than their actual academic achievement is the key determinant of their perceived occupational self-efficacy and preferred choice of work-life (Bandura, Barbaranelli, Caprara, & Pastorelli, 2001, p. 187).

Collective efficacy.

The era of promoting the singular (male) hero-leader has finished (Senge, 2000; West-Burnham, 2009). Organisational theory now acknowledges the need for collective leadership, and consequently, Watson, Chemers and Preiser (2001), quoting Bandura, observed that “Collective efficacy represents a group’s shared belief in its conjoint capabilities to organize and execute the courses of action required to produce given levels of attainments”. Bandura (1999, p. 34) warned that some writers have equated self-efficacy with individualism. This is not the case, and

he noted that, “a high sense of personal efficacy contributes just as importantly to group directedness as to self-directedness” (p. 34). In education, several studies have documented a strong link between perceived collective efficacy and differences in student achievement among schools (Bandura, 1993; Goddard, 2001) as Goddard et al., 2004 explained:

Bandura demonstrated that the effect of perceived collective efficacy on student achievement was stronger than the direct link between SES and student achievement. Similarly, Goddard and his colleagues (2004) have shown that, even after controlling for students’ prior achievement, race/ethnicity, SES, and gender, collective efficacy beliefs have stronger effects on student achievement than student race or SES. Teachers’ beliefs about the collective capability of their faculty vary greatly among schools and are strongly linked to student achievement. (p. 7)

In examining cross-cultural perspectives on self and collective efficacy, Gettingen (1999) compared East and West Germany, before unification. In East Germany, students submitted to teacher and peer evaluations in front of the class collective, and also in “learning conferences” in which the student underwent public evaluation (pp. 158-159). In contrast, students in West Germany were protected by privacy considerations. On Re-unification, as a group, the less able East Germans suffered the greatest loss of self-efficacy because they had been protected in the authoritarian, East German state. Gettingen (1999) reported that:

Earley found that the assessed level of self-efficacy was a highly valid predictor of performance for both types of work conditions (i.e., individualistic vs. collectivistic) for both types of people (i.e., individualistic vs. collectivistic). This latter finding further supports the assumption that self-efficacy’s affect on performance is universal. (p. 171)

Self-efficacy and principal competence.

There is an obvious link between competence, peak performance and self-efficacy. However, while the contents of principal competence lists are much debated, it is often difficult for researchers to reach agreement on all of the dimensions of principals’ competence. In model building every researcher has a personal view of principal competence that often varies from the normative views.

The Dutch researcher, Kruger (2009), has proposed a “Big 5” model of principal competencies, a concept which she has borrowed from the *Big 5 Trait Theory* in personality study. Kruger (2009) identified these five competencies as part of her Big 5 model: Vision orientation; context awareness; deployment of strategies that match new forms of leadership; organisation awareness; and higher-order thinking (p. 120).

Not surprisingly as can be seen in Table 1 (below) Kruger’s (2009) Big 5 Principal Competency Model has a degree of consensus with the work of other researchers. The job of school leaders is to lead and manage others in an educational setting, to optimise students’ learning, which ensures a degree of overlap between organisational and educational operations.

Table 1
Principal Competence: Attempting Convergence

Competence	Kruger, 2009	Leithwood, 2007	OPPD Chicago
Vision orientation	X	X	X
Context awareness	X		
Deployment of strategies that match new forms of leadership	X		
Organisation awareness	X	X	X
Higher-order thinking	X		X
Developing people		X	X
Managing the instructional program		X	X
Facilitate/ Motivate change			X
Balance management			X

Leithwood, Mascall, Strauss, Sacks, Memon, and Yashkina (2007, pp. 43-45) identified four broad leadership functions that included: setting direction; developing people; redesigning the organisation; and managing the instructional program. Leithwood et al. (2007) developed sub-functions for each of the four functions. Importantly, Leithwood and his co-authors recognised the importance of instructional/pedagogic leadership. School systems across the world have developed their own list of competences. The Chicago Office of Principal Preparation and Development (OPPD) (n.d.) utilised five principal competencies that complement the Kruger (2009), and Leithwood et al. (2007) models. The Chicago model, being strongly school-centred, too, emphasised instructional leadership, and also change leadership.

There have been a number of discussions of the closely related theories of competence and self-efficacy. In terms of leadership McCormick (2001, p. 39) posited that, "Leadership self-efficacy is a necessary though not sufficient factor contributing to leadership effectiveness". In other words, self-efficacy is a contributing factor to leadership effectiveness, but other contextual factors are in play also. It is possible for a school leader to have been effective in a small school, but fail in a new appointment to a larger school. As a result of this failure the leader's sense of self-efficacy will have been damaged in the new, more complex context. It is extremely improbable that any effective leader can lack the personal quality of self-efficaciousness, so McCormick's (2001) observation that self-efficacy is a *necessary* condition, is correct.

Self-efficacy is a partitioned concept within the development of human agency. Individuals acknowledge varying degrees of self-efficacy according to their perceptions of what they do well, or poorly. Chemers, Watson and May (2000, p. 269), quoting Bandura, supported the partitioning assertion by proposing that, "... that domain specific measures of self-efficacy should have better predictive validity for behavior and performance than more general measures such as self-esteem". Self-efficacy also responds to self-regulation, feedback, and the cognitive regulation of motivation (Bandura, 1991).

A consequential link between efficacy and responsibility was identified by Wahlstrom and Louis (2008):

A related concept that is emerging in the reform literature is “collective sense of responsibility.” Here the emphasis is on teachers’ belief that they not only have the capacity to influence student learning but the shared obligation to do so. Collective responsibility is often regarded as the outcome of collective efficacy. (p. 466)

There is little doubt that the sense of self-efficacy, which strongly reinforces school leaders’ actions, also reinforces the school leaders’ sense of responsibility for collective outcomes.

Maslow and Peak Experiences

Often confused are the relationships between *peak experience*, *peak performance* and the *optimal performance* of Flow. Jackson and Csikszentmihalyi (1999, p. 13) saw two related but different experiences: “While flow is important for those seeking peak performance, flow experiences are also rewarding for their own sake, regardless of the outcomes they may produce”. Privette (1983), attempted to differentiate the three overlapping constructs. Peak experience was “moments of highest happiness and fulfillment (*sic.*)” (Maslow, 1962, p. 69; as cited in Privette, 1983, p. 1362). Privette (1983) described peak performance as:

Peak performance is a high *level* of functioning rather than a *type* of activity. Therefore, it may occur in any activity as creative expression through an art form, physical strength in a crisis, prowess in an athletic event, intellectual mastery of a problem, or a rich human relationship. (p. 1362)

Csikszentmihalyi (1994, p. 299) acknowledged that he was influenced, as a student, by Maslow, and he noted that Maslow’s *peak experiences* were similar to Flow. However, quoting the early work of Csikszentmihalyi, Privette (1983, p. 1363) further stated, “Flow highlights enjoyment. The construct provides a model for understanding intrinsic motivation and reward”.

The relationship between peak performance and Flow is spelled out by Csikszentmihalyi (1994, p.193) when he said, “Research shows that flow occurs during peak performance, and that athletes are motivated to do their best in order to experience flow again and again”.

Maslow's peak performance, peak experience.

Maslow had developed the concept of peak performance in the 1960s and he saw it as a development of religious experiences: "Practically everything that happens in the peak-experiences, naturalistic though they are, could be listed under the headings of religious happenings, or indeed have been in the past considered to be only religious experiences" (Maslow, 1964, p. 59). Maslow, in this case, equated the human reaction to peak experience with those reported in a deeply religious context. A major problem in studying peak-experience is identifying the triggers. Maslow noted (1968, p. 167; 1971, p. 152):

For purposes of identifying and studying peak experiences, a list of triggers can be made. The list gets so long, however, that it becomes necessary to make generalizations. It looks as if any experience of real excellence, of real perfection, of any moving toward perfect justice or toward perfect values, tends to produce a peak experience. Not always. (p. 152)

Acknowledging the overlap with Maslow's theoretical work, Csikszentmihalyi (1975) stated "What Maslow (1962, 1965, 1971) has called 'peak experiences', and de Charms (1968, p. 44) has called 'origin state', share many distinctive features with the process of flow".

Maslow identified some 25 experiences, classified as both religious and belonging to peak experience, and they included:

- During peak experience the "whole universe is perceived as an integrated and unified whole" (p. 59).
- Cognition during peak experiences "tends to perceive external objects, the world, and individual people as more detached from human concerns". (p. 61) "Phrased positively, this is like experiencing universality and eternity" (p. 63).
- "In the peak-experience there is a very characteristic disorientation in time and space, or even the lack of consciousness of time and space. Phrased positively, this is like experiencing universality and eternity" (p. 63).

- “The world seen in peak-experiences is seen only as beautiful, good, desirable, worthwhile etc. and is never experienced as evil or undesirable” (p. 63).

From a research “insider” stance, Maslow (1964) observed that those researchers who had experienced peak-experience communicated better with the respondents who “know what you mean, i.e., people who have vivid peaks and who can, therefore, feel or intuit what you are trying to point to even when your words are quite inadequate in themselves” (p. 84).

In the world of business and organisation, some companies and organisations are persistent high performers. Pratt (2001, p. 479) developed a primary research question: “How do elite organizations sustain peak performance?” In interviews, the question became, “Why do you keep winning?” The published research then revealed details of Peak Performance Organisations (PPOs) and the role of inspiration:

PPO Theory starts with the concept of an inspirational dream, which gives meaning and purpose to organizational participants. For me, the inspirational dream of the peak performance project is to tell inspirational stories that help people and organizations to become the best that they can be while having the maximum fun doing it. That’s the dream of a lifetime. (Pratt, 2001, p. 482)

A key issue with peak experience is measuring the quality of those experiences. Mathes, Zevon, Roter and Joerger (1982, p. 95-96) acknowledged Wuthnow’s earlier work where he classified his subjects into high-peakers, average peakers and non-peakers based on three experiences: “the feeling of close contact with something holy or sacred; appreciating the beauty of nature in a deeply moving way; and the feeling of being in harmony with the universe”. Interestingly, Wuthnow (1978) had researched a large sample of people (N= 1000) and he found “... peak experiencers do, as Maslow (1970) suggested, exhibit some important differences from nonpeakers. In particular, they appear to be less materialistic, less status conscious, and more socially concerned than nonpeakers”. (p. 74) Wuthnow’s data suggested that school leaders, who are often driven by critical exigencies, would seem less likely to have peak experiences than other groups in society.

Hanin and the Individual Zones of Optimal Functioning (IZOF) Framework

Athletes recognise the critical importance of getting into *the zone* during training and competitive performance. The zone represents a place where everything is working well, pre-race anxiety drops away and the athlete knows that he or she is going to achieve a personal best performance, which may result in winning and setting records. The elusive psychobiosocial state of the zone has been researched by sports psychologists, and as a result Hanin (2003) developed the *Individual Zones of Optimal Functioning (IZOF) Framework*:

The IZOF model (Hanin, 1997, 2000) is an intra-individual framework that aims to describe, predict, explain, and control athlete's optimal and dysfunctional experiences related to individually successful and poor performances. This action-oriented individualized approach provides tools to conceptualize and assess accurately performance related situational subjective experiences, relatively stable emotional patterns, and meta-experiences for the development of individualized self-regulation (intervention) programs. The model defines performance related *psychobiosocial state* as a situational, multimodal, and dynamic manifestation of the total human functioning. Multilevel and system description of performance-related states includes at least five interrelated dimensions: *form, content, intensity, time, and context*. Three of these dimensions (form, content, and intensity) describe the structure of subjective experiences and meta-experiences; two other dimensions (time and context) characterize the dynamics of performers' subjective experiences. (Hanin, 2003, para. 2)

The advantage of the IZOF model is that it distinguishes between three independent levels of performance related experiences: “(a) situational (state-like) experiences, (b) relatively stable patterns of (trait-like) experiences, and (c) meta-experiences (knowledge, attitudes, preferences [or rejections] of one’s experiences)” (Nieuwenhuys, Hanin, & Bakker, 2008, p. 63). For athletes, of these three levels, the meta-experiences are developed through personal experience in racing and training, which is the part that gives experienced competitors a degree of advantage. In organisational studies these three levels will translate as contextual, idiographic-trait, and experiential learning.

In an application of the IZOF framework, Robazza, Pellizzari, and Hanin (2004) said of the model:

Five basic dimensions (form, content, intensity, time, and context) are used to describe individually optimal and dysfunctional structure and dynamics of performance related emotional experiences. The model provides the functional explanation of the dynamics of the emotion-performance relationships based on a detailed description of athletes' idiosyncratic subjective experiences. This is especially important because the practitioners assisting athletes in emotion self-regulation usually face three issues: (a) identifying emotional states related to individually successful and poor performances; (b) understanding emotion-performance relationships; and (c) selecting person- and task-relevant techniques of self-regulation. (p. 380)

In confirmatory research Palmer (2006) identified seven characteristics of athletes when they are operating in the zone:

1. They are totally absorbed and focussed on the activity.
2. They experience an inner clarity and understand exactly what is required of them, knowing their skills are perfectly matched to the task.
3. They have a sense of ecstasy, being outside their everyday reality.
4. They describe being in the moment focusing completely on the present, unaware of time passing, but conversely, they have a sense of time slowing down.
5. They feel a deep passion for the activity, driving them on to higher levels of performance. This experience provides further inspiration it becomes self-perpetuating.
6. They have a sense of serenity, no anxiety, no ego- consequently no fear about performance.
7. They experience no sense of effort. The activity becomes almost easy.... (p. 22)

Additionally, there is a high degree of correspondence between Palmer's seven characteristic of being in the zone, and Csikszentmihalyi's nine dimensions of Flow.

A major problem that arises for both Flow, and getting into the zone, is that even elite athletes, who experience the zone often, have trouble re-gaining entry. Palmer (2006), who trained athletes in peak performance, said of the zone: “I believe that the Zone is a primitive ability and therefore an automatic function triggered by circumstances. It’s a place we arrive at when we let go and allow it to happen. We cannot get there directly by deliberately trying...” (p. 43). Palmer’s belief was confirmed by Edwin Flack, an Australian Olympic marathon squad member, who noted the impossibility of an athlete’s formulaic entry into the zone. (E. Flack, personal communication, September 5, 2010.)

In his experience of free-running (called “parkour”), Atkinson (2009) experienced Flow/the zone, and in agreeing with Flack, he noted that the letting go of unrelated conscious thought appeared to be the key to entry into the zone: “The movement, and our underlying orientation in the session, encouraged me to let go of all conscious thought and simply be present with my breath, movement, and the physical environment. Lines separating roads, buildings, cultures, selves, and bodies disappeared. I had never experienced the city, or running for that matter, in this way. And even though I felt exhausted at the end of the session, a strange peace descended upon me” (p. 170).

Csikszentmihalyi, Flow and Positive Psychology

Against the background of Maslow and Bandura’s research, positive psychology was developed as a long overdue response by psychologists to the perceived orientation of traditional psychology. Seligman and Csikszentmihalyi (2000), who were instrumental in the creation of positive psychology, complained that psychology “concentrates on repairing damage within a disease model of human functioning” (p. 5). The authors proposed that positive psychology would be about positive experiences (well-being, contentment, satisfaction, hope, optimism, Flow, happiness, love, courage, forgiveness, nurturance, altruism, tolerance etc.). In education, Bullough and Hall-Kenyon (2011) observed that negative psychology had prevailed:

Much has been written about the changing context of schooling in the twenty-first century. Surveying the landscape, critics recognize the emergence of a

new managerialism, grounded in a punishing rather than a positive psychology (Ball 2003). Two assumptions underlie most recent school improvement efforts: (1) that threats of punishment – from termination to school closure – motivate teachers to work harder and more efficiently; and (2) that student scores on standardized tests accurately portray both school and individual teacher performance (Nichols and Berliner 2007). (p. 127)

A prime example of positive psychology can be seen as societal pressures demand change, and in key areas such as the exposure of soldiers to traumatic events where psychologists are working to improve soldiers' resilience through proactive-preventative training (Cornum, Matthews and Seligman, 2011).

Arguing for positive psychology programs to be taught in schools, Seligman, Ernst, Gillham, Reivich, and Linkins (2009) observed:

Not only is there widespread depression and spotty increases in happiness, two good reasons that well-being should be taught—if it could be taught—but there is a third good reason. *More well-being is synergistic with better learning*. Increases in wellbeing are likely to produce increases in learning, the traditional goal of education. (p. 294, authors' emphases)

A comprehensive training program carried out at Geelong Grammar School by Seligman et al. (2009) showed good results within the student population.

Schools are often portrayed as tough places, where happiness is a fleeting experience that is stolen between traumatic events. Birbalsingh (2011) related one year of teaching in an inner-city school in England, and she warned the readers in the Foreword:

In order not to bore the reader, I have omitted from this diary the fights that happen every week or, indeed, every day. And to protect real individuals, I have kept some of the worst stories of our education system to myself. While the situations are my creations, there is nothing in *To Miss With Love* that hasn't happened in my ten years as a teacher. I worry about losing my job for having written this book. (p. ix)

War stories have become the currency of shared educational experience, and they appear to be the chief authenticators of author credibility in the teachers' world.

The reason why Csikszentmihalyi is so important in education and psychology is that he has attempted to portray psychology, life and the worlds of sport and work in a positive light through the Flow experience.

Csikszentmihalyi: Developing Flow Theory

The concept of Flow was first developed by Csikszentmihalyi when analysing activities such as rock climbing, chess, dance, basketball and musical composition (Csikszentmihalyi, 1975, p. 41). Csikszentmihalyi (1975, p. 43) examined intrinsic rewards and motivation, and from that developed the concept that he called Flow, "... for the lack of a better term." The six elements of the Flow experience that were identified in this early research included: merging of action and awareness; centering of attention; loss of ego; control of action and environment; demands for action and clear feedback; and the autotelic nature of flow (Csikszentmihalyi, 1975, pp. 44-55). The material in Csikszentmihalyi's original article was challenged by Barnett, who was critical of aspects of play described by the author. In his response he attacked Barnett's artificial separation of intrinsic and extrinsic motivation, but went on to clarify Flow experiences. He concluded, "Whether the flow theory is less elegant than optimal arousal theories is a decision I leave to the readers' aesthetic taste" (Csikszentmihalyi, 1976, p. 91).

Observing the operations of schools, Csikszentmihalyi and Reed (1978) posited that extrinsic motivation destroyed intrinsic motivation: "Unfortunately, these extrinsic sanctions and rewards, upon which the school is based, are destructive to any intrinsic motivation that still exists" (p. 330). The authors also noted that "The feeling of personal causality is subverted. Thus, schools tend to destroy any enjoyment in learning that may already be there" (p. 330).

Csikszentmihalyi's Flow Theory in Sport

Flow Theory is a description of an *optimal psychological state* (Jackson & Eklund, 2004, p. 3) or *optimal experience* (Csikszentmihalyi (1991, p. 3) that, as Csikszentmihalyi (1991, p. 2) observed, is an elusive phenomenon. Elsewhere, Csikszentmihalyi (1994, p. xiii) acknowledged the metaphoric quality of Flow and said, "I call it 'flow' because this was the metaphor that several respondents gave for how it felt when their experience was most enjoyable- it was like being carried away

by a current, everything was moving smoothly without effort.” Later, Csikszentmihalyi (1994, p. 177) confirmed that “... many respondents in our studies have said that during these memorable moments they were acting spontaneously, as if carried away by the tides of a current.” Csikszentmihalyi also reported (1997b, p. 29) that athletes refer to Flow as being *in the zone*, religious mystiques use the term *ecstasy*, musicians talk of being *in the groove*, and artists refer to *aesthetic rapture*.

Flow in sport and physical activity.

Flow Theory is more easily identified in sport and physical activity because the events are more discrete, temporally and contextually defined, than is the case of management and leadership examples. For example, swimmers, runners and cyclists all know what their personal capabilities are in terms of *personal best* performances. Training drills allow elite athletes to develop intimate knowledge their personal capabilities, and they usually measure their personal best performances against national, Olympic and World Records. In attempting a personal best performance the athlete concentrates on developing an optimal performance and a match of challenge-skills balance.

Joint Flow.

Joint Flow is far more difficult to elicit than individual Flow, because of the number of people who need to arrive at the same psychological response, as a result of highly personal experiences, based on common actions.

The word “competition” comes from the two Latin words “con petire” which meant “to search together.” The idea was that the best way to find out how good your skills were was to match them with another person. The point of competition was not to beat someone else, but to search out your personal best (Jackson & Csikszentmihalyi, 1999, p. 80). This is succinctly explained by Novak (1976, as quoted in Bache, 2008) when he explained the emergence of “group mind” in sport:

When a collection of individuals first jells as a team, truly begins to react as a five-headed or eleven-headed unit rather than an aggregate of five or eleven individuals, you can almost hear the click: a new kind of reality comes into existence at a new level of human development.... For those who have participated in a team that has known the click of communality, the experience

is unforgettable, like having attained, at least for a while, a higher level of existence. (p. 45)

Surgery is a team effort, and success in difficult circumstances is often characterised by a “transcendence of ego boundaries” (Csikszentmihalyi, 1975/2000, p. 136). When the surgery is going well, “... it’s like basketball: you don’t have to stop and look around to see where the ball is, you know how things are by the way the motion is going” (Csikszentmihalyi, 1975/2000, p. 136).

Music is an ideal vehicle for the experience of Flow, and an orchestral or ensemble group can develop group Flow, which Sawyer (2006) claimed has been a neglected study:

Group flow has been neglected in studies of flow, which have focused on how individuals attain flow through their own actions (cf. Jimerson, 1999). In group flow, everything seems to come naturally; the performers are in interactional synchrony (Sawyer, 2003a). In this state, each of the group members can even feel as if they are able to anticipate what their fellow performers will do before they do it. Group flow is an emergent property of the group. Group flow can inspire musicians to play things that they would not have been able to play alone, or that they would not have thought of without the inspiration of the group.... (p. 158)

Sawyer’s (2012) later study identified 10 keys to joint Flow, which were different from the dimensions listed by Jackson and Csikszentmihalyi (1996).

Csikszentmihalyi’s Flow Theory in non-Sporting Activities

There is a common perception that Flow is more likely to occur in sport and physical activities such as running and rock climbing. While the Flow experienced in sport dominates the Flow literature, the original Flow Theory, developed by Csikszentmihalyi, was based on observations of artists (Csikszentmihalyi, 1994, p. xi), and he noted, “An almost hypnotic trance seemed to seize them as they struggled to give shape to their vision.” Writing about passion and its impact on people’s performance, Robinson (2009) examined what he called the *zone*. He noted that some people get into the zone through a sense of danger and physical exertion, but for others:

... it may come through activities that seem physically passive, through writing, painting, math, meditation, and other modes of intense contemplation.... We may have different experiences of it in our lives. However, there are some common features to being in that magical place. (p. 90)

Flow in work.

The experiences of deep-Flow are well documented in the sporting arena, but the concept of Flow (micro and deep/macro) in work is less well recognised. Work, the modern equivalent of hunting and gathering, occupies far more time than hunting and gathering in say the stone-age era (Csikszentmihalyi, 1991, p. 143). However, the point made by Gardner, Csikszentmihalyi and Damon (2001, p. 5) is that Flow experiences occur more often at work, than at leisure, providing the job is challenging and has clear goals. For some, work is a Godly act. Weber (1978) in his study of the protestant (work) ethic and the spirit of capitalism, equated work with God's will. Protestant ascetics argued that work equated to moral worthiness, a sense of higher being:

“Work hard in your calling.” But the most important thing was that even beyond that, labour came to be considered in itself the end of life, ordained as such by God. St. Paul's “He who will not work shall not eat” holds unconditionally for everyone. Unwillingness to work is symptomatic of the lack of grace. (p. 159)

The spiritual dimension of work, and the time spent working, helps create a culture in which Flow can be generated by personal and organisational goals and challenges.

Csikszentmihalyi's (1975/2000) research into Flow in surgeons' work was similar to the Flow experiences found in leisure activities. It was noted that outstanding surgeons may avoid the routine and boring aspects of their work by giving those tasks to assistants, while they oversee the operation and do the difficult bits (p. 128). However, not everyone is involved in the challenging work of surgery, and as Mitchell (1998) observed:

Flow, for the most part, takes place in avocational rather than vocational activities. Although it would be ideal to enjoy one's work, and in a few fortunate societies this might indeed be the case, it is generally true in our

society that most people do not find deep involvement and enjoyment in their productive work, but seek it instead in leisure activities. (p. 36)

For most wage earners in Western society, the weekend is the highlight of the week, which is why Mondays elicit such negative feelings.

Flow in professional writing.

Flow is an experience successfully used by writers. Perry (1999) researched the Flow experiences of a large pool of poets and writers, and she found that writers, not unlike athletes seeking the zone, actively sought the creative productivity of writers' Flow. For writers the Flow experience is so powerfully productive that the writers had set techniques to "lure" Flow. Writers in Perry's study had developed rituals and routines, meditation, musical settings and a variety of other strategies to be able to elicit a Flow state.

Flow for successful writers is an integral part of their writing repertoire. Perry (1999) commented that:

For most writers who work regularly, though, flow tends to be such a routine event that it becomes difficult to recall the details of any particular writing session. That may be why those writers who describe atypical flow sessions were able to do so with more detail and concrete particulars than the way they talked about their typical flow writing sessions. (pp. 158-159)

Writers' block is a phenomenon that is experienced by all writers. Interestingly to overcome this problem, Perry developed what she believed were the five keys to attaining Flow for writers, which had similar educational intent to Palmer's (2006) claim of being able to train sports people to "break through to new levels of fitness and performance- by doing less" in attaining the zone. Perry's five keys to writing Flow were: have a reason to write; think like a writer; loosen up; focus in; and, balance among opposites.

An important question that arises in sport is, "How long the Flow phenomenon can be experienced?" In the world of literature, Perry was informed by writers and poets that Flow sessions could be forty minutes, hours, all night and one

writer claimed to have been in Flow for “thirty to forty hours at a sitting” (Perry, 1999, p. 144).

Flow in teaching and learning.

It has been observed that work and education “are not built to provide optimal intrinsic motivation” (Csikszentmihalyi, 1975/2000, p. 137). Many teachers and school leaders work in schools, driven by the moral notion of doing good for others, which impacts on the school-based concepts of flow:

Educators are likely to experience a sense of flow when they are immersed in complex activities that serve a greater purpose, such as helping students learn, and when they can see the results of their work (their students’ achievement). At times like these, they experience some of their happiest and most productive moments. (Vojtek & Vojtek, 2009, p. 24)

If Vojtek and Vojtek were correct then this moral notion needs to be recognised as a precursor of Flow experiences in teachers, and people devoted to the service of others.

The concept of optimal performance is critical to Flow, as experienced in schools. Vojtek and Vojtek (2009) defined optimal performance in the school setting:

We define optimal performance as the state in which individuals within the school community are enthralled in complex, job embedded educational work and learning experiences that serve a greater purpose, have a clear and specific focus, provide knowledge and feedback about the results of the educator effort, intrinsically captivate educator attention, are balanced between the challenge of the activity and the knowledge and skill of the individual, and clearly make a difference in helping all students achieve personalized and collective learning goals. (p. 25)

Furthermore, the authors describe optimal performance as a “... stream of flow-like experiences within a school setting,” which empowers communities to accomplish the “morally compelling mission” (p. 25).

According to Csikszentmihalyi (1997, as cited in Basom & Frase, 2004, p. 33) it is easier for students to be in Flow when the teacher is in Flow. This statement underscores the importance of a teacher's psychological state in the workplace.

However, the assertion is not based on empirical evidence directly derived from a study of teachers. Teaching physical activity is not that different to teaching abstract concepts. However, Csikszentmihalyi (1994, p. 178) observed that a teacher of dance "... derives the most profound enjoyment from passing on the complex skills of her craft, and thus contributing to evolution by enabling others to experience the joyful expression of bodily harmony."

A comprehensive qualitative study of teachers' Flow experiences was conducted by Caouette (1995, p. 367) in which teachers described their Flow sensations as feelings of excitement, relaxation, inner peace, calm, euphoria, joy, tingling, shivers, being moved to tears, gifted, sacred, spiritual, wonderful, warm, harmonious, connected, high, flying, goose bumps, sneezing and full of energy. Significantly, Caouette identified the five conditions that she claimed were necessary for Flow to occur:

1. Teachers' Flow experiences are dependent on the students experiencing optimal performances, or Flow. And, conversely the students don't experience Flow "unless there is a connection between the student and the teacher and participation with the lesson."
2. There needs to be a positive learning environment that allows students to feel safe and respected in the learning process.
3. For students to achieve Flow, there needs to be confirmatory feedback that students are learning and achieving.
4. Teachers experience Flow when they assist students to grow and they feel they are reaching their full potential as teachers.
5. Teachers and students need to feel challenged by the teaching and learning experiences. (pp. 368-369)

Flow and learning.

In an important observation about children's learning Csikszentmihalyi (1994) claimed that children:

... seem to be in flow, constantly; they enjoy 'unfolding their being' as they learn to touch, throw, walk, talk, read and grow up. Unfortunately they soon have to stop 'unfolding' as school starts to force their growth into patterns over which they have no control. When that occurs, flow begins to become

rarer, and many young people end up experiencing it only in games, sports, and other leisure activities with peers. (pp. 191-192)

A solution to this problem was proposed by Ackermann, Gauntlett and Weckstrom (2009) who reasserted the link between Flow, play, creativity and learning:

We are all creative and can become more so through practice and by fostering the relevant mindsets behind the creative process (curiosity, mental readiness, confidence, positive framing and commitment). These 5 mindsets help us pursue a balance between the challenge and our abilities (Flow), between openness and closure and being able to re-frame the problem and focus are essential for being creative and for self-directed learning. (p. 4)

In research that has important implications for all learning, Csikszentmihalyi (1994, p. 193) reported that the frequency of gifted students reporting flow experiences was a better indicator of their future success than parental status and income. He also noted that the students experiencing Flow were more likely to continue in that field of learning, and at more advanced levels.

The Nature of Flow

Flow is a psycho-physiological state that has some commonly recognised characteristics, that are elicited in individuals by a range of idiosyncratic strategies. Athletes and sportspeople have been known to try and induce Flow experiences by wearing the same shoes, or a variety of other superstitious, repetitive actions.

Controlling Flow.

There are considerable benefits in terms of performance in being able to control Flow. Jackson and Csikszentmihalyi (1999, p. 138) point out that it is not possible to control Flow, "... and attempting to do so will only make the state more elusive." However, the authors note that it is possible to remove obstacles and provide "facilitating conditions" that will increase its occurrence. There are recorded examples of athletes going through the same sequence of events, praying and wearing lucky charms to increase the possibility of a Flow experience (Jackson & Csikszentmihalyi, 1999, p. 138).

Flow and motivation.

Li-Fen (2006, p. 45) noted that Csikszentmihalyi (1975) proposed Flow theory as a way of understanding motivation. Csikszentmihalyi (1975/2000, p. 2) had observed that, “The management of behavior, as it is currently practiced, is based on the tacit belief that people are motivated only by external rewards or by fear of external punishment.” Intrinsic motivation, on the other hand, has the capacity to motivate individuals to higher levels. The powerful nature of Flow is such that it can become habit forming, and the athletes, sportspersons, principals and performers can become less adaptive as they narrow their pursuits in search of Flow experiences (Csikszentmihalyi, 1975/2000, p. 139).

Boredom and boring work conditions (Csikszentmihalyi, 1997b, p. 105) don't mean that the workers will never experience Flow. In a factory, Rico, who was given 43 seconds to check a movie camera's sound equipment over 400 times a day, thought his job was difficult, but he was able to cut down the individual item inspection time to 28 seconds and experience job satisfaction. However, failure to generate Flow experiences can lead to boredom, and “All too often the consequences may include alcoholism, family disruption and even suicide” (Csikszentmihalyi, 1975/2000, p. 139).

Levels of Flow.

As with most psychological responses, the responders differentiate between the levels of their subjective responses. Csikszentmihalyi (1975) had observed a continuum in Flow experiences on which he identified two subjective positions: micro-Flow, and deep-Flow or macro-Flow (Csikszentmihalyi, 1975/2000). Jackson and Eklund (2004, p. 3) commented that, “Micro flow experiences were postulated to fit the patterns of everyday life, whereas deep-Flow was reserved for experiences associated with higher levels of complexity and demand on the participant.” Csikszentmihalyi (1975/2000, p. 159) explained the micro-Flow experiences as, “They are the activities that fill the gaps in daily routine. They give structure to the experience in the interstices between the action patterns dictated by need and social role.”

Because of the routine nature of much of schooling, the concept of micro-flow is highly relevant. In Csikszentmihalyi's (1975/2000, p. 147) research into micro-Flow, he developed a taxonomy of activities to describe this category of micro-flow responses. Imagining, attending, oral, kinaesthetic, creative and social activities made up this framework, and the highest reported micro-Flow activities were talking and joking with others (57.1%); touching, rubbing and fiddling with objects (42.4%); and daydreaming (28.6%).

The challenge of building deep-Flow into everyone's life is difficult. "Social, political and economic differences all form barriers to people's ability to control their environment, and hence to their ability to experience flow" (Csikszentmihalyi, 1975/2000, p. 196). Within schools, the school leaders' challenge is create conditions for staff and students to experience deep-Flow.

Antiflow.

In dealing with potentially boring tasks, Csikszentmihalyi is at pains to point out how people doing simple, repetitive jobs can make their jobs more interesting by setting performance challenges. However, Caouette (1995) had proposed the term antiflow, as the antithesis of Flow. The antiflow phenomenon is experienced in "tedious, simplistic and routine activities" (p. 29). Boredom and frustration are the common consequences of antiflow in both work and leisure activities.

A Developing Conceptual Framework of Flow in the Work of School Leaders

The extant literature reporting the concept of Flow is useful in examining a conceptual framework relating to the work of school leaders. Csikszentmihalyi's claim (as cited in Gardner, Csikszentmihalyi, & Damon, 2001, p. 5) that Flow occurs more in the work situation than in recreational and physical activities where there are clear goals and timelines is helpful when constructing a conceptual framework. The literature divides the identification of Flow into the necessary and sufficient conditions of attaining a Flow state (exceeding targets etc.) and then the psycho-physiological conditions that result as a consequence of the Flow state. However, the Flow theory was further expanded by Jackson and Csikszentmihalyi (1999; and Jackson & Eklund, 2004) who stated:

The following nine fundamental dimensions or components best describe the *mind set* in flow:

1. Challenge-skills balance
2. Action-awareness merging
3. Clear goals
4. Unambiguous feedback
5. Concentration on the task in hand
6. Sense of control
7. Loss of self-consciousness
8. Transformation of time
9. Autotelic experience. (Jackson & Csikszentmihalyi, 1999, p. 16)

Each of these nine dimensions will be examined to determine if they fit across the broad dimensions of all Flow experiences, and then to determine if they can be used in the conceptual framework to examine the Flow experiences of school leaders.

