Adolescent Students Views of Factors Influencing Their Learning

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Introduction

In this report the focus is the students’ beliefs and understandings of their capacity to withstand setbacks and form positive goals for the future. The purpose of this study is to investigate the beliefs of adolescents. This study is part of a wider project – Influences on students’ learning goals and their capacity for self-regulation. This broader project evolved from the concern that there has been a decrease in school engagement and increased alienation among middle school students and that through interventions that are in keeping with curriculum needs, teachers may be able to influence the students’ approach to learning.

Academic Resilience and Motivation

The underpinnings of this project are embedded in the research of Dweck (2000), whilst being guided from earlier works on resilience (Werner, 1982; Rutter, 1987; Benard, 1996; Fuller, 2000); academic resilience (Finn & Rocks, 1997; Martin, 2002); goal setting (Locke & Latham, 2002); self-regulation and motivation (Zimmerman, 2002); and possible selves (Oyserman & Markus, 1990).

An area of self-regulation that was explored in detail was that of possible selves. Possible selves has been described as “the future-oriented component of self-concept” (Oyserman, Terry, & Bybee, 2002, p. 313). Various researchers have agreed that possible selves are critical for motivating action (Strauman & Higgins, 1987; Oyserman & Markus, 1990). By connecting current learning in middle school to future goals and aspirations, this project seeks to gather insights into whether students will be encouraged to develop mastery goals and move to incremental views of intelligence.

At any one time, any student may experience lack of motivation, school pressures and adversity (Martin & Marsh, 2006). A recent study of 402 Australian secondary school students found that five factors helped to predict academic resilience: confidence (self-efficacy); coordination (planning); control; composure (low anxiety); and commitment (persistence). Through path analysis, it was found that academic resilience predicted three outcomes: enjoyment of school; class participation; and general self-esteem. By identifying the underpinnings of academic resilience, educators may be able to target interventions to reduce classroom stressors and support students’ learning (Martin & Marsh, 2006). For example, because self-efficacy is a significant predictor of academic resilience, interventions could be provided that would give students opportunities to succeed in rich tasks, encouraging positive beliefs about their abilities whilst also encouraging them to plan and set future goals (Martin et al., 2006). Self-efficacy may be described as an individual’s perception of their ability to perform tasks in particular situations (Bandura, 1982, 1991). In terms of Social-Cognitive theory (Bandura, 1986), self-efficacy and goal orientation work in unison to increase motivation. How an individual perceives their ability to perform will affect to which degree he/she will be motivated.

In other words, perceptions of efficacy influence how people behave, think, feel and self-motivate. (Caraway, Tucker, Reinke, & Hall, 2003, p. 419)
In adolescence, these influences may have long term effects. Schunk and Meece (2002) believe:

> The changes in self-efficacy as adolescents develop have important implications for their school performances, friendships, and career and vocational choices. (p. 72)

The influence of families, schooling and peers all contribute to a student’s self-efficacy. As previously discussed, these influences are the unique experience of the individual and “…beliefs are context-specific judgements of personal capability to organise and execute a course of action to attain a set goal” (Zimmerman & Cleary, 2002, p. 48). According to Locke and Latham (2002), goals affect performance in several ways. For example, goal setting by students may allow them to direct their effort to a specific purpose and by working towards higher goals, students are encouraged to make a greater effort than they would with lower goals. Goals also affect persistence in that if students are allowed to control the time needed to achieve difficult goals, their effort may be prolonged. On the other hand, students may have to find a balance between the time and the intensity at which they work. Goals may also indirectly affect action by allowing students to draw on past skills and knowledge and participate in problem solving, particularly if support is given to encourage participants to attempt a variety of strategies towards achievement of those goals.

Goal setting therefore, may be an effective self-regulatory device if used consistently in the classroom. Bronson (2000) notes the connections between motivation and self-regulation when he argues that:

> Self-directed learning, problem solving, and action can occur only when the ability to control thinking or behaviour is accompanied by the wish to do so. (2000, p. 55)

In the classroom, self-regulatory behaviours may assist students in

> ...goal setting, time management, learning strategies, self-evaluation, self-attributions, seeking help or information, and important self-motivational beliefs, such as self-efficacy and intrinsic task interest. (Zimmerman, 2002, p. 64)

In other words, there are connections between academic resilience, motivation, self-efficacy and goal setting. This study therefore investigates the ability of the participants to plan and set goals and also seeks insights into underlying motivations and the students’ sense of efficacy.

