A Longitudinal Mental Health and Wellbeing Survey of Students Transitioning to a Boys’ Only Boarding School

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Abstract

This longitudinal study aimed to survey over a 12-month period, the mental health and wellbeing of new incoming students transitioning to a boys’ only boarding school. An online self-report questionnaire was used to investigate the perceptions and pre-transition experience of new incoming Year 7 students (e.g., while still in Year 6) prior to their impending transition to Secondary School (Time 1), at the end of Term 1 first year of secondary school (Time 2), and at the end of Term 3 (Time 3) first year of secondary school. All day students enrolled to begin secondary school were also invited to participate. Findings suggest that transition support efforts by the school (e.g. The Connect Programme) were successful in minimising the differences in factors associated with academic, emotional and mental wellbeing between boarding and non-boarding students at three months and six months post-transition. Mental health and wellbeing in terms of the internal, home, school and community protective resilience factors, stayed at similar levels for both boarding and non-boarding students over the first year in secondary school. Academic motivation and self-regulation were found to be higher than normative values but significantly decreased for all students after starting secondary school. Conversely, internalising (e.g. emotional problems) and externalising problems (e.g. conduct problems) increased over time for boarding students. These findings are discussed in terms of transition and the boarding school context. Strengths and limitations of this study are presented.

Key words: Transition, Secondary Boarding School, Mental Health, Wellbeing.

Introduction

The success of school transition is dependent on personal maturity and coping resources, the nature of new environment and level of preparation and social support available prior to and during transition (Crockett, Petersen, Graber, Schulenberg, & Ebata, 1989). The transition period from primary to secondary school is already a challenging period in a young persons’ life as they are experiencing developmental changes associated with the emergence of puberty such as hormonal changes, restructuring of the prefrontal cortex, and development of self-identity (Dahl, Allen, Wilbrecht, & Suleiman, 2018). This school transition period has been found to have numerous effects on the psychological, social and intellectual wellbeing of students (Aikins,
For many young people the transition period represents new possibilities, a time to excel academically, socially, emotionally and in extracurricular activities with many looking forward to transitioning (Roesser, Eccles, & Freedman-Doan, 1999; Yates, 1999). However, this period can be challenging for some adolescents as they need to adapt to new organisational and social structures within their school environment, while having mixed feelings of fear and anticipation about the social relationships which dominate the school transition experience (Frey, Hirschstein, Edstrom, & Snell, 2009; A. Pereira & J. Pooley, 2007). Boarding students are faced with the additional challenges of not only a new school, but adjusting to a new living environment, and the prospect of schooling away from family and home.

Social dynamics, friendship, peer support, and creating a sense of belonging have been identified as important contributors to prompting the likelihood of a successful transition from primary school to secondary school (Ganeson & Ehrich, 2009; Pereira & Pooley, 2007; Towns, 2018; Virtanen, Vasalampi, Kiuru, Lerkkanen, & Poikkeus, 2019). During this transition period students typically experience moving from a primary school setting with smaller class sizes taught by one classroom teacher, to a secondary school environment which generally have larger student cohorts, with teachers, classrooms and often classmates constantly changing (Mizelle, 2005; Pereira & Pooley, 2007). Boarding students have the added challenge where the population of their new secondary year cohort may exceed the total population of their former primary school within their home community (Hadwen, 2015). For any student, the transition period can result in increased feelings of loneliness due to a major change in social structure requiring the development of new friendships (Pellegrini & Bartini, 2000); boarding students also have to deal with culture shock, and separation from their family, home and community. For boarding students, the social context is critically important as they live, learn and play with their peers (Hadwen, 2015). An often-overlooked aspect of the transition experience to secondary schools for new boarding students is that they are arriving with a knowledge base and self-regulatory capacities that are relevant to a primary school setting (Mander & Lester, 2019). The effectiveness and adaptability of these capacities to a secondary boarding school context are often low and can be quickly overwhelmed once a student is away from significant supports such as parents and siblings.

Research suggests the effect of transitioning from primary to boarding secondary school requires continued further attention. Australian studies have found 31% of secondary students experience a difficult transition (Waters, Lester, Wenden, & Cross, 2012), with boarding students reporting a more difficult transition than non-boarders, and boarding females reporting a more difficult transition than boarding males (Mander, Lester, & Cross, 2015). Students who experience a difficult transition to secondary school are more likely to experience lower social and emotional wellbeing, and symptoms associated with depression and anxiety (Akos, 2002; Fenzel, 2000; Kingery & Erdley, 2007; Qualter, Whiteley, Hutchinson, & Pope, 2007; Rice, Frederickson, & Seymour, 2011; Wampler, Munsch, & Adams, 2002; Waters et al., 2012; Zeedyk et al., 2003). Whereas a more positive transition experience has been linked with experiencing less loneliness and victimisation, greater feelings of peer support and safety at school, and lower bullying victimisation, and problems with peers (Waters et al., 2012). The effect of transition on boarders can be significant with one study finding that while both boarders and non-boarders reported a similar positive sense of social and emotional wellbeing and mental health prior to transition into secondary school, after transition, boarders reported significantly greater levels of indicators for depression, anxiety and stress than non-boarders, and poorer emotional wellbeing (Mander et al., 2015). One year post transition, boarding students were found to report lower mental wellbeing compared to non-boarding students, and two years post transition lower emotional wellbeing (Mander & Lester, 2017).
Over the transition period, feeling safe at school, feeling connected to school and the school staff, and peer support are all protective of social, emotional and mental wellbeing (Lester & Cross, 2015; Lester, Waters, & Cross, 2013; Weare & Gray, 2003). In a longitudinal study of boarding and non-boarding students within Western Australia, boarding students reported higher victimisation and perpetration after transition, with the bullying behaviours sustained over the first two years of secondary school (Lester, Mander, & Cross, 2015). Boarding students with poorer mental and emotional wellbeing are significantly more at risk of frequent victimisation and perpetration, whereas greater social wellbeing was associated with less frequent bullying victimisation (Lester & Mander, 2015).