Csikszentmihalyi's nine dimensions of Flow have been used extensively in research, as *prima facie* indicators of the Flow experience in: aging (Payne, Jackson, Noh, & Stine-Morrow, 2011); engagement in elite sport (Hodge, Lonsdale, & Jackson, 2009); gambling (Wanner, Ladouceur, Auclair, & Vitaro, 2006); knowledge work (Quinn, 2005); music (Sawyer, 2006); sequencing Flow (Elkington, 2010); passion (Fredricks, Alfeld, & Eccles, 2010; Jackson & Csikszentmihalyi, 1999); virtue (Annas, 2008) and work place Flow (Ceja & Navarro, 2011). Csikszentmihalyi has also been a prolific writer and his research and writing has covered a 35 year span.

1. Challenge-skills balance.

The key to Flow (described by Jackson & Csikszentmihalyi [1999, p.16] as the "Golden rule of Flow") is the challenge-skills dynamic balance, which Jackson and Eklund (2004, p. 7) saw as an intra-personal challenge, in which the "*perception* of challenge and skill drives the equation." There needs to be a physical and mental challenge in the task to elicit Flow, and if the task is too easy or far too difficult, boredom occurs. The challenge-skills balance is not dissimilar to Vygotsky's Zone of Proximal Development (ZPD) where the students' prior learning makes the tasks

achievable, with a major effort. In surgery, Csikszentmihalyi, (1975/2000, p. 128) found that “Flow is present in some routine cases but is more likely to exist when the surgeon is engaged in a ‘challenging’ or ‘difficult’ operation which is going successfully.”

2. Action-awareness merging.

The effective merging of action and awareness is the prime characteristic of Flow, as Csikszentmihalyi (1994, p. 183) observed. “One becomes so concentrated and involved that the usual dualism between actor and action disappears, one does what needs to be done spontaneously, without conscious effort. This unified consciousness is perhaps the most telling aspect of the flow experience.” Jackson and Csikszentmihalyi (1999) reported top-ranked athletes’ perceptions of action-awareness merging:

Athletes reported this total absorption in very positive terms: “Everything feels very smooth and fluent”, “(I’m) totally absorbed in my stroke”, “(It’s) in the groove.” Some athletes focus on the fact that nothing else enters awareness such times.... The attention becomes so focused on the event that they report not seeing or hearing anyone or anything (p. 20).

Rock climbing provides an excellent example of action and awareness merging, because there is not much margin for error. Csikszentmihalyi (1975/2000, p. 85), in his early research, described “This fluid process of movement-balance-perception-decision-movement-balance ... forms the internal dynamic of climbing.”

3. Clear goals.

The setting of clear goals or targets is important for athletes, coaches, organisations and other formal or informal groups of people. Clear goals can be stated or personal, but they articulate an intent for the goal setters. The stated goals are placed in the public domain, which means that one or more people are aware of what the intention of the individual or group will be. In the lead-up to the Olympic games athletes and coaches set targets of performance that take into account the qualifying times, distances, or heights. In surgery Csikszentmihalyi (1975/2000, p.

139) observed that there were clear and agreed goals and in working in a team situation the surgeon was given essential feedback from others in the surgery team. In complicated surgery, clear goals demanded a narrow focus and concentration from everyone involved.

4. Unambiguous feedback.

In athletics, performing arts and other sports, feedback is critical for improvement. An important point made by Jackson and Csikszentmihalyi (1999, p. 22) is that the most important feedback for athletes is the internal, kinaesthetic feedback from their bodies. Then comes the external formal and informal feedback from others. Athletes performing in public situations report the feedback (applause, heckling) from the audience or spectators as providing instant feedback on their levels of performance (Jackson & Csikszentmihalyi, 1999, p. 23). Surgeons operate as part of a team and the ongoing feedback during complicated surgery allows the surgeon to make instant corrections (Csikszentmihalyi, 1975/2000, p. 133). A surgeon's observations of the patient during surgery (for example, blood in the cavity) also facilitates immediate feedback and makes the operation more exciting (Csikszentmihalyi, 1998, p. 32) than the work of internists and psychiatrists.

5. Concentration on the task in hand.

The challenge-skills balance is set so that the person who is being tested by the challenge must give their best effort, accompanied by uninterrupted concentration. When the challenges are higher than the person's skills then:

... one needs to pay complete attention to the task in hand, and there is no attention left over to process any irrelevant information. For instance, if a violinist begins to think about something else while playing a difficult piece, she is likely to play a wrong note (Csikszentmihalyi, 1994, pp. 182-183).

6. Sense of control.

Control, in real life, is a tenuous balance between a range of factors, far wider than the simplistic equation of a balance between skills and challenges. However,

Csikszentmihalyi (1994, p. 182) observed that rock climbers and concert violinists, for example, need to block out the extraneous factors to be able to concentrate on the task in hand. He claimed (p. 182) "... a climber hanging from his finger tips three thousand feet above the valley floor is not securely in control of his destiny, either, but he knows that if he does his best and concentrates, the probability of success is extremely high." Jackson and Csikszentmihalyi (1999, p. 26) reported: "... people report feeling that they can do no wrong. Like a feeling of invincibility, the sense of control frees the athlete from fear of failure and creates a feeling of empowerment for the challenging tasks to be executed."

7. Loss of self-consciousness.

The loss of self-consciousness is both causative and a consequence of Flow. Athletes describe "becoming one with the activity" and when this happens time is transformed and action and awareness merge (Jackson & Csikszentmihalyi, 1999, p. 27). Being in Flow induces a sense of invincibility accompanied by a loss of self-consciousness. Jackson and Csikszentmihalyi (1999, p. 27) observed that, "Flow frees the individual from self-concern and self-doubt. Loss of self-consciousness is an empowering characteristic: after the Flow experience, the perception of self is stronger and more positive."

8. Transformation of time.

The transformation of time is a common experience, particularly in risky enterprises, which may or may not fall within the domain of a Flow experience. "Another component mentioned in connection with the flow experience is the distortion of the sense of time, so that hours seem to pass in minutes" (Csikszentmihalyi, 1994, p. 186). However, the time dimension can either speed up, or slow down, when Flow is happening. Jackson and Csikszentmihalyi (1999, p. 29) reported that for some people time slows down, yet for ultra-marathon runners, time passes more quickly. It appears that when the athlete is concentrating, time passes slowly.

Elkington (2010) also identified an altered sense of place within Flow as a part of the boundary altering qualities of the Flow experience. He observed:

The sense of place in flow was also found to relate to the functional utility attributed to a particular leisure setting by the individual because of its ability to facilitate the desired flow-related serious leisure experience. The away-from-it-all qualities of the flow state and the feelings of attachment it engenders are thus evidence of a much broader, holistic “sensing of place” that encompasses affective, cognitive and symbolic meaning for the individual (p. 350).

9. Autotelic experience.

An autotelic experience is dependent on a set of preconditions, and Csikszentmihalyi (1994, p. 186) claimed that when most of the dimensions (Challenge-skills balance; Action-awareness merging; Clear goals etc.) “... are present in consciousness, the activity being undertaken tends to become autotelic, that is worth doing for its own sake. Because the experience is so pleasurable, one wants to repeat whatever helped make it happen.” Autotelic experiences are intrinsically rewarding in nature and Csikszentmihalyi (1975/2000, p. 181) identified three activities that were rated as autotelic:

1. Designing or discovering something new;
2. Exploring a strange place; and
3. Solving a mathematical problem.

The autotelic person is almost self-sufficient and needs very few material possessions or social interaction. Such is the power of their autotelic experience that they experience Flow:

... in work, in family life, when interacting with other people when eating, and even when alone with nothing to do, they are less dependent on external rewards that keep others motivated to go on with life composed of dull meaningless routines (Csikszentmihalyi, 1997b, p. 117).

For the purpose of this research, the nine dimensions of Flow developed by Jackson and Csikszentmihalyi (1999) (shown above) will be used a conceptual

framework in the coding of the transcripts produced during the e-interview process. The NVivo coding of free nodes will allow the coder to identify material that does not fit this conceptual framework of the nine dimensions, and then judgements about the utility of the conceptual framework can be made.

Chapter Summary

The second chapter addressed the specific issues of school leadership raised in Chapter 1 through the examination the literature in relation to the phenomenon called *Flow*. The work of Csikszentmihalyi in the development of the dimensions of Flow underwrites a widely recognised framework that provide a theoretical framework in the examination of key aspects of school leaders' intrinsic and extrinsic Flow experiences.

Csikszentmihalyi (1975/2000) made the point that society appears to believe that people are solely motivated by external rewards or fear of punishment (p. 2). He also noted that a fault of contemporary psychological study was that it was “concerned mainly with behavior and performance, rather than the inner states of experience” (p. 5). In his early research Csikszentmihalyi investigated the enjoyment of soccer and hockey players and he found that the respondents' enjoyment was purely intrinsic. However, he identified what he called the *autotelic experience*, which is a “psychological state, based on concrete feedback, which acts as a reward in that it produces continuing behavior in the absence of other rewards” (p. 23). The autotelic state is a manifestation of both micro and deep-Flow.

The psychophysiological nature of Flow is deeply subjective and it is elicited when there is an achievable gap between actors' skill levels and the difficulty of the challenge. In his earlier model Csikszentmihalyi (1975/2000, p. 49) represented Flow as a channel between the skills-challenge axes, and activities that fell outside that channel resulted in anxiety and boredom (too easy), or anxiety and worry when the task was too difficult. The levels of Flow are represented as a continuum in this model.

The complexity of Csikszentmihalyi's Flow model increased over time, with the confirmatory research being conducted in a wide variety of sports and

occupations. Examining play and intrinsic rewards Csikszentmihalyi (1975) had identified six qualities that make activities like rock climbing, chess, dance, basketball and music composition enjoyable. These qualities included:

(a) a person is able to concentrate on a limited stimulus field, (b) in which he or she can use his or her skills to meet clear demands, (c) thereby forgetting his or her own problems, and (d) his or her own separate identity, (e) at the same time obtaining a feeling of control over the environment, (f) which may result in a transcendence of ego-boundaries and consequent psychic integration with metapersonal systems. (p. 41)

This research project used Jackson and Csikszentmihalyi's (1999) nine dimension model as its conceptual framework. The Jackson and Csikszentmihalyi model (1999) had been developed earlier by Jackson and Marsh (1996). Beard and Hoy (2010) were able to confirm the structure of this model.

CHAPTER 3

Methodology and Methods

Introductory Overview

The research that is being undertaken to analyse school leaders' experiences of Flow, in their personal and professional lives, used the *embedded case study* (Yin, 2012) method. As has been shown in the first two chapters, the roles of school leaders have become more difficult, and the position is under threat. Some researchers are of the opinion that the school leaders' roles are now too complex for one person (Cambridge Primary Review, 2009). As a consequence, it appeared that Flow experiences, when linked with positive psychology, could facilitate school leaders' becoming more resilient. This problem and its hypothesised resolution have become the basis of this research project.

The research design employed in the research was conducted in four phases: Phase 1 involved a broad sweep of the literature and conversations with school leaders to determine if the Flow phenomenon had been experienced within their professional working lives.

Phase 2 of the research design required the researcher to locate a purposive sample of school leaders who would be able to contribute to the dearth of material that is available on Flow within a school-leadership domain. Eight school leaders were identified and they were recruited from government and private schools.

Phase 3 of the research, the actual e-interviewing, was conducted in 2010. The researcher used emails to conduct the questioning. The emails were sent to the respondents' private email addresses, so that employer permission to conduct research was not required.

Phase 4 the coding and analysis, was conducted during 2011. The coding and analysis was done using NVivo 9 software.

This embedded case study research was based on a purposive sample of ICT proficient school leaders who had experienced Flow, and it utilised the e-interview method of data collection (Bampton & Cowton, 2002; MacNeill, Cavanagh & Reynolds, 2009).

In relation to the method of interviewing, it should be noted that an e-survey is not an e-interview. In a survey, the respondent receives all of the questions at one time, and there is little opportunity for the researcher to go back to the respondent to seek clarification on some of the responses. In contrast, an e-interview is shaped so that the respondents' responses can be explored and developed over time. The e-interview is delivered with one or two questions at a time, and it is more flexible than a survey protocol. While researchers may develop a semi-structured interview schedule, subsidiary questions seek essential elaboration and then the responses will influence the next round of questions. Researchers have used the e-interview strategy extensively, and methodological articles on this topic have been widely published and accepted (James, 2007; James & Busher, 2006; MacNeill, Cavanagh, & Reynolds, 2009).

Hypothesised Conceptual Framework

The e-interview content and the hypothesised conceptual framework of Flow experiences in school leaders' roles were formed in response to the research questions, as shown in Chapter 1. While school leadership has not been studied specifically, Csikszentmihalyi (1994) noted the ubiquitous occurrence of Flow in society and across a variety of professions. He said:

Flow can occur in almost any activity. Although the nature of those pursuits may be as dissimilar as playing with one's child is different from hang-gliding, the quality of the inner experience in each case is described in often astonishingly similar words. Flow is the phenomenon everyone feels the same way, regardless of age or gender, cultural background or social class (p. 177).

In this research, the nine dimensions of Flow described by Jackson and Csikszentmihalyi (1999) have been used as a conceptual framework to examine the complexity of the school leaders' Flow experiences. The authors strongly make the point that the nine dimensions are the critical "FundaMentals" of the mental state of

Flow (Jackson & Csikszentmihalyi, 1999, p. 16). The twin emphases of *fun* and *mental* are emphasised in rock climbing, cycling, and even surgery. In proposing this hypothesised conceptual framework, it was expected that school leaders' Flow experiences could be mapped.

The challenge for this hypothesised conceptual framework is to determine whether it will fit the role of school leadership. The preliminary indications are that these nine dimensions will fit because of the extant research of into Flow in writing (Perry, 1999); surgery (Csikszentmihalyi, 1975/2000; Jackson & Csikszentmihalyi, 1999); teaching (Caouette, 1995; Csikszentmihalyi, 1991); and learning (Moneta, 2004). An important conceptual problem with the Jackson and Csikszentmihalyi (1999) model remains whether individuals can enter a Flow state if any of the nine dimensions are not present.

Research Approaches

This research incorporates the theory and practice from two research strategies: embedded case study and the e-interview. These approaches describe how the data is collected, and then how it is coded.

Case study.

In this chapter, case study is examined, and its application in this research is discussed. The *embedded case study* used in this research, as a research design, accommodates both qualitative and quantitative research methods. Scholz and Tietje (2002, p. 5) wrote of embedded case study: "... case studies- particularly embedded case studies- are considered an appropriate approach to real, complex, current problems that cannot be treated simply by one of the known analytical methods, such as experiment, proof or survey". This research has an *a priori* sense of direction, demonstrated in the semi-structured interview questions, the listing by the respondents of key dimensions, and supported by dialogic analysis.

Embedded case studies, usually involve more than one sub-unit where the multiplicity of evidence is investigated at least partly in subunits, which focus on different salient aspects of the case" (Scholz & Tietje, 2002, pp. 9-10). In their study of banking information systems, Beimborn, Franke, Wagner and Weitzel (2007)

conducted an embedded case study: “We therefore chose an embedded single case study design by selecting four branches and specific headquarter functions from a single retail bank case as embedded units of analysis.” In the embedded case study three levels of knowledge were investigated: Verstehen, Begreifen and Erklaren (understanding, conceptualising and explaining) (Scholz & Tietje, 2002, p. 30).

Yin (2009, p. 47) has developed a visual representation of case study design on a 2 X 2 matrix. In the x axis are single and multiple-case design, and on the y axis, holistic (single unit), and embedded designs. This case study is a single case (school leaders who have experienced Flow), which is an embedded design because of personal and professional differences in school leaders’ personal and professional experiences. In the third quadrant (single/embedded) the cases can be identified by public/private schooling; and, the leaders’ gender. The embedded case study represents a unifying variation on the understanding of a case. Hanley-Maxwell, Al Hano and Skivington (2007) explained the embedded case in their work on rehabilitative counselling:

Embedded case study is a single case study design in which subunits within the larger case are targeted as part of the study (Yin, 2003; Merriam, 1998). An example of an embedded single case study is a rehabilitation facility being studied as the large unit (or single case) and analysis occurring in the form of an evaluation of the programs, services, or human resources within the facility. The analysis from these levels would then be brought back to the facility level for analysis. The interaction between the whole unit (facility) and the embedded components (specific programs, services, and human resources) would be a critical piece of the equation (p. 107).

The sense of holism in the embedded case is recognised as the sum of the common parts, especially in complex cases with multiple actors (Bitektine, 2008, p.167).

In the literature there is a degree of confusion over what constitutes a case study because of the basic differences between qualitative and quantitative case study. Of this diversity, Gerring (2007) observed, a case study may mean:

(a) that its method is qualitative, small N, (b) that the research is holistic, thick (a more or less comprehensive examination of a phenomenon), (c) that it utilizes a particular type of evidence (e.g., ethnographic, clinical,

nonexperimental, non-survey based, participant-observation, process-tracing, historical, textual, or field research), (d) that its method of evidence gathering is naturalistic (a “real-life context”), (e) that the topic is diffuse (case and context are difficult to distinguish), (f) that employs triangulation (“multiple sources of evidence”), (g) the research investigates the properties of a single observation, or (h) that the research investigates the properties of a single phenomenon, instance, or example. (p. 17)

Gerring’s views are important, but there is a high degree of concurrence about the definition of a case study among the traditional case study advocates. Stake (1995) identified four dimensions of case study: holistic nature, empirical, interpretive and empathetic. Creswell (2003, p. 15) accepted Stake’s (1995) definition, which included an in-depth exploration of an entity bounded in time and place. In defining the case study as an “... intensive study of a single case (or a small set of cases) with an aim to generalize across a larger set of cases of the same general type” (Gerring, 2007, pp. 65, 211), Gerring (2007, p. 49) also confirmed that case studies are “... rightly identified with “holistic” analysis and with the “thick” descriptions of events”.

The Dutch researcher, Swanborn (2010), concurred, noting that case studies can be intensive research:

Case study methodology constitutes a difficult and confusing field because many research traditions use the same expression “case study.” The majority of publications are restricted to one of those traditions, and a world of difference exists, for instance, between case studies in traditional anthropology and, say, Yin’s work, which focuses on changes in organisations. (p. viii)

Yin (2009) clarified the situation and he stated that a case study is an empirical inquiry that:

- investigates a contemporary phenomenon in depth and within its real-life context, especially when
- boundaries between phenomenon and context are not clearly evident. (p. 18)

The interpretive aspects of case study research were discussed by Klein and Meyers (1999):

... research can be classified as interpretive if it is assumed that our knowledge of reality is gained only through social constructions such as language, consciousness, shared meanings, documents, tools, and other artifacts. Interpretive research does not predefine dependent and independent variables, but focuses on the complexity of human sense making as the situation emerges (Kaplan and Maxwell 1994); it attempts to understand phenomena through the meanings that people assign to them.... (p. 69)

Researchers often make the distinction between *emic* (culture-specific) and *etic* (culture-neutral, comparative) observation, which Creswell (1998, p. 60) saw as an insider's view compared with an external, outsider's view. Geertz (1973/2000, p. 27) extended understanding of descriptions by developing the term *thick description* to give added dimensions of insight and understanding. The Lynds' (1929/1957) study of Middletown represented a description of middle-America, which was strengthened by the reporting of conversations:

Much folk talk, for instance- the rattle of conversation that goes on around a luncheon table, on street corners, or waiting for a basket ball game to commence- is here presented, not because it offers scientifically valid evidence, but because affords indispensable insights into the moods and habits of thoughts of the city. (p. 6)

It was noted by Gerring (2007, p. 45) that case studies, "... if well constructed, may allow one to peer into the box of causality to locate the immediate factors lying between some structural cause and its purported effect".

The majority of case studies in research are positivist, and quantitative in nature. When the case displays numerical analyses and uses *a priori* questions, even in a semi-structured interview schedule, the study is deemed quantitative. Harvard Business School has used case study extensively in its MBA courses (Ellet, 2007). The Harvard Business School requires well written case studies to be able to:

- Construct conclusions from the information in the text;
- Filter out irrelevant or low-value portions of the text;
- Furnish missing information through references;

- Associate evidence from different parts of the case and integrate it into a conclusion. (Ellet, 2007, pp. 13-14)

The intent of the Harvard case study are heuristic experiences, as students learn from doing and analysing the cases presented.

Generalisability is a synecdochic (paraphrasing) function of the sampling strategies used in the research, where the part is seen as representing the whole. However, purposive sampling allows generalisation about the sample, fitting Mahoney's (2008, p. 413) dichotomy of *case-oriented* and *population-oriented* research. A major issue with case study is that the study can be seen as only relating to one observer's view of a specific phenomenon, at a specific time, and the belief that generalisation of the findings are not possible. Simons (2009, pp. 164-167) strongly refuted this as *myth* and she listed six types of generalisation in case study:

- Cross-case generalization;
- Naturalistic generalization;
- Concept generalization;
- Process generalization;
- Situated generalization; and
- In-depth particularization- universal understanding.

It is in the nature of *Verstehen* for the readers to make generalisations by relating the similarities and dissimilarities to their subjective experiences.

A distinction put by Gomm, Hammersley and Foster (2009, p. 111) was that of internal (within cases) generalisability, and external generalisability. While one would expect that the within-cases generalisability would be strong, these authors were quite critical: "... there is often a lack of clarity about the boundaries of the case, and sometimes the evidential base used for internal generalization is obscure/and or seems likely to be inadequate" (pp. 111-112).

The e-interview.

The option of whether to use of a survey or interview is addressed by researchers early in the research process. While temporal constraints could influence researchers' methodological decisions, the question of validity is important. Pitts and

Spillane (2009) in using both survey and interview methods of research to examine leadership networks commented:

Specifically, while it is tempting to consider the face-to-face interviews as generating more valid data (high internal validity) due to opportunities for probing and follow-up with participants, internet survey and face-to-face interviews are two distinct methods and one would not expect a perfect match. (p. 199)

Interviews are the staple of data collection in qualitative research (Bagnoli, 2009, p. 547), and with the technological innovations that have influenced society, they have impacted on research methods, also (James & Busher, 2009). The e-interview (Bampton & Cowton, 2002) and online interviewing (James & Busher, 2009) are examples of asynchronous data collection in modern, qualitative interviewing. While it appears that the term *e-interview* predated Bampton and Cowton's (2002) paper, these authors were responsible for bringing the term to the attention of qualitative researchers. Even in the short time since the publication of this paper, the use and reliability of digital communication have increased exponentially. The authors (2002) complained about the failure of the email system and its influence on their research:

Unfortunately these were not as successful as the first, largely because of our university's e-mail system, which suffered from several breakdowns, one of which was for several days. This not only meant considerable delays in being able to send out our messages and delivery problems for interviewees, which undermined momentum and bred frustration, but also it took us into the summer vacation period, when both interviewees were unavailable for several weeks. The interviews were therefore not completed satisfactorily. Even worse, one interview record was lost when one of the university's e-mail servers developed a very serious fault (para. 22).

Five years after the publication of Bampton and Cowton's paper, James (2007, p. 964) reported that times had changed and, "The use of ICT [Information and Communication Technology] is an integral element of teachers' professional lives".

Generally, it is expected that the potential respondents for an e-interview research project are more likely to be more computer literate than the respondents in

2002, when Bampton and Cowton first described the e-interview. For example, Kupetz and Ziegenmeyer (2005) successfully used e-interview to evaluate the effectiveness of their students' multimedia competency:

The e-interview is a useful e-learning course component as it supports the understanding of TEFL issues by combining studying texts and reflecting the knowledge against the background of the expertise of an experienced grammar school teacher. (p. 191)

The e-interview is a digital, asynchronous version of the interviewing process, a specific form of conversation, which is foundational in qualitative research (Kvale, 1996, p. 19). Stewart and Cash (1991) perceived the interview as "... a process of dyadic, relational communication, with a predetermined and serious purpose designed to interchange behavior and involving the asking and answering of questions." (p. 3) In this limiting definition, the authors failed to acknowledge the possibility of more than two people being involved in the interview (dyadic), but they acknowledged the putative relational basis of the recorded dialogue. The interview has become more interactive, not a passive recording of the respondents' answers to the questions put by the interviewer (Kvale, 1996). Gubrium and Holstein (as cited in Hoffman, 2007) claimed that "Researchers are more committed to allowing the people involved to speak for themselves in their own way. The interview, therefore, has become the shared task of a collaboration" (p. 319).

The role of the interviewer, as Kvale (1996) observed, can be described by the metaphors of a traveller or miner (p. 3). The miner travels the world seeking buried metal (knowledge), which is done by stripping away the overburden, seeking the "nuggets of essential meaning" (p. 3). Furthermore, the mined ore is then purified through an analytical process and the end-product is valued according to its purity. On the other hand, the traveller metaphor is less focussed as the traveller *wanders* through landscapes and conversations. Kvale (1996, p.5) noted that the metaphors represent two different research genres, with the traveller representing a postmodern approach to constructive understanding, while the miner metaphor representing a more positivist approach where knowledge is a given.

Interviewing allows a researcher to gain insights into cultural experiences that are often denied to outsiders. The information that respondents provide can range from observations to interpretations. Weiss (1995) noted:

We can learn about what people perceived and how they interpreted those perceptions. We can learn how events affected their thoughts and feelings.

We can learn the meanings to them of their relationships, their families, their work, and their selves. (p. 1)

Schools, as organisations that have a key role in society, have provided rich grounds for research. However, massive changes were visited upon school systems in the 1980s and 1990s in response to perceptions about countries' lack of economic competitiveness in a changing economic environment. In Britain and Australia, this push for change became known as *New Public Management* (NPM) (Dunleavy, Margetts, Bastow & Tinkler, 2006; Gronn, 2003a, 2003b; Moos, 1999; Sachs, 2003), which had a tremendous impact on the way that schools and other public institutions operated. The roles of school leaders were also changed irreversibly at this time. In education, school leadership was moved by a new cult of efficiency. Sachs and Logan (1997), (as cited in Sachs, 2003, p. 20) claimed that the key precepts underlying the managerialist changes to the public sector were based on the beliefs that traditional structures, procedures and services were inefficient and managerial reforms were essential to increase productivity in government services. As a result of increased accountability and scrutiny of schools' operations under New Public Management, principals' time for pedagogic and curriculum issues in schools became limited, as they were increasingly engaged in the expanding managerial demands of schooling (MacNeill, Cavanagh & Silcox, 2005; Wright & MacNeill, 2010).

It is rare for there to be an equitable power balance between the interviewer and the respondent. Attacking the Gubrium and Holstein (2002, as quoted in Hoffman, 2007, p. 319) perception of an interview being a conversation and a "... shared task of a collaboration," Kvale (2006, p. 481) referred to this as a "qualitative progressivity myth, where dialogical interviews in themselves are good and emancipating..." Kvale (2006) explained the unequal power relationship between the interviewer and the interviewee:

It may be concluded that a research interview is not an open and dominance free dialogue between egalitarian partners, but a specific hierarchical and instrumental form of conversation, where the interviewer sets the stage and scripts in accord with his or her research interests. The use of power in interviews to produce knowledge is a valuable and legitimate way of conducting research. With interview knowledge jointly constructed by interviewer and interviewee, overlooking the complex power dynamics of the social construction process may, however, seriously impair the validity of the knowledge constructed. (pp. 485-486)

This view was supported by James and Busher (2009, p.16) who observed that online interviewing, “Reduces if not eliminates researcher/participant effects that result from visual/verbal cues or status difference (age, gender, voice, dress, disabilities, gestures).

A major problem with transcribing what respondents say in interview is dependent on the interviewer’s emic attempt to represent authentically the words that are spoken. In literature, writers often use representations of colloquial language to add dimensions of understanding to the readers’ understanding of a character. For example, Dickens (1854/1996, p. 83) embellished the character of Stephen Blackpool in *Hard Times* with an apt description of his regional dialect: “No, sir, sure I ha’ not coom for nowt o’ th’ kind.”

When Levinson (2007) interviewed English gypsies about education, he tried to give a sense of authenticity to one of the gypsy’s responses about making reed baskets:

I think all this education has made us weaker. When I went to that school it absolutely terrified us. It broke our spirit ‘cos it felt like rest of yer life you’d be put in schools. I always felt like the countryside, the world itself, was our classroom: we learned so much from our parents and grandparents about everything. They’d go into a wet field and pick a’ armful of reeds and then they’d come home, and then they’d chat and fry a bit of Joe Gray, they’d got half a dozen baskets made. (pp. 23-24)

The colloquial authenticity of transcripts of interview is often problematic. Nespore and Barber (1995) explained the dilemma of representing authentic speech: We originally used quotes that included hesitations, pauses, false starts and so forth. We now think that far from being markers of “authentic” speech, these are artifacts of interview practice.... We are forcing people to talk extensively about complex issues ... and treating how they said things as reflections of underlying rules and interactional competencies. But it is an arrogance that harks back to the idea of research as an extractive enterprise to act as if only researchers have the right of revision. (p. 56)

Writers’ attempts at authentically representing respondents’ speech gives credence to the belief of an inherent power asymmetry in the interview equation.

Using Kvale’s seven stages of interview investigation, the comparative analysis of the two interview protocols was confirmed in part by Bampton and Cowton’s (2002) summary of the strengths and weaknesses of the e-interview:

- it offers significant savings in terms of time and financial resources, particularly in relation to the elimination of the need to travel or to transcribe tapes;
- it opens up possibilities for interviewing research subjects who would ordinarily lie beyond the geographical or social reach of the researcher;
- in some circumstances it might be more successful in accessing certain types of research data; but
- it provides a limited register for communication; and
- it is dependent on willing and competent access to reliable technology on the part of both researcher and subject.

Data Sample

This case study research employed a *purposive sampling (judgement sample*, Vogt, Gardner, & Haeffele, 2012) respondent selection to give credibility to the representative case that has been selected for study. Purposive sampling is used when “... samples are drawn to include particular areas or groups found in a population (Short, Ketchen, & Palmer, 2002, p. 369). Sampling is a key feature of social and behavioural research because it is often impractical for researchers to survey the

whole population. In Teddlie and Yu's (2007, p. 78) Taxonomy of Sampling Techniques, the range of sampling strategies used in research were identified: Probability sampling; Purposive sampling; Convenience sampling; and Mixed methods sampling. The sampling in this research can be described as IIA: Sampling to achieve representativeness or comparability.

The data sample was drawn from a purposive sample of school leaders, all of whom had experienced Flow. Battaglia (2008) declared, "A purposive sample, also referred to as a judgmental or expert sample, is a type of nonprobability sample. The main objective of a purposive sample is to produce a sample that can be logically assumed to be representative of the population." Seawright and Gerring (2008) agreed, and recognised that the randomisation used in quantitative research sampling, does not suit the nature of case study research:

Given the insufficiencies of randomization as well as the problems posed by a purely pragmatic selection of cases, the argument for some form of *purposive* case selection seems strong. It is true that purposive methods cannot entirely overcome the inherent unreliability of generalizing from small-*N* samples, but they can nonetheless make an important contribution to the inferential process by enabling researchers to choose the most appropriate cases for a given research strategy, which may be either quantitative or qualitative. (pp. 295-296)

Sale, Lohfeld and Brazil (2002) also noted that in qualitative research the participants are not a sample representing a larger population: "Samples are not meant to represent large populations. Rather, small, purposeful samples of articulate respondents are used because they can provide important information, not because they are representative of a larger group" (p. 45).

An excellent example of purposive sampling can be seen in Lynd and Lynd's (1923/1956, pp. 7-9) study of Middletown, where the researchers set out two main considerations and the six characteristics that they thought best described their typical case (Gerring, 2007, p. 92). The first consideration made by the Lynds (1923/1956) was the selected city had to be as "... representative as possible of contemporary American life" (p. 7). By putting the criterion of *representativeness* up-front, the Lynds declared the bases on which the case was chosen. Such a

declaration then allowed readers to make informed decisions about the rich data produced in the study.

All of the school leaders in this purposive sample were chosen by the researcher because they were all successful school leaders, and they could contribute identifiable cases in this embedded case study. The demographic details shown in Table 2 (below) show the gender and private-public school embedded cases.

Table 2
Embedded Cases in the Purposive Sample

	Male	Female
Department of Education (WA)	4	2
Independent School (WA)	1	
International school	1	

The nature of this purposive sample was that the potential respondents were all known to the researcher, which made entering the field a lot easier than using impersonal letters or telephone calls of introduction. The documentary nature of the research and the ethical approval (Protocol Approval RD-35-09) became a key part of the preliminary procedures in commencing the research, and this was used to confirm the respondent's participation. In most cases entry to the field was either done in a personal approach but the case in New York was recruited by email.

Data Collection Methods

Firstly, a relationship between the researcher and the respondent needs to be established before the e-interview is commenced. In the present author's experiences

the relationship was established in face-to-face meetings in which the research was explained, and the respondents' commitments obtained.

Secondly, the complaint from respondents in James and Busher's (2006, p. 407) research was that sequencing previous conversations was problematic because of the time gap. When the email format is used long strings of conversation are added in chronologic descending order, with the current conversation at the top, in most cases. This causes a problem in that the respondents need to scroll down to refresh their memory of what had been said previously. The more effective strategy, used by the current authors is to use an attached word document with all of the transcripts attached to the questions and the program *Track Changes* engaged. This approach means that the researcher constantly edits and reflects on the narrative and the respondents, also, can reconsider their previous responses. Track Changes alerts the all parties to current changes in the transcripts. This strategy of putting the whole dialogue on display increases transparency and there are no surprises for either party when the final document is signed off.

The role of the email in this case is to communicate with the other party and to pass on the running records of the interview. For example, the Track Changes automatically directs the respondent to the new questions (in colour) in the attached Word document (adding the dates of the responses is also helpful). For example:

Interviewer (22 January): Why did you decide to become a teacher? [Is teaching a job or calling for you?]

Al (22 January): At the time it was something that I thought I could do well. I remember my year 5 teacher Mr [REDACTED] and thought it would be great if I could let kids have as much fun at school as he did and still get them to learn. Some of the strategies that I used when I first started to teach and some that I still use now are things that I remember him doing in class with us at [REDACTED] Primary (school).

Interviewer (24 January): Thanks Al. Have the decisions made by the principal about pedagogy enabled you to fulfil your initial motivation to enter teaching? Please give an example if you answer *yes*.

Al (26 January): Initially No. My first few principals annoyed me. I actually picked up more from colleagues. In one case it was the deputy who offered the most assistance in teaching students. It was not until 2001 when I came to ■■■ that I felt I was finally getting there as far as educationally meeting the needs of the students. Don't get me wrong I felt like I was a pretty good teacher and made great connections with students but there were always a few who slipped through the net. I could establish the relationships but could not get them to learn.

Interviewer (26 January): OK Al, what actions taken by the principal can be seen as a discharge of moral obligations (improving life for the students in the long-term) in bringing about pedagogic change in your school?

Al: (answer here)

“The transcript plays a central role in research on spoken discourse, distilling and freezing in time the complex events and aspects of interaction in categories of interest to the researcher” (Edwards, 2009, p. 3). The e-interview does this also, over an extended time, with the option of both parties making corrections to the written text, at any time, ensuring a mutual consensus. The sign-off by the respondents is facilitated because they have access to the texts over an extended time period. James and Busher (2006) confirmed that the e-interview:

... encourages participants to explore and revisit their insights into their developing professional identities, allowing them to move back and forth through their narratives, thinking about their responses, drafting and redrafting what they want to write; creating, in effect, a form of enriched interview. (pp. 405-406)

Data Analysis Techniques

Interviewing is a basic method of data collection in research, and analysing large amounts of transcript data requires researcher care so that data are not lost. Coding and analysis of transcripts have a degree of subjectivity regardless of whether the researcher is operating in a quantitative or qualitative research paradigm. In the specific case of the e-interview transcripts, manual coding has now been superseded

largely by the use of sophisticated software that is specifically designed to overcome the unwieldy nature of cutting and then pasting vast arrays of information in the printed transcripts.

