

**LEARNING HOW TO SUPPORT THE DEVELOPMENT OF SELF-
DETERMINATION IN YOUNG PEOPLE; A SELF-
DETERMINATION THEORY PERSPECTIVE**

by

Sophie Nicolaysen

Doctorate in Applied Educational Psychology

School of Education, Communication and
Language Sciences

Over-Arching Abstract

Self-determination is described as an innate predisposition to experience choice, develop our competencies and interact within our social environment. Nourishing self-determination empowers young people to achieve goals, be autonomous and feel socially connected. This is key in today's society where youth unemployment and poverty are high, students from low economic backgrounds continue to experience lower academic success and deprivation is successive within families. Self-Determination Theory (SDT) emphasises the importance of satisfying basic underpinning psychological needs for life-long psychological growth and wellbeing.

The three papers depict the research journey undertaken to explore the application of SDT in work to support young people. The systematic review focuses on interventions that develop self-determination. A quantitative approach was taken to synthesise the findings from eight papers. The papers suggest interventions targeting specific skills increased young people's self-determination. However, the majority of studies used small sample sizes and narrow quantitative outcome measures over a short timeframe.

Chapter 2 is a bridging document providing philosophical and theoretical context to explain how the systematic review led to the empirical research. Critical reflections on research methodology and researcher reflexivity are also explored.

Chapter 3 presents the empirical research. The systematic review highlighted a gap in how young people's underpinning psychological needs are met systemically. Eleven participants from a multi-agency service took part in an Appreciative Inquiry to explore their work with young people. Theory driven data analysis was applied to identify how young people's needs are met. Findings indicate that professionals work in a variety of ways to meet underpinning needs of autonomy and competence. Further development into meeting needs at the systemic level and more ways to meet young people's relatedness needs may be required. The research also highlighted that developing the self-determination of young people and professionals by simultaneously meeting their underpinning psychological needs may be effective.

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Chapter One:

What effectively promotes self-determination in young adolescents?

A Systematic Review of the Literature 2011-2012

Abstract

Background: In the current political and economic climate young people's educational attainment and wellbeing are of concern. Self-Determination Theory (Deci & Ryan, 1985) places importance on positive wellbeing, health, developing intrinsic motivation and feeling empowered to achieve goals (Deci & Ryan, 1985, 2000). It is therefore the theoretical basis for this review.

Aim: This review aimed to identify education based interventions to promote self-determination in young people and their effectiveness.

Method: The systematic method outlined by Petticrew and Roberts (2006) was used in this review. An initial broad search was conducted, and when exclusion criteria were applied eight studies were selected for further review.

Results: Interventions focus on developing specific skills associated with self-determination. Quantitative scales are frequently used to measure the increase in overall self-determination as well as these specific skills. All of the studies reported increases in the specific skills and overall self-determination although statistical significance varied.

Conclusion: The results show that there are a number of interventions which can be used to promote self-determination. The studies had a number of limitations and often did not provide effect sizes or give enough data to calculate these. This made it difficult to determine the effect the interventions had. Many of the studies were conducted over a short time so long term effects were not available.

Implications for the future: Reviewing these studies highlighted a number of questions. Firstly is it possible to quantitatively measure something which is an internal state of self? Secondly is it possible to increase self-determination over a short period of time? Finally should all the change come from the child or could wider systemic change enable young people to develop their self-determination further? These are all areas which may benefit from further investigation.

Introduction

Theoretical overview

Self Determination Theory (SDT) is a motivation theory (Deci & Ryan, 2000; Niemiec & Ryan, 2009; Vansteenkiste, Ryan, & Deci, 2008) though there are varying views of Self Determination (SD) (Houchins, 2002; Price, Wolensky, & Mulligan, 2002; Shogren et al., 2008) and the skills it entails (Deci & Ryan, 2000; Vansteenkiste, et al., 2008; Wehmeyer, 1997; Wehmeyer, Abery, Mithaug, & Stancliffe, 2003). Deci and Ryan (1985, 2000) proposed the organismic dialectic perspective of SD. This assumes that humans are active and growth-oriented in:

- striving to satisfy three psychological needs (See Table 1, Deci & Ryan, 2000; Ryan & Deci, 2000)
- developing a unified sense of self (Deci & Ryan, 1985, 2000)
- pursuing connectedness within larger social structures (Deci & Ryan, 1985, 2000; Vansteenkiste, et al., 2008).

Meeting psychological needs is associated with a number of factors; see Table 1. If these needs are not met significant negative consequences and 'ill-being' can occur (Deci & Ryan, 2000 p.250; Niemiec et al., 2006; Vansteenkiste, et al., 2008) e.g. anti-social activity (Deci & Ryan, 2000; Houchins, 2002; Vansteenkiste, et al., 2008). SDT suggests that by meeting these needs we are more motivated intrinsically (Deci & Ryan, 2000; Niemiec & Ryan, 2009; Ryan & Deci, 2000; Ryan & Deci, 2000; Vansteenkiste, et al., 2008).

Research suggests that material rewards can fail to produce sustained motivation, performance and well-being (Deci & Ryan, 2000; Vansteenkiste, et al., 2008). Success from extrinsic goals does not reliably enhance well-being and can diminish it, contrary to cognitive and behavioural models of motivation (Vansteenkiste, et al., 2008). Successes achieved from intrinsically motivated goals are most directly related to satisfaction of basic needs (Deci & Ryan, 1985). Intrinsic motivation is key to pursuing goals and is an important basis for learning (Deci & Ryan, 2012; Department for Education, 2011d; Niemiec & Ryan, 2009).

SDT proposes a 'common human nature' which develops and thrives in different contexts (Ryan & Niemiec, 2009). One of the contexts focussed on is the educational

setting. Halloran (1993 p.214) states the 'ultimate goal of education' is to enable children to be self-determined.

Table 1 : Psychological Needs and factors associated with meeting these needs

Psychological needs	Factors associated with these needs being met
<p>Autonomy: a desire to self-organise and initiate experiences and behaviour. For individual's actions to be in harmony with one's integrated sense of self. Having freedom and being able to integrate external and internal actions (Deci & Ryan, 2000, p.231).</p> <p>Competence: to be able to adapt and be effective in one's exploration and interaction with the environment. Ensuring one's own preservation (Deci & Ryan, 1985, p.27).</p> <p>Relatedness: a desire to feel connected to others, to love and care for others and to be loved and cared for. A sense of belonging and acceptance with one's community (Deci & Ryan, 2000, p.231)</p>	Optimal functioning (Ryan & Deci, 2000)
	Good wellbeing (Deci & Ryan, 2000; Niemiec & Ryan, 2009; Vansteenkiste, et al., 2008)
	Good psychological health (Deci & Ryan, 2000; Niemiec & Ryan, 2009; Vansteenkiste, et al., 2008)
	Sustained performance (Niemiec & Ryan, 2009; Vansteenkiste, et al., 2008)
	Social development (Ryan & Deci, 2000)
	Health (Deci & Ryan, 2000; Ryan & Deci, 2000)

The Positive for Youth policy (Department for Education, 2011d) places an emphasis on supporting young people to develop into healthy well-rounded individuals that achieve academically, highlighting a role for schools and teachers in this.

SDT and education

Empirical research focussed on applying SDT in education is extensive (Ryan & Niemiec, 2009; Shogren, et al., 2008), particularly in relation to the education of young people with disabilities and access to mainstream education (Lee, Wehmeyer, Palmer, Soukup, & Little, 2008; Price, et al., 2002; Wehmeyer, 1997). According to SDT the intrinsic value of education is in its potential for developing human freedom and capabilities (Ryan & Niemiec, 2009 p. 270). When classroom environments meet the three SDT psychological needs, learners' intrinsic motivation is supported and by doing this students are more likely to flourish (Agran, Wehmeyer, Cavin, & Palmer, 2008; Algozzine, Browder, Karvonen, Test, & Wood, 2001; Deci & Ryan, 1985, 2000; Guay, Ratelle, & Chanal, 2008; Niemiec & Ryan, 2009; Ryan & Niemiec, 2009).

A conceptualisation of SD as an educational outcome has emerged (Wehmeyer, 1997). This stemmed from the demands of people with disabilities to experience more choice over their lives and equal access to opportunities (op cit.). Wehmeyer (op cit.) recognises that education plays a crucial part in developing an individual's skills and capacity to exert control. Wehmeyer's (2003a) functional framework considers SD as a personal construct comprised of functional characteristics and SD behaviour consisting of component elements (op.cit) (see Table 2).

Table 2: Functional characteristics and component elements of self-determination

Functional characteristics (Wehmeyer, 1997 p.178; 2003b)	Component elements (Wehmeyer, 2003a, p.179)	
The person acts autonomously	Choice making skills	Self-advocacy and leadership skills
The action(s) is self-regulated	Decision making skills	Self-instruction skills
The person acts in a self-realising manner	Problem solving skills	Internal locus of control
The person initiates and responds to event(s) in a psychologically empowered manner	Goal setting and attainment skills	Positive attributions of efficacy and outcome expectance
	Independence, risk taking and safety skills	Self-awareness
	Self-instruction skills	Self- knowledge
	Self-observation, evaluation and reinforcement skills	

It is claimed that functional characteristics are important to support and develop in the classroom (Deci & Ryan, 1985, 2000; Jang, Reeve, & Deci, 2010; Lüftenegger et al., 2012; Niemiec & Ryan, 2009; Van Ryzin, Gravely, & Roseth, 2009; Wehmeyer, 1997). Environments providing opportunities to develop these skills will enhance individual SD, leading, it is claimed, to longer term success in future learning, employment, wages, well-being and happiness (Agran, Blanchard, Wehmeyer, & Hughes, 2002; Agran, et al., 2008; Gregitis, Gelpi, Moore, & Dees, 2010; Lee, et al., 2008; Price, et al., 2002; Wehmeyer, Palmer, Shogren, Williams-Diehm, & Soukup, 2010).

Current context

Table 3 gives detail about the percentage of 16 year olds finishing Key Stage 4 with 5 GCSEs in 2009/2010 and 2010/2011 (Department for Education, 2010a, 2011a, 2011b, 2012a, 2012b). These figures show that students from less deprived areas and students without special educational needs (SEN) continue to attain higher grades than those from more deprived areas and those with SEN (Department for Education, 2011a). There are concerns that this gap will continue to grow (Pugh, in McAuley & Rose, 2010) and continue into young adulthood.

Table 3: GCSE and Equivalent Scores 2009-2011

	2009/2010	2010/2011
Percentage of students receiving Free School Meals (FSM) achieving 5 GCSEs A*-C including English and Maths	30.9%	34.6%
Percentage of students not receiving Free School Meals (FSM) achieving 5 GCSEs A*-C including English and Maths	58.5%	62.0%
Percentage of Students identified as having SEN achieving 5 GCSEs A*-C including English and Maths	22.6% without a statement 7.3% with a statement	24.7% without a statement 8.5% with a statement
Percentage of Students with no identified SEN achieving 5 GCSEs A*-C including English and Maths	66.2%	69.5%

In the Local Authority I work in the Children and Young People's Plan (CYPP 2010-2014) identifies that between 2006 and 2010 there was a reduction of young people, aged 16-24, not in education, employment or training (NEET), although the total was still greater than the national average. Nationally the number of 16-24 year olds NEET has risen over the past few years (Department for Education, 2011c; Horgan, Gray, & Conlo, 2010). In 2011 over a million young people fell into this category (Department for Education, 2011c). To improve attainment and employment status young people need to feel empowered and supported in developing skills to achieve their goals (Vansteenkiste, et al., 2008); they need to flourish (Department for Education, 2011d). SDT suggests that through this empowerment individuals are more able to achieve their goals. This would meet individual and government needs; improving outcomes is therefore a personal and socio-political issue.

The CYPP 2010-2014 discusses outcomes from the previous four years. One of the main themes prioritised for 2010-2014 is 'Learning, Participation and Personal Development'. This priority area focuses on positive outcomes for young people in relation to their well-being, fulfilling educational potential, high aspirations and making a positive contribution to the lives of others. This priority area is underpinned by the theoretical background to this research. When considering these statistics and LA priorities I was curious about what drives young people to achieve what they want to achieve, to believe they can achieve and what helps them to be independent.

Rationale

Consequently I began researching motivation theories and chose SDT (SDT; Deci & Ryan, 1985, 2000, 2012) to use in this review. I chose SDT because it considers individuals as active, growth oriented, intrinsically motivated to achieve goals, and autonomous in their actions whilst being part of a wider community (Deci & Ryan, 2000). SDT addresses individual and collective goals, behaviour, health and well-being (Deci & Ryan, 2000; Van Ryzin, et al., 2009; Wehmeyer, et al., 2010); with belongingness becoming especially important to well-being in adolescence (Chambers et al., 2007; Van Ryzin, et al., 2009).

Recent literature reviews have investigated SD and education (Algozzine, et al., 2001; Carter, Lane, Crnabori, Bruhn, & Oakes, 2011; Chambers, et al., 2007). Carter et al (2011) mapped the knowledge base of SD research by identifying:

- Which components of SD interventions have focussed on.
- Which students and educational settings are supported by interventions.
- Whether SD was identified as an outcome of an intervention.

Algozzine et al (2001) and Chambers et al., (2007) summarised the research on SD across disability groups, to share knowledge of empirically valid and specific practices for promoting SD with these groups.

These recent reviews mainly mapped empirical research and the types of interventions used rather than effectiveness of the intervention and whether SD increased. Carter et al (2011) suggested a more detailed examination of the effectiveness of interventions would be beneficial. Chambers et al (2007) pointed out that very few studies actually measure global SD.

Aims of the review

- Establish what interventions are put in place to develop global SD or components and characteristics of SD in education settings.
- Identify the effectiveness of these interventions.
- Lead onto empirical research to address further research issues identified.

Method

I applied the systematic method (Petticrew & Roberts, 2006) which involved following a number of stages (see Table 4). Stage three onwards will be discussed in more detail below.

Table 4: The Systematic Review Stages (Petticrew & Roberts, 2006)

	Stage	Action
1	Clearly define the review question in consultation with anticipated users	A consultation was undertaken with my line manager, supervisor and the Head of Children's Services for the Local Authority I work in.
2	Determine the types of studies needed to answer the question	Determined I wanted to explore "what works" in intervention studies. Therefore identified control trials and before-and-after studies as relevant to the research question.
3	Carry out a comprehensive literature search to locate these studies	Set specific search terms and carried out broad searches using online search engines.
4	Screen the studies found using inclusion criteria to identify studies for in-depth review	The abstracts of the initial articles identified were read and reduced based on their relevance to the research question.
5	Describe the included studies to 'map' the field, and critically appraise them for quality and relevance	Data was mapped and appraised to provide a coherent overview of the studies.
6	Synthesise studies' findings	The findings were synthesised.
7	Communicate outcomes of the review	The outcomes of the review were discussed with senior management in my team.

Article Selection

Stage three

Electronic searches were conducted using PsycInfo, Sage, Taylor and Francis Online, Google Scholar, Scopus and Proquest Dialog Datastar which covered the British Education Index and the Educational Resource Index and Abstracts (ERIC).

Hand searches were conducted using the references of relevant literature reviews and other articles found.

I carried out initial broad searches including the terms ‘self-determination’ ‘intervention’, ‘school’ and ‘young people’ and excluded ‘physical’, ‘exercise’. This broad search identified 3050 articles. Given this large number, to identify appropriate studies, I defined specific search terms, arrived at through reading other literature reviews (Algozzine, et al., 2001; Carter, et al., 2011; Chambers, et al., 2007) and by using database thesauri¹ to cover appropriate synonyms. Search terms included combinations and derivatives of the terms which can be found in Table 5.