**The Data Collection**

The study took a longitudinal case study approach with 10 students from regional Victoria. Five students were from a Catholic secondary school and five were from a government secondary school. These schools were chosen to become part of this project because of a history of disengagement and low motivation among students. There were six males and four female students in the project. Students were interviewed individually every four weeks and observed in the classrooms over a period of nine months.

The year 8 students participated in structured interviews questions that enquired into their family backgrounds, extra-curricula activities, peer-relationships, school environments, affects of learning, motivations and aspirations for their future. Instruments sought to discover any connections between resilience, academic resilience, self-regulation, motivation, goal setting and the future possible selves. Students also
participated in activities that looked at specific classes, for example, Mathematics, Science and English, and how they learnt in each subject. They also completed drawing activities that focused on their career aspirations and abilities to set goals.

Through an instrument, “The Ladder Instrument” that asked students to nominate factors that affected their learning in Mathematics, Science and English, it was discovered that relevancy of the subject was an important factor. This was regarded by students as more important than the interest of the subject. Students discussed the fact that they would be more likely to engage in a subject if they thought it to be relevant to their future aspirations. From this response another instrument was developed, the Drawing Instrument, to determine how students see themselves now and at key points in their future.

The purpose for this was to ascertain if students were able to plan ahead and develop strategies to achieve goals while at the same time being able to recognise their possible limitations. The theoretical underpinning of this concept is grounded in the “balanced possible self” literature. The students’ drawings were used as a prompt for further discussions about their goals, their fears and their “possible selves”. If students can connect their present learning to their future goals, believing what they are learning is relevant, they may be more inclined to self-regulate.

The instrument consisted of an A3 sheet of cardboard with six squares in which to draw responses and some pencils and crayons. The squares were labelled Year 8, Year 12, the students at 21 years of age, 25 years of age and the world in the year 2020. The students were asked “How do you see yourself in Year 8?” and so on. By giving them a drawing activity, there was less pressure for the students to verbalise their answers. After each drawing they were asked, “How will you achieve those goals?”, and if able, the students wrote the steps required next to the drawing.

The instrument was designed to allow the students to give different perspectives on their future aspirations and how their future aspirations connect to the ways of getting there, and whether that is likely to be a positive influence on their current actions or not. The instrument sought to access to whether the students had goals for the future. An example of a positive goal would be whether the students, for example, saw themselves as going to university and maybe also saw themselves as ultimately being part of a community of some sort. A negative goal might be where the students did not see an academic career for themselves or even a pathway for employment. In the case of the former one of these, it may be seen as a positive influence on behaviour, and for the latter, a less positive influence on academic motivation. Some of the other issues raised were whether the students saw a way of getting there and whether they were able to see their fears about achieving those goals and if they were positive for them or inhibiting.

While five of the drawings were directed toward the students and their own lives, the sixth square was aimed at how the students thought of the world in the future. This last square was added to encourage further discussion and determine whether the students had a positive or negative overall view of the world.

This instrument attempted to cater for students who were comfortable with a drawing or writing task, preferring it to a verbal discussion. Nevertheless, the students were able to comment freely about their drawings and this added to the richness of the task. It would seem that the drawings became a medium whereby further discussion was encouraged. These verbal displays were digitally recorded and transcribed and the drawings and the verbal comments also aided in triangulation of the data. The drawings provided the researcher with a visual display of the students’ aspirations and ability to plan ahead, and the data was checked with the other instruments for validity. The drawings of one student, Cathy, has been chosen to illustrate the nature and inferences of the data.
The Case of Cathy

In summary, Cathy is a 14 year old student in Year 8, regional Australia. She lives at home with her parents, sisters and brother and has a structured and disciplined home life. She feels at times that her mother is over-protective but agrees with the principle of rules and discipline. In fact, Cathy has a sense of moral responsibility and to some degree this is evident in her choice of friendships and relationships with both adults and peers. Cathy enjoys the sense of tradition and loves her school life. She has a sense of humour and on occasion has displayed qualities of a resilient child. Cathy is aware of her sensitivities, and spends time thinking about how she is able to deal with issues of insecurity. Cathy believes trust and honesty are important in relationships but at times she finds it difficult to express her emotions. In times of need she has been able to seek help with school counsellors and has developed a number of coping strategies that she uses in her private and academic life. Although she appears sensitive to others’ opinions she can be self-motivated and believes she is committed to her learning and has a clear view of her future in terms of career goals.