In research using interviews there is a philosophical dispute over whether interview questions should be developed before, or during the interview. Similarly, there is also argument over whether the coding categories should be developed before, or during the coding process. Richards (2005) argued that in quantitative research, the coding categories are predetermined, while in qualitative research the categories are generated from the data (p. 85). In this research, the primary interview questions are generated from the research question, and the secondary questions then developed from a mix of the need to interrogate the primary questions against the respondents' specific answers, which must guide the coding categories. In good practice, the research questions and coding categories are closely linked, and Richards's *a priori* differentiation is sustained in practice, with difficulty.

Coding involves developing a set of descriptive/analytical labels and parts of the transcript are then assigned to coding categories by the researcher. Coding transcripts can be effected against a variety of levels of analysis (word, phrase, sentence, paragraph, or thematic/nodal levels). Garrison, Cleveland-Innes, Koole and Kappelman (2006, p.3) observed the subjective nature of coding: "Researchers must select their coding methodology and design their data analysis in accordance with the research question(s). Indeed, multiple methods exist for coding transcripts and choices must be made".

An example of the coding in research by Lindstrom and Olszewski (as cited in Olszewski, Macey, & Lindstrom, 2006) was based on descriptive codes developed before the interviews, which were then revised when the transcripts became available.

The descriptive codes were organized into six main categories:

- (1) Features of the partnership at local sites,
- (2) Stages of program development,
- (3) Contextual variables (such as community college policies),
- (4) Student characteristics,
- (5) Pattern of services, and
- (6) Interagency

collaboration. These six broad categories each contained a set of sequentially numbered individual codes. For example, within category five our specific codes included: 5.1: screening, referral and orientation, 5.2: public relations and marketing, 5.3: community college instructional services, 5.4: employment site services, and 5.5: campus support services. (p. 366)

The potential loss of data is a major concern, particularly in manual coding. After conducting many interviews the researcher needs to extract all of the relevant information from the transcripts. A problem occurs when material on one page of transcript can be placed in several locations in the manual coding process, and keeping track of the nodes and sub-nodes used in coding becomes quite complex. In the manual coding process, the coder often has a dilemma of where to place a single copy of a sentence. It is possible that decision could mean that the sentence is lost from the published record because it is not used in the category in which it was placed, and it was never picked up by the coder in other categories because of the large amount of data being analysed.

In the manual coding process one sentence can be placed in more than one classificatory node, and duplicating quoted material becomes an issue in the final copy of the text. Simply, because of the amount of text that the researcher is manipulating, it is possible for parts of the transcription to be duplicated in the research report. Careful editing is needed to locate duplicate and triplicate uses of material. In this research project text that is used in the research report will be highlighted in the original transcript, the first time that it is used. This will then warn the researcher that the text has been used previously.

Computers have facilitated better data control, particularly in large projects. Whereas manual coding requires hardcopies of all of the transcripts, digital coding is done on the computer, thus using less physical space, while giving the researcher better control over the data, at multiple levels. There are several software programs available that can be used for coding (QDA Miner 3.2; SimStat; WordStat), but NVIVO has been used in this research.

The NVIVO 9 coding software accommodates the following descriptive/analytical coding levels, which are labelled “nodes”:

- **Free Nodes:** “stand-alone” nodes that have no clear logical connection with other nodes—they do not easily fit into a hierarchical structure.
- **Tree Nodes:** nodes that are catalogued in a hierarchical structure, moving from a general category at the top (the parent node) to more specific categories (child nodes).
- **Cases:** nodes used to gather material about people or sites that have attributes such as gender or age. Like tree nodes, cases can also be organized in hierarchies.
- **Relationships:** nodes that describe the connection between two project items. For example, the relationship between two cases (Anne works with Bill) or between two nodes (Poverty impacts Health).
- **Matrices:** a collection of nodes resulting from a matrix coding query. Although you can open and explore the nodes in a matrix, you cannot code at them. (QSR International, 2008, p. 11)

The software program allows for simple coding and advanced coding methods, but care needs to be taken with double or triple coding of one piece of text that cause unnecessary repeats of the same quotes.

Validity and Reliability (Truthfulness)

The validity and reliability of the final research report is influenced strongly by the efficacy of the coding practices and judgements made by the researcher. The use of too few coding nodes makes it difficult for the researcher to analyse the transcripts sensitively, and valuable material is lost, thus affecting the validity of the edited transcript. In qualitative research, transcript validity is constructed by the reader (Verstehen). The provocatively titled article “You can generalize stupid”, Ruddin (2006) noted:

An innovative approach to increasing the generalizability of qualitative research is now evident in the work of some scholars who have focused on how to achieve generalisability through the aggregation of extant independently designed case studies. The case survey approach suggested by Yin (1994a, 1994c) is promising in a limited number of cases in which

comparable information is available from a relatively large number of studies.
(p. 810)

The collection and nature of embedded case studies provide independent confirmation of the data and conclusions, providing the bases for deductive construction of generalisations, which was confirmed by Schofield (2009, p. 88). Despite this agreement, Simons (1996, p. 238) still advised the need to embrace ambiguity in case study because it elicits creativity.

A real advantage in e-interviewing is that power relationships that influence validity and truthfulness are not as overtly influential as in face-to-face interviewing. In the virtual world of digital communication many communicants are less influenced by others in the interview equation. A major advantage in busy schools is that it appears the asynchronous nature of the communication allows opportunities for reflection and correction for all parties. As a result, there are distinct advantages in terms of validity, ethical concerns and generalisability in using e-interview, with populations that have email connectivity plus the required knowledge and skills to communicate electronically when effecting research in schools.

Ethical Considerations

Ethical considerations control all university research, and it is an important component not only of the execution of the research design, but it has a major impact on the truthfulness of the research. Approval for this research was granted by the Human Research Ethics Committee (Curtin University): RD-35-09 (Minimal Risk).

The e-interview, as a data collection method, is ethically far more responsive in relation to the potential risks involved in face-to-face interviewing, for literate respondents. Informed consent was obtained from the respondents prior to the commencement of the e-interviewing process. Thirdly, both parties in the e-interview process are given frequent opportunities to correct the transcript of their written responses to questions. As discussed above, the interviewer has an advantage in the interview process when it comes to writing the research. There is a tendency for the researchers' transcripts to be written in standard English, while the interviewees' responses have been recorded as authentic speech or writing, with idiosyncrasies displayed. The Spell-Check function in computer software removes obvious errors in

the e-interviews so that the ethical dilemma facing researchers of representing authentic speech is removed.

Finally, there is an ethical purpose that underwrites all research: the improvement of life. School leaders' professional lives are perceived to be becoming more difficult and complex, and this research investigates the nature of school leaders' motivation and intrinsic reward systems so that there is a better understanding of how they cope in the changing contexts.

The researcher declares that he has not received external research support, honoraria for lectures or consultancy fees in relation to this research.

Conclusion

This embedded case study research, conducted with a purposive sample of respondents (N= 8) using e-interviews, was designed to successfully elicit responses from the targeted school leaders. The rhythm of school life influenced the quality of the school leaders' responses in the e-interview, and it was notable that the speed of the respondents' replies was quicker during school vacations than when schools were in session. While email was the primary method of communication with respondents, telephone calls and personal visits (where possible) were employed to ensure that the interviews were completed.

The hypothesised conceptual framework, using Jackson and Csikszentmihalyi's (1999) nine dimensions as a guide to identify Flow, is intended to facilitate dialogue with the school leader respondents. The fit of these dimensions against the school leaders' Flow experiences is the essence of this research.

Chapter Summary

In this Chapter the case study methods are discussed, and the common aspects acknowledged. This research falls within the embedded case study method because of the research design that collects some data in numerical form, as well as respondents being asked to discuss aspects of the Flow model.

The research design, based on the Flow model described by Jackson and Csikszentmihalyi (1999), facilitated the benchmarking and examination of the respondents' observations of Flow in both their private and school experiences. A feature of Chapter 4 is the use of the respondents' personal stories of Flow experiences that allow the readers to experience the dialogue between the researcher and the school leaders.

CHAPTER 4

Data Analysis

The case study transcript data generated from the e-interviews is presented in two subsections in this Chapter: Recording school leaders' civilian-life Flow experiences, and reporting school leadership Flow. The researcher utilised the features of the NVivo 9 software (QSR International) to help analyse the data generated by the respondents. Coding school leaders' school-based responses is always guided by the subjective question of when to stop. In the NVivo 9 software, coding (free nodes) allows text collation without any assumptions of connection between the coding nodes. In this research the coding was established against Csikszentmihalyi's nine characteristics of Flow, and then further nodes were added during the coding sessions. A major problem in all coding exercises is that establishing a new coding node during the coding of respondents' transcripts means that the transcripts that have already been coded need to be re-examined in relation to the new node. In this Chapter the responses to the hypothesised conceptual framework (Jackson and Csikszentmihalyi's nine dimensions, 1999) are set out, and the analysis is presented.

As expected with a carefully selected purposive sample, all of the respondents reported strong Flow experiences in their outside of school recounts. Even though some of the respondents were still competing in sporting events, at the personal level, none was aware of the developing scientific interest in this important sporting phenomenon and the attempts of sports psychologists to construct models and frameworks, such as Hanin's Individual Zone of Optimal Functioning (IZOF).

Benchmarking School Leaders' Flow Experiences

For athletes, particularly, getting into *the zone* and experiencing optimal performance is an important precursor to Flow. In the last decade sports psychologists have examined the zone/Flow and they are getting better

understanding of the intimate and idiosyncratic physiological and psychological factors that influence that state of optimal performance. Filho, Moraes and Tenenbaum (2008) studied archers and described *individual affect-related performance zones* (IAPZs) that affect the archers' performances:

The link between psychological states and optimal performance is a topic of paramount importance in sport psychology (Kamata, Tenenbaum, & Hanin, 2002). Among the many theoretical approaches that have been proposed to account for and predict peak performance in sports, Hanin's (1997, 2000) individual zone of optimal functioning (IZOF) deserves attention, because it relies on the notion that athletes vary in their optimal performance-related affective state. A central tenet of this theory is that psychological states differ in optimal and non-optimal performance according to the interaction of multiple psychological, biological, and sociological factors. (p. 441)

A key factor in the entry to the zone and Flow is pre-event anxiety. Davis and Cox (2002) examined the two theories that are influencing understanding of optimal performance:

... one could argue that the IZOF model and directionality hypothesis are intuitively related. IZOF theory predicts that best performance occurs when the athlete's anxiety is in his/her zone of optimal functioning. Directionality theory posits that best performance occurs when pre-competition anxiety is perceived as facilitative. If both of these hypotheses are valid, then when an athlete is performing with anxiety in his/her zone of optimal functioning, the athlete should be experiencing best performance and perceive anxiety as facilitative to this performance. (p. 44)

In the first section of this Chapter the school leader respondents' experiences with Flow in activities outside of the school environment are recorded. As an interviewing strategy these recounts are important because they forced the respondents to explore their personal understanding of Flow, which then provided a point of comparison in an examination of Flow experiences in a school leadership environment. Gubrium and Holstein (1998) warned of the controlling contexts of the

... institutionalized storytelling circumstances or the formal relations between interacting parties. A research interview, for example, usually forms

an environment expressly designed to elicit the respondent's, not the interviewer's, narrative. Interview circumstances, format, and protocol dictate that the interviewer does the asking, while the respondent provides the story. Narrative topics are predesignated, and storylines at least partially predetermined. In such instances, we might argue that *formal* narrative control resides in the project itself, although we must be careful not to overstate the determinant power of any communicative framework. In practice, control is interactionally asserted. (p. 175)

However, Hargreaves (1996, p. 12) warned of the tendency to romanticise teachers' voices in the literature. In this report the school leaders' responses have been set out as freestanding cases, and as such they are mainly presented in the respondents' voices. This strategy alleviates the potential problem of misrepresentation, and gives the respondents' voices a higher degree of authenticity.

Demographic Data

The intent of the purposive sampling in this research design was to explore the concept of Flow in selected school leaders' experiences. As indicated elsewhere, the purposive sample of school leaders was taken from schools with low SEIs (socio-economic indexes) with the presumption that Flow would be scarcer in these contexts.

Edwina, Maxwell and Edwin (pseudonyms) were the most prolific writers and they became quite engaged with the concept of Flow and their Flow experiences. Table 3 (below) summarises the key demographic data against the number of words that each respondent wrote in reply to the questions in the e-interviews. The average age of the respondents in this research was 50.37 years in 2010, which corresponds approximately with the Australian average age of primary principals (49) and secondary principals (50) (Australian Government, 2008, p.18).

Table 3

Embedded Cases: Gender and Age and School Leaders' Responses

Name	Gender M/F	Age	Location in Western Australia	Nature of School	Replies (words)
Edwin (Case 1a)	Male	43	Metropolitan	Public	5452
Alvin (1b)	Male	48	Metropolitan	Public	2300
Maxwell (1c)	Male	63	Metropolitan	Public	5741
Barry (1d)	Male	47	Country	Public	3096
Edwina(2a)	Female	51	Country	Public	6077
Ann (2b)	Female	57	Country	Public	4705
James (3)	Male	57	Metropolitan	Private	4288
Michael (4)	Male	37	Country/USA	Public	1895

The Embedded Cases*Case 1a: Edwin Flack, primary school principal, and champion distance runner.*

Edwin Flack (pseudonym) is a 43 year old, male, primary school principal. Flack was a deputy principal for 2 years and has been a school principal for 4 years. The choice of the pseudonym, "Edwin Flack", is interesting because Flack was Australia's first Olympic gold medallist, in 1896. Flack, like the respondent, was an Australian running champion. The modern Edwin Flack related his experiences of Flow to running in major athletic events, and he pointed out that Flow is referred to as the "zone" in running circles (Flack, lines 11-16).

First Flow experience at a national level. The first such occasion occurred in Canberra in 1983 during the National School Boys' Cross Country Championships held around Lake Burley Griffin. At the time I was coming off a particularly solid block of training, it had been uninterrupted for 10 weeks, I was not overly anxious standing on the line and had made a point of sneaking out of our dorms the night before and getting into a night club in an endeavour to burn off excess energy and relax a little. (Not something the manager was overly pleased about nor my coach who was actually the same person). I had done my usual pre race warm up and felt very light and loose throughout. This boosted my confidence prior to the race also.

On the gun I took up position with the lead group and found the pace, although fast to be extremely easy, I situated myself in the pack towards the front. Colin Dalton after about 2km made a push which I covered easily and the pack went from 15 to 5 very quickly. At this point there was still no apparent effort on my part and the exertion of covering the move seemed none existent. At 4km, as discussed with my coach, I made a push to the front on a small incline, at this point also only two runners came with me. Feeling extremely good I continued to accelerate up and over the hill however unlike my usual surges I kept accelerating and established a 100m gap within half a kilometre. Still feeling very little effort I just continued to run and enjoy the moment. I remember feeling no effort and everything was extremely easy. No hard breathing or racing heart rate. The gap continued through to the end of the race and I was well clear by the time I crossed the line, to win the event. (Flack, lines 16-36)

In this example Flack managed to get into the zone very quickly, and he knew that taking the lead on a small hill at the 4 kilometre mark would split the field, and the zone and resultant Flow worked to his advantage.

Developing Flow and failing to utilise it. I have experienced this on the same levels when everything felt easy and I was in sync (sic.) with myself at the National Junior Championships in 1985 in Sydney, during 5 of my 11 Perth

City to Surf wins, one such occasion resulted in a record that stood for 15 years.

During 3 of my 16 Bridge wins and also during the 1985 national half Marathon Championships in Perth where I failed to utilise the situation and finished 5th. On this occasion I was still very new to the distance of 21.1km however at 7km into the race I was feeling extremely comfortable and compared to the other runners around me seemed to be doing it easy. Everything was saying to me to run away from the group but I resisted the urge and sat back. I still recognise that moment as the moment I lost the race. (Flack, lines 37-47)

Developing understanding of the zone.

Flack, in his moves towards national representation in marathon running, knew and valued the zone. For him, getting into the zone was an important factor that influenced the outcome of his performance. Getting into the zone for Flack required that he ran his race according to the agreed plan.

I have managed to replicate this (Flow) feeling on more occasions during training, however it is important to note that the stakes are not as high, so the added pressure of competition is removed from the equation. On those nights when I have hit the *zone* I have found the sessions to be incredibly easy despite the intensity of the work out and came away from them feeling really confident.

I have recognised that it is important to be in the moment, not to be worried about what may or may not happen next but simply to react to what is going on around me. On these occasions, it appears to be my subconsciousness that is actually controlling what I do. (Such occurrences have also been reported by soldiers who have operated alone and in extreme situations for a period of time as is reported on as a heightening of the senses a movie show was loosely based on this affect called “The Sentinel”) basically there is a heightened awareness of self. Everything else around me slows done. I can feel the grass, smell the air, sense my opponent , it is a very surreal sensation. (Flack, lines 48-61)

To get to the stage of being able to get into the *Zone* or Flow experience required a great deal of work on my part. I needed to get extremely fit and had to learn to feel and be aware of my body and how it was feeling. As I got later into my career I quickly learned to go with the feeling once in this Flow and just follow what my subconsciousness, intuition or gut was telling me. (Flack, lines 76-8)

It was interesting that Flack saw Flow as an almost subconscious, intuitive state of being, and he used “visualisation” to try and get into that state: “I used a great deal of visualisation in an effort to replicate this and would often spend periods of time visualising an event to the point of hearing it, smelling it, feeling it etc.” (Flack, lines 64-66). There is a complex interaction between motivation, self-efficacy and levels of fitness for runners, and Flack observed:

As a runner, who is still running, Flack constantly attempts to keep fit and he changes his goals to accommodate the effect of aging on his body. While claiming that age and injury did not prevent him attaining Flow, he then had second thoughts: However and here is the catch. At my present state of fitness everything I do is hard, as I am working against my basic urge to simply sit down and not do any more. I run at a predetermined pace and try to maintain this and this is not a comfortable state to be in. In this regard, it is definitely more difficult to get into a flow which will result in getting into the zone. Injury is different again as this prevents me from running/performing normally so the likelihood of getting into a flow and ultimately the zone is difficult again as it introduces another element into the equation. (Flack, lines 92-98)

Edwin Flack still trains, running long distances, but he has reduced his competitive appearances. His work as a school principal makes less time available for training, and to a degree he has changed his life’s priorities to ensure he gives school administration top billing.

Case 1b: Alvin, a primary school principal.

Alvin White is the 48 year old principal of a small, middle-class suburban primary school. Coming into education later in life, Alvin has a worldly view of education, and he is quite competitive about getting the best educational deal possible for his students. Alvin is currently seeking promotion into a larger school. He is a friend of Edwin Flack, and these two principals work closely together on educational projects and innovations. Like Flack, Alvin's running experience gave him intimate knowledge and experience of Flow:

Flow in competitive running. As a competitive runner, on a state and national level, I have experienced Flow, or being *in the zone* several times over many years. These experiences have never lasted longer than 4 to 6 weeks but interestingly during these short periods of time I have achieved significant measurable improvement that in a normal state may have taken a year or more to achieve. This state is often described as almost euphoric and being in a complete positive state. While I believe these descriptions are accurate, in the following personal example I experienced a complete lack of doubt, which I believe is subtly but importantly different to being in a positive state.

In 1992 at the age of 30 I returned to Perth, after teaching in the country for three years. Over that three-year period, and the two years prior, I had stopped running and had become extremely unfit. On my return to Perth I decided to make a comeback to running, knowing that I was a long way behind the required standard to be even close to competitive.

Importantly, I set a number of challenging but achievable training targets, based on the principles adopted by the coach of Alison Roe who was the world record holder (world's best time) for the women's marathon. Asked about Alison's success her coach replied that he was not surprised because he had always set targets for every training session and he knew Alison would achieve. She achieved success every time that she foot on the training track. His theory was that regular and continual success in training developed absolute belief in one's ability to achieve their goals. With this in mind, my targets, while challenging, were absolutely achievable.

Over the next six months I progressed from being laughed at and being left behind on group long runs, to one of the leaders, dictating the pace. Up until that point my progress had been steady and significant but there had been several periods of plateau that had me questioning my ability to continue to improve significantly. During these plateau periods, training was just hard work and far less rewarding. While I was improving, and I had some great training sessions, on the whole, training was almost methodical. The more my strength grew, however, and the more I was able to match any pace that was set, the more my belief grew. Something clicked and running became a sheer joy and almost effortless, and I often ran in a trance like, or meditative state. I began to experience a lack of doubt. Every challenging running target that I set I began to achieve almost effortlessly. Suddenly, I couldn't get enough of running. When I wasn't running, I wanted to be running. When I was running, I often didn't want the run to end.

During harder interval sessions I was clocking times that, only a few weeks earlier, would have seemed unrealistic. When I had planned to run 6 x 1km intervals in 2min 55sec, I ran 10 x 1km intervals in 2min 50sec. I ran faster than I ever had and when I had completed 6 intervals, I wanted to do more. I wasn't running and trying to complete the session, I was loving it and chewing it up and spitting it out! I was living and breathing running. Nothing else had any importance to me. Within two weeks these times had improved further and I was running my 10 x 1km intervals in 2min 46sec – 2min 48! I felt like an animal that was unstoppable. I loved the agony of pushing myself to the limit, when previously I would have held back from reaching this point or been unable to sustain the effort.

At this time I hit the track for my first track race in eight years. I ran 1500m in 3min 52sec, 14 seconds faster than I had ever run and the fastest time in the state at that time in the year. (Edwin Flack later beat this by one second). The following week, I ran a 3000m, track race and went head to head with the state's leading runner and national representative (Edwin Flack). The lead changed 6 or 7 times and the rest of the field was left in our wake. The race came down to a battle for the line and I was narrowly beaten but only after

running 8 min 22sec, a 36 sec personal best. My belief in my ability to win never faulted and my mind never doubted. I was simply unable to run any faster over the final 20m of the race. I was beaten but I had run one of the fastest times for 3000m by a Western Australian, in Perth, and experienced six weeks in the Flow! (lines 18-77)

Alvin's story is one of overcoming huge obstacles and his running was closely tied into his attempts to resurrect his personal life. Because this running success was so intertwined with his life, at that time, Alvin's success was doubly important and probably elicited a greater Flow experience than others may have had. Alvin's claim that his Flow experience lasted six weeks puts a new dimension into Flow studies.

Case 1c: Maxwell, primary school deputy principal, former actor.

Maxwell is a 63 year old deputy principal and Level 3, Advanced Skills Teacher, who has held these educational leadership positions for five years. As a young man he was an actor overseas, and he used this experience to explain his understanding of Flow.

Flow in acting. In 1973 I was working as a professional actor. I had done previous theatre training and had come into the company through audition. I had played a number of roles as at that time we were performing two evening plays a week, plus a lunchtime play. As part of the company I was also required to be involved in two workshop sessions each week. This was a night and day work commitment. This whole situation was a pretty major flow experience for me.

I played a leading role in partnership with a very well known international actor and was critically acclaimed for this play's successful season. This was pretty heady stuff with full theatre audiences in awe of my performance. Negotiations were discussed for a position in New York in conjunction with the international actor. At that time we had our first child. I decided that my family was first and foremost and New York and the acting life did not fit with doing the best for your children. I made the very difficult decision that

even though I would put my best efforts into achieving at work my family would always come first. This has been a very pivotal decision in my life journey. This did not mean that I would drop everything for every minor family need but that if my family need was greater there would be no confusion. I had made the decision when I was younger and family comes first! I don't even have to think about this. (Maxwell, lines 20-37)

Maxwell had experienced high levels of Flow in acting in New Zealand, and was offered a season with the play in New York. However, other commitments came into play, and acting had to take second place to family commitments.

The nature of Flow in acting. Flow is heady stuff, being right at the top of your game. Because you know it, with the added recognition that comes when you know the wider community knows it, and this is demonstrated through audience reaction, personal acclaim, acclaim from fellow actors, awesome press reviews, and personal contacts. Of these, especially acclaim from fellow actors/directors who know what it is about, are the most valued. Having a most trusted person who you know will always tell you the truth is also extremely important. Personally in Flow, you are on a high, but you are constantly aware that this will last only for the run of the season. There is a carry-over of reputation, but anyone who deals with an audience is fully aware of the transience of all of this. Each new play takes you back to a much lower level and you still have to prove yourself each time, but probably not as low as before this, and gradually the reputation develops on a more permanent basis.

At this time you are also looking after yourself as illness, tiredness, etc. detract from the performance. You can also be rehearsing another play, as “no play continuing = no pay”, unless you are on a contract and fit into a company requirement list for the subsequent season. Each performance is a full-on experience and the relationships with that particular cast are intense because you are all in the same boat together, so to speak. Auto pilot is the quickest way to a very sudden dive in popularity.

Relationships after a season has ended tend to dissolve in a similar way that they do when one moves from a school to another (some last, others disappear quickly) as everyone moves into other situations and onto other plays. WRT (the international star) his performance was very workmanlike and safe. Technical I suppose. There were a few times though when he showed glimpses of why he had the reputation and where he had come from. These times when he lost his way in the script and had to find it again by relying on his own creativity, his knowledge of where he had to arrive in the play and with the help of other actors in the situation who were not entirely sure of where he was going either. These moments, few as they were, showed him at his electrifying best, had the audience on the edges of their seats, and also the rest of the cast. Mainly the rest of the cast was me, but not always. (lines 55-85)

Maxwell made two points about Flow in the theatre:

1. The lines are the least of your worries. If not, you are in the wrong business.
2. Invincibility and auto-pilot never work. An audience needs nurturing and taken seriously to engage them. Take them for granted at your peril! Probably the audience is more threatening as it can take you apart extremely quickly. That is why actors respect and hold in awe particular performers who are not necessarily those the general public admires. It is their skill at working an audience especially when they are on the edge. (Maxwell, lines 92-99)

Maxwell argued that the Flow experiences in acting are very strong because the feedback from the audience is immediate for the trained eye. Also, acclaim from one's fellow actors and newspaper reviews are the standards benchmarks for all actors.

Case 1d: Barry, the tough ex-publican principal.

Barry is built like a typical, rugged, rugby player, and at 47 he has been in education for less than a decade. Barry was educated in New South Wales at a Catholic boarding school that prided itself on its competitive rugby team. After

leaving school Barry eventually gravitated into running hotels in New South Wales. With a young family Barry decided that he needed a lifestyle change and entered teaching. He accepted an acting position at a small rural primary school in the Western Australian wheatbelt, three hours drive from Perth in 2007. Now in his fifth year of principalship, Barry reflected on his best Flow experience in a winning rugby side:

Rugby in a league of its own. I have experienced flow or in the zone on many occasions but on careful reflection these have occurred predominantly in team situations. In 1981 when attending school I was part of a Rugby side which participated in a competition that was and is still considered to be at the elite level of schoolboy competitions within the country. We were a side that trained five days a week and were coached by ex-internationals and professional physical trainers. It could be said that we were at the cutting edge for our time. The team was not expected to perform well by critics and as it was the school's centenary year there was a great deal of expectation around us. The school has a very successful history but had gone through a very lean period. Against all odds we were undefeated through the first six matches (8 game season) before meeting another side who were also undefeated. They were bigger, stronger and faster than us and were expected to win. Before a crowd of over 10000 they made us wait in the centre of the field for 5 minutes before running out and I recall turning and looking at my team mates when we saw them and to a man we were amazed – these guys were huge. In the first half they took us to pieces and led 9 -0 at half time. The second half is where we, as a team were *in the zone*. We knew we were fitter, we knew we were better trained, through excellent coaching we knew our game plan and each player knew their role within the team. To a man we had no doubt that we would be successful. It took us until the final five seconds to get in front but we did. On the siren the crowd ran onto the field and chaired us off, they were crying and emotional – none of the players were because we did not know what the fuss was all about. Our coaches/leaders had prepared us in a way that would get the maximum out of each individual – they had tailored their plans to the team rather than individuals.

I cannot remember anything about what was happening outside the field, but have since been told that the crowd chanted “Never give up” constantly throughout the second half. I know I heard it subconsciously and to this day it has formed the basis of my philosophy in life. For me I experience mild forms of Flow when everything is travelling nicely in my life but I cannot switch this on and off. When, however, other people are directly affected by my performance I can switch on but only if I know what is required.

From a leadership perspective I often reflect on this match as way of reinforcing the belief that your team is only as strong as the sum of all its parts and without appropriate preparation that empowers each person to understand their role in the team it will be difficult to achieve maximum results. I set myself a clear goal of where I want my team to be, form a plan to achieve it and then focus on the end result. I get great satisfaction out of being part of a successful team. (Barry, lines 20-56)

Barry’s story relates how the champion team beat a team of champions, and the discipline that had been drummed into them paid off at the end. Barry’s telling of this story captures both the sense of the team being in the zone, and then the consequent Flow experiences. Interestingly, this experience has motivated Barry for thirty years, and he tries to use these strategies in his school administration.

Case 2a: Edwina, secondary school principal, environmentalist, community builder.

Edwina is a 51 year old, female, secondary school principal, who lives on the rural outskirts of the Perth metropolitan region. Edwina is passionate about education, and everything she does. Her example of Flow, in a non-school situation, shows how she worked with others to save an environmentally sensitive woodland that was in danger of being developed for housing, and in doing so created a new sense of community in that location.

Teacher versus engineers, lawyers and developers. In this example, Edwina used her organisational and social skills to focus community resistance to urban

development. Her words tell as much about her, as the cause, and how she saw herself as “only a teacher” who was pitted against lawyers and engineers:

About 10 years ago a community group was working to try and hold off an urban development which would impact negatively on the woodlands and highly evolved flora of the area near where we live. A relatively small group of neighbours attended all meetings and we started to identify with each other and feel a sense of community and connection. Others at the meetings gradually tailed off, but we continued and formed a close knit group. We, as individuals, brought many different talents to the group. At a couple of the larger meetings I was especially vocal. On a couple of occasions I used a profanity to express my frustration because the views expressed by others at the meetings were, to my way of thinking at the time, too moderate and conciliatory. I expressed strongly what would happen once the “big yellow machines” moved in and I put the very bleak (but correct) view of what the area would become and what would be lost forever. I regretted this passion and was annoyed with myself for not being more diplomatic. I expected this to cause the group to dismiss me as being too “radical” and to proceed without me or to disperse and move from their commitment to “the cause”. However, our meetings continued and I continued to be one of the stalwarts, along with a small group of close neighbours.

I used to be very reflective about how I interacted within the group and what each person brought to the group (including me). For me this was the first time I had worked within a group other than colleagues in a professional capacity or friends in a personal capacity. It was an interesting new experience for me and I intensely watched and thought about how each of us interacted. Group dynamics always fascinate me because I am, by nature, less likely to tolerate group maxims and norms. I was especially impressed with “Sue”. Sue is a housewife and family descendant of pioneers who originally owned much of the land in the area. Sue was going through significant personal health issues but had an amazing ability to build community and rally support from significant individuals at the local and state government level. She had low confidence in her ability and was very critical of herself. However, she was wrong in her low confidence in her own ability. Sue

visited websites and did research. Her work was quiet, behind-the-scenes, work. Yet she achieved wonderful things and then contacted key members of the group to do the things Sue felt uncomfortable or unable to do. I was seen by Sue as a key individual with the ability to write submissions and speak publicly. Sue worked around other professionals in the group and achieved consensus for me to be the person who wrote and presented a key submission to a state planning authority.

The quality of my submission and the extent to which elements of that were included in an important report were part of what I understand to be “Flow”. The feeling was like I could leap tall buildings in a single bound. Each step I worked on was well received and quickly followed by another. Flow was present again. Everything I did met with success or very positive feedback. I felt a strong sense of self satisfaction and pride. It was the first time I had worked in such a way outside my professional life. To have my work acknowledged by an “unofficial” group and to be invited to contribute as a leader of the group in representing their issues in a formal capacity was a wonderful feeling. Up until then such acknowledgement came from my peers and superordinates in a work capacity. I am always quite negative about my own ability, even though I know I am very capable. All my reinforcements for how well I do my job don’t really convince me that I am an equal to lawyers or engineers. I’m only a teacher after all. But suddenly I was seeing the qualities I have and observing how I measured up to those professionals to whom I consider myself to be “inferior”.

The submission to the state authority went so well that I was then endorsed to write and present twice before the local government authority. The members of the public who were present at the local government presentations came up to me and all commented effusively about how articulate I was and how well I had represented them. That feedback was given to the other members of our neighbourhood group at the next meeting. For me the “flow” was the result of the fact that I was a “novice” in this type of socio-political situation, and was constantly checking myself or questioning where I was in this group, yet I came out of the situation with “flying colours”. The impact on my life was

important. As a person who has never suffered fools gladly, I became very patient and tolerant of other members of the group because I was able to contribute more within the group by doing so. Sue became a project for me in that I made sure that I expressed to her my observations of how she had worked in the group and what a significant role she had played in the group's ability to be effective. I felt more charged about my work – and the fact that my skills are transferable and that I'm not just a "teacher" or sub-species in the world of professionals. I was energised and motivated in every element of my life. I felt worthwhile, appreciated, efficacious and proud. As each element of the work I did within the group worked so well I was energised in the next and so it went on. It also contributed to my sense of self in my local community. (Edwina, lines 21-87)

The situation in this small community was polarised by the proposed developments and Edwina was able to utilise her organisational skills to help the community in their struggle against a corporate foe. Becoming an active part of a successful team elicited a range of emotions for Edwina and her husband and it made her a significant member of that community.

Community acceptance. My husband and I realised how well known we are and how fondly regarded we are in our community. I started to notice things I hadn't realised before that. We support the small businesses in our area and are loyal to locals. I became known in the local government authority's planning and was invited to a number of key events and remembered by name. I had the realisation that the routines we keep, like visiting a local coffee shop and bumping into neighbours, or buying the papers from the same little place, and bumping into our neighbours, is what makes a community. That we are known. That people speak fondly of us. This was an important revelation because, for most of my life, I have avoided community and tried to be anonymous and private (the product of a childhood in which our nuclear family moved from place to place as part of their work and I never stayed in one place for more than two years). I have never tried to repeat this because it was a unique environmental issue which brought us together. However, it has transferred to all of my work and impacted on how

I work. The feeling during the period of “flow” was uplifting and made a difference for some time afterwards. We were not successful in holding off the development and the irreparable environmental damage it caused, but we did make an impact in ensuring elements of the development were amended. Official agencies/developers realised that they could not take the community for granted. (Edwina, lines 87-105)

Edwina’s Flow experiences in winning the battle against the property developer was important and it helped develop a sense of community. In doing so, Edwina’s standing in the community was enhanced and the public recognition reinstates the Flow experiences.