Table 5: Search terms used

Treatment Group	secondary school OR High School OR adolescen* ²
Independent variable	choice making OR decision making OR problem solving OR goal attainment OR goal setting OR self-regulation OR intrinsic motivation OR/AND self-determination
Dependent Variable	behaviour OR at risk OR behaviour problems OR behaviour disorder AND/OR self-determination

Electronic searches identified a number of previous systematic reviews connected to this topic (Algozzine, et al., 2001; Carter, et al., 2011; Chambers, et al., 2007). Each time a review was encountered I refined my search terms and carried out alternative electronic searches. All searches were conducted between 10th June 2011 and January 31st 2012.

Specific articles were selected based on whether they met the following inclusion criteria:

- **Participants** – Male and female 14-16 year olds identified as having learning or cognitive difficulties, Emotional or Behavioural Difficulties (EBD) or a variant of this were considered. This was to ensure that students with a range of special educational needs were considered. Initial broad searches highlighted that previous reviews had focussed on interventions for students with predominantly

¹ ERIC Online Thesaurus; Merriam-Webster Online Thesaurus; Collins Online Thesaurus; Ovid Database Thesaurus

² By including ‘*’ at the end of the word it allows the search to identify all variations of the word e.g. adolescence, adolescent or adolescents.

learning and cognitive difficulties *or* emotional behavioural difficulties. I wanted the current review to include young people with either or both of these areas of difficulty.

- **Setting** – An educational setting. All countries were considered.
- **Intervention** – The article must describe empirical research investigating a method, tool or programme which aimed to develop SD or components associated with it. The intervention was to be delivered by an appropriate adult (e.g. a teacher or other professional). Literature reviews and descriptive studies were excluded.
- **Study design** – SD or SD component element was identified within the design. The purpose of the study being to improve, increase, promote or develop young people's skills.
- **Date of study** – searches were limited to dates between 1st January 2001 and 31st January 2012.

By doing this I identified 74 articles which I believed merited further investigation. By reading the abstracts and titles of the 74 identified articles, 20 were selected for the in-depth review.

Stage four

The 20 selected articles were then read in their entirety to check they met the inclusion criteria. Additional criteria were applied in this stage:

- **Participants** – Due to the limited numbers of studies gathered which met all criteria, studies with a broader age range of students were considered. This was limited to age 12 upwards. Primary, Elementary and Junior school students were not considered.
- **Setting** – Participants had to access a general education curriculum, in some form, on a regular basis.
- **Intervention** – Studies which did not discuss the details of the intervention and studies which developed a model were excluded.
- **Study design** – Studies which used a pre-test/post-test design or multiple baseline design were considered. So changes in skills, behaviour or approach to learning were identified explicitly in the results.

From this eight studies were selected to review in-depth. The findings of this in-depth review will now be discussed.

Stage five

Studies identified as meeting the in-depth criteria were analysed, mapped and summarised. Table 6 provides a description, study by study, of:

- Participants: total numbers, control and intervention group numbers and age of participants
- Context and country: where the research was carried out
- The component element of SD investigated
- The intervention: the tool or programme used
- Research design
- The method/sources of evidence used for data collection.
- Follow up data

The effect sizes for some studies were gathered where possible. Cohen's *d* is growing in popularity making it the standard calculation for effect sizes (Cole, 2008). Cohen's *d* is defined as the difference between two means divided by the pooled standard deviation for those means. It has clearly defined benchmarks: .20 small, .50 medium, and .80 large (Cohen, 1992). Some studies had provided their own measure; for others not enough data was provided to make an accurate calculation of effect size.

Assessing quality of studies and weight of evidence

The eight studies included were analysed using the EPPI-Centre Weight of Evidence (WoE) tool (EPPI-Centre, 2007). The WoE was based on specific criteria and questions about the quality of each study:

- Soundness of study, based upon the study only (A).
- Appropriateness of the research design and analysis used for answering the review question (B).
- Relevance of the study focus in relation to the review question (C).
- An overall weight taking into account the above criteria (D). (EPPI-Centre, 2007)

The results and synthesis of the in-depth review and WoE analysis will now be discussed.

Table 6: Description of the studies, methods and outcomes selected for the in-depth review.

Study	Participants				Context and country	Self-determination element	Intervention programme or tool	Design	Sources of evidence	Follow Up	Effect Size available?
	Total N	Age (years)	N receiving intervention	N in comparison group.							
Agran, Blanchard, Wehmeyer & Hughes (2002)	4	12-15	4	0	Middle School (USA)	Problem Solving Skills. Goal Setting: Target behaviours to improve on were identified as goals by the individual participants. They used problem solving skills to develop ways of meeting these goals.	The Self-Determined Learning Model of Instruction (SDLMI) served as the intervention. This was a three phase process. The time taken to complete each phase varied between participants.	A multiple-baseline design: pre-baseline, baseline, intervention and maintenance	Teachers observed and recorded target behaviours. Student and teacher data were collected relating to initial perceptions of outcomes at the end of the intervention and collected again at the end.	Investigation conducted and completed for 3 participants over one term. 1 participant was incomplete.	No
Agran, Wehmeyer, Cavin, Palmer (2008)	3	14-15	3	0	Midwestern Junior High School (USA)	Active Classroom Participation Skills: <ul style="list-style-type: none"> - Coming to class prepared - Beginning journaling - Taking required materials out when requested - Beginning assignments - Engaging in in-group activities as assigned 	The SDLMI served as the intervention. This is a three phase process. The time taken to complete each phase varied between participants.	A multiple-baseline design: pre-baseline, baseline, intervention and maintenance	Teachers and students recorded performance data. A primary and independent observer recorded target behaviours across experimental conditions.	The maintenance phase of the design lasted from a week to two month period dependent on the participant.	No

Table 6: Continued

Study	Participants				Context and country	Self-determination element	Intervention programme or tool	Design	Sources of evidence	Follow Up	Effect Size available?
	Total N	Age (years)	N receiving intervention	N in comparison group.							
Gregitis, Gelpi, Moor and Dees (2010)	10 (4 reported on)	Whole group: 12-18. Reported group: 15-16	10	0	Special School/ Inclusion Unit (USA)	Planning, Communicating, Behaving independently (self-regulation).	7 week (1 hour per week) Occupation-Based Self-Determination program devised from Hoffman and Field (2005) STEPS to self-determination curriculum.	Pre/post-test	Structured interviews, Student self-reports, teacher reports, observations and checklists, parent reports	Yes after the completion of the program. 3 months later	No
Kostons, van Goge and Paas (2012) Experiment 1	80	16	59	21	Secondary school computer classroom (Belgium)	Self-regulation skills: self-assessment, problem solving and task selection	One 70 minute session using self-assessment and task selection modelling through computer screen recordings with spoken text in order to teach self-regulation skills.	Pre/Post-test	Student self-reports	Not available	Yes
Kostons, van Goge and Paas (2012) Experiment 2	90	15	57	33	Secondary school (Belgium)	Self-regulation skills: self-assessment, problem solving and task selection	Effectiveness of teaching self-regulation skills through modelling	Pre/Post-test	Student self-reports, peer assessment.	Not available	Yes

Table 6: Continued

Study	Participants				Context and country	Self-determination element	Intervention programme or tool	Design	Sources of evidence	Follow Up	Effect Size available?
	Total N	Age (years)	N receiving intervention	N in comparison group.							
Lee, Wehmeyer, Palmer, Soukup, Little (2008)	45 total but 42 reported on	14-18 years old.	20	22	High School (USA)	Self-regulated problem solving, student directed learning	Teachers trained to teach Self-Determined Learning Model of Instruction (SDLMI) in a three phase process which ranged from 4-16 weeks for phase 1 and 2 then 2-11 weeks for phase 3.	Pre/Post-test randomised trial	Student self-reports, teacher reports, goal attainment data gathered for the treatment group	Final observation conducted between 2 and 11 weeks after the initial observation.	No
Martin (2008)	53	14-17 years old. Mean age 15 years	26	27 (plus additional 3381 students as a mean level group comparisons were drawn from a larger sample as a weighted comparison)	Independent boys Secondary School (Australia)	Problem solving, task management, self-regulation, self-evaluation and goal setting.	Multi-dimensional Intervention: 13 intervention modules which targeted adaptive, impeding and maladaptive behaviours. These were taught in 50 minute slots. Once all the modules were complete the post-test measures were implemented. Uncertain duration from pre-test to post-test.	Pre/Post-test.	The motivation and Engagement High-school Scale was used to rate motivation and engagement. Students rated themselves, students and teachers also monitored and reviewed modules achieved.	Not Available	Yes

Table 6: Continued

Study	Participants				Context and country	Self-determination element	Intervention programme or tool	Design	Sources of evidence	Follow Up	Effect Size available?
	Total N	Age (years)	N receiving intervention	N in comparison group.							
Rapp-Paglicci, Stewart and Rowe (2011)	142 (108 analysed).	15-18 years old. Mean age 16.8	142	0	Classroom based in the community. (USA)	Self-regulation skills – social skills, anger management, and problem-solving skills.	8 week (3 hour/week) Prodigy arts based program.	Pre/post-test	Student self-reports, parent report and measures, school data on each student	Yes 2 months after completion of the program	Yes
Wehmeyer, Palmer, Shogren, Williams-Diehm & Soukup (2010)	371	14-20 years old	Year 1: 231-235 Year 2: 165 Year 3: 110-111	Year 1: 130-132 Year 2: 106-107 Year 3: 71-72	High School (USA)	Self-Determination and post school outcomes.	A variety of different Self-Determination promoting interventions were available: The Choicemaker Curriculum, The Self-Advocacy Strategy, STEPS to Self-determination, Whose Future is it Anyway? And the SDLMI Next S.T.E.P curriculum.	Pre/post-test randomised trial placebo control group design.	Self-report measures were completed by the participants at the beginning of and over the course of the investigation. Data gathered at the beginning and at the end of years 2 and 3.	After years 2 and 3.	No

Results

General characteristics of the studies

Table 6 shows a number of the studies' characteristics differ. Six studies were conducted in North America, one in Belgium (Kostons, et al., 2012) and one in Australia (Martin, 2008). Five studies were conducted in High School or Secondary School settings. Others used a Middle School (Agran, et al., 2002), a community classroom (Rapp-Paglicci, et al., 2011), and a special school inclusion unit (Gregitis, et al., 2010).

The sample sizes varied between studies ranging from 3 to 371. One of the studies also used a weighted comparison sample group of 3381 from a wider study (Martin, 2008). The participants' age range across the studies was 12 to 20 years old. However the age range reported on was 14-20 due to attrition and time constraints; which will be discussed later.

Seven of the studies had specific participant criteria. Kostons (2012) was the exception. The criterion for five studies was that participants had a disability or learning difficulty³ (Agran, et al., 2002; Agran, et al., 2008; Gregitis, et al., 2010; Lee, et al., 2008; Wehmeyer, et al., 2010). Martin's (2008) criterion was under-performing boys. For Rapp-Paglicci, et al. (2011) participants had to have been adjudicated through the Juvenile Justice System or classed as "at risk" by the researchers.

Rapp-Paglicci, et al. (2011) were explicit about using a nonprobability sample of convenience. The other studies were not explicit. Information given in three other studies suggests judgement sampling was used; participants were identified by teachers based on selection criteria (Lee, et al., 2008; Martin, 2008; Wehmeyer, et al., 2010).

Intervention used

Four studies used the SDLMI⁴ (Agran, et al., 2002; Agran, et al., 2008; Lee, et al., 2008; Wehmeyer, et al., 2010). In Wehmeyer, et al. (2010) it was not the only intervention offered. Teachers chose the SD intervention(s) they would like to

³ The studies defined these as: Attention Deficit Hyperactivity Disorder, Attention Deficit Disorder, Autism, Oppositional defiant disorder, Emotional Behavioural Disorder, multiple disabilities, intellectual disabilities and mental retardation.

⁴ SDLMI stands for the Self-Determined Learning Model of Instruction

implement from a menu (see Table 6). Two studies combined SD interventions with other interventions (Gregitis, et al., 2010; Rapp-Paglicci, et al., 2011). Martin (2008) implemented a modular intervention where participants followed a prepare-generate-reflect-closure⁵ model in order to complete each module. Kostons (2012) implemented modelling interventions inspired by social learning theory (Bandura, 1986) where participants learnt from observing others.

Teachers implemented the interventions in all studies except Kostons (2012). Teachers received training or support in intervention implementation prior to delivering it. All studies used teachers to gather pre and post intervention data.

Table 6 outlines the component elements of SD measured. Only one study focussed on global SD (Wehmeyer, et al., 2010). Martin (2008) identified SD as part of mastery orientation. Gregitis, et al., (2010) measured changes in SD knowledge and SD behaviours. The majority of studies did not focus on one component (Agran, et al., 2002; Gregitis, et al., 2010; Lee, et al., 2008; Martin, 2008; Rapp-Paglicci, et al., 2011). Four studies included problem solving skills (Agran, et al., 2002; Kostons, et al., 2012; Lee, et al., 2008; Rapp-Paglicci, et al., 2011). Six studies included self-regulation (Agran, et al., 2008; Gregitis, et al., 2010; Kostons, et al., 2012; Lee, et al., 2008; Martin, 2008; Rapp-Paglicci, et al., 2011). Two included goal setting (Agran, et al., 2002; Martin, 2008). Two included task management and self-evaluation or self-assessment (Kostons, et al., 2012; Martin, 2008), and two included planning (Gregitis, et al., 2010; Martin, 2008).

Other elements less directly linked to SD were also targeted: social skills, communication (Rapp-Paglicci, et al., 2011; Wehmeyer, et al., 2010), student directed learning, active participation (Agran, et al., 2008), self-advocacy (Wehmeyer, et al., 2010), anger management (Rapp-Paglicci, et al., 2011), anxiety and failure avoidance (Martin, 2008). Despite interventions targeting these components these were not necessarily directly measured or reported on (see Table 8).

⁵ A procedure aimed at: "(a) providing an advance organizer for the module and its key activities, (b) enabling the participants to generate and construct key learning relevant to their motivation, (c) providing an opportunity for the participants to reflect on key messages developed through these learning, and (d) then attaining closure on the target module through having mentors sign off the module for that week" (Martin, 2008, p.240)

Experimental design

Four studies included a control group; three were explicit about using random trial assignment (Kostons, et al., 2012; Lee, et al., 2008; Wehmeyer, et al., 2010). One study also used a larger weighted sample as an additional control (Martin, 2008). Wehmeyer et al's, (2010) control group received a placebo intervention running alongside the treatment group intervention. Other studies were not explicit about the activity of the control group. Martin (2008) ensured that control participants and the remaining students in the relevant year groups took part in the intervention after the study was complete.

Agran, et al., (2002) and Agran, et al., (2008) used a multiple baseline across participants design. Agran (2002) reports that this design was used to assess the staggered effect of the intervention over time (p.283). Gregitis, et al., (2010) used a mixed methods case series design. Six studies used a pre/post-test design. Pre/post-test design is considered to improve internal validity but it can compromise external validity; generalising the results can be limited from this design (Cole, 2008).