Although she has high aspirations, classroom observation indicated that Cathy can be disengaged and disruptive to fellow students at times. Cathy believes the teacher’s role is to create an environment where she can work well. She believes her ability to concentrate is directly related to how the teacher controls the classroom. This would indicate that her ability to self-regulate is conditional.

Nevertheless, Cathy has a determined nature and visualises herself as Australia’s first female Prime Minister.

Well, schools are all about what we’re going to be like in the future and it’s important to learn everything now so you can make something of yourself.

Cathy is aware of how she responds to subjects according to their relevance in her life and future and believes Year 8 and Year 9 could be improved for students by adding subjects that could have a greater relevance.

For many students like Cathy, relevance is an important factor in subject content and can play a direct role in their level of engagement and interest in the classroom. For the most part, Cathy is able to connect much of which she learns to her life. When asked in the “Learning and You” questionnaire from the WHOLE project, Cathy strongly agreed with the statement “I’m able to use some of the things I learn at school in other parts of my life.” Similarly, in the same questionnaire, Cathy ranked the statement “I want to understand the meaning of the things I am learning” at number 2 in importance to her. On occasions however, Cathy feels that some subject content has no particular relevance to her. For example, during a Mathematics class Cathy was unable to see the relevance of learning Algebra.

Personally my opinion on algebra is that it’s useless. I don’t reckon we need to use it in real life.

In this situation however, Cathy persisted and asked the teacher for extra assistance. In this regard she appears to be able to self-regulate when she sees the overall relevance of passing a subject such as Maths that could influence her future goals.

The following section shows a series of Cathy’s drawings and provides further insight into Cathy’s beliefs and goals for the future. Cathy was asked the question “How do you see yourself in Year 8?”
The drawing was interpreted as suggesting that Cathy sees herself as a happy student who is actively involved with sports such as tennis and netball. Her many close friendships are also highlighted as being important to her.

*Figure A: Cathy’s drawing in Year 8.*

She drew herself in her school uniform and commented that she disliked it. She is conscious of her appearance and disagrees with conforming to rules set by the teachers in this regard. Cathy enjoys school, being with her friends and involving herself in her sport, but while her aspirations for the future are high, conforming to classroom protocol is at times difficult for her as demonstrated during the observations.

Cathy was then asked to imagine she was in Year 12 and what she expected she would be doing at that stage.

*Figure B: Cathy’s drawing in Year 12.*

From this drawing we could infer that Cathy was able to see herself studying VCE (Year 12) and celebrating her 18th birthday during that year. This was in keeping with her discussions in all her interviews when she expressed interest in achieving her goals of doing well in her schooling and being eligible to attend university. Her social needs were also acknowledged by her mentioning the celebration of her birthday.

Her drawing depicts the excitement and celebration she imagines on her 18th birthday. She also draws her Mathematics and English text books and writes the words “studying VCE”, but the illustration appears to be predominantly about her birthday. This focus on her social life is also consistent with the classroom observations where Cathy seemed to spend more time interacting with her friends than doing her school work.

Cathy was asked how she saw herself at age 21 years and the steps she would take to achieve any goals.
Cathy - Age 21 years

![Figure C: Cathy’s drawing at age 21 years.](image)

Cathy’s drawing indicated that she aspired to achieve high marks in VCE and to continue on to tertiary education after Year 12. She has high aspirations for her future. When describing how she sees herself at age 21 years, Cathy is certain that she wants to attend Melbourne University to study Law and Politics.