Bushwalking, chess and Flow. In this second example Edwina discusses Flow in team events and individual activities like chess and bushwalking:

Experiencing Flow as an educational leader is harder than in other areas. Although it’s some time since I played chess, it was always a source of Flow. I am very competitive by nature. A game that is won is a source of Flow-easily achieved. A game that is lost is also a source of Flow on some occasions because of the feelings that accompany each strategy on the chess board in an effort to win. The feeling of camaraderie in a team sport (I’ve only ever played occasional games of hockey or netball) is a source of Flow. Bush walking is a source of Flow, especially when conquering a very difficult slope or knowing how far one has walked. Successfully entertaining friends for an evening meal is a source of Flow when all the elements, food, ambience, environment, conversation/laughter work well. (Edwina, 220-229)

Some people are predisposed to experience high levels of Flow. For example, Csikszentmihalyi (1997b, p. 105) used the example of Rico who did a repetitive job with good humour and Flow. Edwina is one of those people who with a sense of what is right, develops a collective belief in community.

Case 2b: Ann, former primary school principal, and tough formative years on the farm.

Ann is a 57 year old former primary school principal. In her time as a principal, she was known to be an outstanding leader and she won a series of promotional positions. She was a highly respected school leader who was recognised by her peers. At the present time Ann is retiring from the Western Australian state education system.

Feeding the workers. In this example Ann speaks about her Flow experiences in catering and cooking. Her upbringing on a farm meant she understood that women's essential work was to support the men doing farming activities. While modern readers may think of this role as less important, the men and women on farms worked in a symbiotic and equal relationship. Ann said:

It's challenging to think of Flow situations as I'm not particularly sporty, or have a hobby, as such. I realise that a Flow context is not achieved in a linear way but really a series of sometimes serendipitous, sometimes planned interactive, iterative actions, thoughts and feelings. However, I think possibly the best scenario I can come up with is cooking for a large group (10 or more people). It's something I can do. This all started at a very young age as I come from a farming family of five children plus many extended family and others. My mother was very adept at this, as well as being a good cook, so she was an excellent model for me. I spent a lot of time in the kitchen helping out Mum, starting from setting the table as a preschooler to later cooking for the gang. My mother would coach me in tasks I needed to do from talking about how I would prepare to do the task I needed to do as well as giving feedback along the way. Mum consistently praised me when I did well, but got onto my case when I was slack. It was also a time when my mother instilled into me her strong philosophical views on life – work hard, be honest, do your best, be well prepared, do the right thing because it's the right thing to do – which I carry with me to this day.

I frequently heard my mother tell others how helpful I was which boosted me no end. I can also remember the delight I felt when I eventually cooked a whole meal for everyone and how pleased my mother was. Interestingly, we were very poor being new land farmers. We lived in a shed for 12 years with

no running water and no money. The worst was in 1969 when we had severe drought when Dad had to shoot starving sheep because it was cheaper to do that than pay for cartage to send them to market and crops were non-existent. However, I don't feel deprived because of the hardships – in fact, I feel it helped me be quite resilient and to be a problem solver. When I was 14 my mother was in hospital having my youngest brother, and my Grandparents were there to help out. There was an expectation I would do the work when I came home from school and on weekends and look after my 17 month old sister to give my grandparents a break, as well as do the cooking and other chores including washing with a copper. I'll never forget the overwhelming tiredness I felt during this time. I learned lots about catering for a crowd then. Despite the lack of money, there was never a shortage of food as Mum had the view that even if we had nothing else her children would eat well – we grew vegetables and slaughtered our own meat. I find I can now cater very easily for a crowd. As a mother myself I feel very confident in cooking or a large group. In fact, my sister-in-law from the US recently remarked she didn't even notice I was cooking up a storm when suddenly it appears! However, since my own three children have left home I find I am losing the skill – have got 15 coming for a BBQ tonight and have to really think about what I'm doing! (lines 18-54)

The tough, formative years on a farm during extended drought broke the backs of many families, but Ann's family soldiered on. While Ann is quite adept at catering for large groups of people, she realised the importance of food and eating together, even in tough times. For Ann the Flow experience was multi-levelled-meeting the challenges of provisioning and catering for large groups, and keeping the family and extended family together.

Flow, cooking and overcoming problems. Ann was asked about out-of-school Flow and how she was able to replicate this feeling:

Many times both in the kitchen and in other aspects of my life. Flow helped me believe I can learn many things over time and with practice. It made me be feel good about myself. It also made me realise that I can have

second/third or maybe more goes to refine something before I get to be okay at it.

The strategies include my thinking about the world and how I work within it. The importance of strategic and logistical planning and doing. And to laugh about things. It also made me realise that I have to take responsibility for the things I can do something about – I'm not so good at letting go sometimes ... tend to carry other people's monkeys.

The underlying values embedded during these times have assisted in all I do – hard work, being ethical, not beating yourself up when you made a dill of yourself, not being afraid to take risks, being well prepared and organised (to a degree), problem solving when things aren't perfect. It also made me like doing things by myself at times. (Anne, lines 60-77)

Catering on farms, and for shearing teams is not for the faint hearted, or fragile. Ann's formative years were marked by early parentification (looking after siblings), a degree of poverty, and also catering for the family and farm workers. This was a character building exercise and the stuff of the real Australian bush battlers who stayed on their blocks when others moved to the security of large towns.

Case 3: James, Catholic school principal, and golfer.

James is an energetic 57 year old Catholic Primary School principal. His school serves a parish on the eastern edge of the Perth metropolitan area. The parish, and school are characterised by a predominance of young families. While the housing estate in which families reside is new, the income of the school community is less than average. Recording a non-school Flow experience for James was difficult:

It has been quite difficult for me to recall a "Flow experience" that is not related to work. I suspect that this is true because of the nature of Flow. One is aware that one is encountering a Flow experience because there are often clear markers, targets or outcomes that the experience can be measured against in terms of the level of success or accomplishment that is being

experienced. Such 'markers' tend to be more clearly evident in a work environment than in a non-work environment. (James, lines 19-24)

Golf and Flow. On reflection, James's experiences playing social golf provided an example of Flow for this exercise:

I will detail a circumstance where I believe I was in the Flow but for only for a comparatively very short time. This occurred when I was in my thirties playing golf. I played with a social club every Sunday morning. Although I was never an outstanding golfer I enjoyed the company and was mainly focused on improving my game rather than competing against others. However, having the lowest score after handicaps were taken into consideration by all players as something to be aiming for.

On one particular day I began the round and from the very first tee I found that I could do nothing wrong. I was achieving score for each hole well below my handicap of 25. Initially I simply enjoyed the whole experience. There was a sense of the unreal. I had read quite a few coaching books on golf and so I would often attempt to apply some of this knowledge during the game if I was not playing very well. In most circumstances this had very little impact on the overall outcome. However, on this day I was playing more intuitively and not giving a great deal of thought to my grip or stance or swing.

Emotionally, I experienced growing excitement while attempting to maintain an inner calm that I knew was necessary to maintain whatever it was I was doing. I felt very confident even though I was aware that at any time this sense (Flow) could leave me. I tried to reflect during the game on what I was experiencing. What was my state of being? What attitude was I displaying? I was searching for indicators that I could use to replicate what I was doing again and again.

I was not able to repeat that experience even though I tried on a number of occasions to do so. (James, lines 19-44)

Reflecting on other Flow experiences. James remarked that he had experienced Flow, not frequently, in other leisure pursuits.

Flow has happened to me at other times in other circumstances (e.g. fishing) and it was always a brief or one time experience and very often not repeatable. So, I can certainly describe a Flow experience within my work life, both with clarity and as something that took place over time. As I mentioned above, I believe that Flow has something to do with the presence of markers within the context of the Flow experience that allow you to more readily identify it within a working environment. (James, lines 47-53)

This exercise proved difficult for James who said that the out-of-school Flow experiences were hard to remember, but he had little problem identifying Flow in the school situation.

Case 4: Michael Knight, a high jumping educational leader.

Michael Knight is a young District Superintendent in New York State. At 37 years of age, Michael is in his second year of his first superintendent role. His former principal recalled that Michael became a high-performing elementary school principal, and when asked about his Flow experience Michael chose to relate a gripping story about a personal best in a high jumping competition, as a 16 year old:

Jumping into Flow. The best Flow experience I can recall is when I was a junior in high school (age 16). I was on the track team and a pretty decent high jumper. I had a teammate who was a year older and even better than me. The two of us routinely won first and second places in the high jump at most every meet we competed in. The day I remember being in the Flow was a warm, spring day at a local school meet. Both my teammate and I were jumping our best that day. This was one of my favourite venues to compete at. They had a nice surface and location for the jumping pits. We were both jumping well, then the bar would move up another two inches, and we would clear that height. I know we were feeding off each other's energy. To me, the rest of the world kind of faded into the background. Sounds became muffled. I had a connection with my approach and jump that I never remembered before. As this was happening, the rest of the track meet ended. My teammate

and I were going so high that we were still jumping when all the other events had ended.

All the people in the venue crowded around us as they were aware that something big was happening. It was this new element of a crowd that first clicked me back into reality but also pushed me to go higher. Both my teammate and I cleared six feet in front of the group. That was the highest I had ever gone. The bar moved to six feet, two inches and we both cleared it. I was in the Flow. The bar moved to six feet, four inches and I did not make it. My teammate cleared both six feet, four and then six feet, six before he was done. Both of us set our personal records for the day. I believe it was a combination of all things at one time. The right physical and mental mood, the right weather, a favourable venue, the element of camaraderie and competition with my teammate, the internal drive to go higher, the external motivation of the crowd, and the motivation from continued successes as the bar moved up. This performance solidified me as one of the premier high jumpers in the region. Coming from a small region, the word gets out pretty quickly that you are one of the best. I believe my performance on this day helped me at all future meets due to the reputation I earned. Over twenty years later, I can still remember that day very clearly. (Michael Knight, lines 18-45)

In this exciting story Michael Knight re-lives his place in a nail-biting jump-off in an athletic carnival in New York state. Michael had achieved a personal best height and was still in the competition. The rest of the meet had finished and the crowd gathered to watch two young students jumping to new heights. This event had a lasting effect on Michael at a personal level, and within the community. Michael's sense of Flow was character forming.

Conclusion

The eight respondents in this sample of school leaders were part of a purposive sample (sampling to achieve representativeness or comparability), so it was known that they had experienced Flow in their professional and personal lives. The majority of male school leaders' out-of-school reported experiences were

sporting examples (running, jumping, golfing and rugby). The women respondents (Ann and Edwina, embedded case 2) chose to describe saving the environment and catering/cooking as their out-of-school Flow experiences.

The individually competitive athletes (Edwin Flack, Alvin and Michael Knight) knew Flow well, and it was their constant companion in training and competition. In their early experience the runners (Edwin and Alvin) experienced Flow, almost by accident. After that first experience they actively sought to control what they thought were the necessary preconditions for Flow. As long distance runners, during a race, or in training, Edwin and Alvin worked hard to get *into the zone* by trying to put into place the array of psychological and physiological factors that allow entry to the zone, and access to the consequent Flow experiences. Getting into the zone was often difficult and Edwin Flack (personal communication, September 5, 2010) observed:

... some days I could not get into it at all. Nothing flowed. For me it was a mental state that I got into.... I can think of a certain time when I actually got out of it, although in the marathon there were certainly ebbs and flows. In the Sydney marathon I felt good early and should have gone, but I sat back, missed the opportunity, and then felt like shit for the rest of the run.

An emerging phenomenon that doesn't play a pivotal role in Csikszentmihalyi's Flow, but can be seen in the literature on athletes working to get into the zone, elicited a supplementary question to all of the respondents in this research. Hanin's development of the individual zone of optimal functioning (IZOF) model (Cohen, Tenenbaum & English, 2006, p. 260) was helpful in understanding of the factors influencing Flow.

Reporting School Leadership Flow

In this chapter all of the respondents to the e-interview recounted their experiences of Flow in a variety of environments outside school: distance running, acting, cooking, playing rugby, playing golf, high jumping, and saving the environment.

The e-interviews in this part of the research were designed to establish the comparative sense of Flow in recording both the experiences from outside the school situation, and that of Flow in school leadership. In this Chapter the respondents discuss what they saw as their school leadership Flow experiences.

Coding school leaders' school-based responses is guided by the complex question of when to stop. In the software NVivo 9, coding (free nodes) allows text collation without any assumptions of connection between the coding nodes. In this research the coding was established against Csikszentmihalyi's nine characteristics of Flow, and then further nodes were added during the coding sessions. A major problem in all coding exercises is that establishing a new coding node during the coding of respondents' transcripts means that the transcripts that have already been coded need to be re-examined in relation to the new node. In this Chapter the responses to the hypothesised conceptual framework (Csikszentmihalyi's nine dimensions) are set out, and the analysis is presented in Chapter 6.

Csikszentmihalyi's Nine Dimensions of Flow

Jackson and Csikszentmihalyi's (1999, p. 16) nine fundamental dimensions or components of Flow form the conceptual framework used in this research to deconstruct the school leaders' Flow experiences. These nine characteristics were validated by Jackson and others and they form the bases of the Flow Scale Manuals (Jackson & Eklund, 2004).

1. Challenge-skills balance.

This dimension is the key to Csikszentmihalyi's Flow Theory. Unless the challenge and the skill levels are in the correct orientation then Flow will not happen. Effective school leaders live on their skills so, on key issues they are constantly challenged and they cannot afford to lose control, or their credibility and reputation are damaged. Because school leaders' professional standing is under the spotlight at all staff meetings, school council meetings, and meetings with parents, principals cannot let their guard drop. For all school leaders the challenge-skills balance is in constant play on both minor and key issues.

Edwina took over a difficult rural secondary school that had been controlled by toxic elements for some years. As with all military leaders, Edwina had to work out which battle to fight first, knowing that she had to win because a critical loss would mean that the uncommitted staff members would be reluctant to align themselves with a losing side. Addressing key issues in the first eight weeks of her appointment became a key role for Edwina:

Every element of the management of ongoing issues of school tone for the first 8 weeks of my appointment was full of ups and downs. Because of my high level of experience in this area, I felt very confident of what I was doing and the way I was mentoring others. Risk management was another element of this. The campus, in previous years, had been a succession of critical incidents. Reducing this volatility was important to the work of Term 1. From Day 1 the school went from being a major source of work for District Office (parent complaints and critical incidents) to being unheard of by DO. Overcoming the inexperience of leaders was the ongoing focus of my work also. I had to be very directly involved in their development whilst tackling a number of other fronts. (Edwina, lines 163-173)

First, Edwina needed to indicate to the school community that she was going to run the school. So, she chose to address the problem of the three senior, Year 12, male students who were influencing key aspects of the school's operations:

There were three senior male students running the show and in the wider community the school had a reputation for being controlled by them. I made it my business to directly involve myself in the management of this core group. I modelled the management of these students so that other leaders bore witness to all that I did and knew my expectations for ensuring this never happened in the school again. As a direct result I prevailed and the boys were pulled into line with one leaving the school. The tone of my work with these students had to be public, and I had to be very firm and clear about what was not going to be tolerated from them. To see the response from other staff who had been insipid in their approaches to managing this issue in past years was interesting. "White-anting" of my leadership by key staff diminished considerably (although on other fronts it continued as I took on each issue... a

bit like ten pin bowling ... knocking off pin by pin). (Edwina, lines 152-163)

In selecting an importantly challenging, but winnable battle first up, Edwina had shown the community that she was prepared to confront the challenges that this school faced, and that she wasn't going to ignore the problems. For her, the challenge-skills dimension was critical in a professional sense too- it was her first appointment as a school principal. While fighting the battle for control of the school was a lonely task (there were lots of spectators watching, before aligning themselves), and Edwina's Flow experiences reinforced her resolve:

If my school had been completely functional, I would still have generated strategies and ideas to move it forward, and this would still have been a source of Flow as my ideas and efforts bore fruit. It will be wonderful to reach the point where I have excellent results in the school and the senior echelons celebrate the work. Presently I feel quite alone in my work. If it weren't for some key successes, my strong sense of duty and the feelings of Flow I experience, I wouldn't be able to continue. As I mentioned above, there continues to be much work to do. (Edwina, lines 212-218)

Every day became a battle for Edwina, and after three years, she is still standing, and still facing daily challenges.

Ann is an experienced primary school principal whose formative years on the farm during drought gave her a sense of toughness and a will to accept challenges. In her mind, Ann saw the resultant Flow as directly proportional to the challenge-skills balance:

I think too there is a difference in whether the Flow is task oriented (doing an individual action e.g. cooking) and changing the way a group of people think about and do their work collectively. I think that perhaps the low level Flow might be characterised by my effort alone, is task/process oriented, deep philosophical beliefs and values are not challenged, and it's easy to observe e.g. doing the school budget, following the staffing process, timetabling. However, High level Flow, on the other hand, might be characterised by challenging deep seated beliefs/ values, attempting to change others' behaviour, is difficult to observe especially when it occurs over time i.e. years

in a school situation. However, the two would be interrelated. For example, a high level flow might be changing some teaching practice and involve complex activities over time such as engaging in new learning and then implementing and embedding it, understanding how to have conversations/interactions that will promote change, knowing how/when others buy-in etc. The low level flow part of it might involve allocating/identifying the professional learning, resource allocation, budgeting. (lines 110-124)

In reality, every school leader faces the challenge-skill balance many times every day, and they cannot afford to fail because their authority, while positional, is also determined by their credibility in the rough and tumble of school decision making. Edwina (2010) concluded:

Perhaps it's about inputs and outputs. If the input is social and enjoyable and more relaxed then the resultant Flow is not as appreciated or hard won. If the terrain is less known or predictable then the Flow is going to be longer or deeper or higher because of the intellectual, emotional, physical and nervous energy that has gone into achieving that outcome". (lines 261-265)

In a metaphoric sense, the position of the school leader is not dissimilar to that of Akela, the leader of the wolf pack, in Kipling's (1960) *Jungle Book*. "When the leader of the pack has missed his kill, he is called the Dead Wolf, as long as he lives, which is not long, as a rule" (p. 28). While school leaders do not face such a grisly end, continual failure against important challenges translates in the loss of credibility and respect from the staff members and parents. A factor not considered in the Jackson and Csikszentmihalyi (1999) model is the consequence of failure in the skill-challenge balance. If, for example, a tight-rope walker is required to walk 10 metres on a rope lifted a metre from the ground, that is not difficult; but if the rope is lifted to 400 metres above the ground, the skill-challenge equation changes because of the consequences of possible failure.

2. Action-awareness merging.

Action and awareness merging come about when "the mind and body fuse into one.... This oneness with movement does not require effort in flow" (Csikszentmihalyi, 1999, p. 19). Jackson and Csikszentmihalyi (1999, p. 20)

described the holism of the action and awareness merging. Louis XIV of France is believed to have said, “L'état, c'est moi”. To a degree, the action-awareness merging promotes such an anthropomorphism, a joining of the school and the school leadership. School leaders become the school. In their research Jackson and Eklund (2004) described athletes becoming totally absorbed in the challenge: “Feelings of automaticity are described by athletes, whose well-learned routines enable them to process subconsciously and pay full attention to their actions” (p. 8).

Edwin Flack, who runs a metropolitan primary school in Perth, has an extensive and intimate knowledge and experience in Flow, from his extensive experience in long-distance running. He is driven by a desire to achieve at the highest levels, and he actively seeks the merging of action and awareness:

Overall this ability or rather experience of the “Zone” has created within me a desire to achieve at the highest of levels in anything that I do. It has created a belief in me that if I turn a hand to it and put in the effort then I can and will be successful. This in turn, I believe creates a high degree of optimism in my way of thinking and tends to create a higher degree of positiveness in the ways that I tackle things. There is a down side though. With this comes a very structured and organised way of doing things. Everything comes with a pattern. This is something, particularly in a relationship that people fail to recognise. Spontaneity is there, however it is an organised spontaneity. (Edwin Flack, lines 69-77)

In such circumstance, Barry the ex-publican, rugby playing principal had difficulty identifying Flow in the school organisational setting. He said:

This is difficult to really ascertain whether or not I have. Most of it depends on the individual's interpretation of Flow. If you understand it to mean when an individual switches off from their surroundings in order to focus solely on the task at hand, then I would say I have to say yes. (Barry, lines 6-63)

Overall, this dimension elicited a poor response from the respondents. A supplementary question was sent to the respondents to check whether this lack of support came from their understanding of the question, or whether it was a coding

error on the researcher's part. It was not a coding error, and the respondents' responses are dealt with in Chapter 6.

3. Clear goals.

Whether in sporting events or school administration, school leaders need clear sets of personal and professional goals. Setting clear goals is a part of the skills-challenge balance, and "To enter Flow, goals should be set clearly in advance, so that the athlete knows exactly what he is to do" (Jackson & Csikszentmihalyi, 1999, p. 21). The articulation of those goals may not be overly sophisticated, and in terms of Maslow's Hierarchy of Needs, the school leader's personal goal could be as simple as leadership survival in the hurly-burly of modern schooling.

In her school Edwina was well aware of the need to set clear goals, not only for strategic planning but at the short-term level of personal survival. For Edwina the Flow that accompanied her successes was gratifying:

To see the momentum of the work start to show and the resulting change in tone was exhilarating – a source of adrenalin and inspiration to persist no matter what hitches arose. I could also see Leader X energised and excited to see that the results of the work I had guided and advised were very evident. The complete turnaround in the school continues to be a source of Flow.
(lines 173-177)

She continued:

There was at least one occasion when I could quite happily have walked out of the school and never returned, but I would never have done that because, ethically, as Principal, I have a strong moral responsibility to continue the work I have started. Every element of the work results in Flow because every single strategy undertaken links with another and as each one works the exhilaration is extraordinary. Moving on to the next priority becomes possible and the same set of ups and downs occurs. That is why educational leadership is so exhilarating. (Edwina, lines 196-200)

Key features of school leadership are courage and determination.

Organisations and schools can have as many clear goals as they want, but it requires

the leader to indicate that the goals are important, and they will be done. When the goals have been set, then doing nothing is not an option, as Edwina has indicated.

I stepped in, stamped my foot, and gave explicit instructions on what two of these were to look like. At the fear of incurring my wrath and indignation they went away, organised and planned meticulously along the lines of my request and finally achieved two amazing celebration assemblies. Leaders came up to me and said, “We now know what you mean. We get it!” That sense of Flow was nothing like the feeling associated with changing whole of school tone and approaches to case management, behaviour management and community perceptions. Similarly, if I work patiently with one staff member over a period of time - and results are achieved - that is going to be deeper or higher or longer Flow than if I give a bloody good speech which is well received by staff. (lines 269-278)

Michael Knight, the former principal and superintendent at the present time, observed that the collective achievement of goals is far more satisfying than achieving personal goals. “I also experience higher-level Flow when something good benefits the whole district. Lower-level Flow, for me, comes with individual moments or accomplishments that only affect one school” (lines 83-85). However, he also warned that “it is harder in a school setting than in a team setting. Sports teams have a very clear goal” (lines 99-100).

In his role as his school’s strategic planner, Maxwell acknowledged that the clear goals were essential for a school to have a commitment to an agreed purpose.

Yes, linked to internal and external goals. I like to make the decisions that work and get a buzz from these. As a school administrator and teacher, I want the students and teachers to perform to the best of their abilities and to develop the school culture to ensure this happens. Working with a cooperative administrative group is important to me in this as well as ensuring things are done as efficiently as possible with resources assigned to those requiring them. (lines 244-249)

Edwin Flack has devoted his lifetime to competitive distance running, and he has carried that sense of purpose to his school leadership. He observed that having clear goals was integral to his running and school administration:

In my running the setting of goals was fundamental to what I was doing. I ran to keep fit but more importantly I ran to challenge myself and my abilities. The setting of goals established a pathway to future successes. Having said this and having a better understanding of the administrator's role I believe that the setting of goals (purpose) is more important to achieving a flow in this role. I cannot see how you could achieve a flow while aimlessly leading a school. There needs to be a rhythm that has to be established through clear purpose, vision, direction. (lines 235-241)

James, the very experienced Catholic primary school principal used a variety of markers to constantly check how he was meeting the school's goals and making good decisions. He observed that:

This is important because consciousness of being in the "Flow" is attained by the regular feedback obtained from such markers. These markers can be from interactions with other teaching colleagues, head office personnel, parents and students or from inanimate references such as student improvement data or school events. (lines 70-75)

A real issue for principals is the question of valid knowledge, and James constantly checked that he was heading in the right direction:

I just knew that if I keep going it will be for the better. This was not just 'gut reaction'. There were other markers that confirmed this. My professional expertise, professional reading attendance at conferences all confirmed that what was being structured and developed was correct and it would achieve improved student outcomes. (lines 109-113)

Goal setting is an essential process that all schools undertake as a part of their strategic and operational planning, and because of this, all of the respondents in this research had clear sets of goals for their schools' planning. In her reflection, it was interesting that Edwina separated the goals from the strategies to achieve those goals:

As I mentioned in my response above, it's not necessarily about the goal, it's more about the battle. The more involved in the battle, the more exhilarating

the Flow when one prevails. However, if one is “drifting” without goals I can’t see how Flow could be experienced. If there has been no personal, emotional, intellectual investment in pursuing a goal, then how is there going to be Flow when that “battle” is won. (lines 308-313)

For most of the respondents the strategies and the effort to obtain the goals are inseparable.

4. Unambiguous feedback.

The importance of feedback is critical for high-level performance. Scriven (1996) developed the heuristic concepts of formative and summative assessment. In relation to school leadership, feedback based on formative and summative assessment is critically important to school leaders’ performance, their sense of self-efficacy and their ability to attain Flow states. Feedback comes from many sources and for athletes bio-feedback (kinaesthetic awareness) is important in the middle of competition.

From years of experience, Edwin Flack knew the importance of feedback in relation to his distance running program. He compared his running feedback and his leadership feedback:

The primary difference between my running and my leadership role is that while running I was able to receive immediate feedback in relation to my performance at the time, be that in training or competition. There were times that I had established as bench marks. These benchmarks don’t exist in my role as a principal and I have to gauge my performance through the performance of others. (lines 355-359)

The quality of the feedback and the credibility of the person giving it are important. Flack complained:

In my leadership role if I did not receive feedback, let’s face it, the principal review is only worth something if you respect the person who is giving it, I would still do it because like my running the bottom line is I love the job and the challenges of the job. For me life is a challenge, always has been, always will be and if I can stick it to someone along the way I will in order to achieve what I feel I need to achieve. Once that feeling of challenge has

gone I think I will close the door and walk out of the office. (Flack, lines 362-368)

Michael Knight, who lives in an environment of high-stakes educational testing in New York, used a combination of test scores, standards, competition and unambiguous feedback to lift his own school's ratings.

I see competition as motivation. I think we all have a desire to be a little better at something than the other guy. This is easily seen in sports. I want to be faster than him so I am motivated to give it my all. The end of the race is in sight. All I need to do is be in the Flow for 100 meters and win. That creates the internal drive. The external drive would come in the form of accolades, ribbons, or movement on to another level of competition. School leadership is capitalizing more on competition lately with the increase in standardized testing and the awareness of it. This is kind of a perverse incentive for more testing, but it does create concrete numbers that can be ranked. At my last school where I was principal, we used the scores from neighboring schools as motivation on the state English exam. I hope we move more in a direction of applauding and recognizing improvement and not just test results. (lines 115-125)

Feedback can be problematic, and in the Western Australian context, Ann took an antithetical view to Michael Knight. While external competition and external feedback are parts of the educational scene, she deplored their effects on the less fortunate students, particularly in remote Aboriginal communities:

I'm off-loading here, but it's a scenario where external competition is creating a morally corrupt world order, and is not supporting Flow of good school leadership. I have no problem with external standards, just with what we are doing with them. (lines 221-222)

While the national testing results give fairly valid feedback to schools about their performance in literacy and numeracy, there is a suite of other formal and informal feedback sources that school leaders receive. All Western Australian schools are required to gather data on their performance from a wide range of

sources through surveys, interviews and other less formal measures. Idiographic and nomothetic feedback were shown to be important to the respondents in this sample.

5. Concentration on the task in hand.

A key dimension of Flow in sport and writing is the sense of total concentration to the task at hand. Jackson and Eklund (2004, p. 9) remarked: “Being totally connected to the task at hand epitomizes the flow state, and is one of its most often mentioned characteristics”. On the other hand, the nature of school leadership is such that it is difficult to concentrate on just one project or event, to the exclusion of everything that occurs in running a school. Flack (2010) responded to this question incredulously:

This cannot be a serious question. As a school leader when do we ever get to concentrate on only one task? There have been very few times if any that I could say I focussed on one task and ignored all other. These other worries, tasks or concerns are always in our peripheral vision. There have been times when I have flowed effortlessly from one task to the next in a seamless manner. (lines 375-380)

What is often unrecognised in the literature is that school leaders pay a price for this heavy concentration to the task at hand, and demanding work load. Barry, who leads a monastic life living away from his family and running a small country school, revealed the price that he pays, every weekend:

This term has been a classic case in point with the new initiatives that are being implemented. Having to wear many different hats, several of which I haven't had to wear before it has been important to prioritise and focus on the most important tasks. In order to do this I always need to get on, what I term, “a roll”. Procrastination has always been an area of concern for me so by putting myself under pressure I find that I work better. I am currently teaching three days a week and in the office for two and obviously this leaves very little time to waste. By doing this I cannot procrastinate and I find that I get more done. The old cliché of ‘if you want something done give it to a busy person’ definitely rings true in this case. There are things that must be done and when I switch on they get done. In this instance there are others

who are affected by the work I do so I have to be conscious of this. I can probably say that I have been ‘In the Zone’ for most of this term. I know this because each weekend when I switch off I am exhausted and the energy levels are low. (lines 64-76)

Later, Barry, who is the sole administrator in his rural school, clarified his thoughts and reiterated his key role to get all of his staff on-side and supporting the direction the school was taking:

Yes I have and feel that to do my job correctly I must do this. My current focus is on ensuring that my school continues on the path that we are on long after I’m gone. To do this I need to commit the staff (teaching and non-teaching) to producing whole school plans and processes that are embedded in the culture. That is the end target and to achieve that there are many smaller targets that need to be achieved. I currently have all staff willingly working on these things now. The Flow state comes when the collective energy of the group drives everyone. (lines 197-203)

Edwina, too, had experienced the complexity of the principal’s role. She observed:

Managing impressions; communicating, communicating, communicating; knowing that no matter how kind one is there will be the inevitable backbiting in back rooms; and, knowing that lack of capacity is a big issue which one is constantly working to overcome in some areas/individuals makes the work of an educational leader complex. Having so many matters to juggle at once adds to the complexity. (Edwina, lines 232-236)

Despite the complexity of the tasks facing the principal each day, Edwina saw this as facilitating a Flow experience: “The goal is always clear. But the way we manage the difficulties and obstacles along the way is what contributes to Flow” (Edwina, lines 288-290).

In supporting the positions of both Barry and Edwina, James reiterated that school leaders do not deal with discrete self-contained issues, which makes concentrating on one task almost an impossibility. He responded to this question:

In terms of systems thinking no single event is independent in terms of the outcome of such an event i.e. cause and effect is not linear or so simplistic. The analogy that appears apt is of the pebble dropped into a still pond. The ripple effect is indicative of the many and often unforeseen implications of what are essentially a desire to meet the imperative of the established 'moral purpose'. When a leader undertakes a course of action there are always secondary issues and impacts that you ignore at your peril. Leadership can never be seen as one-dimensional. As a leader you are conscious that there are many aspects of your leadership that you bring to bear in order to achieve the desired goals set for school improvement. When you are in Flow you are very conscious of the rate at which you are making those gains but always aware that staying in the Flow is not just being carried by the momentum but continually seeking clues as to what maintains that momentum. It is an active rather than passive state. (James, lines 283-296)

With the inter-dependence of many of Csikszentmihalyi's dimensions of Flow, Edwina (2010) summed up the situation well:

It is my belief that, when all of these four factors are present, I am in a state of Flow. Motivation, concentration, control, confidence, time, all are factors which I can very confidently identify as being in a particular state when I am experiencing Flow. Concentration isn't something one has to work on in Flow. Concentration is a problem when I am working on the administrative and detritus that can become distracting for me as a principal. I will find ways to be distracted if I'm not careful. It is those times when I am especially delighted if something comes along to divert me from the task at hand. (lines 372-379)

Feedback from the respondents in relation to this dimension showed that it attracted considerable comment, but the school leaders pointed out the complexity and demands of the job.

6. Sense of control.

This dimension of Flow received a lot of comment and qualified support from the school administrators. Being on the top of your game, and in control of the situation are the essential precursors in generating a sense of Flow. In the Flow literature, Jackson and Eklund (2004, p. 10) found athletes describing the sense of control as “unshatterable self-esteem”, and “infallibility”.

Being a school leader is not unlike being an actor, and Maxwell, who started his adult life in the theatre, commented on the fleeting nature of being in control and the resultant Flow:

In my experience Flow is mostly a short lived feeling, whether in administration or acting. At each new task or play you are required to prove yourself anew. People want it to go on forever – it doesn’t – as soon as you rest on your reputation you have lost the drive to create and are on the decline. (lines 109-112)

For Ann in her various civilian and educational roles, getting into a state of control was critical for the development of Flow. In answer to the question she said, “How did I feel when Flow was happening? Relaxed, in charge, able to manage unexpected situations, able to manage more than one thing at a time, juggling” (Anne, lines 58-59).

Edwina had fought an on-going battle with the entrenched elements of her staff when she took over her school. The school had developed a poor reputation and many entrenched staff didn’t want change brought in by the new principal. For Edwina the battle became a battle for professional survival and she could not afford to lose control. Her sense of self-efficacy helped her through these difficult times. A psychological aspect of the sense of control is the concept of self-efficacy for principals, and this has a flow-on effect for the rest of the school. Hipp (1996, as cited in Wahlstrom & Lois, 2008, p. 467), in a study of 10 middle-schools, “found that principals affected efficacy by addressing in-school problems within their control, such as creating and supporting student discipline policies or enacting in-

school structures for shared decision making”. Edwina (2010) had observed this efficacy equation in her leadership role:

Efficacy is very important to my performance. I am a complex creature. Very self critical on one hand, I know my ability on the other. If I wasn't highly efficacious I wouldn't be a Principal. It's a role in which the responsibilities are significant. It's not a job one should consider if one isn't capable. It's about integrity. There is a lot resting on the shoulders of the principal of a school. I know that I will always do the right thing by the students, staff, parents and community. That doesn't change the fact that whatever I do is never quite good enough, yet when things go well the Flow is reason to keep going. As I mentioned in my response above, it's not necessarily about the goal, it's more about the battle. The more involved in the “battle”, the more exhilarating the Flow when one prevails. However, if one is “drifting” without goals I can't see how Flow could be experienced. If there has been no personal, emotional, intellectual investment in pursuing a goal, then how is there going to be Flow when that “battle” is won. (Edwina, lines 301-313)

James (2010), the experienced principal in the Catholic education system, strongly believed that he was vulnerable in his decision making.

In my school experience of Flow I could not say that I felt I was invincible. Rather while in the Flow I was aware that I was constantly making judgements and decisions for which I hoped would provide me with the desired outcomes I was seeking. The complexity and ambiguity that exists within leadership is never able to provide you with a sense (in real time) that you cannot make a mistake. Rather, in hindsight you are able to reflect on how nearly every decision that was made was the right one and consequently you infer from that a sense control. Yet this is more on reflection. (lines 305-313)

The transient nature of being in control with everything working had been experienced by Flack in his large primary school, and he reflected on how this had happened:

Yes I have had days where I have felt that nothing could go wrong and that I was in full control of the school setting. Decisions were made easily and they were the correct ones, teachers were on track, the office staff were ticking along and everything was just buzzing along. These are the days when I get a little bored as everything seems to be in its place and working as it should. These times can last anywhere from a moment to all day. It is those times where I think, “What did I do to get that?” Was it a result of something I had done the day before or was it the culmination of a numbers of days work?
(lines 384-392)

While Alvin had experienced the sense of control accompanying Flow when running, he drew the connection between that and the feeling of administrative efficacy.