Methods of data collection varied between the studies. Seven studies used student self-reports and teacher reports to collect data (Agran, et al., 2002; Agran, et al., 2008; Gregitis, et al., 2010; Lee, et al., 2008; Martin, 2008; Rapp-Paglicci, et al., 2011; Wehmeyer, et al., 2010). Two studies (Gregitis, et al., 2010; Rapp-Paglicci, et al., 2011) used parent reports. Three studies also used observations (Agran, et al., 2002; Agran, et al., 2008; Lee, et al., 2008). One study used structured interviews prior to and post intervention.

Consent was gained from the parents or guardians of the participants in all studies except Martin (2008) who did not report on consent. Two studies reported that the individual participants also gave their assent (Gregitis, et al., 2010; Wehmeyer, et al., 2010). Lee, et al., (2008) reported that the teachers also gave their assent. Only one study reported that both parents and the students had the opportunity to refuse participation (Rapp-Paglicci, et al., 2011).

Measures of fidelity were reported in some studies (Agran, et al., 2008; Lee, et al., 2008; Wehmeyer, et al., 2010); others were not explicit (Agran, et al., 2002; Martin, 2008; Rapp-Paglicci, et al., 2011). The studies which reported fidelity measures discussed context, compliance and competence fidelity.

The length of time for each study to be completed and follow up data to be collected varied. Only Wehmeyer et al. (2010) carried out a longitudinal study which spanned a five year period. Five studies took place over a period of two to four months including follow up (Agran, et al., 2002; Agran, et al., 2008; Gregitis, et al., 2010; Lee, et al., 2008; Rapp-Paglicci, et al., 2011). Two studies did not give exact timeframes (Kostons, et al., 2012; Martin, 2008). In some cases time constraints were placed on the study due to school schedules, school calendars, the time it took for consent to be given and the time it took to collect data (Agran, et al., 2002; Agran, et al., 2008; Rapp-Paglicci, et al., 2011).

Weight of Evidence

Table 7 summarises the overall judgements made using the EPPI-Centre WoE tool (2007).

The overall weight of evidence in a number of studies was judged as Low/Medium due to:

- small sample sizes
- specific criteria for participants
- lack of information given about ethical considerations
- limitations on data collection
- lack of a control group in some cases

The majority of the studies had very specific samples which were varied across the range of studies; this has been judged to limit generalisability.

Studies rated as medium overall were found to give more information about the experimental design and more depth to the data analysis. There were still a number of limitations with the sample size, lack of control and limited data published.

However results and discussions were more closely linked to the current research question than others.

Table 7: Weight of Evidence

	A: Trustworthy in terms of own question	B: Appropriate design and analysis for addressing the current systematic review question	C: Relevance of focus to the current systematic review question	D: Overall weight in relation to review questions
Agran, Blanchard, Wehmeyer & Hughes (2002)	Low/Medium	Low/Medium	Medium	Low/Medium
Agran, Wehmeyer, Cavin, Palmer (2008)	Low/Medium	Low/Medium	Medium	Low/Medium
Gregitis, Gelpi, Moor and Dees (2010)	Low/Medium	Low/Medium	High	Medium
Kostons, van Goge and Paas (2012)	Medium	Medium	Low	Low/Medium
Lee, Wehmeyer, Palmer, Soukup, Little (2008)	Medium	High	High	Medium/High
Martin (2008)	Low/Medium	Medium/High	Low	Medium
Rapp-Paglicci, Stewart and Rowe (2011)	Medium	Medium/High	Medium	Medium
Wehmeyer, Palmer, Shogren, Williams-Diehm & Soukup (Wehmeyer, et al., 2010)	Low/Medium	High	High	Medium/High

Studies rated as Medium/High had larger sample sizes and more rigorous data analysis were deemed to have greater weight of evidence than the other studies (Lee, et al., 2008; Wehmeyer, et al., 2010). These studies were also more aligned with the current review than other studies were found to be.

Outcomes and Effectiveness

Table 8 outlines: SD component, different interventions used and gains made. The range of success criteria and instruments used to measure the data was broad. This may be due to the range of research questions posed in each study. The studies

utilised a range of interventions targeting an array of SD components or behaviours. The measured outcomes did not always map directly onto these specific components. Some studies did not provide effect sizes or the appropriate data to calculate effect sizes. All studies reported gains made. These results will now be discussed.

The SDLMI was used in four of the studies. The results indicated that gains in SD components were made and thus suggest the SDLMI may be an effective way to develop SD or SD components. However these studies did not offer any effect sizes and often did not report whether gains were significant.

Agran et al.'s (2002; 2008) studies were based on small sample sizes with difficulties collecting all of the data due to school schedules, which lead to the maintenance period for some of the participants being only a few days. Wehmeyer et al (2010) and Lee et al (2008) had larger sample sizes and conducted the studies over longer periods of time. Wehmeyer et al's (2010) longitudinal study allowed for data collection after years two and three post intervention. Wehmeyer, et al., (2010) allowed teachers to choose and implement a variety of interventions at the same time. It is therefore difficult to distinguish if the SDLMI was the main cause for the gains or whether it was a combination of the interventions. Another finding in this study was that gains were only found on one of the measures (AIR)⁶ but not on the other (SDS)⁷. On the second measure both control and intervention group made gains over time. Wehmeyer et al (2010) suggested that there are potentially two aspects of SD being measured by the different scales. The studies have, perhaps, not considered that SD as an overall concept could be achieved in different stages. Therefore each study may have measured SD at a different moment of development and cannot be compared.

Lee et al. (2008) identified significant positive relationships between SD behaviour and academic response. This suggests that increasing SD behaviour leads to improved access to the general curriculum and decreases competing behaviours. They also highlighted that interventions to promote SD are a positive augmentation of the curriculum based on these findings. This was the only study that focussed on

⁶ AIR stands for American Institutes for Research Self-Determination Scale

⁷ SDS stands for Self-Determination Scale

how SD affects school engagement. Martin (2008) used an intervention that also resulted in significant positive gains, reported in the effect sizes. Significant gains were reported for the treatment group compared to the control group and the larger weighted sample. Pre-test scores for the control group were already higher than the treatment group, which could mean that they had less room to develop their skills. However, Martin (2008) reported the treatment group made significant gains over and above that of the weighted comparison; the intervention had an effect it was not just a return to the population mean. The study does not explain to what extent the larger weighted sample received the intervention.

Rapp-Paglicci, et al., (2011) used parent reports in addition to other data. They found significant positive behavioural changes post intervention. Positive trends in relation to school performance were found and recognised by both parents and students although these were not statistically significant. There were some inconsistencies between parent and student reports. It is difficult for parents to comment on the internal feelings of their child accurately. Students' perceived their academic self-efficacy significantly improved after programme completion. Another finding was a negative correlation with school performance and mental health symptoms which they suggest could be due to participation in the programme and perceptions of increased academic self-efficacy. There were numerous limitations in this study due to the lack of experimental design, reported by the authors (p.317), the threat to internal validity and the convenience sample. Perhaps the motivation of the participants towards change should be taken into account.

Gregitis et al (2010) and Rapp-Paglicci et al (2011) reported combining interventions. Rapp-Paglicci et al (2011) were disappointed that findings were not consistent with previous studies despite gains being made. Perhaps combining interventions is not simple. Gregitis, et al., (2010) reported a 25% difference in students' understanding and knowledge of SD between pre and post-test student reports. This study used teacher and parent perceptions and both reported positive changes.

Table 8: Results according to the targeted SD component or SD itself

SD component or characteristic	Specific detail	Intervention	Study	Significant Gains made?	Effect Size
Problem solving		SDLMI	Agran, et al., (2002)	Yes but no measure of significance	NA
			Lee, et al., (2008)	Not measured directly	-
		Self-assessment & task Selection modelling	Kostons, et al., (2012) Experiment 1	Not directly measured but suggested to have increased	-
		Prodigy arts based programme	Rapp-Paglicci, et al., (2011)	Not directly measured	-
Goal Setting		SDLMI	Agran, et al., (2002)	Yes but no measure of significance	NA
		Modular programme targeting adaptive, impeding and maladaptive behaviour	Martin (2008)	Not directly measured	-
Self-Regulation		SDLMI	Lee, et al., (2008)	Yes $p < 0.1$	NA
			Agran, et al., (2008)	Not directly measured	-
			Agran, et al., (2002)	Yes but no measure of significance	NA
		Occupation based Self-Determination intervention programme	Gregitis, et al., (2010)	Not directly measured	-
	Learning gains	Self-assessment & task Selection modelling	Kostons, et al., (2012) Experiment 2	Yes, Control $p = 0.005$ Practice $p = 0.013$.64 .61
	Planning, task management and persistence	Modular programme targeting adaptive, impeding and maladaptive behaviour	Martin (2008)	Not directly measured	-
	Internalising behaviour e.g. mood	Prodigy arts based programme	Rapp-Paglicci, et al., (2011)	Not significant $P = 0.11$.39
	Externalising behaviour e.g. disruptive behaviour	Prodigy arts based programme	Rapp-Paglicci, et al., (2011)	Yes (?) $P = 0.44$.37
	Aggressive behaviour	Prodigy arts based programme	Rapp-Paglicci, et al., (2011)	Not significant $P = 0.40$.40

SD component or characteristic	Specific detail	Intervention	Study	Significant Gains made?	Effect Size
Planning		Occupation based Self-Determination intervention programme	Gregitis, et al., (2010)	Not directly measured	-
		Modular programme targeting adaptive, impeding and maladaptive behaviour	Martin (2008)	Yes p< 0.001	.69
Academic Self-Efficacy		Prodigy arts based programme	Rapp-Paglicci, et al., (2011)	Yes 0.10	.39
Self-evaluation	Self-Assessment accuracy	Self-assessment & task Selection modelling	Kostons, et al., (2012) Experiment 1	Yes p= 0.006	.10
	Self-Assessment accuracy	Self-assessment & task Selection modelling	Kostons, et al., (2012) Experiment 2	Not significant p= 0.037	
	Task-selection accuracy	Self-assessment & task Selection modelling	Kostons, et al., (2012) Experiment 1	Yes P= 0.001	.14
	Task-selection accuracy	Self-assessment & task Selection modelling	Kostons, et al., (2012) Experiment 2	Yes P=0.004	.75
		Modular programme targeting adaptive, impeding and maladaptive behaviour	Martin (2008)	Not directly measured	-
Self-Determination	Mastery Orientation	Modular programme targeting adaptive, impeding and maladaptive behaviour	Martin (2008)	Yes against weighted sample p<0.05	.39
		SDLMI	Wehmeyer, et al., (2010)	Yes on one measure (AIR-S) p< 0.0001	NA
		The <i>ChoiceMaker</i> Curriculum			
		Steps to Self-Determination			
		Whose Future is it anyway?			
		NEXT S.T.E.P Curriculum			
	SD knowledge and behaviours	Occupation based Self-Determination intervention programme	Gregitis, et al., (2010)	Gains made but no measure of significance	NA
Task Management		Modular programme targeting adaptive, impeding and maladaptive behaviour	Martin (2008)	Yes p< 0.1	.44
	Task Selection	Self-assessment & task Selection modelling	Kostons, et al., (2012) Experiment 1	Yes P= 0.001	.14
	Task Selection	Self-assessment & task Selection modelling	Kostons, et al., (2012) Experiment 2	Yes P=0.004	.75
Active Classroom Participation Skills	Being prepared, organise, engaged, responsive to requests and promptly starting work	SDLMI	Agran, et al., (2008)	Gains made but no measure of significance	NA
Valuing		Modular programme targeting adaptive, impeding and maladaptive behaviour	Martin (2008)	Yes p<0.01	.32
Persistence		Modular programme targeting adaptive, impeding and maladaptive behaviour	Martin (2008)	Yes p< 0.01 with academic response and p<0.05 with accommodation	.43
Psychological Empowerment		SDLMI	Lee, et al., (2008)	Yes p<0.05 with academic response and p<0.05 with accommodation	NA

The students reported they felt there was an increase in their awareness of their strengths and weaknesses and their ability to set, achieve and evaluate goals. This study used very small samples and relied on self-reports, compromising validity and generalisability.

Conclusions and Recommendations

Conclusions

Various interventions available to promote self-determination have been reported including two studies that combine interventions (Gregitis, et al., 2010; Rapp-Paglicci, et al., 2011). All the studies reported positive gains and in those that reported effect sizes, the majority were medium with one being large (Martin, 2008). These interventions have been implemented in school settings, community classroom settings and an inclusion unit. Despite all the studies reporting positive gains, very few were statistically significant. The studies targeted a number of SD components but often these were not measured directly. Numerous limitations were identified by the authors of the studies. These limitations affect the reliability, generalisability and validity of the studies and this review.

Limitations

The weight of evidence tool allowed judgements to be made on each study. However, I was making subjective decisions; a limitation of the tool. The overall weight of evidence in some instances was rated as medium/high (Lee, et al., 2008; Wehmeyer, et al., 2010). This reflects the relevance of the questions researched and the methodology behind the research. This does not reflect the claims made by the individual studies based on their findings as the limitations outweighed these claims in my opinion.

Wehmeyer et al. (2010) found inconsistencies between the scales used to measure global SD. This warrants further investigation as perhaps the two measures are identifying different components or stages of SD. They suggested capturing the characteristics and components of SD behaviour may be a complex process. Are the scales used useful tools in assessing changes in global SD or are they a crude glimpse of a complex behaviour which cannot be measured quantitatively? Lee et al. (2008) also used self-reports and observations to measure changes. Using the same

scales (AIR-S and SDS) as Wehmeyer et al. (op. cit) they did not find inconsistencies between the two. Taking into consideration the previous comment, perhaps this is not the most effective way to identify changes in global SD. The design of the scale and the questions posed may not fit with the individual's construct of their behaviour and what this means to them. This may also suggest using quantitative methods may not be the most effective way of measuring global SD. The time frame for follow up varied greatly between the two studies. SD is developmental (Ryan & Deci, 2009) and perhaps the scales are measuring different components over time.

Other studies used scales and self-reports to measure changes pre and post intervention (Agran, et al., 2008; Gregitis, et al., 2010; Martin, 2008; Rapp-Paglicci, et al., 2011). Some of these used parent and teacher reports. It was noted that outcomes between parents and students may differ. Asking others to report on changes to an individual may not be appropriate. It is difficult to know how the other person feels and to what extent can an individual describe the changes they have felt through a scale, if any?

The experimental designs varied in rigour. Lack of control groups, small sample sizes and short follow up timeframes limited reliability and validity (Punch, 2005) and in some instances not all cases were reported on (Rapp-Paglicci, et al., 2011). The lack of rigour may be evident in the lack of significant results.

Some studies were affected by attrition, where participant numbers reduce over time, and absenteeism, where participants were not present during the intervention (Gregitis, et al., 2010; Wehmeyer, et al., 2010). Others were affected by time constraints, meaning in some instances post intervention data was not collected for some participants (Agran, et al., 2002). Despite this, researchers still considered that the results indicated positive gains.

Finally, only one study looked at global SD as an outcome (Wehmeyer, et al., 2010). The others identified SD components. Due to limited follow-up periods, perhaps the data cannot be used to suggest the intervention promotes global SD but merely targets a few aspects of it. As Wehmeyer et al (2010) report, capturing SD is a complex process.

Due to the limitations of the studies there are limitations to this review. A variety of settings, participants and sample sizes have been used across the studies. This has largely meant that direct comparison between studies has been difficult. However, considering the subjectivity of SD changes, perhaps the lack of comparison between studies is not entirely problematic? Lack of data to calculate effect size made it difficult to measure the effect of some interventions, although the way it is measured may not be most appropriate to understand global SD development. Providing an effect size may not convey the personal changes an individual feels; these may be greater than a numerical figure can describe.