She believes she will also have a part time job so she can support herself through her studies. Cathy was able to see the steps necessary for her to achieve entrance to tertiary level, knowing that she has to “score high in VCE” and “save money” to support her move to Melbourne.

For one that has clear long term goals and comprehension of what she needs to do to achieve those goals, her current behaviour in Year 8 does not always match her aspirations. Perhaps if teachers knew these aspirations, they may be able to link her Year 8 school work to these goals and encourage her to engage in her present tasks by helping her develop proximal short term goals.

Cathy - Age 25 years

![Figure D: Cathy’s drawing at age 25 years.](image)

Cathy’s drawing of parliament house would indicate that her political aspirations are high. By the age of 25 years of age, Cathy envisages that she will have completed her university degree in Law and Politics and will have been elected as a politician. On a personal level she believes she might be in a relationship and engaged to be married.
Her aspirations are high and she feels that if she “tries hard” and has belief in herself she will attain her goals. She also feels it is important to “believe in myself” and “do what I want, not what people tell me.”

Cathy is unwavering in her belief that she will enter a career in politics and like some students, believes effort and focus will assist her. Cathy is developing an understanding of how she learns, and recognises some of the elements that inhibit her learning experience. In theory, she is able to view her goals and her fears in the same domain and is attempting to develop a balanced possible self. With maturity, her ability to self-regulate seems to become stronger, although the influence of peers seems to limit her at times. Having future goals does not always mean that Cathy is able to self-regulate, however by reinforcing relevancy in terms of building knowledge over time to achieve long term goals, Cathy may be able to regulate her goals to meet specific tasks in Year 8.

Cathy was one of ten students who participated in the Drawing and Ladder instruments. While the students demonstrated a range of ideas of how they saw themselves in Year 8 and in the future, they were able to articulate their beliefs and it was noted that the factors that affected their learning was complex.

**Conclusion**

Overall the students enjoyed using the instrument, and while some students embraced the drawing and visual aspect of the task others were equally comfortable about performing the task with written words and discussion. This is not to say that all students found it an easy exercise. Some students found ease in visualising themselves in the future, but found difficulty in knowing the steps and processes necessary to achieve these results. Other students found difficulty in expressing themselves through drawing, preferring to write one word descriptions of how they saw themselves in the future.

It was found that Year 8 students in this study were articulate and keen to express their views on learning and their futures. It was also discovered that students had different ideas of what may have affected their learning in the classroom. Because of the range of differences among the attitudes of the students one implication for schools may be that teachers need to be more conscious of the individual in the classroom rather than approaching the students as a “group”. An implication for teachers of Year 8 students is that many of these young people are able to imagine the world beyond their secondary schooling. Some even realise they will have to support themselves and move away from their families so they may achieve their future career goals. Life skills in these particular areas may be of great benefit for these students, helping them learn skills that will eventually assist them in achieving opportunities through tertiary education.

One interesting aspect of the instrument was that many students, while being able to imagine themselves between 25 and 30 years old and able to plan for their goals at this age, found difficulty in envisaging what the world might be like in the year 2020, although this would be at the same time of their life. It would seem that some students, although aware of world issues, had difficulty in connecting these issues to their personal lives. Even when reminded of this fact, some students felt this part of the task was too difficult to imagine, although they had clear ideas of what they may be doing at that age.
While many students interviewed during the WHOLE project displayed low aspirations, some students like the case study represented above had high aspirations and expectations of the future. Having these high expectations did not necessarily translate in to the student engaging in classroom activities and being able to self-regulate consistently. For the student in this case, the teacher, the teaching methods and the relationship with the teacher was an influential factor in how the student learnt at school. If the teacher was aware of these influencing factors when teaching a topic they may have more opportunities to assist the student to self-regulate. Teachers therefore may benefit from exploring individual student goals and connecting the relevance of what students are learning to their future.

Within this study of ten students, all were able to see themselves either at university or TAFE in the future. They were less able to clearly name the processes of achieving their future goals and the obstacles that might prevent them from doing so. At present, curriculum does not seem to include career guidance for students in Year 8 and as relevance appears to be an influencing factor in their learning, students may benefit from advice at this early stage when they are beginning to choose non-core subjects.

Bibliography