For me, I think efficacy is everything. From observing others I believe the people who are the most successful over a long period of time, have an almost unshakeable self-belief. Their armour is very resilient and I believe this is more important than ability. I believe your goals are what you measure your progress against. These goals may not always be formal but they guide what you want to achieve and it is against these that we stack up the data we collect on our own performance. (lines 126-131)

Self-efficacy is closely intertwined with the dimension of a sense of control. However, Jackson and Eklund (2004, p. 10) observed that, “Like flow itself, the sense of control lasts only a short time”.

7. Loss of self-consciousness.

This dimension of Flow is well represented in the literature on sport and physical activities. Flack, who had worked with Flow every time he ran, said of Flow in distance running:

In terms of motivation it acts as a stimulant as you try to chase the feeling again in order to replicate the ability to be able to perform at your highest level. This level brings with the feeling of invincibility. I used a great deal of visualisation in an effort to replicate this and would often spend periods of

time visualising an event to the point of hearing it, smelling it, feeling it etc.
(lines 64-68)

James (2010) thoughtfully observed that he thought that this dimension could be nurtured in schools:

Loss of self-consciousness I have interrupted as a mindset where, as a leader, you no longer or to a lesser degree *double think* yourself. This loss of self-consciousness tends to grow as the experience of Flow is maintained. Good decisions tend to be confirmed by good results/outcomes and as this sequence continues you are aware that the need to scrutinise possible decisions for possible negative consequences tends to be reduced. There is a growing confidence in your capacity as a leader and this is reflected in your growing capacity to defend decisions on the basis of previous successes. In addition, those that would oppose you are now more reluctant to do so because of the history of success you already have. (lines 323-332)

It is interesting that because of the public nature of athletic performance, the athletes find it is difficult to lose the sense of self-consciousness (Jackson & Eklund, 2004, p. 10). This dimension, too, attracted a poor level of response from the school leaders, and a supplementary question was sent to all respondents. The replies are listed in the analysis in Chapter 6.

8. Transformation of time

Students in schools may complain that they are “starting to become involved with a subject that is interesting to them, such as an art project or a science experiment, the bell signals the end of the fifty-minute period and they have to change classes” (Csikszentmihalyi, 1994, p. 186). However, unlike sporting events and interesting classes that are finished in minutes, the most important temporal timelines for school leaders are terms, semesters and years. The researchers, Jackson and Eklund (2004), claimed that this dimension may be the least experienced of all the dimensions. They noted that time is often a critical part of athletes’ performances and it cannot be ignored by well trained athletes. These authors also proposed that the transformation of time only occurred during deep-Flow, which was far less common.

Edwina had experienced both the slow and fast versions of the transformation of time in her leadership role:

I always felt that – in a state of Flow – I could do so much so effectively in whatever time span was needed. Adrenalin or motivation, heightened in Flow, seems to make one work more potently. Time doesn't matter as much. It seems to go slowly AND quickly because one's intrinsic motivation is so in tune with the work being done and the connection with that work. (Edwina, 2010, lines 430-435)

Taking a big-picture view of the time issue, James (2010) described how time, in terms of weeks, months, and even the school year can pass quickly:

In my experience I have found that when I experience Flow time always goes faster. I think this comes about because the gains you are making in terms of school improvement do tend to gather momentum and cluster within a relatively small time frame. In my experience this timeframe would be within the vicinity of approximately 24 months. It is this 24-26 month timeframe when the majority of the most significant and vital reforms are put into action. (lines 337-342)

Barry (2010, lines 232-233) summed up the collective wisdom on the transformation of time when he observed that time goes slowly when the task is boring, and when “the whole team is actively focussed the collective energy produced makes time go quickly”.

9. Autotelic experience

In Human Resource Management terms, the autotelic personality is a highly desired work characteristic for identifying employable teachers and school leaders because they are self-motivated. The term refers to a “self contained activity, one that is done not with the expectation of some future benefit, but simply because the doing itself is the reward” (Csikszentmihalyi, 1991, p. 67). Csikszentmihalyi (1975/2000) also commented that, “Autotelic activities are patterns of action which maximize immediate, intrinsic rewards to the participant” (p. 21). However, no one is fully autotelic because there are always tasks that are not enjoyable but they have to be

done (Csikszentmihalyi, 1997b, p. 117). The positive reinforcement offered in the Flow experience, coupled with a variable interval schedule of reward makes Flow a very important motivator for athletes, writers, teachers and school leaders.

The performance of Edwina, in her difficult school, is very interesting in terms of autotelism. Almost every day, Edwina has to fight for her personal and professional survival as she addressed issues generated by the inherited toxic culture. In these circumstances, knowing that she has survived another day elicited Flow. She reported:

Every element of the work results in Flow because every single strategy undertaken links with another and as each one works the exhilaration is extraordinary. Moving on to the next priority becomes possible and the same set of ups and downs occurs. That is why educational leadership is so exhilarating. (lines 199-202)

In terms of her daily struggles, Edwina (2010) thinks in terms of battles:

The Flow from that was amazing, but not as good as the Flow from a more difficult “battle” where I agonised over strategies to win over a hard group or raise a group’s understanding. As a leader, successes come from spontaneous situations, but the Flow is short, or shallow or low. So I ask myself is it about the goal or is it about the battle, the pleasure of knowing you positioned the troops, responded to each challenge, deployed resources, regrouped, motivated troops under fire. The goal is always clear. But the way we manage the difficulties and obstacles along the way is what contributes to Flow. (lines 283-290)

In rationalising her autotelic drive Edwina (2010) balanced the complexity of school leadership, against the moral imperative of improving students’ lives.

One of the reasons I enjoy being an educational leader is firstly, because of the complexity of the environment and, secondly, because of the importance to me of seeing improvement happen rather than acceptance of the status quo. I have to move forward and see the outcomes and processes in my workplace improve in some way, shape or form. Those two factors combine to create the potential for me to experience Flow in my opinion. Without complexity and without change for the better, I would not experience Flow in my professional

life. More importantly, without Flow, I don't believe I would continue in my work.... (lines 111-118)

The characteristic of autotelesis, like many other personal qualities, is often easier for others to see, which is probably why there was a limited response to this dimension by school leaders.

Chapter Summary

The data generated in the e-interviews of the eight selected respondents provided rich descriptions of their out-of-school, macro-Flow experiences, which was expected because of the purposive nature of this sampling. The respondents' voices were written in vignettes in the first person, in a manner that was designed to engage the listeners/readers. However, it became clear as this analysis was being constructed that there was a mismatch between the out-of-school and in-school experiences both in the intensity of the Flow experiences, and also in relation to the Jackson and Csikszentmihalyi (1999) nine dimensions of Flow.

CHAPTER 5

Discussion

In Chapter 4, all of the respondents to the e-interview recounted their experiences of Flow in a variety of environments, both inside and outside the school contexts, including distance running, acting, cooking, playing rugby, playing golf, high jumping, and saving the environment. The school leaders generated over 33000 words in response to the e-interview questions. Thirty three NVIVO 9 common nodes were used to analyse the respondents' replies into related themes that facilitated comparative analysis and the generation of findings and propositions. The e-interviews in this part of the research were designed to establish the personal comparative sense of Flow in recording both the experiences from outside the school situation, and that of Flow in school leadership. The results described in this chapter show an inherent dissonance between the Flow experienced in, for example, sporting experiences that are relatively quick and reliant on individual effort, and those of school leaders embedded in complex group situations, which are sustained over lengthy periods of time.

A major finding in this research is that the hypothesised conceptual framework, based on the nine dimensions used in the research by Jackson and Csikszentmihalyi (1999), did not fit the Flow experiences of school leaders. In this chapter the lack of support for the hypothesised conceptual framework is examined, and then the implications of these analyses are considered in Chapter 6.

Part 1: An Overview of Jackson and Csikszentmihalyi's Model Fit/Misfit

The conceptual framework used to guide this research is an adaptation of Csikszentmihalyi's nine fundamental dimensions, or components, of Flow. The dimensions have been verified in sport by Jackson and Csikszentmihalyi (1999) and they form a framework to examine school leaders' Flow experiences.

1. Challenge-skills balance.

A key aspect of the analysis and comparison of Flow in the school situation and in sport or leisure type activities were the respondents' responses in the contrasting situations. Those respondents who had experienced high levels of Flow actively pursued this response in the school situation. While this point is covered below (as #12), competition is a factor that the high performers inserted into their administrative strategies.

Newly appointed school leaders in Western Australian schools are often placed in the jobs, with little support. Within one day the school leader may face a multitude of events that bring into play a personal skills-challenge balance. Edwina faced this situation, which constantly brought the challenge-skills balance to the fore, every day. In this example, Edwina (2010) explained the strategies that she used to ensure her survival:

... very early in my selection and appointment to the role I felt very clear about the order of challenges I needed to “pick off”. I also became aware, very early on, that the confidence expressed by some of my senior colleagues did not match their professional knowledge or experience. I quietly and patiently mentored and supported a key member of the team “picking off” the first major issue that had to be addressed – that of poor school tone, very poor student behaviour, and very inconsistent approaches by staff to managing student behaviour. A key group of staff who managed students well and had close relationships with them were over-familiar with students and quite “predatory” in their attitudes to staff who did not experience such success.
(lines 125-151)

All of the respondents in this research faced similar challenges as they established their reputations and support bases in new schools. While the literature on school administration emphasises the need to establish Professional Learning Communities and to distribute leadership, it is very difficult for newly appointed school leaders to do that in the early days of a new appointment, particularly if that school is characterised by elements of a toxic culture.

The shortcoming of Jackson and Csikszentmihalyi's (1999) description of the skills-challenge balance is that it is difficult to gauge in a school environment. For school leaders constant public failure in the skills-challenge balance can permanently damage their credibility and job security. In relation to school leaders the consequences of failure need to be considered in the challenge aspect of the Flow equation.

2. Action-awareness merging.

This dimension was identified strongly in sporting endeavours, and it happens when the athlete becomes totally absorbed in the activity. Jackson and Eklund (2004, p. 8) relate the example of cyclists who becomes mentally and physically fused with their bikes. Elsewhere, Jackson and Csikszentmihalyi (1999, p. 20) related examples of athletes having sensations of "floating and flowing, of things feeling easy". Perry (1999), examining writers' Flow, identified two types of people: high absorption and low-absorption. She said: "It's also been argued that high-absorption people are motivated intrinsically, by their own experiences, while low-absorption people tend to be more motivated by outside events" (p. 76). It remains to be seen if there is transference between absorption in sport, and absorption in mentally stimulating activities.

Not surprisingly school leaders did not identify this dimension in their responses. While athletes develop this sense in individual performances, it appears very difficult to elicit in a school administrative context. This sample of school leaders did not identify a clear, single case of action-awareness merging.

3. Clear goals.

There was very strong support for the dimension of setting clear goals. In an organisational sense all schools are required to do goal setting as a part of their strategic planning. On the personal level, Edwin Flack also had extensive experience in the setting of clear goals as key part of his competitive running program at the state and national level. He re-asserted the necessity of this act in the attainment of Flow because the plan had been set, and he could then concentrate on his running:

The setting of goals gives you a real purpose. In doing so you no longer need to think too hard about what you are doing as the path has been set. As I stated in my earlier answers it was during this time of just doing that the Flow (being in the zone) was experienced more often as I was simply focussed on being in the now. (Flack, lines 242-245)

In his school leadership role, the problem arises when there is an inherent conflict between system and personal-school goals. Flack rues the current situation and looks forward to school independence:

I see flow, my Flow, as linked to both however the role that the external goals/standards plays is a negative one as it is when these factors have an influence that flow is hindered. I think of the staffing process every year, of the Schools Plus process, the necessity of meeting Indigenous priorities with only superficial support in terms of ground level assistance and a non-functional Aboriginal education section within district office. There are very few instances, other than the ability to become an Independent Public School, that would be beneficial to Flow. (Flack, lines 300-306)

When the goals are clear, everyone is aware of the agreed definition of success and there is nowhere to hide for the key players. In a reflected moment, Ann commented on the public nature of clear goals:

However, the stakes are higher in work situations as everything is so public and everyone watches what the principal is doing. In the work situation stuff ups are not considered funny as there is a perception that so much rides on the principal and that we are working to improve kids. It's about the level of wisdom and maturity that I bring to the role. (lines 100-104)

There is no point in having clear goals unless standards are built into those goals. Ann remarked:

Flow is linked to both internal and external standards, but I think internal standards hold greater sway. I think Flow has to do with moral stance – I find that by having a moral compass it is much easier to have Flow – in my earlier days of the principalship I didn't understand the power of moral purpose. It's about taking a 'stand' about an issue. For instance, when working with a group of teachers on improving literacy, I don't talk about poor NAPLAN

results and beat teachers up, but rather about the effects of low literacy on individuals, each community and society in general and why it is important for all our well being. It creates a moral purpose. We examine the NAPLAN but avoid the blame game as is the want of pollies and some of our esteemed DOE leaders. (Anne, lines 186-195)

Ann concluded: “I have no problem with external standards, just with what we are doing with them. What will future Flow focus on?” (Anne, lines 222-224)

In a similar vein, James from St Mary’s Catholic Primary School (a pseudonym) pointed out that there was little point in having clear goals unless standards were included in those goals. In fact, the standards are linked to Flow:

Yes, I believe that Flow is linked to internal and external standards or expectations. The relationship or the relevance of each is difficult to describe as I feel that each can have an influence depending on the situation e.g. your own recognition of Flow can be the result of the strong moral purpose (i.e. all children can learn and every teacher wants to teach) which is an internal standard which is validated by conversation of staff and teaching and learning around the staff room table at lunch time, the improved learning outcomes that school assessment have demonstrated and the comment of a prospective parent about what they have heard about the school. However from the example above it can be seen that external standards or markers have more influence or are more informative in determining the existence of Flow. (James, lines 216-225)

Barry, who had experienced strong Flow and clear goals in his school-boy rugby exploits, explained his view on the interaction of goals and Flow at this time:

The more I think about this Flow concept the more I understand that it certainly has a place. In writing this I am in the zone in a small way in order to get it finished. I have taken so long to do it that I have now set aside the time and am concentrating totally on this. I have set a deadline and am working towards it. This again proves the theory that if you know clearly what or when the end result is then you can get into the zone. (lines 77-82) A clearly defined goal and challenge is a prerequisite for flow to be maintained.

These goals and challenges need to be constantly reviewed and new ones found once each has been achieved. (lines 171-174)

Having clear goals is both a desirable personal and organisational strategy for managing one's life and one's work. School leaders' daily work is prescribed by strategic and operational plans, with pre-set, explicit budgeting. In terms of professional development many have been exposed to time management material and SMART goal setting (specific, measurable, achievable, realistic, and timely). It is not surprising that this dimension received such strong support.

4. Unambiguous feedback.

In the development of Flow experiences, unambiguous feedback is essential. This feedback can be from significant others, self analysis, or a combination of both, and it is closely aligned with goal setting. A reflective Michael Knight (2010) described his internal feedback loop as *muscle memory*:

Specific situations or accomplishments that have been the result of individual or collective-Flow certainly have given me the confidence and reasons to stay in my job. Being able to call on that "muscle memory" to get back into a state of Flow, or to call on a past experience to utilize those skills in a new challenge. Learning from past mistakes. Keeping the overarching goal of improving student learning in the forefront of all decision making. These are the factors that create an area of Flow for me, that build my self-efficacy, and that keep me coming to work each day. (lines 129-135)

Athletes constantly monitor their performances, particularly in long distance events, and school leaders do the same thing. James's (2010) thought about the cumulative effect of feedback:

Once in the Flow I could see how the school was improving and with that came the data which confirmed that this was the case. With the data came the capacity to talk to people in explicit ways about how the school was improving which gave further impetus to the direction we were taking. The Flow plays upon itself and magnifies its effect. (lines 114-118)

The resultant Flow then reinforced James's sense of direction:

Being in the Flow gave me multiple experiences of getting it right. It was an exhilarating experience that gave me an amazing sense of self worth and achievement. Not that it was always smooth sailing. There were always instances where I was challenged but it was the Flow that gave me the courage to persist. (lines 105-108)

In this research, the respondents strongly supported both the intrinsic and extrinsic feedback loops and their effect on the school leaders' performances. It is interesting that Barry, a school leader in an isolated rural school, makes reference to the need for a mentor, or significant other who can give feedback to school leaders in similar positions:

The non-school example is definitely more intense due to the shorter time involved. The school leadership scenario needs to be sustained for a far greater length of time hence it becomes more mentally taxing rather than physical. I believe an important factor in maintaining the focus or Flow is the presence of trusted colleagues with whom you can discuss issues etc. In doing this the flow can be maintained when needed rather than an individual having issues on their mind endlessly. This is counterproductive and leads to burnout. My non-school situation is one where Flow can be switched on and off easily whereas with the other you need to compartmentalise and know when to do it and when not. (lines 155-163)

It has been reported (Basom & Frase, 2004) that the feedback given to teachers during the principals' classroom visits is particularly effective in eliciting Flow.

These experiences when applied to classrooms have the potential of enhancing teachers' work environments and increasing their effectiveness, thereby increasing student achievement. A review of research over several years indicates that the frequency of principals' classroom visits predicts teacher flow experiences in the following areas: (a) teacher self-efficacy, (b) teacher-perceived school efficacy, (c) teacher-perceived efficacy of other teachers, (d) teacher-perceived organizational effectiveness, and (e) teacher-perceived efficacy of evaluations and professional development programs. (p. 241)

From the principals' stand-points, giving positive feedback to the teachers can also elicit personal Flow.

Timely feedback from both credible external sources and personal, incisive reflection are important for self and organisational improvement. The first feedback that athletes receive is the kinaesthetic feedback from their bodies. Jackson and Csikszentmihalyi (1999) observed that "Being aware of the quality of a performance as it occurs and how it matches an ideal performance is a skill that allows athletes to know moment by moment whether they are creating the movements they want" (pp. 22-23). The external-level of feedback for elite athletes usually comes from their coaches and the audiences during the performance. In schools the school leaders are given formative feedback from trusted colleagues, parents, students and staff members, while summative feedback may come from their line-managers.

5. Concentration on the task in hand.

The classic ethnography, "The Man in the Principal's Office" (Wolcott, 2003) clearly demonstrated that the principal's (Ed Bell) role was embedded in a multitude of formal and informal encounters. Wolcott (2003, p. 177) described the "strangely diversified demands" placed on Bell, and how his time "was taken up almost totally by demands placed on him by others". In such a demanding and reactive environment, with little control over the myriad of interactions required of a principal, concentration on one task is very difficult.

In a large primary school, noted for its diverse school population, Maxwell pointed out the impossibility of concentrating on the one task.

At peak times for a number of situations some tasks become peripheral while the main one is dealt with. This does not mean that other tasks are ignored, they are just not as important to the timeline of the particular task taking precedence and tend to be picked up at the end of the day when time allows. If all other tasks were completely ignored I believe the general running of the school would deteriorate and although systems in place get you through for a while things break down. These overriding tasks tend to have short term timelines for completion, fundamental importance and require more complex organisation or hijack brain thinking space. When these tasks are repeated

in subsequent years they do not necessarily retain their all consuming manner e.g. report time, swimming, implementation of a new program (Jolly Phonics), staffing at the peak. (Maxwell, lines 375-385)

The complexity of decision making in a school situation drew James to comment on the reality of the principal's task: "I cannot fully agree with what the implication that in Flow the leader ignores all other factors. Yes, there is a single-mindedness about achieving the desired outcomes however this is never at the expense of not dealing with the peripherals" (lines 280-282). He then elaborated this response:

Having qualified my response there must always exist a single-mindedness in terms of achieving what you as a leader believes is important for the school. Flow does focus your actions and limits the possibility of being distracted by factors that would divert you from your preferred course of action. (lines 297-300)

When asked if she had experienced the state of being able to work on one task, and ignoring the others, Ann replied that she had never been able to do that in school. She continued, expanding on the concept of multi-tasking:

Being a school leader requires multi-tasking on many fronts simultaneously. However, as I became more experienced, I developed a (greater) calmness over having myriad tasks and learned that the world generally didn't fall apart if I didn't manage everything on my own all the time. I became better at delegating, not needing to do it all myself, trusting others, declaring my vulnerabilities and using others' ideas. I learned that, while there are many tasks, I needed to come back to the 'main game'. That is, teaching and learning. Over time, I got better at directing energies, thinking and resources to teaching and learning, and learned not to get too distracted by other things, even when it was important I manage those other things. I trained myself to continually have conversations around teaching and learning in both formal and non formal situations. (Ann, lines 298-308)

So, while this dimension attracted a lot of comments from the respondents, they all made the point that unlike long distance running, school leadership involves

serial multi-tasking. Occasionally, important issues require focussed concentration, but the school leaders made note that they also had to watch other developing issues at the same time. School leadership is like juggling four balls and then throwing and being thrown balls by surrounding jugglers who randomly demand to be included. Concentration on the one task in hand is a luxury that few school leaders actually experience.

6. Sense of control.

School leadership gives the incumbents the positional authority and legal control of the schools. However, in many of the schools in this sample the school leaders' authority is often challenged. School leaders can experience the sense of control that comes with Flow, but they have to remain constantly alert because of their vulnerability to uncontrolled (human) events. Maxwell (2010) strongly disagreed that this dimension fits the role of school leaders well:

No. I am acutely aware that things can go pear shaped at any time. I believe we tread the knife's edge constantly due to the many matters and personality types we are juggling. Our range of contacts and potentially at risk matters we deal with are massive (tasks, students, parents, teachers, "blow-ins"). Matters can disintegrate very quickly even when you think things are going really well. For example, while you were away and I stopped and had a relaxed coffee with ■■■■ that was the moment a student from ■■■ decided to walk out the gate and we were off to the police station to get him. In a strange, perverted sort of way these are the times that bring out the best in you and hone your decision making skills. (lines 399-407)

School leaders who exist in a bureaucratic, hierarchical system often do not have authorship of the school's decisions, so the school leaders' sense of control is tenuous. Ann supported this claim:

Working in our current government education system does not allow one to develop a 'sense of invincibility' due to the threatening nature of the central bureaucracy which does not appear to have a moral imperative. Everything seems to be based on competition, a narrow array of data, is efficiency focussed, with a threat of public humiliation within the external school

review arrangements. If school leaders believe they are invincible they are on thin ice or delusional, because there are usually unexpected situations. (lines 313-319)

There is a strong link between efficacy and the personal sense of control. However, in most of the schools in this sample, school leaders had to live on their wits because of the lack of control over other stakeholders. James made the point that Flow enhances the leaders' confidence, which addresses one small aspect of self control.

A sense of efficacy is essential in terms of my performance as a principal. I must have what I believe to be clear, contemporary understandings about teaching and learning in order to be an effective instructional leader. Being an effective instructional leader is how I am able to set the vision and direction of the school and influence others to follow the direction that I have set (lines 159-163). What Flow does for the leader is to provide him/her with a more intense sense of confidence and capacity to make decisions that the leader believes are necessary for the betterment of the school in spite of the uncertainty that may exist around such decisions. In that way it could be said that you have greater sense of control but this applies to your thinking and actions and not those of others (lines 314-318).

This dimension, the sense of control, was not well supported by the school leaders in this research. Even in occasional Flow experiences the school leaders remained vigilant for impending threats. This uncertainty also affected the dimension *a loss of self-consciousness*. However, Csikszentmihalyi (1991) examined both intrapersonal and environmental impediments to enjoyment. He noted in the case of the Bushmen and the Inuit that while the environment was hostile, "Possibly the snow dwellers and sand dwellers who couldn't build enjoyment into their lives eventually gave up and died out. But the fact that some survived shows that nature alone cannot prevent flow from happening" (p. 85). In answer to this phenomenon, Wuthnow (1978) proposed that some people are *peakers* (experience peak experience) and others do not. Peakers know that their lives are meaningful and they have the capacity to self-actualise.

7. Loss of self-consciousness.

This dimension was not identified in the transcripts of the school leader respondents and this seems to have occurred because of the different contexts of school leadership and physical activities. Ann claimed that she has never experienced the lack of self-consciousness in her role as a school leader, even though she had experienced Flow. She said:

Never. I think part of the job of being a school leader is to be aware and wise. However, I felt that I was able to establish a rhythm in each of the schools in which I was a leader. This means establishing or building on the school vision, having a clear moral purpose, setting up clear processes for everyone to have input into big decisions, and reflection opportunities etc. I have been in schools that don't have a rhythm and they are usually unpleasant places. Once the school rhythm is established things go a lot smoother. (lines 332-338)

Barry agreed with Ann, and using a rugby analogy, said of the loss of self-consciousness: "Never, cannot afford to, must maintain clarity at all times because if you take your eye off the ball you are gone (lines 225-226).

Edwina, who appears to experience more Flow than any of the other respondents, supported the loss of self-consciousness in the school leadership role. She made the point that the sense of control and the loss of self-consciousness are linked:

Absolutely – with all situations in which I experienced Flow and which were described in notes submitted previously. It is linked very closely with loss of self consciousness (notes below). It is not *control* in the sense of imposing one's will upon others I might add. It is very much about one's confidence in one's own ability. (Edwina, lines 384-387)

So, with the exception of Edwina's experiences there was not any support for this dimension.

8. Transformation of time.

This dimension of the Jackson and Csikszentmihalyi model did not receive strong support from the school leaders in this sample. However, Edwina, James and Ann did comment on how quickly time can pass when things are going well.

Experiencing more Flow than the other respondents, Edwina observed that:

In Flow (time is) never the problem. I will do whatever needs to be done and enjoy every minute of it. My energy levels will be more than adequate and I will still feel energised at the end. I will expend the time needed because of the heightened motivation and my energy levels won't be affected, at least not until some time after the work/results have been accomplished. It is almost as if time stands still, for want of a better description. (lines 439-444)

James stated, "I believe this concept of time could also be influenced by the satisfaction and exhilaration that is experienced while in Flow. That is to say that while good things are happening time seems to move faster and when bad things are happening time seems to move more slowly" (lines 343-346). Ann agreed, noting: "As a school leader, my days always go quickly. Whether this is flow or not, I'm not sure. My head is totally in the school, and I have to make a conscious effort not to focus on non-school issues" (lines 343-345).

The problem with this dimension is that intense school administrative busy-work helps time pass quickly, so in reality, this *transformation of time* may not be related to a micro or deep-Flow experiences.

9. Autotelic experience.

Autotelesis is the hidden treasure in the operation of schools (and any other organisation). In athletic pursuits the autotelic experience continually motivates the athletes to improve, and be more successful. In a simplistic sense, the autotelic equation takes this form:

**SUCCESS> FLOW> ENJOYMENT> GREATER MOTIVATION> MORE EFFORT>
GREATER SUCCESS**

The sequence is self-perpetuating. For example, in education, teachers and school administrators quickly become aware of the autotelic students and their work ethic. In his study of Japanese students Asakawa (2004) found:

The exploratory examination of the autotelic personality showed that the autotelic students' levels of perceived challenges and skills were more balanced than those of their non-autotelic counterparts. Moreover, the autotelic students showed a tendency to position themselves in situations where their perceived challenges were higher than their perceived skills, whereas the reverse was true for the non-autotelic students. Implications of these findings were discussed in terms of the universality of flow experience and autotelic personality, and their potentials to increase psychological well-being for the Japanese, as well as people across cultures. (p.123)

Baumann and Scheffer (2011) hypothesised that a key contributing dimension to the autotelic personality is achievement Flow and this is behaviour is clearly identifiable:

The present findings show that frequent flow experiences may be driven by a stable achievement flow motive. Thus, when you see a person getting fully immersed in solving difficult puzzles or training for a marathon, you may explain this behavior by a motive disposition to seek and master challenges. The achievement flow motive may promote a set of specific behaviors such as analyzing problems (seeing difficulty) and spreading optimism (mastering difficulty). In turn, being able to focus on both aspects or shift between difficulty and mastery may promote flow experiences. (p. 282)

They further postulate that: "More specifically, we propose the affective change hypothesis, which states that achievement flow arises from dynamic changes between low positive affect ('seeing difficulty') and high positive affect ('mastering difficulty')" (Baumann & Scheffer, 2010, p. 1304).

The mainstream literature fails to recognise the concept of *vicarious Flow* but it influences school leaders' job satisfaction and self-efficacy. James (2010) related an example of vicarious Flow in his leadership role:

There is a third example relating to staffing that again I attribute to the Flow. One of the other key teachers in the whole school improvement process was

what was known as the Second Wave Co-ordinator. Mine was someone who had been poorly treated and did not have a strong following amongst the parent body. I backed her without really knowing whether she would be able to meet the challenges the role had for her. She was outstanding and significantly contributed to helping the school achieve the improvements we wanted. But on face value it may not have been the best decision to make, yet it turned out extremely well. Such markers tell you that you are in the Flow. (lines 91-99)

An important part of Edwin Flack's growth as a school leader is to experience vicarious Flow. Edwin (2010) has carefully developed his deputy principal, and he now experiences Flow from the work that she does:

By feeding her ideas and providing her with the encouragement to progress she in turn creates her own flow within the school, and in turn enables another staff member to move forward also. Through her I am able to experience a type of leadership buzz. A sense of achievement that I am enabling another leader to grow and develop. It is through these lesser flows that I believe, and you are correct in assuming, you get a great sense of fulfilment. The ability to celebrate another's success. (lines 178-184)

An interesting theory of the cumulative effect of micro-Flow adding up to deep-Flow, within an autotelic, school administrative environment is proposed by Edwin Flack (2010):

All these minor Flows, it is anticipated, will converge at some point in time to create a major Flow, shift or necessary impetus to enable the school make a significant shift and reach, as it has been put by a previous writer, a critical mass. It is at this point that I would argue a major Flow has occurred. This is point at which the school leader can step back. This is also the point at which I feel I would leave the school and move on as the sense of achievement attained from creating such success could only be sustained. From an administrator's point of view, more importantly from this administrator's point of view it is the getting there and the work that you put into creating this success, which best simulates what an athlete does to create a situation where they are in the 'zone'.(lines 194-203)

Edwin reflected that unlike running, in school leadership his success was measured against the delayed performances of others:

The primary difference between my running and my leadership role is that while running I was able to receive immediate feedback in relation to my performance at the time. Be that in training or competition. There were times that I had established as bench marks. These bench marks don't exist in my role as a principal and I have to gauge my performance through the performance of others. (lines 355-359)

An interesting observation that Csikszentmihalyi (1991, p. 67) made about teaching is that there are multiple levels of reward for teachers, but it is the interaction with students, rather than high level objectives, that elicits Flow. "Teaching children in order to turn them into good citizens is not autotelic, whereas teaching them because one enjoys interacting with children is" (p. 67). In the selection of school leaders for this research, each of the respondents was self-motivated and autotelic in their own right. All of the transcripts support the concept of autotelesis.

Ancillary Flow Results

In the analysis of the school leaders' responses during the e-interview, four concepts that were additional to Csikszentmihalyi's dimensions were identified. These additional notes expand the concept of Flow for school leaders and to a degree fill the space left by the misfit of five of Jackson and Csikszentmihalyi's (1999) dimensions.

Micro-Flow and delayed gratification.

Delaying gratification is seen as a quality that all high achievers have. Walter Mischel's (1989) marshmallow experiment of delayed gratification seems pertinent when examining school leaders' deep-Flow experiences, because the gratification that comes from Flow is harder to elicit and more difficult to identify in the school administrators' professional lives.

Michael Knight, a former elementary school principal in New York was a high jumper of note, and his exhilarating experience in a state-level competition was described in Chapter 4. Csikszentmihalyi (2003) recognised the particular efforts of high jumpers:

Each inch (in height) demands not only a greater investment of psychic energy, a larger slice out of one's life, but also a greater commitment of social capital in the form of coaching equipment, travel and so on.

Complexity does not come cheap. (p. 79)

With this sporting experience behind him, Knight, who had analysed the levels of Flow, commented:

I believe you can because Flow is an internal state that can be based on individual accomplishments or drive or can be based on your work with others. I have higher-level Flow experiences in my job as a school leader when I am working with others. There is something to that collective experience. I also experience higher-level Flow when something good benefits the whole district. Lower-level Flow, for me, comes with individual moments or accomplishments that only affect one school. (lines 80-85)

The nature of collective-Flow.

Elmore (2000) complained about the effect of loose coupling on the links between teachers and administration in schools, and the consequential phenomenon of buffering, in which school leaders explain away the teacher and school's shortcomings without attacking the teachers. Getting past the normal relationships in schools, and generating a collective sense of purpose that influences the whole staff can be difficult, and as a result collective-Flow becomes far more difficult to elicit.

In this sample of schools and school leaders' collective-Flow was seen as more important than many of the dimensions of Flow that were developed in the Jackson and Csikszentmihalyi sport-based model (1999). The effectiveness of school leaders is often measured against their ability to move a whole staff forward in school-based change and so, collective-Flow is seen as a critical measure of the leaders' effectiveness.

Barry leads his small country school without any official support from deputy principals. His strong background in team sports means that he works hard on developing team spirit, and he constantly seeks collective-Flow experiences:

In a team sport setting each member clearly knows their role and can concentrate on doing their job. The coach (Principal) needs to understand and focus on each team member and ensure they know and are performing their role. Flow in my case is occurring because I now have the support and trust of my team therefore I am confident that plans will be carried out as they should be. (Barry, lines 204-208)

Further he explained:

A school leader, like any leader, must endeavour to draw the best from all staff under their guidance. The ability to select your own staff enables the leader to build a team that will deliver the results required. Most importantly the leader must believe that they have the ability, not necessarily the answers, to make this happen. (Barry, lines 115-119)

In St Mary's Catholic Primary School, James, had worked hard to bring about whole-school improvement. He said:

In my view when a school collectively experiences Flow you have a vibrant, exciting and exceptional school because as I mentioned previously Flow is a 'magnifier'. Once established it feeds on itself and grows. All have this same sense of accomplishment and achievement and all know that what is being achieved is what has been targeted. The 'markers' that reflect Flow are now much broader and come from the school community as a whole and also from the wider community. At enrolment interview when you ask a family why they want to send their child/ren to the school they respond with 'it has a very good reputation in the community' or 'my neighbours told me about the school'. This, in part, answers the question on school and team sport. For a school to experience Flow then the majority of the members of that school should be getting positive feedback about what they are doing by reference to a variety of 'markers' that themselves point to the goal or moral purpose. This includes students, parents, parish and broader local community. This can be quite difficult to attain and may take three or four years. (lines 182-202)

Michael Knight, the former principal who now has the oversight of an educational district in New York state, summed up the difficulty of generating Flow in a school setting:

I think it is harder in a school setting than in a team setting. Sports teams have a very clear goal. If it is a basketball team, the goal is to score more baskets than the other team does. You realize in basketball that this is easier to do when each individual player does his part in making the collective goal become a reality. In a school setting, there are so many individuals who have individual agendas and beliefs that following the collective vision for the school can be murky. (Michael Knight, lines 99-104)

Ann has been a successful principal and District Director, and she compared collective-Flow experiences with that in team sports.