From carrying out this systematic review I have not only learnt about the intricacy of SD and how it develops but also the complexity of the research process. Following Petticrew & Roberts (2006) systematic review process I have learnt one way of comparing different studies to satisfy my research questions. I could return to this method if I was asked to carry out research again. The process has been eye-opening for me as a new researcher. I was surprised by the lack of rigour in some of the studies and the claims made despite limitations. It has made me consider how I will describe my own results when I undertake the empirical research.

From undertaking the review I have developed my understanding of global SD and the components, skills, attitudes and beliefs that comprise SD competencies (Abery & Stancliffe, 2003b). The current review has examined the outcomes and effectiveness of education based self-determination interventions more closely, as suggested by Carter, et al.'s (2011) review findings. In contrast to Carter, et al. (op. cit.), if I was to carry out the review again, in light of the findings (Chapter 3, p.58), I would consider focussing on interventions that meet the underpinning SDT needs of young people, and how these contribute to the development of overall SD.

Further Research

The results of this review generate some questions about how we measure SD. The studies reviewed used quantitative methods which, due to limitations of the studies, may not be appropriate. Further research using qualitative methods may be beneficial in order to answer the review question fully. Further research where data is gathered over a longer period of time may help in the pursuit of what promotes SD as well as how, or if, it changes over time.

Although the interventions were carried out in specific settings, the influence of the individual on the environment and the environment and systems around the individual cannot be ignored (Bronfenbrenner, 1979; Darling, 2007). Further research into developing systemic change to support SD development may help to embed the principles behind it into the systems around the child, which in turn may support their development further.

Chapter Two:

From the Systematic Review to the Real World Research; a Bridging Document

Abstract

This bridging document provides an overview of my Doctoral research journey connecting the systematic review to the real world research. It demonstrates my personal journey as a researcher and how my epistemology and ontology have shaped the way I carried out the research. Theoretical and legislative contexts are provided to aid the understanding of this piece of work. The methodology and methods adopted in this research are discussed.

Introduction

Identifying the area of research

Since completing my undergraduate Psychology degree I have worked in a variety of roles which have supported young people. I have often wondered about what drives individuals to do the things they do across their life span. Over the course of the Doctoral course this curiosity has become embedded in my practice. I often ask children, young people, parents and teachers about the future and what they envisage they will be like, do or achieve in their future and how our work can help them long term. This type of questioning can be met with peculiar looks as often those in a challenging situation become so focussed on the problem it is difficult to see beyond it (Kelly, Kim, & Fanklin, 2008). I recognised that it was the drive within a person and how their needs drive behaviour that I was most interested in. I began to explore concepts of motivation (Deci & Ryan, 1985, 2000; Maslow, 1970 ; Weiner, 2000). This led me to intrinsic motivation (Deci & Ryan, 1985; Ryan & Deci, 2000; Vansteenkiste, Lens, & Deci, 2006) and from there what helps develop self-determination (Deci & Ryan, 1985).

Determining the research question

The systematic review enabled me to identify a gap in the literature to investigate further. The findings from the systematic review, in Chapter 1, highlighted the following:

- There are many interventions identified to promote self-determination (SD) within educational settings. These interventions largely focus on developing specific skills over a set amount of time.
- Research on SD interventions is mainly reliant on quantitative self-report measures. This may raise questions of validity of the measures used, how they relate to the individualised construct of SD, whether others (e.g. parents and teachers) can rate a subjective construct, or if it can be measured at all.
- Wehmeyer, et al (2010) identified differences in the results between measures used suggesting that they may measure SD at different stages of development

- Reliability of the research was negligible due to many limitations in the studies, such as limited reported data and researchers training component skills of SD then measuring overall SD development and other skills which were not targeted in the intervention.

I approached the systematic review quantitatively (Petticrew & Roberts, 2006) as, at that time, I was interested in the effectiveness of interventions that develop SD and the studies identified from the search were also quantitative. The studies in the review largely focused on implementing a short term intervention. The interventions focused on training the skills associated with SD (Wehmeyer, 2003a) and measuring changes. Although the interventions were an environmental change I felt the studies were focused on a child deficit model rather than seeing the child within their wider context and ecological system (Bronfenbrenner, 1979). This is something I believed important to consider when deciding upon my empirical research.

As this has been a personal journey, as well as an academic one, carrying out a quantitative systematic review led me to question not only what gaps there are in the literature but, whether and how important it is to me that something can be measured. In light of this I have had to reflect on my own values and view of the world in order to determine the way I carry out research (Willig, 2008). This will be discussed further in the Philosophical Journey section. I believed it to be important to consider a move away from training then measuring skills towards understanding the way young people's underpinning psychological needs (Deci & Ryan, 2000) are being met in order to develop SD.

Simultaneously in my day-to-day practice as a trainee educational psychologist I had become more interested in systemic ways of working and working more holistically with other professionals. This way of working is congruent with my beliefs that individuals are active in their environment. They affect the systems around them but equally the environment is active and can support or constrain the individual (Bronfenbrenner, 1979; Christens, Hanlin, & Speer, 2007). This way of working mirrors my beliefs that when change happens at different levels within a system it can have a lasting impact (Christens, et al., 2007). Reflecting on the issues from the systematic review, my practice as an applied psychologist and liaising with the stakeholders led me to consider taking a systemic approach to explore the

development of self-determination. This mirrors my on-going reflective practice and desire to challenge the perceptions of educational psychologists predominantly as individual case workers (Pellegrini, 2009).

Negotiating with stakeholders

Throughout the research process I liaised with stakeholders who had a particular interest in the empirical research (Petticrew & Roberts, 2006). The stakeholders were the senior management of the Educational Psychology Service who in turn liaised with senior management in Children's Services about the research. Due to LA priorities there were some constraints placed on me during the research process. I had originally intended to use young offenders as the target population in the systematic review. However, the stakeholders felt that this population was too specific and did not link to LA priorities. I considered their concerns and discussed the areas of difficulty relating to young offenders, for example learning difficulties and social, emotional and behavioural difficulties (Bryan, Freer, & Furlong, 2007; Chitsabesan et al., 2006; Herrington, 2009; Talbot & Riley, 2007). It was, therefore, agreed that young people with these range of difficulties would be the target population rather than just young offenders in the systematic review.

I also liaised with the stakeholders about undertaking the research in a systemic way. I wanted to work with professionals from other teams within the LA. Due to the hierarchical nature of LA systems and my trainee status, the senior management felt it would be more appropriate if they discussed my research with other service managers in order to identify teams to work with. Although I made suggestions about the range of professionals I would like to work with I had no other control over this. Once a service had been identified I then liaised with the service manager about the nature of the research and the participants I would like to use. I was led to believe from this discussion that I would be able to work with a range of professionals and managers from the service. However, on the day I carried out the research no managers were present just a range of professionals from different teams within the service. They had not been informed of the research. Participant sampling was, therefore, out of my control.

Legislative context

The process of conducting the systematic review and the empirical research spanned 2011 to 2013. During this time the Government proposed significant changes to SEN legislation in the Green Paper and 'next steps reports' following consultations (Department for Education, 2010b, 2011e, 2012c, 2013b), to take effect in 2014.

The Green paper identified a need for more effective work between different professionals to provide a more holistic, individualised plan for a young person. It is with this in mind that conducting research in a more systemic way may help to provide: a better understanding between professionals of their roles, more proactive than reactive work to meet young people's needs and, from an educational psychology perspective, enable our profession to work in different ways in order to affect change at individual and policy levels (Anderman, 2011).

Theoretical Framework

Self-determination theory (SDT) is the over-arching theory which drives the research. An overview of SDT and the components of SD were given in Chapter 1. It is important to identify the underpinning theoretical paradigm which runs through the empirical research and why this was selected.

SDT is a needs driven theory of motivation (Deci & Ryan, 1985). Many models of SD applied to education focus on the skills and behaviour associated with SD (Wehmeyer, et al., 2003). In the systematic review I identified a gap in the research about understanding how young people's needs, identified in SDT, are being met rather than how specific skills associated with SD behaviour can be developed. It is for these reasons that I chose to underpin the empirical research from the organismic dialectic perspective of SDT proposed by Deci and Ryan (1985, 2000), which assumes that humans are active and growth-oriented in:

- striving to satisfy three psychological needs: autonomy, competence and relatedness (Deci & Ryan, 2000; Ryan & Deci, 2000)
- developing a unified sense of self (Deci & Ryan, 1985, 2000)
- pursuing connectedness within larger social structures (Deci & Ryan, 1985, 2000; Vansteenkiste, et al., 2008).

These assumptions mirror my principles and values about individuals being active within their ecological systems (Bronfenbrenner, 1979; Darling, 2007). I also believe that we strive to have our needs met throughout our lives and if these are not met in a satisfactory way then ill being can occur (Deci & Ryan, 2000; Niemiec, et al., 2006; Vansteenkiste, et al., 2008). This perspective also matches my beliefs that other people are integral to our lives and how we develop, learn and grow through our experiences.

Meeting SDT psychological needs (Deci & Ryan, 2000; Ryan & Deci, 2000; Ryan & Deci, 2000), see p.11, enables an individual to flourish and maintain intrinsic motivation (Deci & Ryan, 2000). I believe this is something relevant in the classroom and the community. Providing the right support and environment to satisfy these needs may in turn increase motivation, participation and engagement of young people in the long term, not just in a specific instance. This is another reason I believed research into meeting these needs would be useful and applicable to my practice as well as other professionals.

As well as the theoretical framework the philosophical paradigm is another aspect which shaped the research and the way it has been carried out. This will be discussed next.

The Philosophical Journey

This research journey has enabled me to understand my own view of the world and has therefore been a personal journey as much as a research journey. In order to move forward on this philosophical journey I needed to understand the relationship between reality, knowledge and how to investigate and understand the world. I needed to be reflexive about the relationship between ontology, epistemology and methodology (Shacklock & Smyth, 1998).

Ontology refers to what there is to know about the world and can be understood as related to questions about the nature of being, the form of reality and what it is to be a human (Guba & Lincoln, 1998). Epistemology refers to how and what we can know; the theory of knowledge (Willig, 2008). Methodology describes the approach to research, what you do and how you do it; this is informed by the epistemology and ontology of the researcher (Grix, 2001). This will be discussed further in the Reflexivity section.

The journey to identifying my research area has been challenging. It has taken time to understand my epistemological stance and how to reflect this in the empirical research. I valued taking the time to reflect on my own values and beliefs in order to determine how to carry out the research. Considering the values and principles I hold in relation to my role and how I perceive the world I maintain a critical realist perspective (Bhaskar, 2008; Scott, 2005). This perspective states that there is a 'real world' that exists independent of our knowledge of it (Burr, 1998). It can be discovered through research but it is open to interpretation and fallibility (Scott, 2005).

Social phenomena have intrinsic meaning which cannot be measured (Sayer, 2000). The information I wanted to gather could not have been observed because of this. The data I gathered was the interpretation of individuals within their context and in turn I interpreted their meaning through the lens of SDT; a double hermeneutic (Sayer, 2000).

Robson (2002) identified that critical realism is critical of the social practices it studies. This is something I have been aware of throughout the course of my research journey. I asked participants about the work they do to support young people and by doing this, in terms of my theoretical framework, I acknowledged that their actions are influencing the development of SD of those they work with. This is based on a shared understanding of the work they do through my interpretation and that of the participants. Critically speaking these assumptions may well be false and are indeed subjective.

The methodology I selected needed to be compatible with the research area, but also with my own epistemology. This will now be discussed.

Methodology

My epistemology encompasses my values and beliefs in there being things in the world which exist irrelevant of whether I explore them or not. I also believe in the power of discourse in sharing and understanding information and that through discourse knowledge can emerge. However I believe that knowledge is drawn from experiences we have had already or from the world as we know it to be. These things affect the way I approached the research. By taking a critical realist stance I have also taken a position on the methodology. Due to my epistemology, ontology and the findings from the systematic review I selected qualitative research as a way to explore my question further.

Willig (2008) outlined that qualitative research:

- allows the research question to identify a process or entity
- gathers naturalistic data
- minimises data reduction
- create a comprehensive record of participants words and actions
- ensures participants can challenge the researcher's assumptions

These ideals match my perspective of the purpose of my research. I wanted it to explore the process of 'how' young people's underpinning psychological needs were being met. I was keen to gather detailed information from the participants, not an immediately reduced version, which is why I audio recorded the session. This allowed me to create a comprehensive record of the participants' words. I also offered a feedback session to the participants in order to reflect on the process and the findings.

There is a range of qualitative research methods which may have been appropriate to use in this piece of empirical research. Using an interview technique may have allowed me to gather more detailed and personal information, using focus groups may have provided in depth focused data, carrying out a case study may have allowed the fine details to be identified and highlighted. However I selected Appreciative Inquiry (AI) as the framework to gather my data.

Why Appreciative Inquiry?

Following the Systematic Review I gave a great deal of consideration towards the best way to approach the research. I sought regular supervision with my research supervisor to reflect on my thoughts. Using this supervision and exploring recent research I chose AI as an appropriate tool.

I chose to use AI to generate data for a number of reasons. My critical realist perspective and my qualitative methodology acknowledge my role as a researcher being active within the research process. Willig (2008) described researchers as the builders who build a house. This metaphor describes how I view my role within the research process. It is suggested that a researcher from a realist perspective is not the author of the findings but someone who “uses their skills to unearth the evidence” (p. 14). I believe that AI enabled me to do this.

AI grew out of social constructionist thought (Cooperrider, 2008) which does not match my epistemology. However I believe this was an appropriate framework to choose considering my epistemological stance for the following reasons. AI involves discovering what gives “life to a living system when it is most effective, alive and constructively capable in economic, ecological, and human terms” (op. cit. p. 3). In this sense it is exploring things already happening within an organisation, irrespective of the research. In this sense I believe it matches my critical realist perspective that there is a ‘reality’ but there may be various interpretations of it; the research I am doing is there to discover these interpretations (Larkin, Watts, & Clifton, 2006). The AI allowed participants to discuss things which are real and happen within their work; not concepts created through the discussion. The AI enabled individuals to share their differing realities to paint a broader picture of the work they do or “could” do. However, I believe that this knowledge is based on what they already know and is bound by the constraints of their reality e.g. the Local Authority.

I approached the research from an SDT perspective. By doing this I already brought the assumption that SD exists and that the participants were doing something within their roles that meets the underpinning psychological needs. In this sense the AI was not used in its traditional sense of an organisational change model but as a tool for gathering data. Using AI as a framework within research provides the facilitator with

potential for “unlocking” answers that can be put into action (Boyd & Bright, 2007). I wanted this research to be useful for professionals to reflect on and support their practice.

Additionally AI has been identified to support the development of participants’ SD (Verleysen, Boogaard, Dolce, Franssen, & Van Acker, 2010). As a researcher I wanted to be immersed within the theory and apply it to my own practice. Using a data gathering framework which met the underpinning needs of the participants reflected the overarching concept of using the research to inform practice. This will be discussed further in Chapter 3.

Reflexivity

The research journey is not a straight path; it is a process where the researcher must remain reflexive throughout (Grix, 2001). Willig (2008) outlined that reflexivity allows researchers to reflect on the position they have taken in relation to the phenomenon studied in order to identify how this has shaped the research.

Reflexivity, both personal and epistemological (Willig, 2008), has played an important part of my journey as a researcher. As I have taken a critical realist perspective I have regularly questioned what is “real”, the assumptions I make and whether my role as a researcher uncovered what there is to know. I have regularly questioned my role, my interpretations of the data and regularly revisited my research question. As a reflexive researcher I am aware of how looking through any specific lens may affect the research. My role in this process has been an active one. However I used bracketing to enable me to highlight my awareness of my personal assumptions and my position in order to provide more validity to the research (Ahern, 1999; Scott, 2005). My supervisor has played an important part in the research journey and has provided me with the space and time to bracket my reflections and evaluations of the research (Ahern, 1999). Without being reflexive I do not believe I would have made the discoveries I have made.

In the data generation I was aware of my use of language and how this could affect the answers given. However language is something Burr (1998) discussed in her realism, relativism debate. She discussed Collier’s view that language enables us to

describe the world but comes from the nature of the, social and material, things in it (p.19). I was aware in the data generation that I asked the participants to make sense of their realities through language. Then in the data analysis I was making sense of their sense making. Scott (2007) discussed how critical realism allows for both social construction of reality and recognises knowledge is fallible. This has enabled me to reflect on my own position and recognise that the participants are using their language to discover their reality and I am interpreting this further through a theoretical lens in order to make sense of a social phenomenon. I recognise that in other circumstances someone else may make sense of the data differently or a different set of participants could generate different information.

Considering the statement that knowledge can be fallible I have used my supervision sessions to reflect on and discuss whether the results would be generalisable. I believe the participants identified things important to them in their context at the time of the data generation. Although similar things may be done in other teams the same experiences may not have identified as important by others if it was conducted again. However because the research is theory driven I believe it is likely that other teams would be carrying out work that could be interpreted through the SD lens. As a critical realist I assume that social phenomena exist in the world but a different group may have a different reality. Even if this was carried out with the same group in exactly the same way it does not necessarily mean the same data would be generated. However I do believe that professionals are doing things which meet the underpinning psychological needs of young people on a daily basis and these needs exist irrelevant of whether I asked the questions and so were there to be discovered through the research process (Grix, 2001; Scott, 2005).

Chapter Three:

**How do Teams within a Local Authority meet
the underpinning psychological needs of
young people?**

Abstract

Background: Developing self-determination is said to have a sustained effect on achieving goals and experiencing positive life outcomes e.g. wellbeing, job satisfaction and educational success. Self-Determination Theory (Deci & Ryan, 1985) poses that to become self-determined three underpinning psychological needs should be satisfied. Previous research has tended to focus on developing the skills associated with self-determined behaviour rather than meeting these needs.

Aim: This research aimed to explore how professionals in a Local Authority meet the young people's underpinning psychological needs. From this, the research aimed to develop a framework for practice for professionals. The research also aimed to utilise a data generating tool that met the underpinning needs of the participants.

Method: A qualitative approach was taken to explore the aims of the research. An Appreciative Inquiry was carried out with eleven participants from a multi-agency service to generate the data. The data was analysed using a deductive thematic analysis, driven by the assumptions of Self-Determination Theory.

Results: The findings highlighted a range of work carried out by participants met the underpinning needs of young people. This was particularly prevalent in meeting the need of autonomy. Participants identified further work that could be carried out to improve the effectiveness in their work. This corresponded to having their professional needs met, particularly at a systemic level. The data highlighted the connection between the underpinning needs of the participants and the young people they work with.

Conclusions: There is a variety of work that professionals carry out to meet the needs of young people. However there are also barriers to their effectiveness. The connection between the needs of the professionals and the participants they work with highlights the importance of meeting professional needs and young people's needs simultaneously in order to increase self-determination. Barriers could be overcome by meeting the needs of professionals systemically, reducing bureaucracy and increasing joined up working.

Introduction

Background

The pressures of “achieving” in school frequently relate to academic attainment and exam success leading to positive outcomes later in life (ACEVO, 2012; Deci & Ryan, 2002; Solberg, Howard, Gresham, & Carter, 2012; Wilson, 2013). In today’s economic climate it is becoming increasingly difficult for young people to gain employment (ACEVO, Association of Chief Executives of Voluntary Organisations, 2012). There are concerns about the future wellbeing of our young people (Bradshaw, 2011; Pugh, in McAuley & Rose, 2010). Wilson (2013) identified that young people who experience low academic success make up 39% of young people unemployed and not in education. I was curious about what supports young people to become intrinsically motivated to pursue their goals which led me to Self-Determination Theory (SDT, Deci & Ryan, 1985). This theory has been applied in a variety of contexts, particularly in education (Wehmeyer, et al., 2003) as discussed in Chapter 1.

Local Context

Socio-economic challenges are particularly prevalent in the Local Authority (LA) I work in. The recent LA Children and Young People’s Plan (CYPP 2010- 2014) reported 19.9% of children live in poverty, not taking into account the recession, which is expected to reinforce the disadvantage of the vulnerable families more. The LA CYPP reports that poverty is successive within families. This affects the health, education and employment outcomes of the children and young people throughout their lives (CYPP 2010- 2014). Nurturing self-determination (SD) can empower young people despite economic, educational and socio-political challenges (Deci & Ryan, 2002). In order to provide theoretical context for the research the construct of SD and its application will now be considered.

The right environment

SDT is a needs driven theory (Deci & Ryan, 1985) which identifies three underpinning psychological needs individuals strive to satisfy: autonomy, competence and relatedness (Deci & Ryan, 1985, 2000; Ryan & Deci, 2000; Ryan & Deci, 2000). These needs are deemed critical for personal growth and wellbeing

(Deci & Ryan, 2000; Liu, Wang, Tan, Koh, & Ee, 2009) and specified as “innate psychological nutriments” (Ryan & Deci, 2000, p.229).

SD has been attributed to educational success and long-term happiness (Deci & Ryan, 1985, 2000; Mithaug, 2003; Vansteenkiste, et al., 2008), when individuals have their needs met and are intrinsically motivated (Ryan, Huta, & Deci, 2008). SDT assumes that humans are proactive, curious and have an innate tendency to learn through engaging with their inner drives and needs as well as the environment around them (Ryan & Deci, 2009). However teachers are under pressure to ensure young people achieve target grades (Bill and Melinda Gates Foundation, 2010; Department for Education, 2013a; The Sutton Trust, 2011), creating controlling learning environments (Deci & Ryan, 2002; Niemiec & Ryan, 2009; Ryan & Brown, 2005). Research has identified that external controls work in the short term but do not provide sustained motivation (Murayama, Pekrun, Lichtenfeld, & vom Hofe, 2012; Vansteenkiste, et al., 2006; Vansteenkiste, et al., 2008). External controls can thwart intrinsic motivation (Deci & Ryan, 2012) and so the innate desire to learn (Niemiec & Ryan, 2009) and engage in learning (Ryan & Deci, 2009) diminishes.

SD is the ability to choose and let these choices be the determinants of our actions rather than external reinforcement or pressures (Deci & Ryan, 1985). SDT proposes that behaviours controlled by external motivators are the least self-determined of behaviours (Niemiec & Ryan, 2009). Behaviours which originate from the self for pleasure, interest and satisfaction are the most self-determined of behaviours (Liu, et al., 2009). According to SDT the extent individuals attain and pursue their goals is dependent on the extent their psychological needs are being met (Deci & Ryan, 2000). It is not the physical environment which controls this behaviour but “social contexts affect people’s experience” and consequently the satisfaction of their needs (Abery & Stancliffe, 2003a; Ryan & Niemiec, 2009, p.265). Parents, teachers (Guay, et al., 2008) and professionals play a crucial role in this.

The role of others

According to SDT people are active in their environment and are naturally growth-orientated (Deci & Ryan, 2000). Young people interact in a variety of social contexts (Ryan & Niemiec, 2009). These social environments and related ecological systems can affect change resulting in adjustments in the structure of settings, policies and

attitudes etc. (Bronfenbrenner, 1979) offering opportunities for young people to be active in meeting their needs. The individual person (Darling, 2007) may or may not fulfil these changes unless they take advantage of these opportunities (Abery & Stancliffe, 2003a). Nevertheless other people and the environment play an important part in SD development (Abery & Stancliffe, 2003a; Cho, Wehmeyer, & Kingston, 2011) by creating opportunities.

This led me to consider how professionals may provide opportunities for young people's SD to develop. In a similar manner to Bronfenbrenner (op. cit.) I was interested in *why* the work professionals do may have an effect, not just whether it had an effect (Darling, 2007).

Rationale

From Deci and Ryan's (1985) work various sub-theories emerged focussing on: young people with disabilities (Wehmeyer, 1997), systems around the child (Abery & Stancliffe, 2003a), and functional skills in being self-determined (Wehmeyer, 2003b). Much of the research around SD and education focuses on the development of skills and the interventions that support them (Agran, et al., 2002; Agran, et al., 2008; Algozzine, et al., 2001; Carter, et al., 2011; Gregitis, et al., 2010; Kostons, et al., 2012; Rapp-Paglicci, et al., 2011; Wehmeyer, 2003b; Wehmeyer, et al., 2010).

Despite the application of these different theories I believed it was important to return to the root of SDT; meeting underpinning psychological needs. I believe professionals meet the SDT underpinning psychological needs of young people in their work but may not be aware of this.

I strive to work in an evidence based way and wanted to reflect this in my research. Taking recent research, reported LA outcomes, and national data into consideration, I wanted to explore the application of SDT within the context of my work and discover what professionals do that supports SD development by meeting young people's needs. I was curious about what the barriers may be to meeting these needs. This research should be considered as a framework for working with young people as opposed to a short term intervention to be implemented.

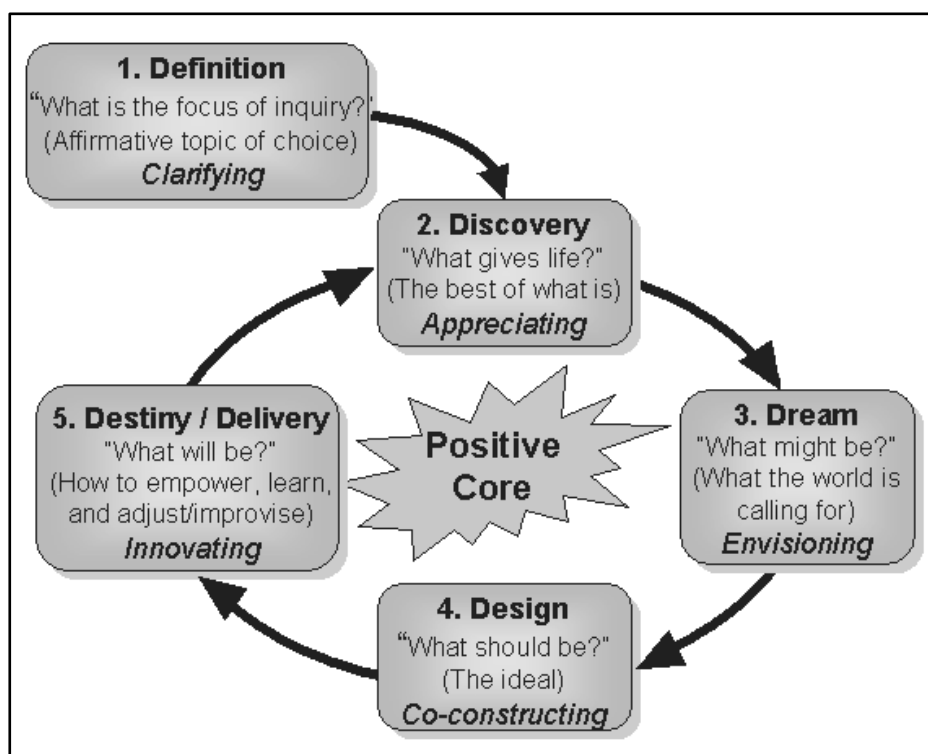
In order to do this and to immerse myself in the application of SDT it was important to select a data generating tool which met the underpinning SDT needs of the participants. This will now be discussed.

Data Generation

Appreciative Inquiry (AI) differs from conventional problem-solving action-research as the process lies in social innovation grounded in the history and facts of that group (Cooperrider & Srivastva, 1987; Hammond, 1998; Hammond & Royal, 1998). By looking through a positive lens AI looks at what is working well or has worked well in the past and uses that as a basis for future development (Hammond, 1998; Seel, 2008). AI is a ‘generative’ process (Bushe, 2007; Cooperrider & Srivastva, 1987; Hammond, 1998). Figure 1 shows the 5-D model of AI to illustrate this process. In AI all participants make a contribution and the information discovered is organic; beliefs, values and ideas are shared by the participants.

Hammond (1998) proposed that shared beliefs create thoughts and action. So a workforce may function according to the group rules and assumptions (shared beliefs) and so think and act in a certain way. By working as a group to discover these values participants feel empowered and can relate to others within their team.

Figure 1: The 5D model of Appreciative Inquiry



This meets the underpinning SDT need of relatedness (Deci & Ryan, 2000). Sharing experiences also relates to the underpinning need of competence as individuals recognise the positive work they are doing (Deci & Ryan, 2002; Ryan & Deci, 2009). Recent research identified that experiencing AI improved participants' "psychological capital" (Verleysen, et al., 2010). It was also found that participants underpinning psychological needs (autonomy, competence and relatedness) were met by experiencing the AI process, and SD increased (ibid).

AI relies on sharing experiences amongst the group and from these experiences a new positive future can be developed (Hammond 1998). Groups and organisations change in the way they investigate things (Cooperrider & Whitney, 2005; Seel, 2008). A problem solving approach may merely find problems (Hammond 1998). AI has a 'positive core' (Cooperrider and Whitney 2006) and helps to discover good practice within the group (Cooperrider & Whitney, 2005; Hammond, 1998; Seel, 2008). For the purpose of this research I was interested in finding out what teams believed they did in their work that supported young people. Using AI to explore this would allow me to learn more about what is good and therefore what may be meeting underpinning psychological needs.

Research Aims

This research aimed to:

- Utilise a data gathering tool which met the underpinning psychological needs of the participants according to SDT (See Appendix);
- Discover what teams within the LA do in their work to support young people;
- Identify how this work may meet young people's underpinning SDT psychological needs;
- Develop a framework for practice for professionals working with young people to support their underpinning psychological needs.

Method

Participants

The research was carried out with members of a Youth Offending and Prevention Service in the North East of England. This Service is the umbrella for a number of

teams including, probation, youth offending substance misuse, police, social services, health, education, and housing officers. A convenience sample was used due to the selection of people present on the day and the nature of how the participants were decided upon. 11 participants took part in the research, 6 female and 5 male. The participants represented the teams of the overarching service.

Data Generation

Appreciative Inquiry was used as a qualitative research method to generate the data. I was particularly conscious of my role as the facilitator of the AI for a number of reasons. Firstly I needed to adopt the principals of AI. The facilitator needs to help bring themes to the surface and enable the group to organise the process of doing the discovery together (Hammond, 1998). It is an active and transformational process for the participants (Cooperrider, 2008; Cooperrider & Whitney, 2005; Hammond, 1998).

Secondly the language used can shape the process (Hammond, 1998). The facilitator has to continually support members of the group to make this process unique for them (Cooperrider & Whitney, 2005). I did not want the process to be driven by my SDT perspective, preferring it to be pure and organic. Therefore I developed a script and a prompt sheet for the participants to use as a guide through the AI. I showed these to a colleague who had no knowledge of my research aims to ensure the questions I used were true to AI values and did not contain any leading information in relation to SDT.