The Flow in schools is much more difficult because it is more complex and bound up with so many more variables, rules are not clear, it's not time or space bound. However, for a coach to have Flow in teaching a new skill in sport is not dissimilar to teaching a new skill in a classroom. My husband claims that many attributes of a basketball team can be transposed to life – I think it's dribble! A sport coach has the capacity to be more didactic given if the players don't follow his/her instructions they're out of the team or are made to feel like they should leave. To have flow in a school situation requires a higher degree of psychological agility (manipulation?). However, I can see that for a sports team to have Flow requires everyone to have clarity about their particular role and understand how that fits in with the team goal, not dissimilar to a school situation. (Ann, lines 164-175)

Maxwell (2010) saw his school's administrative team in the same light as the casts that he had experienced as an actor:

This not dissimilar to performing. While things are rolling along and “going well” matters such as someone missing a line, not appearing on stage, a prop not working, something unexpected happening, etc. can intervene to make life very interesting in front of an audience that needs to be dealt with there and then so to an audience there is no obvious problem. Actors do not like to take prompts, they pride themselves on knowing the play and the faith in

other actors to be able to get themselves out of these situations. In fact some of the most exciting theatre I have observed, been involved in has been when things were about to hit the fan big time and they did not due to professional skill and support from a tight knit group of performers. (lines 408-416)

Alvin (2010) compared schools with the top Australian Football League sides and concluded that school leaders face a difficult task:

There are obvious examples of this in the AFL. Teams like Geelong, in recent years, have had an unshakeable belief in their collective ability to be more skilful and more physical than other sides. They believe in their team processes and systems, they are drilled to follow them and execute the game plan to perfection. This builds a collective efficacy and a collective-Flow. This is embedded in a culture of excellence where only your absolute best is accepted and commitment to the team and your team-mates is a significant yardstick. If this is true, creating this in schools presents with enormous difficulties. Our job has to be to create a school culture that resembles this to some degree. If we can do this then it is possible. (lines 137-146)

The concluding comment is from Barry (2010), who works really hard to develop collective-Flow in his small staff.

I think that when you learn what makes your staff tick and know how to get the best out of them, then and only then, will Flow be able to be maintained. Whilst working towards this, periods of Flow will come and go. One person cannot keep the Flow going. It needs to be taken over at different times by other team members when necessary. (lines 235-239)

The place of competition in generating Flow.

The nature of schooling is changing. *Competition* was considered a dirty word in Western Australian public schools over the last decade. Furedi (2009) commented that the move to introduce competition into British schools would be "... bitterly opposed by a formidable army of educators, psychologists and health professionals who contend that competition threatens the emotional well-being of children" (p. 14). The advantage of competition in education is that it allows students

to develop clear goals and personal standards, not unlike the junior athletes who take part in *Little Athletics* every weekend.

In the United States, Michael Knight had not been influenced by Anglo-Australian move to constructivism in education. Knight said:

I see competition as motivation. I think we all have a desire to be a little better at something than the other guy. This is easily seen in sports. “I want to be faster than him so I am motivated to give it my all. The end of the race is in sight. All I need to do is be in the Flow for 100 meters and win”. That creates the internal drive. The external drive would come in the form of accolades, ribbons, or movement on to another level of competition. School leadership is capitalizing more on competition lately with the increase in standardized testing and the awareness of it. This is kind of a perverse incentive for more testing, but it does create concrete numbers that can be ranked. At my last school where I was principal, we used the scores from neighboring schools as motivation on the state English exam. I hope we move more in a direction of applauding and recognizing improvement and not just test results. (lines 115-125)

In her school Edwina saw the need for standards, and competition:

Yes most definitely. Internal (integrity, ethics, personal beliefs, dreams) are fundamental to Flow. The external factors are the disciplines which keep one on the straight and narrow, that is, doing what “the system” expects of one...rather than doing just what one believes is right. Aligning the two is part of the work. Competition is Number 1 for this principal. As mentioned earlier, I am highly competitive. I lead a school with no prestige in the system whatsoever. I took it on because I want to make it stand out in the community. It has complexities unique in the system, and I need that sort of challenge. It’s always the same western suburbs schools who get the accolades. I would love to see my school (unique in the system in so many ways) punch above its weight. (lines 338-348)

Alvin (2010) did not have a problem with competition: “Competition is only self- imposed standards by which we measure our progress or achievements. So

competition in leadership may not be evident on the surface but it drives any leader who strives for improvement just like an athlete or a coach” (lines 159-162). And he then asked, “It all comes back to goals & challenges. Is Flow more about collective energy and in order to achieve it does the principal have to be single minded in their pursuit of achieving their goals” (lines 249-251)?

Barry, who is pushing forward cutting-edge change, noted: “For me competition does not play a huge part unless I feel strongly that I have something to offer that is more than the next person then competitiveness kicks in” (lines 148-149).

James sounded a warning that would not have been out of place in a church school system:

Unfortunately I think that competition can play a role in this because one could use the performance of other schools as part of the feedback loop to affirm Flow. Why I say this is unfortunate is because in the longer-term this is detrimental to schools and leadership in schools as a whole. I believe this to be true because good practice which drives good learning will be hidden rather than shared. It has been my experience that leaders are often reluctant to share good leadership practice because of the competitive nature that some believe is fundamental to the educational environment. However in my experience competition has not had a significant influence in terms of my own assessment of Flow. (lines 226-234)

Edwin Flack developed an in-house competition where he uses scores from standardised tests to allow the teachers to make between-class comparisons on their teaching effectiveness.

There is a competitive role that I play in using my staff against one another to help move them to a higher level but it is a difficult job to get this process to match so that I achieve Flow within the organisation because for the staff to feel this Flow they need to feel non-threatened in what they are doing. This is again the difficult part, support without appearing threatening. (lines 317-321)

Edwin felt that this competitive approach helps teachers do their jobs better.

Factors necessary to elicit Flow in school leaders' roles.

As can be seen in Chapter 4 of this dissertation, the athletes who consciously worked on getting into the zone and experiencing Flow had an intimate understanding of what they needed to do. Educational leadership was shown to be different to the experiences underwriting the Jackson and Csikszentmihalyi (1999) model and to synthesise their beliefs, all of the respondents were asked to list Flow producing dimensions in order of their personal importance.

In activities that can't be measured mechanically in terms of scores, heights, times, and strokes, success that elicits Flow is often generated by feedback from significant others. In the non-school examples (Table 4, below), doing Good for others did not rank as highly as in the school-based factors. However, the aggregated factors of competition, winning and being successful were ranked most highly by the respondents. It seems that nothing succeeds like success. The athletes particularly also worked with the closely related concepts of self-efficacy, goal and target achievement, and improvement towards peak performance. The inter-connectedness of Flow was also recognised by Pinguart and Silbereisen (2010) studying work, leisure and intimate relationships: "Surprisingly, higher levels of self-efficacy beliefs were only found in groups with high levels of flow during leisure alone or in combination with the other criteria of success" (p. 158).

Examining both sides of Table 4 (below) it is clear that the respondents were mainly reporting on intensely competitive, singular efforts in the non-school ratings (running, jumping, golfing, cooking), which contrasted to the collective situation they faced in school leadership.

Table 4

Respondents' Non-School Based Flow Eliciting Factors

<i>Non-School Based Flow Eliciting Factors</i>		<i>School Flow Eliciting Factors</i>	
In Sport/Chess activities	Ranking	In school leadership	Ranking
Competition/winning	1	Doing good (moral)	1
Peak performance/improving	2	Reaching important goals	1
Reaching goals	3	self efficacy	3
Self efficacy	4	Bettering standards	4
Motivation, improving	5	Improving performance	5
Top of craft/sport	6	Competition	6
Winning/recognition	7	Creativity	6
Feedback/appreciation	8	Risk taking	6
Risk taking	9	Feedback/appreciation	9
Practising skills	10	Reaching top- Peak	9
Productivity	11	Belonging	11
Problem solving	11	Determination, belief	11
Luck	13	Trust	13
Doing good (moral)	14	Understanding capabilities	13
Understanding self	14	Celebration, recognition	13

Barry was the only school leader who used a team event as his out-of-school Flow example, but his responses paralleled those of the individual athletes. Even though he was describing a rugby team in a grand final, Barry's example had a sense of strong unity (one-ness) in the face of adversity:

In the first half they took us to pieces and led 9 -0 at half time. The second half is where we, as a team were in the zone. We knew we were fitter, we knew we were better trained, through excellent coaching we knew our game

plan and each player knew their role within the team. To a man we had no doubt that we would be successful. It took us until the final five seconds to get in front but we did. On the siren the crowd ran onto the field and chaired us off, they were crying and emotional – none of the players were because we did not know what the fuss was all about. Our coaches/leaders had prepared us in a way that would get the maximum out of each individual – they had tailored their plans to the team rather than individuals. (lines 34-43)

In the school situation it appeared that Flow was more difficult to elicit, but the respondents were able to identify a set of facilitating factors, harbingers, of the school-based Flow experiences. If a school leader sees education as a calling, then the moral response of *doing Good for others* will be ranked highly. This sample (shown in Table 4, above) was composed of highly successful school leaders, most of whom were working in the public school systems, but they saw that doing good for the students was a key motivator, and Flow facilitator. Analysing Flow within an ethical context, Annas (2008) found a better alignment with Flow-eliciting factors described by school leaders (above), than by the athletes in Csikszentmihalyi's research. She noted:

- Flow comes not from mindless letting go but from being in control of your activity in the right way (p.32).
- Flow requires not relaxing but keeping your intelligence trained on what you are doing (p.32).
- Flow requires precise tuning in, not tuning out (p.32).

Annas concluded: “The virtuous person, like the expert in a practical skill, responds dynamically to challenges, but this is, we may think, experienced in action as a selfless kind of flow”, (p. 33) which is what keeps the virtuous staff members in the difficult schools.

In examining the factors that elicit Flow in complex situations (such as school leadership), it is worth noting that Flow production is not a part of a simple linear equation. Csikszentmihalyi (1994, pp. 193-196) claimed that the consequences of Flow include creativity, peak performance, talent development, productivity, self-esteem, stress reduction and clinical applications. Examining the action of *doing moral good*, the school leaders may not experience Flow once, at the end of the

process but Flow can be generated many times as different parts of the school community successfully put in place the required changes, and Csikszentmihalyi's consequences come into play at different times.

The Structural Modelling of Flow

Model construction is a useful strategy in the visual presentation of the key concepts and constructs when building theory. In recent years research modelling has received a massive fillip from researchers investigating on-line Web usage and associated advertising. Synonyms used in the literature include conceptual modelling (Novak & Hoffman, 1997), concept mapping (Freeman & Jessup, 2004), and structural modelling (Novak & Hoffman, 1997; Novak, Hoffman & Yung, 2000). Freeman and Jessup (2004) claimed:

Concept mapping is a technique to let one person convey meaning and relationships to another person in a visual format, and concept maps have been shown to foster a joint understanding between two individuals viewing the same map.... The concept map is believed to enhance recall and memory, aid in negotiation and balancing of conflicting needs, and create mutual understanding. (p. 152)

Importantly, in building Flow models, the Web researchers identified three, often overlapping models: conceptual, causal and Flow channel segmentation (Novak & Hoffman, 1997).

The nature of Flow, and its fit in complex organisational contexts, are important considerations when analysing the results of this research. The starting point is that Flow, in its own right, is an important motivational factor, which can be experienced by the students, teachers and school leaders. However, there are three dichotomous considerations that must be considered when examining the nature of Flow. First, Fullagar and Kelloway (2009) question whether Flow is a *state* or *trait*, but their research conclusion shows this to be a false dichotomy: "Thus, flow has both state and trait components with the former predominating" (p. 607). A second false dichotomy that influences Flow modelling is the extrinsic and intrinsic motivation division, which strongly influences performance. The third dichotomy is from the research of Jackson and Eklund (2004) who developed the two Flow scales for both *state* and *disposition*, which recognised the state-trait distinction discussed

by Fullagar and Kelloway (p. 13). Finally, in his research Csikszentmihalyi recognised two levels of Flow: micro-Flow and deep-Flow. However, he noted: “In fact, the flow model suggests that flow exists on a continuum from extremely low to extremely high complexity” (Csikszentmihalyi, 1975/2000, p. 141). But he also observed that “microflow activities may be as intrinsically rewarding as deep-Flow activities, depending on the person’s life situation” (p. 141). In Figure 1 (below) Asakawa (2004, p. 133) modelled four experiential regions in the Flow channel of the challenge-skill graph based on Csikszentmihalyi’s (1975/2000, p. 49) earlier work.

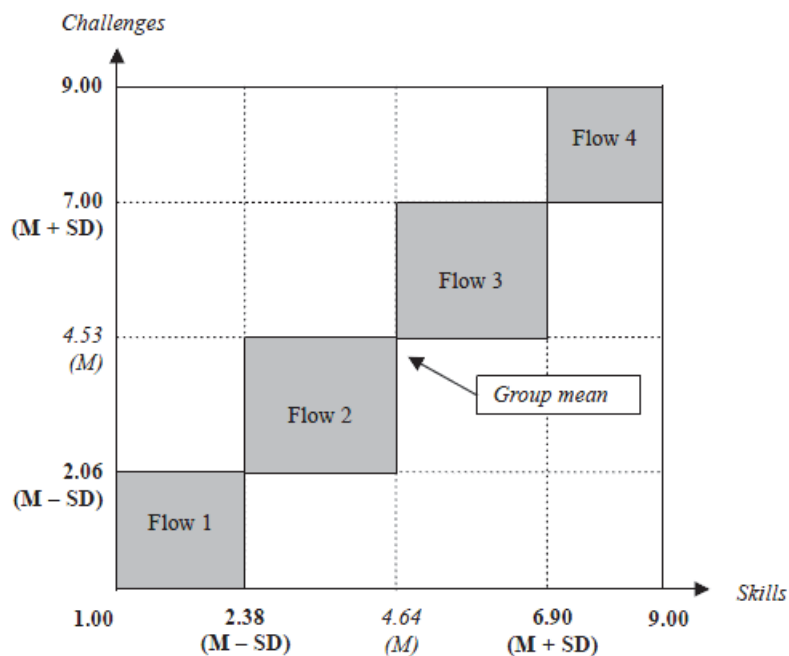


Figure 1. Asakawa’s (2004) four statistical levels in the Flow channel.

Asakawa’s (2004, p. 133) model of a Flow channel hypothesised that as the skills and challenge equation became more difficult the levels of Flow would increase. So, Flow 4 was seen as more intense than Flow 1.

The challenge-skills equation of student Flow plays an important role in teachers’ pedagogic practices, and the research by Cavanagh, Kennish and Sturgess (2008), which examined the place of Flow in students’ engagement in learning, concluded:

It was proposed that a student who is engaged within a particular situation is expected to have a balance between the perceived level of the challenge being faced and his/her perceived capability to meet the incumbent requirements. Measurement of this condition in a classroom context was suggested to require measurement of a student's *capability for learning* and also the *expectations of the student's learning*. (p. 15)

In the *Simplified Model of Flow and Learning* (Figure 2) quoted in the Cavanagh, Kennish and Sturgess research, the two input variables (classroom context and learner characteristics) combine to influence the student's psychological state, which then influences the student's learning. The student's performance may elicit Flow, which then affects the student's resilience and skill levels. This model is equally applicable to the performance of teachers and school leaders.

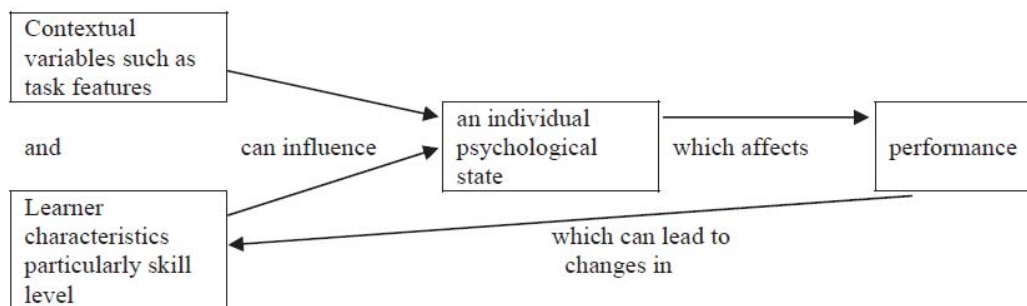


Figure 2. Simplified model of Flow and learning. (Egbert, 2003, p. 500)

In her early research of teaching, Caouette (1995) indicated that some dimensions of the Flow model had better fit than others. Caouette's (1995, pp. 368-369) research described the necessary conditions for teachers' Flow experiences as:

- Teachers' specifications of students' flow experiences;
- Positive learning environment;
- Seeing growth in students;
- Achieving goals and feeling successful as a teacher; and
- Being challenged.

Not surprisingly, Caouette (1995, pp. 370-372) also noted that the themes which enhanced teachers' Flow experiences were: planning and preparation for teaching;

autonomy and control; collegial support; Professionalism and teacher learning; and quality time.

Caouette’s (1995, pp. 381) research on teachers’ Flow experiences identified four implications for leadership practices in schools. First, Flow is identified as a part of a relationship in schools that facilitates movement of positive energy. Second, Flow is enhanced in an environment that promotes lifelong learning and growth. Third, Caouette recognised that Maslow’s Hierarchy of Needs, particularly self-actualisation is important in Flow generation. Finally, Caouette (1995, p. 384) pleaded for school leaders to redesign the work of teachers. Figure 3 shows the fit of Caouette’s research against Csikszentmihalyi’s Flow model.

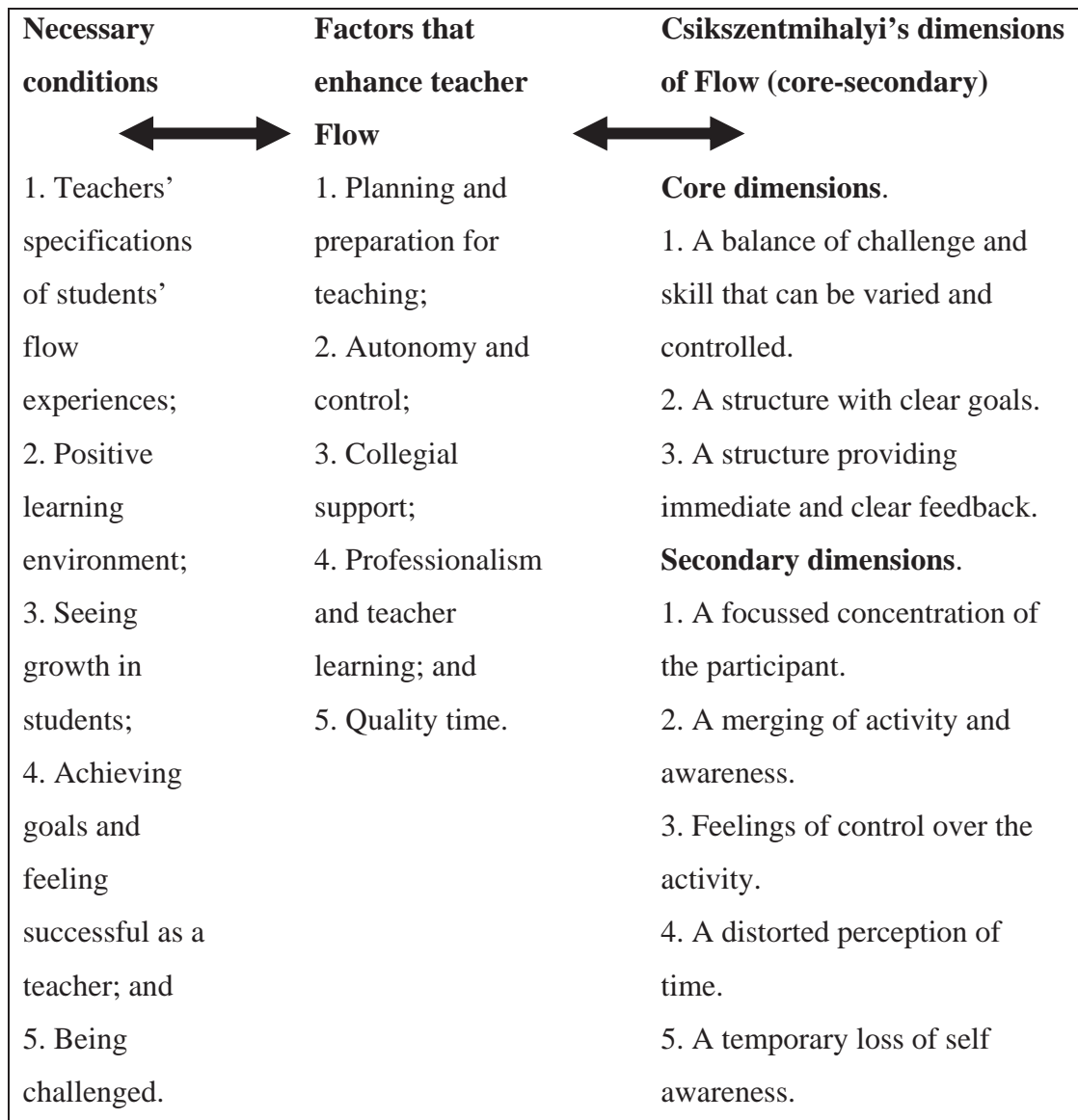


Figure 3. A construction of Caouette’s (1995) conceptual model of teacher Flow.

Jackson's models of Flow.

Jackson, a sport psychologist, with other researchers (Jackson & Csikszentmihalyi, 1999; Jackson & Eklund, 2004), has extensively studied Flow. The Jackson and Csikszentmihalyi (1999) model was based on Csikszentmihalyi's earlier writings and verified in research by Jackson and Eklund (2004). Beard and Hoy (2010, pp. 430-431) reinvestigated this model and found:

Using confirmatory factor analysis, they studied athletics and sports and provided evidence that the nine components of flow (Csikszentmihalyi, 1990; Jackson & Csikszentmihalyi, 1999; Jackson & March, 1996) did indeed form a holistic and integrated whole, which they called "flow" or a "flow experience." We refer to this unified conceptual perspective of Csikszentmihalyi's construct of flow as the Jackson-Marsh model.

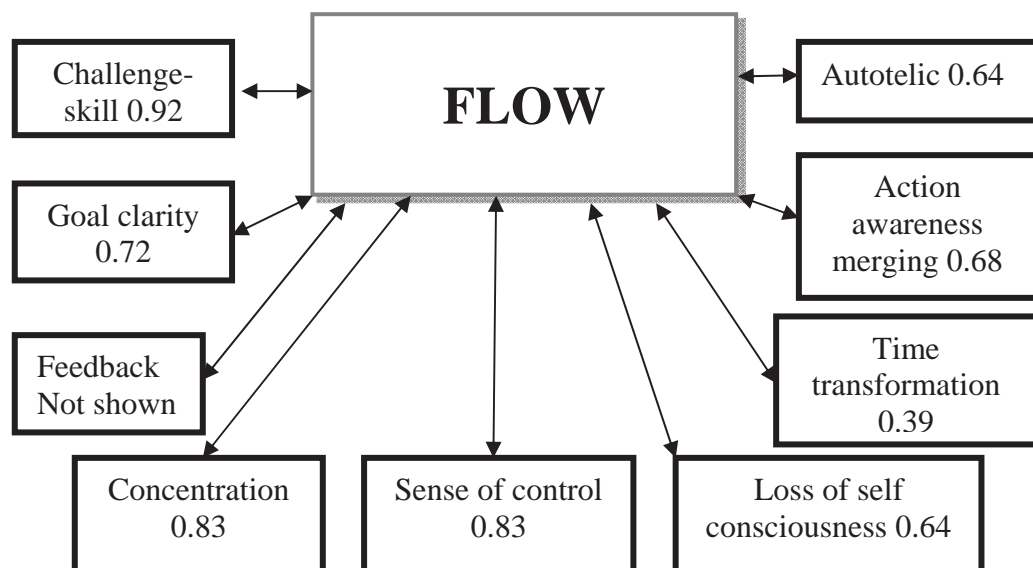


Figure 4. Beard and Hoy's confirmatory study of the Jackson-Marsh Flow (adapted).

While Beard and Hoy (2010, p. 453) compared the fit of models when examining teachers' Flow experiences, they concluded their study optimistically:

Our study breaks new ground in the analysis of teachers and schools. To our knowledge, this is the first comprehensive, quantitative study of flow in schools. We provided evidence that the Jackson-Marsh measure of flow is a reasonably reliable and valid measure of flow for elementary teachers....

The Quinn model.

Knowledge work is a key component of the work of school leaders, and Quinn's (2005) research at the Sandia National Laboratories examining the American national defence contractual work, generated two competing models of Flow. Quinn's results, shown in Figure 5 (below) shows Flow as a consequence of goal clarity, the challenge-skills balance, concentration, and feedback clarity. As a result, the Flow experiences of the knowledge workers then affected the workers' loss of self-consciousness, sense of control, and autotelic experience. The relative strengths of the inter-relationships are shown as correlations.

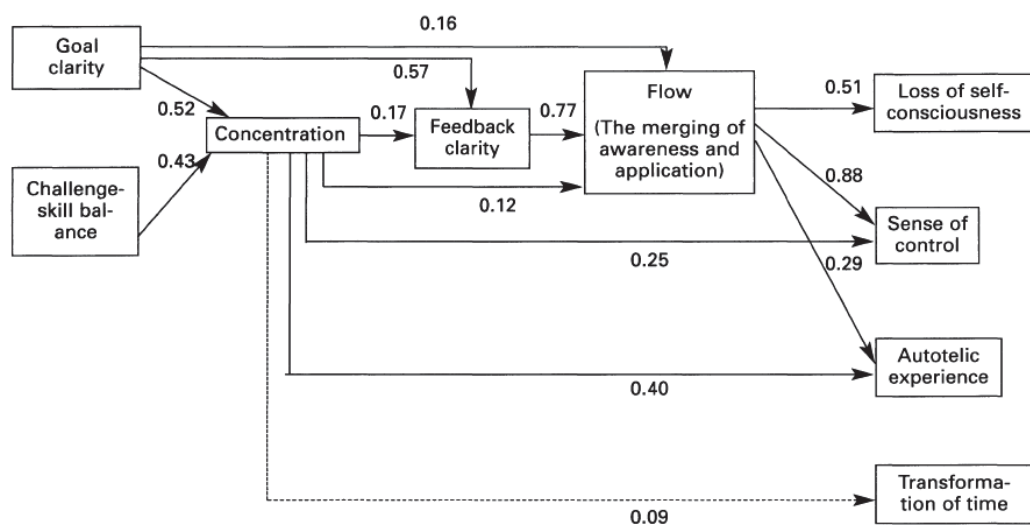


Figure 5. Quinn's (2005) model of Flow. (Quinn, 2005, p. 630)

A major problem with Quinn's model is that he shows the inter-relationship as being unidirectional, which they are not. Second, the dimensions are not delivered in discrete blocks of time, and the consequential Flow will vary in strength as each dimension is brought into play. For example, when the knowledge worker exhibits Flow, the people giving feedback are more inclined to tailor the feedback to the workers' perceived state of self-efficacy and resilience.

The Novak and Hoffman Web-based Flow research models (1996, 1997)

In the world of Hypermedia Computer-Mediated Environments (CMEs), which is the language of on-line purchasing transactions, and in this virtual world *Flow* it is claimed is seen differently, and it is:

(1) characterized by a seamless sequence of responses facilitated by machine interactivity, (2) intrinsically enjoyable, (3) accompanied by a loss of self-consciousness, and (4) self-reinforcing. In the flow experience, which formalizes and extends a sense of playfulness (Csikszentmihalyi 1977; Csikszentmihalyi and LeFevre 1989), consumers are so acutely involved in the act of network navigation in the hypermedia CME that "nothing else seems to matter" (Csikszentmihalyi 1990, p. 4). Two primary antecedents must be present in sufficiently motivated users of a hypermedia CME for the flow experience to occur. Consumers must focus their attention on the interaction, narrowing their focus of awareness so that irrelevant perceptions and thoughts are filtered out, and they must perceive a balance between their skills and the challenges of the interaction. (Hoffman & Novak, 1996, p. 57)

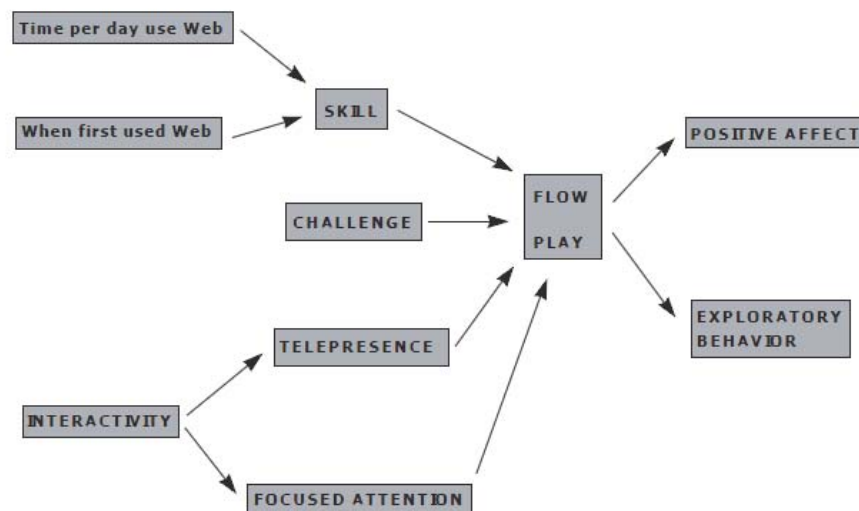


Figure 6. Simplified version of Hoffman & Novak's (1996) Conceptual Model.

Web based customer research brought a new lease of life to the concept of Flow, as the on-line Flow experiences of clients were researched. The much quoted Hoffman and Novak (1996) model (figure 6) sets out the hypothesised antecedents

and outcomes of on-line customers' Flow experiences (Novak & Hoffman, 1997, p. 8). However, while online purchasing may elicit euphoria, it is not Flow because the challenge-skill prerequisite is not present. Online gambling can elicit Flow because of the challenge-skill factor of beating the banker, but online purchasing cannot generate Flow. In the brave new world of on-line connectivity, a new type of Flow can exist, thus claiming to extend Csikszentmihalyi's original conceptual model.

Conclusions: Modelling these Research Findings.

The stages of modelling the psycho-physiological responses termed Flow were different for school leaders in this research sample, to those used by Jackson and Csikszentmihalyi (1995), Beard and Hoy (2010), Quinn (2005), Hoffman and Novak (1996), and Egbert (2003). Using Csikszentmihalyi's (1975/2000, p. 49) Flow channel model, Asakawa (2004) has claimed there are four levels of Flow, and those levels change as runners get further into the zone, or golfers get further into the groove. This means that there is a two-way biofeedback loop in operation during all activities, and consequently Flow should always be identified with two-way arrows. In complex tasks (idiographic and nomothetic), such as school administration, it is feasible that a shortcoming in the model construction is that an administrative act has many parts, each of which generates Flow in its own right, and those flow dividends are not represented by a single, engorged Flow experience as shown in the conceptual maps.

In an attempt to explain why the respondents' Flow experiences were different to the Jackson Csikszentmihalyi (1999) dimensions, the respondents in this research listed (in order of importance) what they believed were the factors that generated personal Flow. Interestingly, the sense of doing moral good, or beneficence (Vallance, 2005), underwrote these school leaders' roles, which was not unexpected as the sample was taken from school leaders with experience in low SEI schools. As can be seen in Figure 7 (below) the school leaders' experiential model of Flow is different to that of Csikszentmihalyi and others. This working model has been developed incorporating Csikszentmihalyi's (1975/2000, p. 21) concerns about a role for intrinsic motivation.

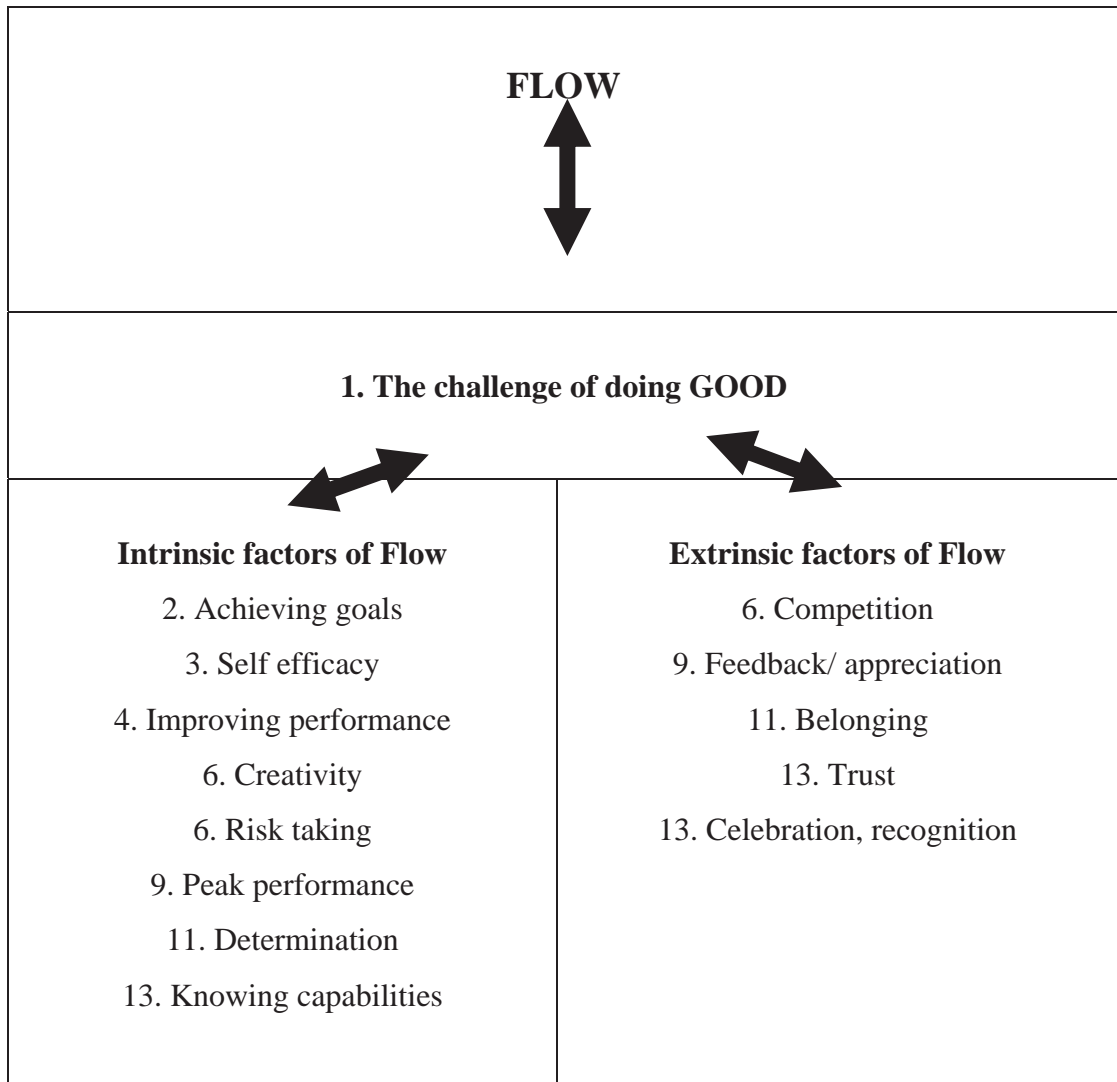


Figure 7. A causal model of school leaders' judgements on Flow in school contexts.