The AI was carried out in one single two hour session. The participants remained in a whole group when I provided instructions about the different phases of AI throughout the process. Participants were split into smaller groups of 3-4 participants per group following the instructions for each phase. All of the participants came back together to feedback as a group at the end of each phase. I provided a structured time frame for each phase of AI to manage the limited time we had available. The AI was recorded onto digital voice recorders with a scribe noting the key feedback points during the process. These notes were pinned around the room for the participants to see throughout the process. I retained these sheets for use in data analysis.

Feedback was offered to the Service within 12 months of the research taking place in order to debrief and provide an opportunity for the participants to feedback.

Data Analysis

I transcribed the Appreciative Inquiry verbatim but anonymised the identities of the participants and young people. Transcripts were subjected to a theoretical thematic analysis (Braun & Clarke, 2006). The coding systems were driven by the research question and application of SDT as a framework for data analysis. The focus was on data which reflected SDT need satisfaction.

I was conscious of being theory driven so I critically re-read the transcription to identify other areas which may contradict SDT or may draw on other theories. This required me to maintain reflexivity and raised my awareness of my own assumptions. In order to triangulate the data I compared the key themes identified in the thematic analysis with the notes taken by the scribe in the AI. This ensured I captured an accurate account of what the participants identified as important within the work they do through my data analysis.

Braun and Clarke’s (2006) guidelines were followed to provide clarity and structure to the process (see Table 9). I also found Attride-Stirling’s (2001) thematic network model useful to visualise the data and clarify key themes.

Table 9:Thematic Analysis Process (Braun & Clarke, 2006)

Phase	Description	Action
Phase 1	Familiarisation with data	Transcribing data, reading and re-reading the data. Noting down initial ideas.
Phase 2	Generating initial codes	Coding interesting features of the data across the entire data set, collating data relevant to each code.
Phase 3	Searching for themes	Collating codes into potential themes, gathering all the data relevant to each theme.
Phase 4	Reviewing themes	Checking if the themes work in relation to the coded extracts and the entire data set generating a thematic map.
Phase 5	Defining and naming themes	On-going analysis to refine the specifics of each theme and the overall story the analysis tells generating clear definitions and names for each theme.
Phase 6	Producing the report	The final opportunity for analysis. Selection of vivid extract examples, final analysis of selected extracts relating back to the literature and research question, producing a scholarly report of the analysis.

Ethical Considerations

Following the British Psychological Society guidelines the research design addressed various ethical issues. All participants were given a written information sheet outlining the research. Informed, written consent was granted by the participants. Participant's names have remained anonymous and only referred to as P(M) for a male participant and P(F) for a female participant. I respected confidentiality of the services and the individuals the participants work with by altering any other identifying information. Participants were informed they had the option to withdraw at any time.

They were informed that the audio recordings would be destroyed following research completion and in the meantime would be stored in a secure office that only I would have access to. The research design was considered ethically sound by Newcastle University Ethics Committee.

Findings

Data analysis was a journey full of discovery and adventure (Willig, 2008). I describe it as this because the transcription of the AI has not only provided a significant amount of detailed information which explore the aims of the research but also data has emerged about the way professionals' needs are satisfied in order for them to work more effectively. Through the analysis the following have been found:

- A variety of ways professionals in LA teams meet the needs of young people;
- A variety of ways professionals' could work in order to be more effective;
- Meeting professionals' SDT needs could enable them to be more effective in their roles;
- Meeting professionals' needs and the needs of young people are connected;

These key findings will be explored in more detail in the subsections below. Direct quotes are used to provide further understanding of the information which generated the identification of the themes and work carried out by professionals.

Through the AI process the participants generated a significant amount of detailed information. The structure of the different phases guided participants from identifying the work they already do with young people to consider what their role could be and how to implement this.

In the 'discover' phase participants discussed what they already do to support young people. They were vibrant in their discussions and keen to share success stories. In the 'dream' phase participants initially found it difficult to engage in more expansive thinking about the future of their work (Boyd & Bright, 2007). They found it difficult to develop their ideas about their ideal way of working; they frequently identified barriers. However, the structure of the AI encouraged the participants to apply their knowledge of their work to highlight how to overcome these and be creative.

Participants found some aspects of the 'design' and 'destiny' phases challenging. They identified that it would have been beneficial to have members of management in the AI to create an effective action plan to develop their way of working. The participants were required to develop provocative propositions in the 'design' phase to challenge them and inspire them. Again some participants found it difficult to think in this way but highlighted that it was because they were not used to this way of thinking.

The participants' passion for their work and their connection to young people was apparent throughout the session. The AI process gave them the opportunity to share these feelings with likeminded people. This opportunity helped to maintain lively discussions in each of the phases, despite initial difficulty in some phases. The participants engaged well not only in their small groups but in the whole group feedback sessions. The scribe was able to note down the information generated in these feedback sessions. Having the opportunity to share ideas in the feedback sections of the process frequently led to in depth discussions between participants about their role and their ideals. The participants reflected back at the end that they had found the AI process useful for a variety of reasons but particularly to reflect on practice (see Appendix 1).

An aim of the research was to provide a framework for practice. This is something I have considered in my presentation of the findings. As this research has been carried out in my role as an applied psychologist I have drawn on evidence from

Currie (2000) to present the findings. Currie (op. cit.) plotted the work of educational psychologists across three main levels: individual child or family, school or establishment and the local authority level. These levels have enabled me to frame the data so it is useful for applied practice. For the purpose of this research I have adapted these levels to: individual, community and systemic level. I adapted these levels into terms I thought fitted with the context of the research and so that they would be more accessible and meaningful to the other professionals with whom I worked.

How professionals are meeting the underpinning needs of young people

Table 10 maps the three theory driven themes against the different types of work carried out by professionals. These findings identified that there is work being done at all three levels of professional practice to meet the needs of young people. This set of data was mainly generated in the “define” and “discover” phases of AI.

Research (Niemi & Ryan, 2009; Ryan & Deci, 2009) identifies that all these needs should be satisfied as this enables young people (YP) to internalise the knowledge, practices and social connections around them and become intrinsically motivated.

Table 10 highlights the majority of this work is at the individual level, particularly meeting the need of autonomy.

Participants often referred to the work they did in terms of achieving successes and “positive outcomes” for young people. Initially they did not discuss specific pieces of work or types of activities they carried out. They seemed to find it difficult to identify the specific work they had done that contributed to these. This may be due to being participants, or the process of AI is something they have not encountered before or that the work they do is so embedded in them it is difficult to identify these specifics. The AI framework and structured prompts I provided enabled this level of reflection to take place.

Although I have categorised the work into SDT themes connections can be seen in how the work meets all three psychological needs (see Table 1, p11). For example under the theme of competence “providing feedback” allows the YP to recognise their skills, the effect they had on the situation or task and to celebrate successes. This is in line with research which indicates perceived competence can be raised and developed through feedback (Deci & Ryan, 2002; Niemi & Ryan, 2009).

However it is recognised that to perceive competence the environment must be supportive of autonomy and relatedness also (Ryan & Deci, 2002, 2009). Without a good relationship and the right environment for the YP to have a voice and act upon the feedback then 'competence' may not be met. The YP may have felt that the professional was telling them how they are and may perceive an external locus of control and so thwart intrinsic motivation (Deci & Ryan, 2000, 2002). Connections can therefore be made across the three themes that demonstrate how the needs are met by creating the right environment for the YP.

Table 10: Work identified by LA professionals as currently carried out to support YPs

Level of Work YP Underpinning Needs	Individual (Young Person [YP])	Community (peers, parents, family and wider community)	Systemic (team, service, LA and nationally)
Autonomy	<ul style="list-style-type: none"> • Supporting YP to participate • Identifying and providing interesting activities • Identifying and providing new interesting experiences • Scaffolding positive decision making • Allowing the YP to have a voice and be heard • Providing YP with choice • Supporting YPs in decision making • Supporting the development a YP's self-esteem and self-confidence • Supporting them to meet individual targets set • Modelling pro-social behaviour • Creating individual, bespoke interventions specific to the YP 	<ul style="list-style-type: none"> • Modelling pro-social behaviour within the community • Using information learnt from community etc. to feedback to YP • Provide opportunities for community members to share their experiences and views with YP to develop an understanding of one another • Provide opportunities for YP to engage in community activities e.g. volunteering 	<ul style="list-style-type: none"> • Making the YP's voice heard at Service level • Being an advocate for the YP's in decision making meetings • YP can contact professional out of ordinary work hours • Work with local resources and centres to provide activities YPs can access 'out of hours' that they have an interest in • Recognising YP's individual needs and working in a holistic way to meet them
Competence	<ul style="list-style-type: none"> • Scaffolding new experiences • Providing feedback to the YP • Enabling YPs to experience success • Providing opportunities for YPs to put skills into action • Long term support and long term projects in place • "Guided discovery work" • Provide different levels of interventions to allow for progression 	<ul style="list-style-type: none"> • Supporting others in the community to share their views/experiences in order to put in place meaningful activities for YP to develop skills and grow • Providing opportunities to work with peers on projects 	<ul style="list-style-type: none"> • Providing education, training and employment opportunities • Completing assessments to identify progress made by YP • Work with local resources and centres to provide activities YPs can access to develop their skills or try new things • Access to professional training which opens up new opportunities for YPs to engage in

	<ul style="list-style-type: none"> • Intervening in challenging situations to support YP in finding a way out • Providing opportunity for them to create a legacy of experiences 		
Relatedness	<ul style="list-style-type: none"> • Spending time with the YP • Genuine care for the YP • Building trust in 1:1 relationship • Being available for the YP • Genuine interest in the YP's wellbeing • Being themselves with the YP • "Going the extra mile" for the YP • Being interested in the YP • Being fair 	<ul style="list-style-type: none"> • Providing opportunities for YPs to meet as a group • Supporting YP back into the community through arranged visits • Mediating with people in the community • Supporting relationships to be built/re-built • Persisting in engaging with the parents/community, despite challenges, in order to build relationships • Ensuring parents are on board in supporting the YP 	<ul style="list-style-type: none"> • Identifying and reframing the perceptions professionals have of YPs • Working with local resources and centres to create links for YPs to mix with peers and members of the community • Ethos and values, both personal and professional, that focus on YP wellbeing and support • Supportive team used to reflect on individual work and relationship with YP

Discovered themes

Coding uncovered organising and basic themes (Attride-Stirling, 2001) which helped to make sense of the work professionals do more specifically. These seemed to be strong factors in effective work. Although these themes have been identified as discrete there are many aspects of these which overlap in terms of the needs they meet. However I felt it important to discuss the three separately to allow for more specific detail to be covered.

Theme one: Above and beyond the call of duty

Each group of participants discussed work they had done that could be categorised in this way. This seemed to be a significant aspect of their work and was one of the most prevalent in the early stages of the AI.

P (M): ...people going the extra mile being prepared to go above and beyond... So there might be a time when...we do much more than is our job really in order to help young people.

There was a shared understanding that the standards and expectations set nationally could be too rigid and inflexible to be effective with a young person. So to be effective sometimes these needed to be superseded:

P (M): It's really common sometimes to be less effective if you don't address young people's...welfare

P (F): ...Can you remember when [specifically named national board] came out about the national standards and stuff and were saying that "yes you might do all the welfare stuff but you still need to be clear about ending behaviour sessions"...but it was completely unrealistic

Although participants were conscious there were expectations to work in a particular way, they recognised that to have a significant effect on a young person's life their personal and professional judgement was important. One participant identified a piece of work where he did what he believed necessary to change the young person's life:

P (M): ...there was this whole nasty world there and I basically got in, grabbed her by the scruff of the neck and pulled her out. Which was possibly unprofessional but...it made a massive impact on her life.

The way the participants discussed their work highlighted that going above and beyond what was expected may be a natural part of the participants' personal core values as well as their professional ones, an intrinsic motivation (Deci & Ryan, 1985).

P (M):...some of the skills that came out...were kind of a compassion for young people and a real focus on getting them to achieve the best. I think that's ingrained onto who we are as people rather than what's coming from the Service.

This was something all of the participants identified with throughout the AI. The participants' core values and personal qualities strongly underpin the way they approach their work. "Going the extra mile" also incorporated being available outside normal office hours and providing long term support to the young people:

P (M):...it's not just an in and out thing, you're taking weeks, months to prepare and actually do the activity

Theme two: Being an advocate for the young person

In the 'define' phase of AI, being an advocate for young people was introduced when a participant discussed their role working with the young person:

P (F):...discovery of new ways of doing things new activities to become involved in...discovering a new path in life.

The participants were clear on their role being for the young person and how important it was to identify with that young person:

P (M):...if y' listen to the media...you'd believe that all kids were just wild demons but I think we can obviously remember when we were kids we were probably similar to some of the young people we work with

The participants identified that having this understanding enabled them to make professional judgements to support the young people effectively. This regularly meant being the voice for the young person systemically and challenging the system to gain the right outcome for the individual:

P (M):...having the confidence to stand up to my manager in front of the whole team, when...challenged on me decision and being able to give the answers, the correct answers...

P (F):...and get positive outcomes

In addition to being the voice for the young person systemically the participants highlighted their role in bringing families and community members together to share views and move forward together; meeting the need of relatedness. Participants support the young person through this acting as mediators:

P (M):...if you've helped the family or a child...you dealt with the family and the young person to work together to get them back into the family...educating the family as well as the young person

An important part in being an advocate for the young person was giving them space and scaffolding their development as well as being a positive role model for them:

P (F): I think giving them good role models...I think there's an assumption that they've had the upbringing perhaps that we have...they learn from people around them...it's giving them an alternative...way of thinking and doing things...but also allowing them to take responsibility in their decision making as well

The participants scaffold the young person's learning but enable them to achieve success themselves, enhancing sense of belonging, meeting the need of relatedness, which in turn facilitates internalisation of values and a willingness to engage (Niemic & Ryan, 2009), meeting the needs of autonomy and then competence simultaneously.

These quotes highlight that the young person is at the heart of participants' work and they ensure the young person's voice is heard in their work.

Theme three: Providing opportunities

Participants discussed how they provide opportunities in a variety of ways. This sits within the research discussed in the introduction where structures within the ecological system provide opportunities for SD development (Abery & Stancliffe, 2003a; Bronfenbrenner, 1979; Niemic & Ryan, 2009). One of these ways was providing new experiences for young people:

P (M):...we do offer lots of new opportunities for kids... They do come in and do things, you know, they've never done before...as simple as taking somebody up to Newcastle...

However it was not just providing new experiences that was important but creating the opportunity for personal development alongside it (Ryan & Deci, 2009):

P (M):...if you do something different which the kids have never had any experience of, you get the kids to write out for the funding...it's giving them a legacy of their different experience, which they've never had before....

Providing opportunities was also not just limited to young people but to parents and the wider community too:

P (F):...interviewing parents and getting the parents going together...I'll get loads of info back...it's not gonna be just tell us what's good...the whole picture...more meaningful than...fill out this questionnaire...it might have some impact on how to do things

What else could be done to meet young people's needs

Table 11 maps the work participants believe could be implemented to be more effective onto their SDT needs. Although there is lots of work being done to support YPs (Table 10), participants strongly felt there were limits to their effectiveness. This set of data was mainly generated in the “dream” and “destiny” phases of AI (see Figure 1). This set of data strongly related to the needs of the participants - a serendipitous finding of the research, and discussed further in the next section.

All participants agreed that they would not change anything particular about the 1:1 work they already do with young people. They would just like to do more of it. The majority of changes and developments would be at a systemic level; this was identified across all three needs. Participants outlined that changes needed to be made in processes and protocols to allow them to do more things with young people individually and “*be out there with the kids*”. They discussed how their work sometimes felt like a paper exercise to “*cover their backs if something goes wrong*” which reduces their feelings of competence and autonomy:

P(M):...the young people and families get lost in the whole bureaucracy thing. I don't think they are the main focus, I think the main focus at the end of it is saving money.....

P(M):it's all about ticking boxes

The participants agreed that more joined up working between professionals would be beneficial. A better understanding of each other's roles was seen as something that would bring trust, meeting relatedness needs, as well as a more holistic approach to working with a young person.

P(F): Certain agencies...say they are working towards the same goal but...all have their own agendas. It's about bringing everyone to the party in an effective way...working out how you can best move forward to achieve the same goal.

P(M): You've got to have that trust...from other agencies. It's like when we say we need something...they say "why do you need it?"...We don't need them to tell w' that we don't.

Participants emphasised that young people are set targets and assessed by lots of different professionals. This can be repetitive and loses the focus of the work. This is particularly noticeable when professionals have specific targets and criteria to follow and therefore dismiss a young person in need:

P(M): It's about them picking it up isn't it....the fact that J walked out of the assessment so they haven't followed it up speaks volumes about his learning disability but yet they say he's refused to complete the assessment so...can't assess him.

P(M): It's about Services taking a bit more responsibility

Participants felt relatively helpless in making these changes to the way they work particularly when they considered this is often driven by Government agendas and LA initiatives. Examples such as funding for resources and the structure of the teams can be affected by the Government. This then affects the accessibility of services, the work they can provide and the targets they have to meet. These conditions create an environment where participant SDT needs are thwarted, affecting their performance, their perceptions of autonomy and their competence

(Baard, Deci, & Ryan, 2004). This constrains their effectiveness and therefore the ability to satisfy the needs of young people.

Table 11: Work identified by participants that could be implemented to be more effective

Level of Work Participant Underpinning Needs	Individual (Individual professional role)	Community (Work with colleagues, team and other professionals)	Systemic (Wider work at service, LA and national levels)
Autonomy	<ul style="list-style-type: none"> • Opportunity to be creative • Putting own ideas into action • Opportunity to defend decisions made • Significant part of the role is out in the field not the office 	<ul style="list-style-type: none"> • Engage in proactive rather than reactive work • Other teams and services maintaining contact with young people 	<ul style="list-style-type: none"> • Ideas being actioned by management • Shared values and ethos • Funding to allow for proactive rather than reactive work • Providing long term support for YPs and families including transition into adulthood support.
Competence	<ul style="list-style-type: none"> • Flexibility in the role • Using information learnt from work with YP to apply to and improve working practice • Personal recognition • Opportunity to provide equal amount of activities and experiences for YPs at all levels of need 	<ul style="list-style-type: none"> • Trust in professional judgement • Learning skills from others • Recognition of the work of the team and of colleagues. Celebrating each other's successes • Shared resources • Increased speed in connecting with other services • Services being more inclusive of young people with SEN 	<ul style="list-style-type: none"> • Realistic targets from Governing body • Signposting to other agencies • Sharing of skills within and across teams • Receiving feedback • Recognition of successes in teams across the LA • Reduction in systems and paperwork • Funding to allow for more creative activities • Accessible venues for YPs to attend activities

<p>Relatedness</p>	<p>More opportunity to:</p> <ul style="list-style-type: none"> • Interact and work closely with YP • Have dedicated time to working with YP to build up the relationship • More opportunity to work with parents, families and community members 	<ul style="list-style-type: none"> • Better understanding of the roles of different professionals • Professionals understanding the participants role better • Working with different professionals regularly • Opportunity to share experiences, training, reflections and ideas within the team • Joined up, holistic working 	<ul style="list-style-type: none"> • Opportunity to share experiences, training, reflections and ideas across services • Accessible, community based offices for YPs to drop into • Case or key worker approach to working with YPs
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Satisfying both young people's and professionals' needs

In data analysis it became apparent that the participants' effectiveness in their work with young people was connected with having their own needs met in their professional role (see Table 11). This finding is supported by previous research which identifies that for professionals to create environments and opportunities to develop young people's SD then this needs to be reciprocated in their professional environment (Deci & Ryan, 2002; Niemiec & Ryan, 2009).

Considering this and the data, it became apparent that the needs of the professionals and young people are interlinked through their ecological systems. This led me to consider the ecological systems around both the professionals and young people. I found it useful to refer to research in order to present the findings (Abery & Stancliffe, 2003a; Bronfenbrenner, 1979).

Figures 2 and 3 present the ecological systems adapted from the works of Darling (2007) and Abery and Stancliffe (2003a). At the Macrosystem and Exosystem level of the professionals and young people the factors, settings and structures identified seemed the same. The participants highlighted that they are constrained by factors out of their control, mainly at the systemic level; the Macrosystem and Exosystem. In the dream and destiny phases of AI they regularly referenced funding, resources and Government policy or LA agendas as factors that constrained their ideal way of working with young people. These factors suggest their needs, as shown in the systems, are closely linked. The similarities between the professional and young person Microsystems highlighted the interaction between the two ecological systems further.

Figure 2: The Ecological system surrounding the Young person

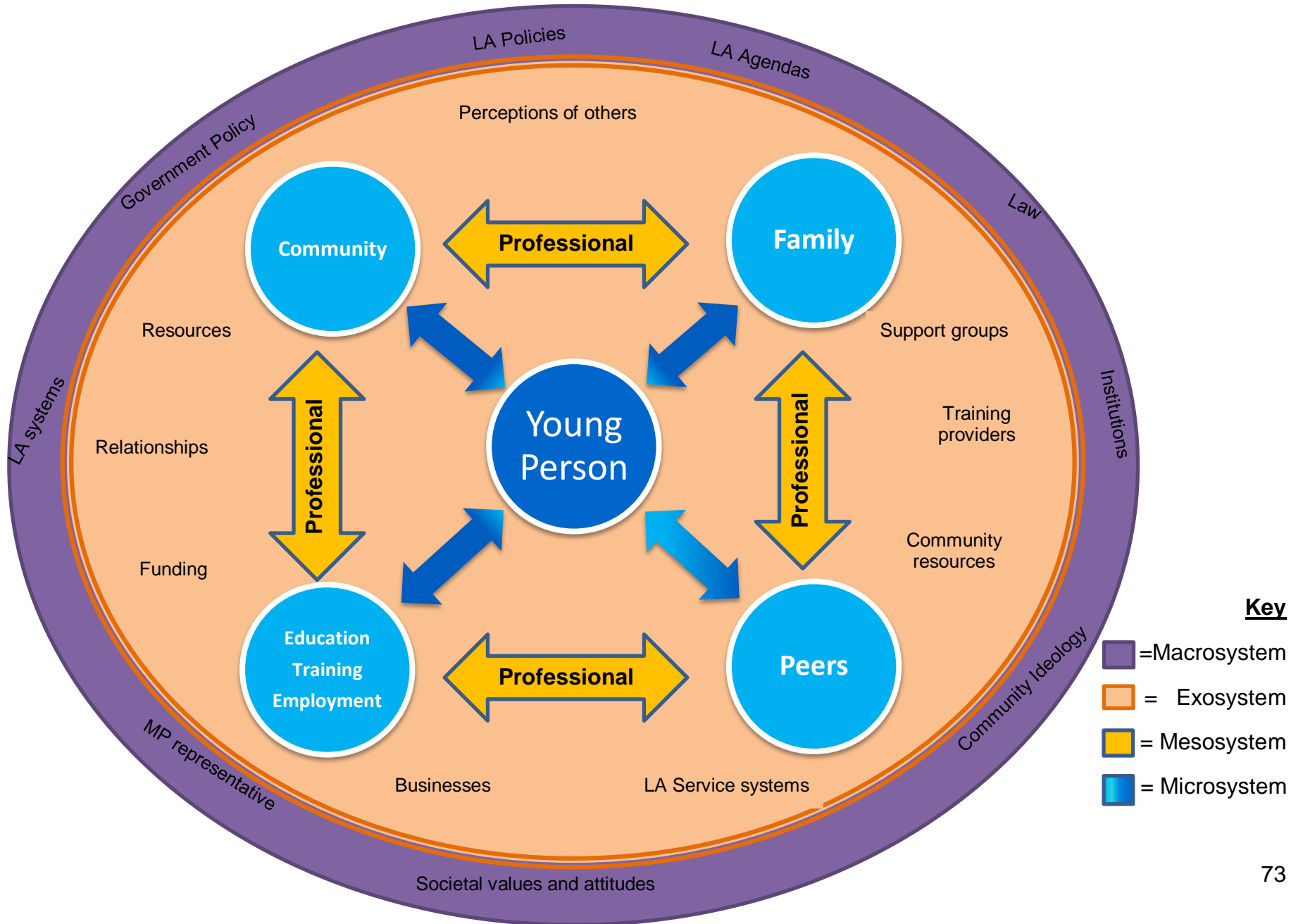


Figure 3: The Ecological system surrounding the Professional

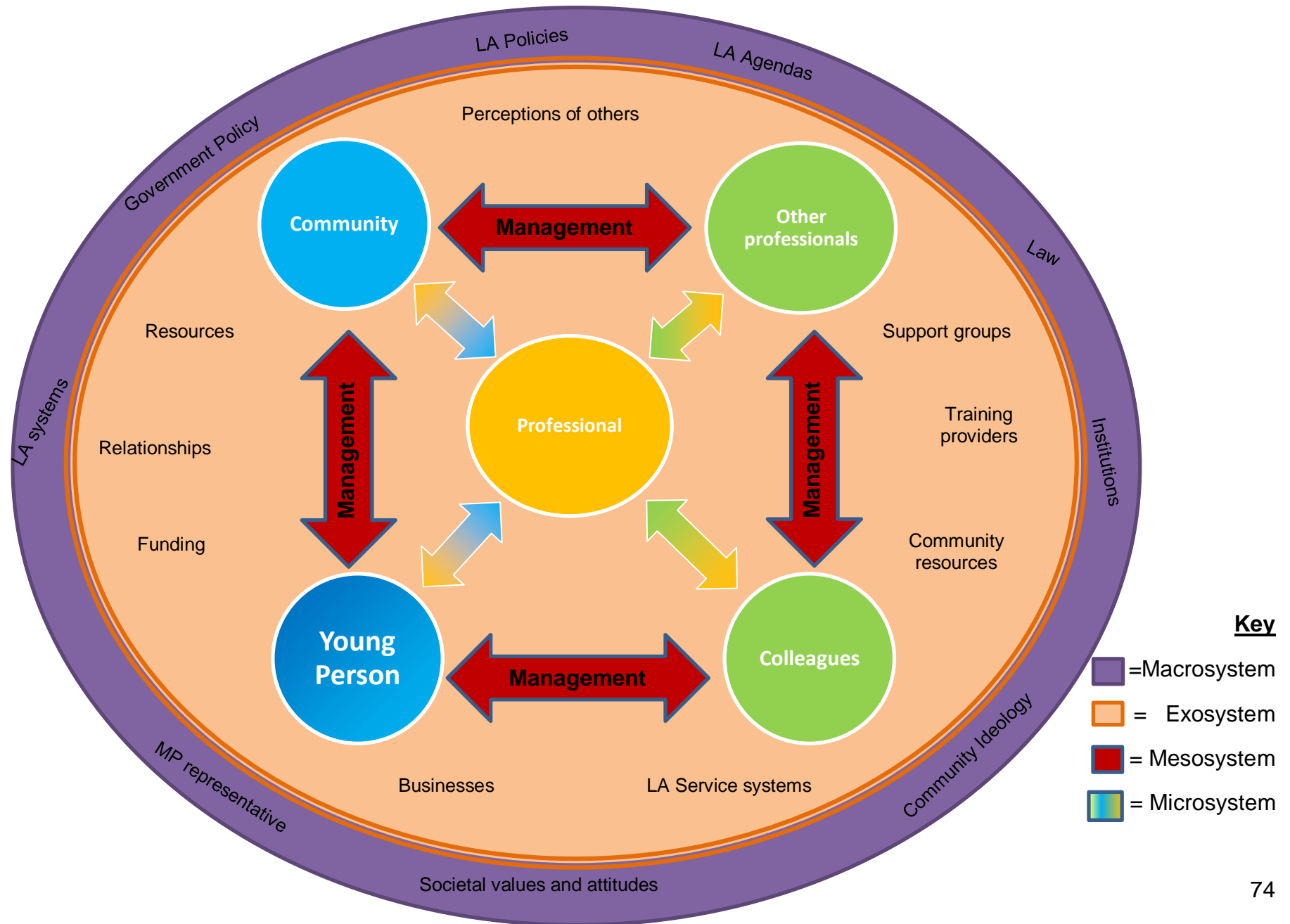
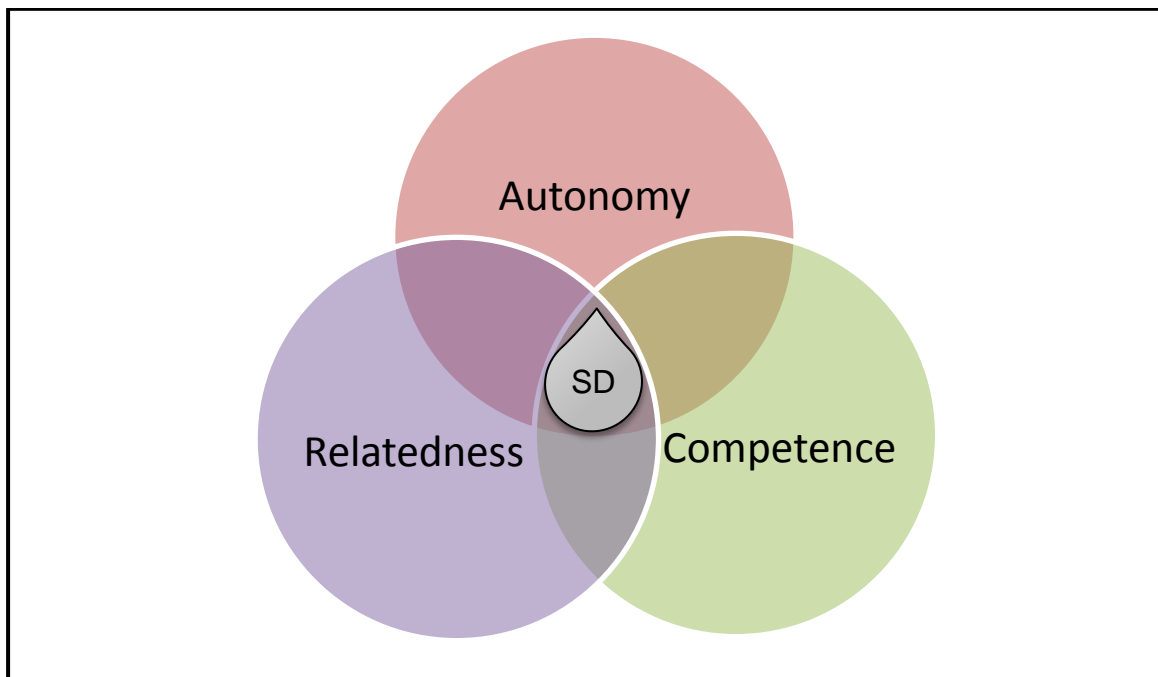


Figure 4 highlights when all three needs are met then SD can develop. The findings identified that when the needs of the professionals aren't met they find it difficult to work in a self-determined and effective way, this in turn effects the way the young person's needs are met. The findings indicate that ecological systems should nurture all three needs simultaneously, providing the right environment for both young people and professionals' SD to develop.