Part 2: The Research Questions

The power of intrinsic motivation and the generation of both micro-Flow and deep-Flow have been overlooked in relation to the role and functioning of school leaders. The issues relating to extrinsic motivation, while important in ensuring that teachers and school leaders' work and living conditions do not get in the way of them doing their jobs, are the sufficient conditions for developing effective schools. "Like all forms of motivation, flow, is a dangerous resource. But given its advantages over extrinsic rewards, it is a resource which one cannot afford to neglect" (Csikszentmihalyi, 1975/2000, p. 139).

The nature of school leadership is such that Flow for school leaders is generally reliant on other people. In the real world, leadership in schools is different from the individual pursuits such as running, canoeing and rock climbing. Five of the dimensions of Flow developed by Jackson and Csikszentmihalyi (1999) did not fit school leadership well.

1. What is the nature of the Flow experiences of school leaders?

The Flow experiences of the respondents in this purposive sample were rich and diversified. Closely examining the school leaders' transcripts it became clear that Jackson and Csikszentmihalyi's (1999) dimensions of Flow, which included the singular efforts of sportspersons, surgeons, writers and chess players did not fit the collective enterprise of schooling of the roles of school leaders. While school leaders may carry out parts of programs personally, the results are usually measured against the collective sense of moving the school forward.

Most importantly, the moral concept of doing good for others was strongly supported by the school leaders as essential requirement for Flow. It seemed that school leaders always had this ubiquitous moral measure in their minds because most school-based actions are measured against improving students' learning, which is seen as *good*. Also, all of the respondents in this sample were very effective school leaders in their own right, so, in a psychological sense they had the professional expertise to be able to measure their performances objectively, which elicited their personal, moral, self-actualising assessments of situations:

In examining self-actualizing people directly, I find that in all cases, at least in our culture, they are dedicated people, devoted to some task "outside themselves," some vocation, or duty, or beloved job. Generally the devotion and dedication is so marked that one can fairly use the old words vocation, calling, or mission to describe their passionate, selfless, and profound feeling for their "work". We could even use the words destiny or fate. I have sometimes gone so far as to speak of oblation in the religious sense, in the sense of offering oneself or dedicating oneself upon some altar for some

particular task, some cause outside oneself and bigger than oneself, something not merely selfish, something impersonal. (Maslow, 1967, p. 94)

As can be seen in the conclusions Csikszentmihalyi's core dimensions survived in different manifestations in the school leaders' Flow experiences. For example, the important challenge-skills balance was recognised by the school leaders as improving performance; risk taking; peak performance, knowing capabilities, and competition. So, apart from the action of doing moral good, the key dimensions were carried forward into the Flow experiences of the school leaders.

The addictive nature of Flow can be problematic, and addicted gamblers are demonstrative examples of this. In many of the repetitive aspects of school leadership the school leaders can experience boredom, and a worry is that undertaking unnecessarily risky behaviours can be seen as one strategy used to exit a boring situation and seeking the deep-Flow of high risk end-games. This was not a well supported observation but it was reported in schools (Michael Knight, personal communication, October 15, 2010).

The nature of the school is also an important factor in school leaders' Flow experiences. In a school where challenges are generated for the school leaders, it would be expected that the quality of Flow would be stronger than in routine, repetitive administrative situations. In Ceja and Navarro's (2011) research the challenge-skills equation is tested in chaotic conditions and they expected that this would generate higher levels of Flow: "we expect that high values of the key components of flow (e.g., balance of perceived challenges and skills, merging of action and awareness, etc.) will be more associated with the chaotic pattern than with the linear and random patterns" (p. 633). In schools, mundane routines are a Flow inhibitor.

2. Can the school leaders identify micro- and the deep, macro-Flow experiences?

While measurement of personally experiential sensations are notoriously subjective, Csikszentmihalyi's dichotomy of micro and deep-Flow is conceptually

useful. From the respondents' answers, it appeared that experiencing deep-Flow was a rarity in the school situation, particularly where school leaders were dependant on the efforts and agreements of others. Temporally, in schools, the major decisions and their consequences are often not seen for months or even years, which then makes experiencing deep-Flow difficult, because there was no guarantee that the key stakeholders would still be *in situ*.

Micro-Flow was reported by the school leaders, and it usually involved their personal and singular efforts on some task. Interestingly, Edwina who was put into a situation where failure loomed daily, managing to survive what happened each day elicited Flow.

Personalised Flow levels are also an issue that should be considered in assessing the dichotomous Flow levels used by Csikszentmihalyi. Just as it can be argued that "low levels of pain" mean different things to different people, micro-Flow and deep-Flow experience the same problem. This is an area of research that needs further development.

3. What effect did Flow experiences have on school leaders' intrinsic job motivation?

Intrinsic motivation was a major concern for Csikszentmihalyi (1975/2000, p. 1) who noted that in a world supposedly driven by the extrinsic factors of "money, power, prestige and pleasure" there are people who are driven by experiences "that will allow us to make everyday life more meaningful" (p.1). In his development of the concept of autotelis (Dimension 9) Csikszentmihalyi warned that the intrinsic reward that individuals experience is solipsistically subjective: "We cannot assume, however, that even the most universally enjoyable activity will be experienced as autotelic at any given time, or that a person who is usually most responsive to intrinsic rewards will enjoy a given experience" (p. 23).

In Figure 7 (above, page 143) a model constructed to show the nature of school leaders' Flow experiences placed *The Challenge of Doing Moral Good* at the top of the Flow diagram because it was the top rated dimension by all respondents.

While Kyriacou and Coulthard (2000) separated *altruism* from *intrinsic motivation*, there is an overlap, and *doing moral good* is predominantly an intrinsic motivator, particularly in pursuits such as working with the poor or teaching in tough neighbourhoods. Attention is drawn to the purposive sample of school leaders in this research, and it is acknowledged that all had served in low SEI schools when all had options of leading schools with middle-class clientele.

The intrinsic motivational factors that were listed in Figure 7 included: Achieving goals; Self-efficacy; Improving performance; Creativity; Risk taking; Peak performance; Determination; and Knowing capabilities. Depending on the particular circumstances some of the listed factors can include an extrinsic component. *Achieving goals*, for example, could include personal goals and organisational goals, and the mix varies in different cases. Because of the solitary nature of much of the school leaders' work, this factor was placed in the intrinsic motivation list.

The motivation and coaching of school leaders is a developing phenomenon. Previously, school leaders' performance was line-managed by their superordinates, in a process that mixed the dual issues of compliance and educational leadership judgements. The separation of these two roles allows the real business of educational leadership to be progressed. Hanin's (Hanin, 2003; Hagtvet & Hanin, 2007; Nieuwenhuys, Hanin & Bakker, 2008) development of the individual zones of optimal functioning (IZOF) provides a useful approach to rethinking school leaders' motivation and performance in nomothetic and idiographic measures.

4. Can school leaders compare Flow experiences in their jobs with Flow experiences elsewhere?

The research design had two parts that recorded the respondents' Flow experiences both inside and outside the school environments. The purposive sample was predicated on the knowledge that each of the respondents had experienced Flow, externally to their school life. Secondly, a feature of the e-interview was a question to each respondent, asking each of them to describe their out-of-school Flow

experiences. As an interviewing strategy this was an effective way to establish rapport, and develop a useful set of question response expectations.

With two exceptions, the respondents' out-of-school Flow experiences seemed richer and more life influencing than their school-based Flow experiences. The athletes (Edwin, Alvin and Michael), who had competed at state level all were able to relive their Flow experiences, although they happened many decades ago. Michael and Edwin's lives were influenced by their performances, and the public still perceive them as role models with high public profiles.

The two exceptions are Edwina and James. James is a Catholic education principal and an acolyte. He lives for education, and he was singularly motivated by the moral drive to improve students' lives and life expectations. He observed: "The goal/challenge /moral purpose is critical to the Flow experience. It is the distant beacon that lights the way and therefore is the universal reference point from which you measure your leadership success" (James, lines 150-152). James's mental approach to school administration was to seize the successes and improvements. Because of this optimism, he experienced Flow frequently, and it seemed stronger than his Flow experience while playing golf.

In a tough school environment Edwina is fighting for her professional existence, and it is a battle that she cannot afford to lose. Edwina, too, was driven by a strong sense of moral right: "For school leadership my motivation is social justice.... the fundamental belief that a just and healthy society values the importance of a good education for all" (lines 357-359). While Flow supports her resolve, Edwina felt that if she couldn't make a difference to the students' education she would not do the job:

Because the work is successful, Flow happens, but so does the reinforcement that the work is effective. If I didn't experience Flow would that not be because I wasn't achieving desired results/goals? If I continued in my work whilst constantly failing wouldn't that make me inept, incompetent or incredibly unethical? (lines 364-367)

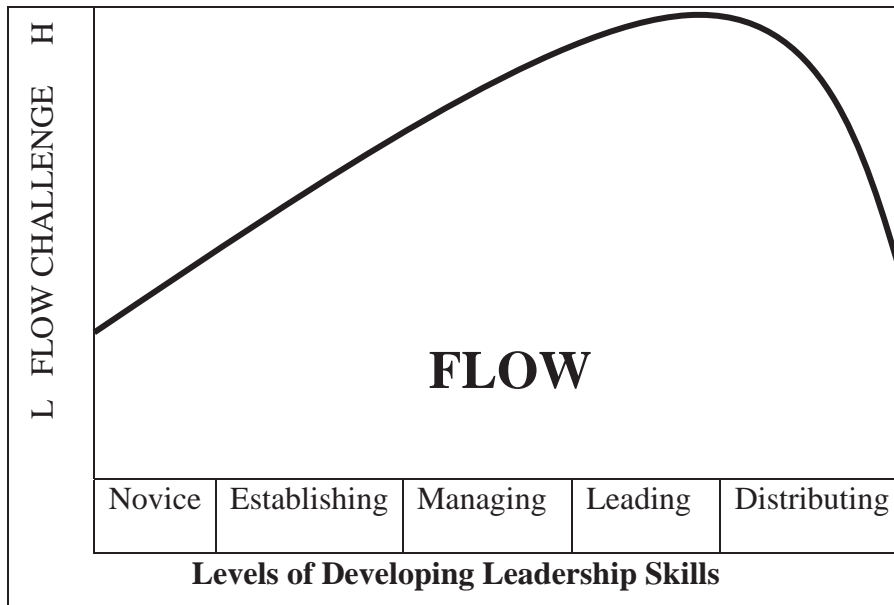


Figure 8. Hypothesised relationship between the Flow potential and the levels of developing leadership skills.

Finally, the Flow potential appears to be directly related to the challenge that the school situation provides against the school leaders' skills in managing and leading the organisations. When school leaders enter a novel situation there are many challenges that need to be addressed. As the school leaders become more established and have greater control the challenge-skills ratios change, and as a result the expected Flow potential diminishes. This hypothesised relationship is shown in Figure 8 (above) and follows Asakawa's four channels of Flow in Figure 1.

An issue for novice school leaders is that they are never fully aware of all aspects of their role, and as a consequence they see fewer issues than a highly competent school leader would see. In Figure 8 it is hypothesised that the school leader who has developed his or her skills fully will experience more Flow, and in the mature stage of distributing leadership that school leader will experience a vicarious sense of Flow, through the achievements of empowered others.

Conclusion

Jackson and Csikszentmihalyi's nine dimension model of Flow, which can be found in sporting events, did not fit the work of school leaders. The nature of school

leadership is such that the dimensions that fit singular events don't fit many team events, within the loosely-coupled models of school leadership.

When asked to identify the key characteristics of Flow in school leadership, the respondents submitted their personal understanding of Flow in the school working context, shown in Table 5 (below).

Table 5

Comparing Csikszentmihalyi's Flow with This Research

Jackson & Csikszentmihalyi (1999)		This research	
Intrinsic Factors	Extrinsic Factors	Intrinsic Factors	Extrinsic Factors
Challenge-skills balance	Unambiguous feedback	1. Doing moral good	6. Competition
Clear goals		2. Achieving goals	9. Feedback/ appreciation
Autotelic personality		3. Self efficacy	11. Belonging
		4. Improving performance	13. Trust
<u>Dimensions not supported by school leaders:</u>		6. Creativity	13. Celebration, recognition
2. Action-awareness merging.		6. Risk taking	
5. Concentration on the task in hand.		9. Peak performance	
6. Sense of control		11. Determination	
7. Loss of self-consciousness		13. Knowing capabilities	
8. Transformation of time			

As can be seen in Table 5, the school leaders did not support five dimensions from the Jackson and Csikszentmihalyi (1999) model. Specifically:

2. Action-awareness merging.
5. Concentration on the task in hand.
6. Sense of control
7. Loss of self-consciousness
8. Transformation of time

The four dimensions that were supported in the transcripts were also restated in the school leaders' responses. For example, the challenge-skills balance could be seen in the school leaders' list as: 4. Improving performance; 6. Competition; 6. Risk taking; 9. Peak performance; 13. Know capabilities.

The important differences in the two models can be seen in these three dimensions:

1. Doing moral good
11. Belonging and
13. Trust

The *doing moral good* was the top ranked dimension of Flow for the school leaders, and was seen as a guide to their action, but also as an essential link in their achievement of Flow. The psychological states of *belonging* and *trust* were both factors and products of the Flow experiences, and what is expected in school-based environments.

A reconfiguration of Jackson and Csikszentmihalyi's (1999) model to fit the findings of this research would see the following seven dimensions included in the Flow Dimensions of School Leaders:

1. Doing moral good
2. Challenge-skills balance (Improving performance; Competition; Risk taking; Peak performance; Knowing capabilities)
3. Clear goals
4. Autotelic personality (Self-efficacy; creativity; determination)
5. Unambiguous feedback (Feedback/ appreciation; celebration/recognition)
6. Belonging and
7. Trust

The final three points (Unambiguous feedback; belonging and Trust) are important criteria in measuring the quality of the way that the school staff members work together for a common purpose.

Chapter Summary

In this Chapter the transcripts from the eight school leader respondents were analysed and the 33000 word responses provided an excellent insight into the school leader respondents' thinking of their Flow experiences. This research has shown, within the sampling limitations, that all of the dimensions of Flow developed by Csikszentmihalyi (Jackson & Csikszentmihalyi, 1999) do not fit the work of school leaders. The nature of the work of school leaders is different to that of elite athletes, sports people, cyclists, surgeons and writers. Schools are loosely coupled organisations (Elmore, 2000; Weick 1976) and there are a lot of uncontrolled (and uncontrollable) variables in the school leaders' work. The hierarchical nature of school administration means that responsibility and accountability sit on the head of the school leader, who doesn't have the same levels of power and control as a military commander or football coach. The situation is further complicated, as Elmore (2000) observed, when principals become compromised by buffering, or feather-bedding the industrial situation in schools, so the school, and staff, look good.

The research questions have been addressed in this research and the conceptual framework (Jackson and Csikszentmihalyi, 1999) has served as a useful starting point, and benchmark in this research. While the Jackson and Csikszentmihalyi (1999) model was recognised as fitting sporting activities and some other activities its dimensions did not fit well the work experiences of school leaders.

In Chapter 6 the 12 propositions generated in this research will be discussed and the implications of this research to Flow model building considered.

CHAPTER 6

Propositions, Future Research and Theoretical Implications

Introduction

This study explored an area of leadership that has never been researched- the impact of Flow on school leaders' professional roles. The unique nature of the research and an analysis of the e-interview transcripts provided comparative insights into school leaders' Flow experiences outside school, and then within their administrative roles. Surprisingly, many school administrators had not been aware of the subconscious Flow phenomenon, as the respondent school principal Edwin Flack pointed out:

In both cases you can experience flow without setting yourself goals. In running being in the "zone" (flow) was a state of being, a situation where everything just matched and the running became effortless. A young sportsman and in the same vein, a young principal, or deputy may experience this without actually realising what was occurring. (lines 228-232)

The propositions that follow examine the concept of Flow in the school administrative context, and as such, they supplement the literature on motivation and school leadership. As can be seen in this chapter all of the dimensions of the Jackson and Csikszentmihalyi model have not fitted the Flow experiences of the school leaders in this purposive sample. Of the nine dimensions of Flow proposed by Jackson and Csikszentmihalyi (1999) five of these did not fit the school leaders' experiences of Flow, in a school environment:

2. Action-awareness merging.
5. Concentration on the task in hand.
6. Sense of control
7. Loss of self-consciousness

8. Transformation of time

However, the autotelic personality and the core dimensions (Caouette, 1995, p. 376) were recognised by the respondents:

1. Challenge-skills balance
3. Clear goals
4. Unambiguous feedback
9. Autotelic personality.

Reviewing the transcripts, and the nature of Flow in schools based on the experiences of the school leaders in this purposive sample 12 propositions can be made from this research. In the final section of this chapter suggestions for further research are made based on the nature of school leaders' Flow experiences in the context of improving the school leaders' motivation and job satisfaction.

The School Leaders' Flow Propositions

Proposition 1: Taxonomy-The Linked Nature of Peak Performance and Flow

In the literature Peak Performance, Peak Experience and Flow are closely linked, in conceptual and sequential senses. Peak performance and peak experience were terms used by Maslow (1964, 1968, 1971) and in his original writing on this subject Maslow looked for the triggers that would elicit peak experiences. However, Maslow warned that "The list (of triggers) gets so long that it becomes necessary to make generalizations. It looks as if any experience of real excellence, of real perfection, of any moving toward the perfect justice or toward perfect values tends to produce a peak experience" (Maslow, 1968, p. 167). In everyday language, Maslow (1971, p. 151) described these peak experiences as ecstatic. The overlap between Flow and peak performance was confirmed by Jackson (1995) who saw that:

... understanding the factors that may make it more or less likely that flow will occur during an athletic performance is of great interest to the athlete, coach, and sport psychologist. Further, knowing whether these factors are perceived by athletes as being within their control or not, is important information for those involved in helping athletes to prepare for optimal performance. (p. 138)

The real problem of identifying peak experience, peak performance and Flow in the work of school leaders is that it is often complicated by ubiquitous school cultures of the collective nature of decisions, and the joint execution of most significant actions. The “Power of One” is difficult to identify in modern school settings. Table 6 summarises the differences between the single person physical activities and school administrative Flow generators. It is hypothesised that physical activities generate more observable Flow experiences than those of the school leaders.

Table 6

An Hypothesised Taxonomy of Flow Identification

<i>Activity</i>	<i>Real time</i>	<i>Reflection/Significant other</i>	<i>Flow type</i>
<i>Physical competitive (single and team)</i>	Yes, can see competition. Repetitive.	Yes- others can see, measure success.	Micro-Flow & Deep-Flow
<i>Personal physical activity (singular)</i>	Yes biofeedback and personal best. Repetitive	Yes others can see, measure success	Micro-Flow & Deep-Flow
<i>School administration</i>	Often long time lapses between start and conclusion. Often novel experiences.	Sometimes- line manager (significant other) says “Well done”.	Micro-Flow. Deep-Flow is rare.

School leadership is unlike coaching sporting teams because in schools the coach has direct authorship of the actions that the players take, and the coach also determines if the players will be playing or not. In organisational study terminology schools are *loosely-coupled* organisations and this situation was described by Weick (1976) in this allegory:

Imagine that you're either the referee, coach, player or spectator at an unconventional soccer match: the field for the game is round; there are several goals scattered haphazardly around the circular field; people can enter and leave the game whenever they want to; they can throw balls in whenever they want; they can say "that's my goal" whenever they want to, as many times as they want to, and for as many goals as they want to; the entire game takes place on a sloped field; and the game is played as if it makes sense....

If you now substitute in that example *principals* for *referees*, *teachers* for *coaches*, *students* for *players*, *parents* for *spectators* and *schooling* for *soccer*, you have an equally unconventional depiction of school organizations. (p. 1)

In such circumstances, where the rules and goals are not clear, and the notion of success clearly defined, peak performance and deep-Flow are unlikely to occur.

In organisational terms, successful teams are always tightly coupled but schools are not. There is an associated corollary of the sense of oneness in that a champion team will always beat a team of champions. The respondents in this research, generally, were rarely able to describe an example of deep-Flow. It appears that it is in the nature of school leadership that peak performance and deep-Flow are rarely experienced. However, school leaders have the capacity to change this situation for all of the members of the school community and ensure that motivation, engagement and resilience are enhanced through the introduction of specific organisational programs. The school leader, Alvin White (2010) who had resurrected his running career worked hard on getting into the zone and experiencing Flow. He commented on peak performance and Flow's transient and elusive nature in school leadership:

Being in or out of the state of Flow in leadership is a little like riding a see-saw. In my experience it can disappear quicker than it has developed. Of course this is given the vagaries of my own efficacy, experience and resilience in these situations. With growing experience and success in the position, my resilience to outside opinions and events has strengthened, and the frequency of negative influences on my belief has diminished. I think this has placed me in a better position to experience flow for longer periods and more often. (lines 176-182)

As a distance runner, White concentrated on the intrinsic factors that generate the zone, peak performance and Flow. In an organisational sense, concentrating on the idiosyncratic, intrapersonal Flow experiences is linked to self-efficacy, in White's experiences.

As an organisational imperative, each school leader needs to be able to recognise the importance of putting in place the intrinsic and extrinsic factors that will facilitate peak performance and multi-levelled Flow experiences. Celebrating key achievements and recognising individual staff members' performances is generally not done well in schools, and can easily be improved.

Proposition 2: The Nature of Flow is Addictive

In his research Csikszentmihalyi (1975/2000) recognised the addictive nature of Flow. Examining surgeons' experiences in surgery many claimed that, "The experience can be so enjoyable that one becomes over-dependent on it. Every day life begins to seem drab by comparison. One surgeon mentioned that operating is 'like taking narcotics' ..." (1975/2000, p. 138). However, like all addictions, there is a downside to being driven by the Flow experience:

But the simple beauty of the deep-Flow world is so seductive for some that they relinquish their foothold in everyday life and retreat into the self-contained universe of activity. When this happens, the constructive potential of flow is lost. The flow activity is still enjoyable, but it becomes a rigid isolating system instead of a growing, integrative one. (Csikszentmihalyi, 1975/2000, p. 139)

Supporting the addictive nature of Flow, Wanner, Ladouceur, Auclair and Vitaro (2006) studied Flow experiences in pathological gamblers and they found:

... both flow and dissociation lay on a continuum of subjective experiences across activity groups. Specifically, pathological gamblers experienced lower levels of flow than athletes, whereas recreational gamblers lay in between the previous groups in this regard. In contrast, pathological gamblers experienced higher mean levels of dissociation than athletes and recreational gamblers who, in turn, were similar in this regard. (p. 289)

The addictive Flow experienced by gamblers caused Keller and Bless (2008) to conclude that, unlike the motivation of the school leaders in this research, Flow does not solely fall in the ethical or moral domains: “Moreover, flow is not necessarily related to positive ethical or social consequences because flow experiences can become addictive (e.g. gambling, video games) and flow can be experienced when individuals engage in antisocial activities (e.g. crime and warfare)” (pp. 98-99).

Extreme sports attract the Flow addicts and interviewing a variety of extreme sports participants Willig (2008) reported a mix of complex Flow-like experiences: The enjoyment of extreme sports activities manifested itself in a number of different pleasurable feelings. These included an ‘adrenaline buzz’ characterized by excitement which some participants described as ‘feeling high’. Feelings of joy and happiness were also invoked, and the experience was described as ‘magical’ (Jay), ‘fantastic’ (Jo) and ‘blissful’ (Billy). There was a sense of pleasure through feeling alive, energized and vital; participants talked about feelings of ‘elation’ (Jay) and ‘exhilaration’ (Jo). These feelings could outlast the actual sporting activity, sometimes lasting for days afterwards. They were felt throughout the body and they seemed to lie outside of the normal range of emotions experienced by participants in their everyday life. As such, they were experienced as rare and precious moments. (p. 698)

However, it was important that Willig (2008) was able to separate Flow from the excitement of extreme sports, and she concluded: “It was the achievement of this state (Flow), rather than thrills and excitement, which both Celsi et al. (as cited in Willig, 2008) and the participants in this study described as potentially addictive” (p. 699).

The purposive sample in this research confirmed that each of the school leaders had experienced deep-Flow in their lives, other than in a school related experience. Each of the respondents related their Flow experiences with a sense of fondness and longing. The athletes (Edwin, Alvin and Michael) saw their primary Flow experiences as character forming, life changing, and highly significant. They explained that it was like the experience had happened yesterday. Importantly, for each of these athletes, their Flow experiences were witnessed by others in state and

national level competitions, and as a result, their reputations and personal standing with peers were enhanced. Alvin reported the impact of deep-Flow in his life:

Macro Flow in sport was more pervasive on my entire life. I ate it, breathed it, slept it, it totally consumed me. Everything in my life came second when I was in that flow period. If I have experienced flow professionally, it is gratifying and does have an effect on my thinking out of school but not to the same degree. This could be age related, family situation or just the complexity of life. (lines 167-171)

An interesting contrast to the out-of-school examples of deep-Flow was that of James, the Catholic school principal in this sample, who was motivated by the addictive nature of the moral purpose of education:

The goal/challenge /moral purpose is critical to the Flow experience. It is the distant beacon that lights the way and therefore is the universal reference point from which you measure your leadership success. Flow is the context within which you experience leadership success. That is the chemistry that is so addictive that I referred to previously. (lines 150-154)

He expanded these thoughts and also confirmed the deep-Flow and micro Flow dichotomy in schools:

I am in my third year in my current leadership role and I can sense the Flow. I can also recognise a desire to experience Flow again. It is a mildly addictive chemistry the Flow seems to stimulate. It is like being blindfolded with your hands under a tap. Someone turns on a tap. There is a restricted flow of water, you know, without seeing it because you feel it. At this point in time I would say that I was experiencing 'Low Level Flow' but this is difficult to quantify and I'm unsure about if there is a clear boundary to "High Level Flow" except that you know when you experience it. (lines 130-136)

In the public schools both Edwin and Ann reflected on their experiences with the addictive nature of Flow. Edwin Flack, who had experienced a lot of deep-Flow, spoke of "chasing" Flow by using visualisation:

In terms of motivation it acts as a stimulant as you try to chase the feeling again in order to replicate the ability to be able to perform at your highest level. This level brings with the feeling of invincibility. I used a great deal of

visualisation in an effort to replicate this and would often spend periods of time visualising an event to the point of hearing it, smelling it, feeling it etc. (lines 64-68)

The ability to manage crises is important to Maxwell, a late career school administrator, and the personal risk is rewarded with Flow. Maxwell made the point that he doesn't have to work but he is prepared to travel long distances for this experience:

The feeling associated with Flow is one that you want and need to repeat. Perhaps it is the addiction of leadership that drives you on. Once you are able to recreate, almost at will, this feeling you appear to make decisions with more clarity and precision where previously you may, not necessarily would, have second guessed yourself on the decisions that matter. You know you can and will deal with matters, often many times in a day, and this has a multiplier effect on your determination to retain this sense of power and this position that makes the difference for the lives of students and families. There is nowhere else in the school structure you would rather be as the chances to influence and be intrinsically rewarded do not occur with the same frequency or intensity. All of this does not mean that you do everything without consultation, in fact the better your security in the position the more likely you are to consult without concern. The frequency of dealing with situations and the intensity of these situations increase your determination to retain the leadership position – you would not want to step backwards and I believe nor would you. I would rather travel distance as long as I can be involved in exciting tasks. I am at a fortunate stage of my career, retain this position or retire. (Maxwell, lines 312-327)

Administrative risk taking, crises survival and the addictive nature of Flow, particularly deep-Flow, must be acknowledged by school leaders and then utilised to improve the school stakeholders' inclusion and performance in school operations.

Proposition 3: School Leaders Generate and Survive High Risk Situations

The addictive nature of Flow can have an unintended consequence for school leaders who are swamped by the mundane demands. Some school leaders are moved to undertake risky, but justifiable actions to enliven their administrative roles. Such risky behaviours can include making important public presentations, home visits to the houses where criminal activity is believed to be taking place, media contact, police contact, meeting with dangerous parents, and Child Protection reporting.

Maxwell (2010), a deputy principal who had been an actor, reported that a former principal experienced Flow when addressing high profile parents. He said:

On a positive note, a Principal who used any chance at public speaking to raise profile and elicit Flow by speaking very passionately when parents were present, even about rather minor matters. This was his Flow producing contact with the high profile parents and did not mostly happen when he was speaking to staff. He took every opportunity to talk the school up and did a very good job at this. I believe he experienced a definite sense of Flow at these times and this carried him over to the next occasion. (lines 361-367)

Again, Maxwell was in-charge of a school when a drug affected parent came into the school grounds:

The time [REDACTED] came to the school stoned, and in dire need due to everything falling down around her was one such time. There was only myself and the school psychologist present to deal with this. I had to coordinate this, involve the psychologist where necessary, ensure the freaked out office staff were safeguarded, ensure no one was hurt, include the salvos and ensure the best possible interventions were in place without students or the Mum's child being aware. I felt very fired up after the successful completion of this situation. (lines 120-126)

Ann, a former principal, noted that not all hard decisions elicit Flow. If she had to make a hard decision to remedy a mistake, that did not produce Flow. However, her decision to report a drug dealing biker to the police took courage, and eventually produced a delayed Flow situation.

However, I do get a “buzz” when someone does the wrong thing – like the time the drug dealing bikie step-dad plonked a little four year old kindy kid on the back of his motor bike and sped off from school. I reported him to the police who “pinged” him and told him he was not allowed to take the 4 year old on his bike. He came up to the school and abused a few people accusing us of infringing on his rights! A few weeks later he came off his bike and broke his leg. The endorphins did flow on that day. (lines 279-285)

Long periods of stability can be a problem for school leaders in certain circumstances. Some principals are particularly “gung-ho” and they love the drama of crises. Michael Knight observed:

I wonder if principals generate the crises or just like getting caught up in them? I can think of one person that I work with now who loves to get involved in personal "drama." She seems to really feed off it and gets into the "gung ho" state. I can see her increased physical activity and breathing. It seems like she enjoys these crazy personal situations (which I personally do not enjoy). (M. Knight, personal communication October 15, 2010)

Barry (2010) argued that in some cases school leaders just need to be bloody minded: Efficacy, resilience & determination – some may call it false bravado, stubbornness and sheer bloody mindedness but whatever it may be I doubt there are many great leaders who have won the trust and respect of their troops without it. It has been and currently is an important factor in how I do my job. (lines 188-191)

For some school leaders cultural stability generates a sense of boredom, which says something about the school situation and the school leaders’ skill repertoire. If the school is operating well, there is little point in initiating disruptive whole-school change. It is recognised that some change models require a constant challenging of the status quo, and destabilising the school situation is a legitimate whole-school change strategy, which can be found in Lewin’s (1947) freeze, unfreeze and refreeze model, and the so-called Hegel’s Dialectic (thesis, antithesis, synthesis).

Proposition 4: Hubris and the Personification of Leaders' Failure

Hubris in management is "... the presumptuous belief that everything is, can be and must be predicted, planned for and controlled through the use of scientific knowledge" (Gabriel, 1998, p. 257). It is the lack of certainty that promotes belief in hubris and it also influences the performances of athletes who try to get into the zone, or a Flow state, by mechanically repeating a set procedure, which on some occasions may not elicit the zone or a Flow state. A familiarity with the zone encourages athletes to actively seek the mental and physical state but it appears that *hubris* can intervene. The Merriam-Webster dictionary defines hubris as "exaggerated pride or self-confidence". It was noted by Ravizza (as cited in Young & Pain, 1999, pp. 22-23) that the sport peak experience was:

... temporary and of relatively short duration; non-voluntary and not induced at will; and, unique and not necessarily associated with a successful performance outcome. He also found that the athletes' mastering of the basic skills of the sport was a pre-condition for the occurrence of peak experiences.

Edwin Flack had a long career in marathon running, and he had an intimate relationship with Flow. Flack observed:

Overall this ability or rather experience of the Zone has created within me a desire to achieve at the highest of levels in anything that I do. It has created a belief in me that if I turn a hand to it and put in the effort then I can and will be successful. This in turn, I believe creates a high degree of optimism in my way of thinking and tends to create a higher degree of positiveness in the ways that I tackle things. There is a down side though. With this comes a very structured and organised way of doing things. Everything comes with a pattern. This is something, particularly in a relationship that people fail to recognise. Spontaneity is there however it is an organised spontaneity. (lines 69-77)

However, entering Flow is not always possible, and Flack commented that the harder a runner tries to get into the zone, the less likely it will happen. He also remarked:

There have been times when I have been anxious and still got into the zone. If you look back to my previous responses you will see that I mentioned being in the zone was relative to being in the moment. The Flow, and possibly getting into the zone, came from just running. Not worrying about what every other bastard in the race was doing but just being in the moment. (E. Flack, personal communication, September 13, 2010)

The lack of stability in public schools can be an issue, and Edwina (2010) works through the current issues, not knowing what uncontrolled variable can come into the school at any time.

Knowing that a very talented teacher can leave at any time and there may be no replacement. Knowing that, in a government school, my next major headache is only another enrolment-through-the-door away. Knowing that one is not prepared to accept the status quo no matter what that is adds to the complexity, that is, the need to move the organisation forward from whatever point that may be. Delivering a well received motivational speech to staff takes me to a Flow Zone. That is relatively easy to achieve. But the work of sustainable leadership which results in wider, longer lasting improvement is hard. (lines 237-244)

The cut-throat world of the professional actor is not unlike administering schools, and Maxwell (2010) noted:

Flow in the acting is more intense because there is a much wider sphere of recognition. When a very large, not universal, part of your surrounding people recognise your achievements there is a pretty intense feed-back and so personal feeling of being at the top – even though in the whole scheme of things you are very close to base level. It is very easy to forget where you really fit and be carried away by these personal feelings. You only need your next role to be one in which you feel vulnerable about your skills to succeed for the sense of Flow to quickly disappear! (lines 257-263)

A key to initiating Flow may promote the psychological avoidance of hubris through the generation of a sense of humbleness in many athletes, and reflective

school administrators. Michael Knight; who performed well as an athlete, also demonstrated great leadership qualities in New York he explained his account of hubris:

I am very confident in my own abilities. I also come from a modest background and I am careful not to be boastful or arrogant. Arrogance is probably my number one disliked trait in others. My confidence is based on a belief in my own abilities coupled with past successes. These lead me to believe that I can accomplish anything I set my mind to. I also realize that I do not have all the answers and cannot do it alone. My successes often come as a result of working with great people. All of these positive experiences increase my self-efficacy and willingness to take on a new challenge. (lines 88-95)

Among school based leaders there is an inherent belief that after a string of good fortune, bad luck is lurking. That is hubris, and Maxwell (2010) typifies the belief in these in these terms: “I have a constant sense that when things are most relaxed is the most vulnerable time. Last day of term, or year when people want to relax a bit is the most dangerous”. (lines 421-423)

Proposition 5: The Intensity of Singularly Generated Flow is Always Greater Than Flow Generated from a Collective School Work Situation

Athletes in the sporting arena get immediate feedback on their performances at both the intrapersonal and interpersonal levels. Standards and levels of personal performance are well known because of the competitive nature of these pursuits, the repetitive nature of the experiences, and the public nature of standards in the form of records. In individual events such as running or high jumping the athlete is competing against his or her personal best efforts, and then against the personal best efforts of competitors, and even absent record holders. The individual athlete immediately knows how his or her performance has measured up against this array of personal and external standards. Flow is then delivered as personal recognition of the effort is attained. Edwin Flack (2010) reported:

The difference in the type and quality of Flow, having experienced it from an athlete’s perspective, and to a very much lesser extent an administrator’s perspective is significant. The euphoria of a physical endeavour is due largely

to the expenditure of physical, emotional and some would argue a mental energy that could not be matched within the administrative role. However I would agree with the Flow and feel you could argue for both a major and minor Flow. (lines 165-170)

In sharp contrast, the Flow experienced in school administration is less personal, is more elusive and it has an almost vicarious, experiential quality. This comes about because there are few external measures against which a school administrator can measure his or her performance. Unlike field athletes, the school administrators' experiences take place over an extended period of time- months and years, instead of minutes or hours. Furthermore, some of the major tasks undertaken by school administrators in many cases represent their first efforts, and so it is impossible for them to measure an intrapersonal performance against past experience. Finally, because of the unique nature of many of these administrative tasks and the lack of former experiences, school administrators rely on *significant others* to give the necessary recognition for a Flow experience. Among the significant others who may give this feedback are credible parents, respected teachers, district superintendents or directors and the school governance executives.

The Flow experiences for field athletes or swimmers doing their individual events are incredibly strong. Athletes work hard to get into the zone and they know that Flow will follow. So, relying on identifiable precursors, athletes have higher levels of capability to predict the initiation of the euphoric state of Flow. It has been argued by Walker (2010, p. 3) that social Flow is more enjoyable than individual Flow: "Taken together, the three investigations support the conclusion that doing it together is better than doing it alone. Solitary flow, while quite enjoyable, is not as enjoyable as social flow".

School leaders' Flow experiences do not appear to reach the same levels of intensity as either personal Flow in sport or the strong, social Flow experienced by award winning teams. This is because their Flow experiences are always conditional, extrinsic, generally take place over weeks and months rather than minutes, and rely on a second party affirmation. In the respondents' transcripts, deep-Flow was rare, but school leaders were encouraged by examples of personal micro- Flow. Maxwell

(2010) claimed his experiences of Flow in school lasted longer: “Flow in a school is much longer lasting. There is this gradual building of intervention on top of intervention that provides stability. This drops out suddenly when you move to another school” (lines 297-300). A second exception is Edwina who was put into a failing school, with a staff that saw her as a threat, and just surviving was a cause for Flow.

Flow, like other sensations, is very personal. James made three findings about his Flow experiences. Firstly:

One final reflection on the Flow; it is not necessary apparent when it begins and when it ends. On reflection one is able to nominate start and even finish events but ‘in the moment’ this is not apparent. What is true is that it is relatively self-evident that you are experiencing the Flow once you are immersed in it. (lines 119-122)

Secondly, he made the important finding about vicarious experiences that can elicit Flow.

In my experience I think it is possible to experience Flow from one teacher’s performance but this depends on the nature of the teacher’s role within the school. In my previous school the one teacher was in a critical position in terms of the process of school improvement that I was seeking. Other teachers may have also been contributing but either they were deemed by me to not have a significant contribution to make at that point in time or I was not aware of their efforts until later in the process. (lines 143-149)

Thirdly, like Edwina, James who is dedicated to a life in education, argued that (for him) school-based Flow is more intense than the Flow experienced in society.

I believe that the Flow experienced in school leadership is more intense than that experienced in the non-school example. There could be a number of reasons why this is the case:

1. The engagement with the non-school experience of Flow (playing good golf) is limited because this is a limited activity in relation to my work experience. Hence it is conceivable that Flow could be perceived as more intense in the school setting because of the level of sustained exposure to the experience.
2. In school leadership there are more “markers” that provide feedback to you

that you are experiencing Flow than there are in golf. Golf is played with up to four participants whereas in educational leadership there are significantly more stakeholders who input into the feedback loop.

3. The relative importance of the school and non-school activities may influence the degree of intensity experienced. Achieving significant improved learning outcomes for students who may not have been able to attain such outcomes without your leadership is very powerful and certainly fuels Flow. (lines 239-253)

Flow in school administration is, in many cases, dependent on others. Alvin (2010) observed:

I have had several occasions where I have experienced a Flow like state in admin., but this was completely different than my experiences in running or football. My admin. experiences were based more around a feeling of having the staff eating out of my hand. Where I felt I was completely supported in the direction I was going, and whilst this was professionally rewarding and personally gratifying I think this was more an ego response than a physical one. My sporting experiences of 'flow' were far more intense and affected me in a broader sense, including physical and emotional. With the sporting experience you are in it and you know it, and it feels uplifting. It is like being on drug and there is definitely a heightened state. I couldn't say I have experienced this intensity in admin. (lines 83-92)

Alvin (2010), further expanded his response and deep-Flow in sport made school administration seem less rewarding:

Sport is definitely easier. Sport does not depend on the responses of others. In sport it is you and your mind which, in that state, you have complete control over. I wrote of the absence of doubt earlier. I believe the doubt is your mind in control with the negative habits that you have allowed it to develop over time. In my experience, when you are in the zone you disallow your mind to go to this previously allowed negative state because you are in control, in a complete positive state. In my experiences in admin., however, there are so many outside contributing factors. There have been many, many times when I have felt like I had made significant positive steps forward and then walked into a brick wall, almost one big step forward and then two backwards. For

me, the physical and psychological rewards of being in the Flow in sport are far more significant than in admin. Perhaps over 21 years of competitive sport and a reasonable level, I developed a resilience of thinking towards the doubt or a more empowered thought process. Given time and experience in admin. this may be something that I will develop more. (lines 93-106)

Schools are not strongly regimented teams so school leaders rarely experience the same levels of Flow as the coach of the Australian Football League premiership team. School leaders exist in a context where their tasks are not temporally defined and success not clearly identified. Furthermore, the challenge-skills equation only exist at an intrapersonal level, so that the school leader can never be certain how his or her performance measures up against an agreed standard.

Proposition 6: The IZOF Framework can be Applied to School Leaders' Performance

In physical performance, because the zone and Flow are critically important to athletes' performances, sports scientists have identified the *Individual Zones of Optimal Functioning* through research with elite athletes. Sportspeople attempt to get into the zone, and when they get there then all of the characteristics of peak experience (ecstasy) and Flow, follow. Hanin, in an attempt to improve the performance of Russian divers, developed the IZOF framework. Hanin (2003) said of the IZOF model:

The model defines performance related *psychobiosocial state* as a situational, multimodal, and dynamic manifestation of the total human functioning. Multilevel and system description of performance-related states includes at least five interrelated dimensions: *form, content, intensity, time, and context....* Three of these dimensions (form, content, and intensity) describe the structure of subjective experiences and meta-experiences; two other dimensions (time and context) characterize the dynamics of performers' subjective experiences. (p. 4)

Surprisingly, Hanin found that emotion and stress play quite different roles in each athlete's performances.

Optimal functioning in sport was always a major objective for athletes, and Edwin Flack warned of the dangers of over-intellectualising the Flow, and zone experiences:

To get to the stage of being able to get into the 'Zone' or Flow experience required a great deal of work on my part. I needed to get extremely fit and had to learn to feel and be aware of my body and how it was feeling. As I got later into my career I quickly learned to go with the feeling once in this flow and just follow what my subconsciousness, intuition or gut was telling me. (lines 78-82)

In an interesting analogy, Alvin White (2010) tried to account for the factors that would facilitate his IZOF. He thought:

We, consciously and subconsciously, continually gather data and feedback on the impact we have as leaders. I think this becomes like a bank ledger, the more that we consider to be banked on the positive side of the ledger, the more we build our resilience and efficacy, and the better we are placed to experience Flow. The frequency and intensity banked on the negative side of the ledger place us in danger of lower aspiration and diminished efficacy. This can seriously impact on your ability to do your job. I believe there are many examples of ineffective Principals who spend a large proportion of time in this state. When I have experienced this type of low, my love for the position has been significantly affected and this has impacted on my ability to do the job at the level where I want to be. However, taking action and making decisions that moves the organisation forward can tip the see-saw again very quickly. The ability to do this has been important for me and has helped develop the conditions to experience a kind of continual Flow. In this position, I am more motivated, more committed and far more effective as a principal. (lines 183-197)

Contemporary research by Baumann and Scheffer (2010, 2011) has shown that Flow and the IZOF are consequences of aspects of the autotelic personality, intrinsic motivation and a predisposition to seek achievement-Flow by actively seeking challenges:

The present findings show that frequent flow experiences may be driven by a stable achievement flow motive. Thus, when you see a person getting fully immersed in solving difficult puzzles or training for a marathon, you may explain this behavior by a motive disposition to seek and master challenges. The achievement flow motive may promote a set of specific behaviors such as analyzing problems (seeing difficulty) and spreading optimism (mastering difficulty). In turn, being able to focus on both aspects or shift between difficulty and mastery may promote flow experiences. (Baumann & Scheffer, 2011, p. 282)

In light of this research, and notwithstanding the shortcomings of the Jackson and Csikszentmihalyi (1999) model of Flow when applied to the roles of school leaders (as reported in this research), it makes good sense in future research to develop an IZOF of high performing school leaders that will include the “motive disposition to seek and master challenges” (Baumann & Scheffer, 2011, p. 267).

Table 7

Jackson's (1995, p. 143) Facilitating and Inhibiting Factors of Flow

Help Flow	Prevent Flow	Disrupt Flow
Motivation to perform	Lacking motivation to perform	
Achieving optimal arousal level before complete	Non-optimal arousal level	
Pre-competitive and competitive plans and preparation	Problems with pre-competitive preparation	
Optimal physical preparation and readiness	Non-optimal physical preparation and readiness	Problems with physical readiness or physical state
Optimal environmental and situational conditions	Non-optimal environmental and situational conditions	Non-optimal environmental and situational influences
Performance feeling good	Performance going poorly	Performance errors/problems
Focus	Inappropriate focus	Inappropriate focus
Confidence and positive attitude	Lacking confidence and negative attitude	Doubting or putting pressure on self
Positive team play and interaction	Negative team play and interaction	Problems with team performance or interactions
Experience factor		

Table 7 provides an excellent summary of Jackson's (1995) view of the factors that facilitate and inhibit Flow in athletes. Interestingly, Jackson acknowledges the conditions necessary to promote Flow, which corresponds with the responses made by Edwin Flack about getting into the zone.

Proposition 7: Leadership and the Necessity of Setting and Celebrating Formative and Summative Goals

A major problem with Flow in the role of school administrators' roles is that extrinsic recognition of teachers and administrators' work is not done well. Delaying gratification is a key element of success in a range of professional pursuits. For example, Csikszentmihalyi (1991) observed that surgeons undertake such long periods of training "because of exotelic expectations: to help people, to make money, to achieve prestige (p. 67).

In teaching and learning, teachers carry out programs of formative and summative testing. This important dichotomy was developed by Scriven (1996) and the point that has been re-emphasised is the need to carry out formative testing, as a key part of the teaching process. This research has indicated that there is a need to set both short-term and long-term goals when undertaking change or professional learning in schools. The short-term (formative) goals are essential to demonstrate that important milestones are achieved and that the program is on-track.

In bringing about whole-school change in a Catholic primary school James explained the difficulties that he faced even after 18 months into the change:

For the first 18 months there was very limited feedback to indicate to me that what I was trying to do was having any impact. Mentally I found myself being more and more reluctant to push on with what had to be done. Resilience and conviction in my own beliefs were the two threads that sustained me. A lack of Flow has a strongly negative impact on my leadership. As the benefits to both students, teachers and parents became apparent then I started to recognise some of the markers that I was wanting to see. This feedback to me reaffirmed my leadership and the direction I was struggling to take the school and gave me a strong sense of purpose and determination to stay for the long haul. Whereas prior to this I may have shared with a few trusted colleagues that maybe this was not the school for me I am now more positive about what it is I want to see in the school and more forceful with those who consider my leadership inappropriate and ineffectual. (lines 262-274)

Formative goal achievement.

Ann (2010) reflected on the lack of formative feedback in schools, when compared with sporting activities, where the score board gives instantaneous feedback.

The Flow in schools is much more difficult because it is more complex and bound up with so many more variables, rules are not clear, it's not time or space bound. However, for a coach to have Flow in teaching a new skill in sport is not dissimilar to teaching a new skill in a classroom.... A sport coach has the capacity to be more didactic given if the players don't follow his/her instructions they're out of the team or are made to feel like they should leave. To have flow in a school situation requires a higher degree of psychological agility (manipulation?). However, I can see that for a sports team to have Flow requires everyone to have clarity about their particular role and understand how that fits in with the team goal, not dissimilar to a school situation. (lines 164-175)

In her difficult school, Edwina was faced with waiting for terminal failure, or intervening to bring about a formative change. She said:

I stepped in, stamped my foot, and gave explicit instructions on what two of these were to look like. At the fear of incurring my wrath and indignation they went away, organised and planned meticulously along the lines of my request and finally achieved two amazing celebration assemblies. Leaders came up to me and said, "We now know what you mean. We get it!" That sense of Flow was nothing like the feeling associated with changing whole of school tone and approaches to case management, behaviour management and community perceptions. (lines 269-275)

Summative goal achievement.

Summative achievement is often acknowledged in schools, but because it takes its place with the other pressing issues, it does not receive the acknowledgement it deserves. Barry (2010) discussed the issue of Flow, summative goal achievement and all of the other issues that compete for school leaders' time.

Prior to taking on this survey I would not have placed a great deal of credence in this subject. With Flow being in the forefront of my mind I realise that, for

me, it is extremely important. I have been questioning my current situation in recent weeks because I have reached a stage where many goals have been achieved and I feel the urge to reach for a more substantial position. In the last 24 hours a situation has arisen which I feel is an opportunity for me to showcase my leadership credentials. It is a challenge that most would shy away from but one that will allow me to resolve a long standing issue that has previously been beyond many others. I will need to be focussed and strong in my convictions but if successful it will go a long way to achieving some long term goals that have been put into place. (lines 178-187)

Proposition 8: Intellectual Flow

While the examples of Flow tend, in the main, to be physical in nature, Flow can also be purely intellectual. In Csikszentmihalyi's (1975/2000) research on Flow in chess, seventy four percent of the respondents offered variants of "intellectual challenge" (p. 64). The chess players' intrinsic motivation were driven by a sense of enjoyment from "... primarily an intellectual challenge; it produces exhilaration by giving the player a feeling of control in a difficult situation. The typical flow experience in chess depends on this precarious balance between challenges and skills" (p. 65).

The physical and intellectual aspects of Flow often do not mix. In distance running, while race tactics are important, getting into the zone and experiencing Flow, means switching off unrelated thought. Atkinson (2009) experienced Flow/ the zone and he asserted that letting go conscious thought was the key to entry into the zone in distance running (p. 170). Edwin Flack (2010), a distance runner of national reputation, warned of the dangers of over-intellectualising running, and he found that his thoughts sometimes set barriers to Flow:

To achieve in the sporting arena, and to achieve at a high level, the belief in yourself is closely linked to achievement. My successes as a young athlete (early and late 20s) were more frequent when there was less doubt on my part. Matched with this was a lack of fear. A naivety if you like. Running fast times did not frighten me. As an older athlete I doubted my ability to run

those times. In some ways I over analysed the situation and subconsciously set barriers. (lines 214-219)

The chess playing Edwina observed that Flow in school leadership is more difficult to achieve than flow in sport, and even intellectual pursuits like chess: Experiencing Flow as an educational leader is harder than in other areas. Although it's some time since I played chess, it was always a source of Flow. I am very competitive by nature. A game that is won is a source of Flow, and easily achieved. A game that is lost is also a source of Flow on some occasions because of the feelings that accompany each strategy on the chess board in an effort to win. (Edwina, lines 220-224)

In terms of the definition of Flow in intellectual activity, Quinn (2005, p. 613) observed the conceptual dissonance, "which means that the description of flow concepts is often constrained by the language of physical rather than intellectual activity". However this is contrary to Csikszentmihalyi's early research on creativity and he stated: "The good things in life do not only come through the senses. Some of the most exhilarating experiences that we undergo are generated inside the mind, triggered by information that challenges our ability to think, rather than from the use of sensory skills" (Csikszentmihalyi, 1991, p. 117).

Proposition 9. The Nature of Moral Flow

Moral Flow appears to be a major characteristic of the work of school leaders. It does not appear to make any difference whether the school leader is in a public (secular) school, or a church school. The virtue of *doing good for others* (particularly students) is not dependent on a professional, religious employment commitment, but it is as rewarding, none-the-less. A philosophical study into the nature of virtue found that Flow was relevant:

Is there, then, anything after all to the phenomenology of virtue? I suggest that an answer is to be found in looking to Aristotle's suggestion that virtuous activity is pleasant to the virtuous person. I try to do this, using the work of the contemporary social psychologist Mihaly Csikszentmihalyi and his work on the 'flow experience'. Crucial here is the point that I consider accounts of virtue which take it to have the structure of a practical expertise or skill. It is

when we are most engaged in skilful complex activity that the activity is experienced as 'unimpeded', in Aristotle's terms, or as 'flow'. (Annas, 2008, p. 21)

Edwina, who entered a toxic school culture, commented that the moral aspect of the job was important for her:

There was at least one occasion when I could quite happily have walked out of the school and never returned, but I would never have done that because, ethically, as principal, I have a strong moral responsibility to continue the work I have started. (Edwina, lines 196-198)

Elsewhere, Edwina (2010) spoke of the social justice drive in her school leadership:

For school leadership my motivation is social justice, the fundamental belief that a just and healthy society values the importance of a good education for all. Flow doesn't affect how I do my job. I think it **does** affect my resilience and determination. (lines 357-361)

Edwin Flack (2010) acknowledged the moral basis of the efforts that he made in administering his school.

In terms of my leadership role this is something that I do because, like you, I believe that I can make a difference, I also enjoy what I do a great deal despite the tough elements that sometimes make the job challenging. In fact it is these challenges that I enjoy the most as they put pressure on me to perform and do my job. Those times when I do receive positive feedback, from staff or parents and even kids, reaffirm for me that I am making a difference. These little pieces of recognition make the difference and provide the feedback that enables a re-energising of my vision. These are the times when I feel like I'm not fighting, but Flowing. (lines 347-354)

Throughout his responses to the questions, James strongly, and consistently pushed the importance of the moral drive in his school administration.

Experiencing Flow without reference to moral purpose is quite a difficult question to respond to. In most instances I believe that you would not normally experience Flow without knowing what constitutes good leadership which results in improved student learning performance. However, having

made that statement I can think of instances which have indicated to me that I am fulfilling my principal responsibilities in ways that I had not seriously given much thought to, e.g. management issues that are important but not necessarily critical to my moral purpose. The problem with reflecting on such circumstances is being able to analyse them to determine if they are Flow experiences or merely ‘feel-good’ experiences which I don’t think are necessarily the same thing. An example of this may be that a parent tells me how wonderful the school grounds are and how good this is for people to see the school looking so well maintained. That is a compliment that I will accept (a feel good experience) but it would not necessarily be a part of the Flow that I am currently experiencing. (lines 164-177)

He also noted that, “If I am distracted away from my moral purpose of improving students’ learning and enhancing teacher instruction I can find myself not experiencing any sense of Flow” (lines 140-142).

In his small rural school, Barry reflected on the higher purpose of school leadership and he complained about the directions of public education: “If the focus is on promotion and ticking boxes I believe the Flow state is negative and counter-productive. Unfortunately the system has bred this and many principals focus on they need to done for them rather than what is best for the students” (lines 218-220).

The moral aspect of teaching is a key driver for the participating school leaders. The point made by Csikszentmihalyi (1998, p. 34) is that climbing to the mountain summit is not the goal for climbers, because the goal is the climbing experience. The same holds for school leadership. It appears that the goal for school leaders, and most teachers and principals, is not to be seen to be doing a good job administering a school or classroom, but it is the moral notion of optimising students’ future life options.

Proposition 10. School Leaders’ Lack Access to Experiential, Repetitive Learning

In elite sport, the athletes practise their training programs daily. Rock climbers train in the mountains and on climbing walls. Divers constantly practise

under the watchful eyes of their coaches who give them feedback as they leave the water after every dive. Swimmers swim kilometres of varied sequences. Footballers, basketballers, netballers, and soccer player all practise their offensive and defensive drills. In all of the elite sports the athletes practise their skills through constant repetition, feedback, and goal setting. As a result, Flow can be experienced as the daily goals are achieved.

In the research on Individual Zones of Optimal Functioning (IZOF) it was found that experiential repetition allows athletes to control and manipulate their anxiety: “Because sport activity is repetitive, situational state-like experiences such as anxiety have a good chance of developing into relatively stable patterns of experiences such as trait anxiety. Very importantly, athletes often reflect on their experiences in successful and unsuccessful performances. As a result, meta-experiences are developed” (Nieuwenhuys, Hanin, & Bakker, 2008, p. 63).

In the military, all troops undertake the repetitive contact drills, so that when contact is made with a hostile enemy, training will over-ride emotion and anxiety and the troops will be able to counter-attack. Weapon malfunctions, too, are also trained for as troops constantly practice their IAs (immediate actions). Being able to successfully strip a weapon under-fire, and live through the contact is an immediate source of Flow.

A major problem with school leadership is that in experiential terms, administering schools consists of a lot of low level repetitive actions. However, the high level crises that make or break school leaders’ reputations are often unique and often experienced only once in their professional life-times. Very few school leaders will experience the death of more than one of their students; police lock-downs, or other serious crises. Schools and school systems need to put in place the military style *After Action Reports* and facilitate debriefing of other school leaders after each crisis. These rare crises need to form a syllabus of training, reinforced by Flow.

An associated problem is that the story telling that can be used to alert other school leaders to potential problems is often not effected by the school leaders. Woods (1986) noted of teachers’ learning:

... the teacher is the sole owner of pedagogic knowledge. It is synthetic, building up separate elements (for example from the various disciplines) into a connected whole, which is a teacher's teaching orientation.... Only the teacher is privy to this constellation of factors. (p. 3)

It can be argued that the same situation applies to school leaders, who are never sure of the standards expected of responses to situations that may be personally unique. So, even in a vicarious sense school leaders learn little from the experiences of their colleagues.

Proposition 11. The Novelty of School Leaders' Learning Situations

In all Western Australian schools newly appointed school leaders learn on-the-job. In the struggle to survive the novice school leaders balance their skill levels against the challenges of the new job, usually in an unfamiliar school environment, surrounded by competing interests. This research indicated that newly appointed school administrators more frequently experienced Flow, as they achieved the novelty of their quotidian goals. In part, the novelty of a new appointment means that important milestones or markers need to be achieved to establish the new leaders' credibility. At the same time, the newly appointed leader is doing a lot of cultural and administrative learning. The anthropologist Edward Hali declared that "Humans are learning organisms *par excellence*. The drive to learn is as strong as the sexual drive — it begins earlier and lasts longer" (Senge & Carstedt, 2001).

James (2010) reported that on his first appointment, the anxiety he felt then generated a considerable amount of Flow, as he survived his first days, and then took charge.

I experienced Flow over a considerable length of time while as a principal at St [REDACTED]'s Primary School in [REDACTED]. This was my first appointment as principal and like many newly appointed principals I entered the role with very little real understanding of the scope, complexity or ambiguity inherent within leading a school community. (lines 58-62)

Edwina's first principalship was in a poorly performing high school that had a huge element of toxic culture. In the years before her appointment the school had developed alternative, powerful, leadership cliques among staff and students, and

they weren't going to surrender that power without a fight. Deal and Peterson's (1999) description of a toxic school culture applied to Edwina's inherited position:

Rather than changing to the educational needs of their new clientele, teachers and administrators took refuge in the past. Negativity replaced optimism and the culture took a strikingly negative tone. Teachers berated students and lowered expectations.... The principal's chief function became to maintain order and keep parents at bay. Negative teachers ruled the roost. (p. 117)

In these circumstances Edwina had to pick her battles carefully, and make certain that she had some early successes. By breaking the days and tasks into short-term goals, with an exhausting skills-challenge work-load, Edwina experienced Flow often.

In examining an account of Barry's appointment to a small country school, it is possible to see that the Flow experiences were more common and stronger during the period of learning.

When I got there I had a good idea of what I needed to do but was certainly on my own. The focus or flow was about building relationships and working out what departmental issues were important and what were not. I think the Flow was far more sustainable because there was more to do - the boredom factor again. For me it was not that difficult because I had lived it before and was able to put previous lessons to good use – so, yes the Flow was definitely there. I maintained it because it was reaffirming my views about many things and the task at hand was clear (to me). A younger less experienced person may well have struggled.

Different situation now. I have done what I need to, so, to a degree I am treading water which I do not want to do. I am busily setting new targets to keep me occupied, while the intelligent people in the department realise that I can be of benefit to them somewhere in the Metro area. Make my family and me happy. (lines 259-270)

As Ann found on her first appointment, Flow was a great supporter as she intuitively learnt her job:

Getting a sense of Flow in leadership is a great relief because no-one tells you about this – it just occurs over time. There is poor/no language around school

leadership. It's an *ah-ha* moment. When I first started out in the principal job I had no idea what I was doing but now I feel confident, am quite good at setting others up to be successful, don't get rattled when things go "belly up", can take public scrutiny, learnt how to maintain focus and not get sidetracked, use dissent in wiser ways, feel confident enough about my pedagogical knowledge, feel okay about not knowing everything, and learnt to give over the trust to others. (lines 244-251)

For the novice school leaders the Flow experiences are generated by the moving challenge-skills equation. Like learning to drive, changing a gear or driving to the nearest shops are Flow experiences. As the new driver's skill acquisition progresses then changing a gear becomes automated and the driver sets new goals and challenges. This principle holds for novice school leaders. In a first administrative appointment the successful new school leader will experience high levels of personal Flow for acts that will be seen as routine by late career school leaders.

Proposition 12. Teams are the Key to Leadership

Schools are generally not run like highly disciplined and professional sporting teams because they are loosely-coupled, and professional relationships prevent this type of approach. However, voluntary teams are formed for specific purposes. In the school's strategic planning processes there is an intent, through staff members' involvement, to win commitment, not compliance to an agreed sense of direction for the school.

Collective-Flow is difficult to achieve in a school situation because of the number of uncontrolled variables. Barry, who has a strong commitment to working with teams, noted that collective-Flow is possible, but difficult to achieve:

It is definitely possible to experience collective-Flow. I believe it is the single most important ingredient to achieving maximum outcomes. All must be heading in the same direction. As we speak today I believe this school is experiencing it at the moment and it is very powerful. The school is united on all fronts – the difficulty is maintaining it. If a leader can recognise it they can harness a team quickly. It is a fickle thing when it is collective as there are

many variables that can change quickly. If the leader is enthusiastic, genuine, committed and passionate it can be infectious and staff will follow.

Is it more difficult – Yes because of the presence of greater number of variables, the length of time it takes to achieve goals and in the case of schools the difficulty in measuring the performance. (lines 127-137)

Edwin Flack has an encyclopaedic knowledge of sport and he related examples of Australia's winning of the America's Cup, and Lance Armstrong's cycling team as very successful examples of the power of teamwork. He warned that schools are more tolerant of non-performers, which makes a top-level performance difficult.

The answer, without a doubt, is yes. Again you only need to look to the sporting arena to see incredible examples of this.... The same can be said and asked of a school. As an administrator this Flow would be considered the Holy Grail: to have all my staff feeding off each other and just achieving success and moving forward effortlessly. However, unlike a sporting team in most cases you cannot and do not get to pick your team. You have to build with what is already there. In a sporting team, again in most cases, if one player is off their game they can be substituted until they get their mojo back. This is a lot more difficult in the school setting. In the school setting this person has to be carried and in some ways protected to the detriment of the team. (lines 249-269)

The organisational nature of schools prevents the formation of highly disciplined teams, unlike examples in the military world where operating in small, independent teams is seen as a mark of military elitism. Successful submarine attack teams were characterised by less verbalisation, less information requests, and less stress reactivity than their less successful counterparts (Espevik, Johnsen, Eid & Thayer, 2006). Special Air Service teams operate for days in dangerous situations without speaking a word to each other, relying on hand signals and a shared knowledge. In contrast, the loosely-coupled, democratic teams that exist in schools operate by talking and arguing about directions, and even then some staff members may not be committed to what has been agreed.

The Implications of This Study

It is in the nature of schools and modern education that the accountability requirements constantly change in the belief that the students' achievements can always be improved. Levin (2010), who was Deputy Minister for Education in Ontario, Canada, observed of government driven structural change:

Governments are driven to tinker with the levers they control most directly whether or not those are the real drivers of outcomes. The main means used to try to generate improvement have most often been be around structural aspects of the system – governance, finance, workforce, and accountability or incentive systems. Most of these can be changed relatively easily, at least on paper, through policy edicts, and the changes have been deeply influenced by dominant ideas rooted in economic systems such as managerialism, choice, markets, and incentives. Thus the emphasis on decentralization, competition, leadership, inspection, and accountability. (p. 740)

Against the backdrop of constant political tinkering, Levin concluded that such changes are rarely successful.

So, within the hurly-burly of constant change in schools, school leaders pursue changing targets, while teachers cope with constantly changing pedagogic and curricular demands. This stressful situation takes its toll on school staff, as resilience and job satisfaction decline. At the personnel level, Flow provides some amelioration from the disruptive aspects of schooling. In this research Flow was something that all the respondents had experienced but they couldn't articulate the sensation. When the school leaders understood the concept, their attitude toward Flow became one of interest and they all agreed that Flow helped them with their job satisfaction, motivation and drive to address the challenging issues that arose in their schools. However, at the school and system levels, the failure to recognise the effect and potential of Flow means that schools are not getting the best out of their human resources.

A major problem that was identified in the research was that school-based change was loosely coupled, the personnel were transitory, and the timeline was both flexible and generally extended. It was likely that in a project extending over 12

months different personnel would be involved, especially if the project ran over two academic years. In these diasporic circumstances Flow experiences are less likely because of the lack of long-term ownership of the change process. In planning strategic projects the school planners fail to write-in significant milestones or checkpoints, which are the formative points of evaluation that can be used for reflection and celebration. Schools do not celebrate their successes well, and turning this around will promote Flow, more resilience and more commitment from the stakeholders.

Most of the school leaders who took part in this research were administering schools that catered for students from low socio-economic environments, and student violent acts were relatively common in the schools. In the responses collected in the e-interviews it appeared that school leaders had ingrained beliefs that may be *hubris*, and it appeared they believed that celebrating successes needed to be moderated because there will always be another problem looming. Clearly the so-called *hubris* phenomenon is one that needs to be addressed at the school level to help make the school culture more positive.

Finally, this research was conducted on a very small, purposive sample (N=8). While the purposive sample served its purpose, drawing generalised conclusions is problematic. With this caveat recorded, it means that broader studies will be needed to confirm these findings.

Further Research

This examination of Flow Theory in the lives of school leaders identified key issues in the world of school leaders.

1. Positive Psychology of Schools. The factor that was labelled *hubris* was identified in school leaders' beliefs and it has major implications for the way that people relate to each other in school environments. The *hubris* that has school leaders wondering when their run of good fortune will end badly, could be indicative of the experiences of the school leaders in this small purposive sample from tough schools, but if it has

a wider spread than it is an issue for schools. Positive psychology provides one solution to this problem. Seligman's work with Csikszentmihalyi (Seligman & Csikszentmihalyi, 2000, p. 5) aimed to refocus psychology from a pathological viewpoint to one that values "... subjective experiences: well-being, contentment, and satisfaction (in the past); hope and optimism (for the future); and flow and happiness (in the present)".

Positive Psychology and the programs developed by Seligman and others (Seligman, Ernst, Gillham, Reivich, & Linkins, 2009) have attempted to move beyond the focus of youth depression, to teaching happiness in schools. The program at Geelong Grammar (Seligman et al., 2009) included the classroom activities of identifying three good things that happened each day, and identifying each student's strengths. Such programs could be broadened to include all staff members, and using staff Flow as evidence of success/happiness in these types of activities could have a positive effect on staff resilience and motivation. Because of the pressing needs in schools, further research is needed on this topic.

2. Feedback loops. Formal critical feedback for school leaders is often non-existent or delayed, as school-based projects are extended over many years, such is the nature of the work. Secondly, school leaders rarely have sole agency in relation to the projects, and potential individual Flow is subsequently diluted. In contrast, Csikszentmihalyi (1998, p. 32) observed that surgeons experience more Flow than "internists or psychiatrists" because of direct agency and immediate feedback. While psychologists employ the strategy of debriefing, the military formalises this strategy with the mandatory After Action Reports.

In a study investigating debriefing in sport, McArdle, Martin, Lennon and Moore (2010) observed of educational debriefing:

The process of debriefing in education includes three general phases: (a) systematic reflection and analysis (the individual reflects on his or her experience), (b) intensification and personalization (the refocusing of participants' reflections on to their own individual experience and the personal meaning of their experience), and (c) generalization and application (participants are asked to contemplate how their own individual

experience can be applied to a wider context; Lederman, 1992). Unlike the aims of debriefing in the military and clinical psychology, emotional and psychological recovery is not an aim of debriefing in educational/learning contexts. (p. 321)

An example of educational debriefing for learning can be seen in the Action-Reflection-Confidence Dynamic (Mackenzie & Marnik, 2008, p. 196) that the University of Maine developed to utilise the personal experiences of school leaders to advance their professional learning.

More important for school leaders is the day-to-day feedback from a *significant other* who has an oversight of the school's operations. While further research is needed, this strategy, coupled with the need to promote a positive school psychology, has the capacity to improve the resilience of school leaders.

3. Moral Good. Public schools are secular, and *moral good* is often seen as the proprietary right of the church schools. However, it was interesting that all of the school leaders in this research recognised doing moral good as the primary generator of Flow. The *moral good* seemed to provide the de facto standards for the school leaders, as measures of their effectiveness, when other standards and milestones were absent. In programs of change that may takes years to embed, small indicators give impressions of improvements, and the school leaders may then ask, "Are we doing good for our students?"

Further research is needed to find the place of moral good in school leaders' educational intentions, and it would be useful to see if there is a difference between school leaders in secular public schools and church schools on this important topic.

4. Flow in the World of School Leadership. This research was conducted with a small, purposive sample of school leaders (N= 8) mainly based in the eastern suburbs of Perth, Western Australia. The conclusions drawn from the e-interviews of this group of school leaders were important because for the first time, the fit of the nine dimensions of Flow (Jackson & Csikszentmihalyi, 1999) described by Csikszentmihalyi were challenged, and misfitting dimensions identified. Importantly

these school leaders saw doing moral good, belonging and trust as important harbingers of Flow.

Further research will be needed to confirm or reject these results so that relevant models of positive psychology can be adopted in schools to ameliorate the ongoing losses of personnel to school leadership positions.

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