Figure 4: The three underpinning SDT needs



Conclusions

By considering how the needs of young people are met by professionals, this research has offered insight into the type and level of work that may do this. Key themes include being an advocate for the young person and offering opportunities for them to develop their skills. This provides an environment for young people to have their voice heard, pursue things that interest them and feel supported by professionals working with them; meeting their underpinning needs (Niemi & Ryan, 2009; Wehmeyer, 2003b). The data showed that professionals meet young people's needs across three levels of working (Currie, 2000). By mapping the results in this way it is intended to provide an awareness for professionals of the

types of work they do and perhaps an opportunity to reflect on how and why these support young people to enhance their working practice.

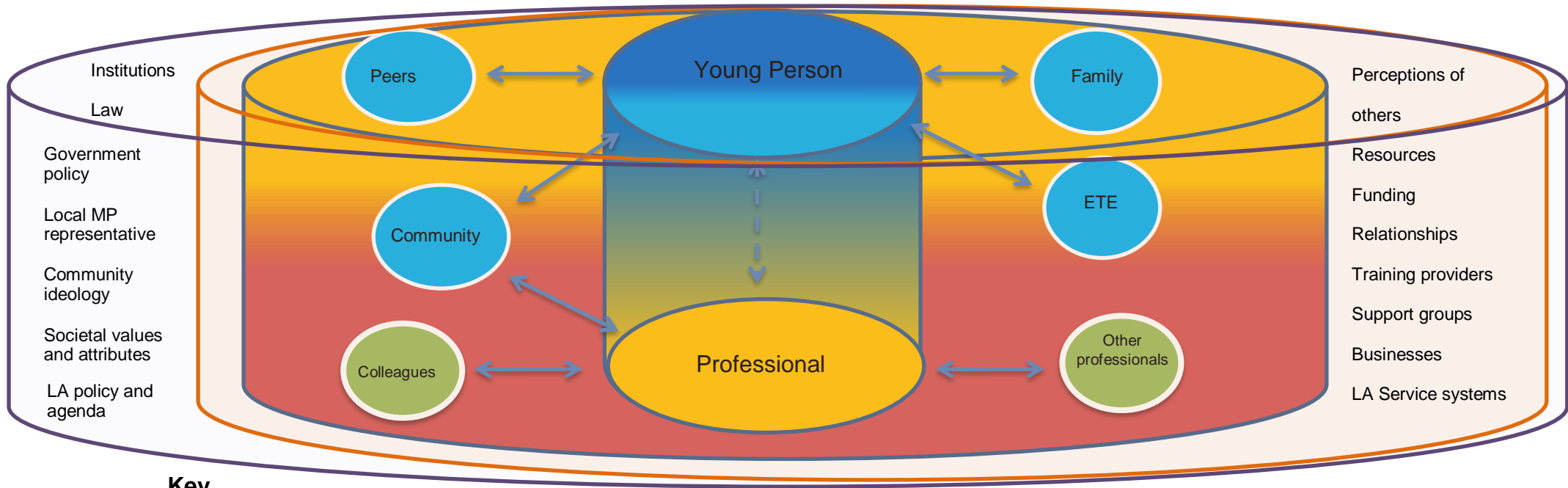
Implications for practice

This research has also offered a tentative understanding of further ways that young people's needs can be satisfied by highlighting the connection between young people's needs and those of the professionals working with them. Figure 5 presents the professionals' and young person's ecological systems three dimensionally to highlight the connection between them. The microsystem of the young person is connected by the professionals and their microsystems, which in turn is surrounded by management. It is clear to see how the work and barriers to work that influence the professional effect the young person in turn. The ecological systems are at the heart of providing opportunities to develop SD.

Currently in a changing economic climate the emphasis seems to be on achieving targets, particularly in education (The Sutton Trust, 2011); the purpose and enthusiasm for the work can be lost (Deci & Ryan, 2002). The results highlight that professionals are able to recognise ways they could work more effectively but they feel stuck within a controlling environment; thwarting their own need satisfaction (Deci & Ryan, 2000).

Conditions to meet the needs of professionals as well as young people must be implemented within the wider ecological systems. Promoting opportunities to be autonomous, feel competent and related within the professionals' environment and for those they work with should be considered as a main focus; meeting targets will follow when needs are satisfied.

Figure 5: The inter-linked ecological systems of professionals and young people



Key

- = Macrosystem
- = Exosystem
- = Mesosystem (professionals for YP and management for professionals)
- = Microsystem

Implications for Educational Psychologists

Throughout this research journey (Willig, 2008) I have discovered skills I have developed and gained as an *applied* educational psychologist. In my day-to-day practice I am an advocate of promoting the range of work EPs can do. Undertaking this research was no different. I was conscious of my role when undertaking research with professionals from a different service. I was aware of myself as, a postgraduate student, a researcher and as a trainee educational psychologist for the EPS. I was mindful of demonstrating to the participants that the work I was doing could be carried out by educational psychologists generally; it was not just part of the Doctorate course but research and intervention were core functions of our role (Currie, 2000; Farrell et al., 2006).

I set out to consciously apply theory to practice, conducting the research from a theory driven perspective, and to apply a psychological framework to carry out the research. Having the opportunity to reflect and be reflexive about these experiences has enabled me to recognise their value not only in research but in the day-to-day work of an EP. The application of both SDT and AI have filtered into my day-to-day practice as a result of this research and, I believe, should be considered and utilised more in EP practice.

Utilising Appreciative Inquiry

AI has gained stature as an organisational change tool and an action research method (Boyd & Bright, 2007; Cooperrider, 2008). I found AI to be a powerful and empowering framework to use in this research. From a researcher perspective AI generates rich qualitative data. From a facilitator perspective it provides a clear structure to engage and guide participants through the process of change whilst providing challenge and being provocative. Although it acknowledges the role, and influence, of the facilitator and their use of language (Hammond, 1998) it allows participants to explore their own practice in terms meaningful to them through generative dialogues. The facilitator is not seen as the expert which is relatively freeing as an EP (Monsen & Frederickson, 2008; Shanteau, 1992) where the 'expert role' can be a position we are expected to take in our daily practice. Moving away

from the expert role enables the “collaborative, meaning-making enterprise” that EP practice can represent (Moore, 2005, p.110).

AI is rooted in positive psychology and may be compared to solution focussed brief therapy. It was developed in relation to organisations and the effectiveness of the organisation in order to understand the system (Cooperrider & Srivastva, 1987), whereas solution focussed brief therapy was developed in family therapy (De Shazer et al., 1986) and later applied to organisations. In this way there are differences between them in the type of language used, the role of the facilitator, the role of organisation leaders, and the use of ideals compared with pragmatics (Clarke, 2003). The latter is, for me, the main difference in utilising AI. The process is described as energising for participants (Boyd & Bright, 2007) and this was particularly noticeable in the current research. Giving the opportunity for participants to focus on the ideal and be highly creative with the ideal of “what could be” generated a vibrant discussion within the group. AI provides an environment for participants to be creative, relate to one another, reflect and develop ideas (Boyd & Bright, 2007; Cooperrider, 2008; Hammond & Royal, 1998) rooted in real world practice but allows them the opportunity to be highly creative with their thinking. In this piece of research the participants identified that this way of thinking made them feel connected to their peers and enabled them to reflect on their practice more (see Appendix 1). This reflection is consistent with research that found AI satisfies participant needs of autonomy, competency, and relatedness (Verleynsen, et al., 2010).

After undertaking the AI in the research I have found myself using the AI structure in consultation meetings. I have used it in consultation meetings where the parents and a range of professionals are present and the focus is on changing something to improve the child’s learning experience, rather than reviewing their progress for example. Due to the nature of the ‘dream’ phase it allows people to share ideas that they may not have considered sharing before or sharing ideas they are not sure how to implement as then the group can develop the idea together, no matter how idealistic it is. Clarke (2003) criticises AI for being too idealistic but the participants draw on their own experiences to then ground their ideals in reality to ‘design’ the next steps, empowering participants and affecting change.

As an advocate of solution focussed approaches in my practice, using the AI approach is something that I feel requires further application in our day-to-day work and in research. EPs could use AI in its traditional sense with large staff teams within an organisation or develop the application of AI in consultation meetings or other aspects of work. Perhaps it would be useful for EP teams to use it in developing EPS delivery models through a time of national change not just to SEN (Department for Education, 2010b, 2011e, 2012c, 2013b) but also in a time of EPS changes towards traded services (Association of Educational Psychologists, 2011).

As identified in other literature (Boyd & Bright, 2007; Clarke, 2003; Cooperridder, 2008) the role of leaders is important in the process. This was also highlighted by the participants in the current research. Further investigation of the level of change with and without leaders present in AI sessions may need to be considered when applying this in EP work.

Educational Psychology and SDT

Drawing on findings of the current research I have considered the application of SDT within EP practice as two-fold; EPs meeting the SD needs of young people and having EP's needs met as professionals.

Young People's needs

Analysing the data made me more consciously aware of meeting SDT needs of young people in my own work. I have reflected on the environment I create when I carry out work with a child and how well this meets their needs as well as how I can support teachers and parents to do the same. Reconsidering how much choice I offer the young person (autonomy supporting) and the level of feedback I provide them (developing competence) during and following my work have been interesting aspects of my work to reflect on. These are not dramatic changes to make in daily work but consciously identifying how I am meeting these needs has been a useful exercise. When providing feedback to schools or parents about the 'needs' of their child I have used the SDT framework to discuss and outline my findings. In these discussions I have received feedback that it has been helpful to consider strategies alongside a reason *why* they may work.

SDT is just one of a number of theories that EPs may draw on in their work but as discussed in Chapter One (p.13) there are a number of component elements which

are part of SD development that we may suggest to schools and parents to support. Abery & Stancliffe (2003b) also identifies knowledge, attitudes and beliefs that SD comprises, including self-efficacy, as an example, that we may also provide strategies to support in school, without realising that by meeting overarching SD needs then these skills, attitudes and beliefs may also develop and vice versa. Recent research has also suggested that unlike self-efficacy SD may be domain general (Soenens & Vansteenkiste, 2005) . Soenens & Vaansteenkiste (2005) found “*that the interpersonal environment perceived by young people impacts on their self-determined functioning rather than directly on domain-specific outcomes*” (p.602). They also found that when parents and teachers created autonomy-supportive environments then perceived SD developed in school, job seeking and in social competence. Therefore, encouraging parents and teachers to create environments that meet SD needs may then affect the young person’s SD in a range of contexts. More research could be carried out to investigate this, and other contexts, further.

Professional Needs

As previously mentioned the current research has identified the importance of meeting professional’s needs in order for them to be effective and meet the needs of young people (see Figure 5). The importance of meeting EP needs within the EPS so that they can be effective in their work with children and young people is no different. In this time of national change (Department for Education, 2010b, 2011e, 2012c, 2013b), this research may provide an opportunity to reflect on the effect of change on EP practice.

The Green Paper (Department for Education, 2012c) provides a range of opportunities for EPs that may fulfil their professional SD needs if EPS’ are able to create the environment for them to do this. Developing ways of working systemically, holistically, jointly with other professionals and providing EPs with more opportunity to utilise their range of core functions (Currie, 2000; Farrell, et al., 2006) in different, which may meet needs of competence and autonomy; developing their SD.

Continuing to provide EPs with opportunities to reflect and share ideas with fellow EPs through supervision, peer support and staff development sessions may not only support their skill development and self-efficacy but also meet their underpinning SD needs.

Personal development

Finally, in carrying out this research I experienced an opportunity to meet my own professional SDT needs. It enabled me to create a connection between services (relatedness), allowed me to demonstrate alternative work that Educational Psychologists (EP) can do, e.g. AI and research, and challenged the participants' perspectives of the role of the EP (autonomy) whilst creating an environment that satisfied participants needs (competence). This experience has highlighted to me the practicality of applying theory to practice in order for me to develop my own skills and be more effective in meeting the needs of others. I have learnt about the process of research and recognised the effect it can have on changing practice. The role of EP as researcher is not something regularly used in day-to-day practice but it is an avenue I feel could be developed to investigate areas of interest for the LA, schools, the community or the EPS, as examples, and provide evidence to inform practice and affect change.

Further study

This research has drawn on the experiences of a small number of professionals within one Service in a LA. Further investigation into a wider range of teams and services may be beneficial to identify key themes and ways of working as well as need satisfaction. If I was carrying out the research again I would change the sample to include leaders within the organisation. This is something that the participants identified would have been useful and is recognised within AI literature as an important part of the process of organisational change (Cooperrider, 2008).

“The complexity of self-determination is captured only when the synergy between individuals and their ecosystems is considered” (Abery & Stancliffe, 2003b, p.78). Exploring the ecological systems around the young people and professionals further by taking a case study approach may provide a useful insight into the complexity of needs satisfaction and SD development.

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Appendix

Reflection on AI and SDT

As set out in the aims of the research I chose to use AI as it has been identified as a way to meet people's underpinning psychological needs through the process (Verleysen, et al., 2010). Although I did not formally measure this I felt it appropriate to report evidence I gathered. I asked participants to feedback about the AI. I wanted to know something they found challenging, something useful and something they would take away with them. This was optional and therefore not all participants responded. I asked the questions in this way so that I did not impose the SDT lens.

Analysing the comments in relation to underpinning SDT needs showed that the AI may have met all three needs in some way. The participants identified that they relished sharing information with colleagues, having shared goals and finding common themes between them. This relates to sense of belonging (Niemic & Ryan, 2009) and feeling connected as defined in the underpinning need of relatedness (Ryan & Deci, 2002). The opportunity to reflect and share in the process relates to integrating selves and feeling that actions are aligned with one's self as defined in the underpinning needs of autonomy (Ryan & Deci, 2002). Finally being able to identify what they were good at and focussing on the positives relates to the underpinning need of competence (op. cit.). The responses also identified that overcoming barriers and making changes to achieve the dream are challenging. In relation to the previous section and how the needs of professionals are met, this may be because the participants do not feel their needs are being met systemically and feel a lack of ability to affect change. They may also feel that they are working in a controlling environment which is thwarting their needs (Baard, et al., 2004; Ryan & Deci, 2009). The data emerging from both these sections suggests that with respect to these challenges the participants feel there is an external locus of control (Abery & Stancliffe, 2003b; Deci & Ryan, 1985; Ryan & Deci, 2000); management.

No further questioning was imposed on the participants to explore any further meaning from their responses. Further investigation into how AI meets the needs of participants would be useful.

Table 12: Feedback on AI: Participant quotes

Participant Underpinning Need \ Category	Useful	Challenging	Take away
Autonomy	<ul style="list-style-type: none"> - Reflection - Reflecting on practice 	<ul style="list-style-type: none"> - Thinking of the dream phase 	<ul style="list-style-type: none"> - “The Dream” - Reflection
Competence	<ul style="list-style-type: none"> - Nice to focus on the positives of the work the service does - Seeing all other professionals have the same barriers to their role in an attempt to benefit/help the young person - Identifying what we are good at 	<ul style="list-style-type: none"> - Thinking how to change - Thinking of how to overcome barriers 	<ul style="list-style-type: none"> - Thinking about changes that could be made now
Relatedness	<ul style="list-style-type: none"> - Found it useful to hear everyone had the same objectives and values - Some interesting points made. Most staff have the same ideas, goals and outlook of what we do and what needs to be done 	<ul style="list-style-type: none"> - 	<ul style="list-style-type: none"> - That we are all working towards the same goal