Attempts have been made to identify key aspects which promote a successful adjustment to secondary schooling (Akos & Galassi, 2004; Cross & Lester, 2017; J. Smith, 1997). Effective transition programs have been described as an inclusive process emphasising the importance of social interaction (P. Smith & Brain, 2000). Transition programs involving the whole school community have shown positive student outcomes, including higher academic involvement, greater school retention and more positive school experiences (Cohen & Smerdon, 2009; Farmer et al., 2010; P. Smith & Brain, 2000). Boarding schools offer a variety of pre and post transition activities to assist boarders’ transition into their new school and home environments. Orientation days, personalised regular communication with students and their families, encouraging positive relationships between the boarding house and families, and mentoring programmes, are considered to be critically important in reducing boarding student stress and supporting a successful transition, while activities such as sleeping over in the boarding house or starting school a day early, have the capacity to increase students’ sense of connectedness to the boarding house and each other (Hadwen, 2015).

Gender has consistently emerged as an important factor to consider when examining school experiences over the transition period. Studies have shown high-achieving girls and low-achieving boys are most negatively affected by transition, experiences with friendship stability and friendship groups, and bullying perpetration and victimisation differ by gender over the transition period (A, 2016; Pellegrini & Long, 2002; Pratt & George, 2005; Wang, Brittain, McDougall, & Vaillancourt, 2016). Gender differences with respect to academic achievement after transition have been contradictory (Chung, Elias, & Schneider, 1998). Girls show more psychological distress before and after transition than boys, with low levels of transition stress predicting higher levels of school connectedness for girls, and high levels of transition stress in girls predicting increased anxiety (Chung et al., 1998; Goldstein, Boxer, & Rudolph, 2015). A recent study concluded stress associated with transition predicts academic and motivational challenges regardless of gender, and suggests efforts need to be aimed at reducing transition stress (Goldstein et al., 2015).

Frydenberg (2018) states negative emotions associated with a stressful situation can be reduced by reinterpreting a threat as a challenge, and that coping can be promoted through resilience and wellbeing. Resilience can be built through developing young peoples’ personal and social capabilities, and supported and enhanced through peer, school, home and community protective factors. Young people can be supported in developing coping skills prior to transition, increasing the likelihood of a successful transition (Newman & Blackburn, 2002; Stewart & Lewthwaite, 2016). Supportive interpersonal relationships, both formal and informal, with adults and peers in secondary school can promote resilience and enhance the social and emotional wellbeing of young people (Jindal-Snape & Miller, 2008). Hence, identifying the protective factors and supports which enhance resilience in boarding students is essential.

**The Connect Programme**

The Connect Programme is located at a large sized independent Catholic day and boarding school (e.g., Kindergarten to Year 12) located in Perth, WA. The majority of students are day students
(e.g., 1100) with a smaller boarding student population (e.g., 200). The Connect Programme provides transition support to new incoming Year 7 and 8 boarding students during the 6-month period prior to arriving at school (e.g., still at primary school and in Year 6), as well as in-school support for the first 6-months post-transition (e.g., when at school and in Year 7). The Connect Programme aims to make the transition to boarding school easier for the College’s boarding students by engaging the student in activities together in the year prior to starting boarding. The activities are designed for students to engage with one another at College events or via the internet, to create social connections and build friendships before the students start their boarding experience. The Connect Programme is coordinated by a lead teacher who works directly with new incoming students and their families and in close collaboration with key stakeholders at the school.

The Connect Programme (see Figure 1) combines on campus orientation activities with regular weekly opportunities for the students to connect with one another at home through a range of teacher-led social networking and academic digital platforms, designed as relationship building exercises. This unique aspect of the programme helps to bridge the vast physical distances between incoming Year Seven and Eight students and promotes early positive friendships and a network of support before they start at the school as a boarding student.

This longitudinal study aimed to estimate over a 12-month period the mental health and wellbeing of boarding students transitioning into a boys’ only boarding school.

<table>
<thead>
<tr>
<th>Pre-Transition Supports</th>
<th>Post-Transition Supports</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>6 months before arriving on campus</strong></td>
<td><strong>First 6 months on campus</strong></td>
</tr>
<tr>
<td>On campus orientations</td>
<td>Pastoral and academic student transition information handover to boarding and teaching staff</td>
</tr>
<tr>
<td>Online social platforms for students and their families</td>
<td>Student integration to better understand the College environment and expectations</td>
</tr>
<tr>
<td>Online and offline learning platforms and resources</td>
<td>Capacity building; organisational skills, study skills, managing technology</td>
</tr>
<tr>
<td>Weekly afterschool online virtual classroom lessons/experiences</td>
<td>Monitor students’ academic outcomes</td>
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<tr>
<td></td>
<td>Connect families/ students with support services if required</td>
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**Figure 1: The Connect Programme pre- and post-transition supports**

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Methodology

A mixed-method quantitative instrument (e.g., online questionnaire) was used to investigate the perceptions and pre-transition experience of new incoming Year 7 students (e.g., while still in Year 6) prior to their impending transition to S1 (Time 1), at the end of Term 1 first year secondary school (Time 2), and at the end of Term 3 (Time 3) first year secondary school. All day students enrolled to begin secondary school at S1 were invited to participate.

Participants

All boarding participants were recruited through the Connect Programme at S1 and had participated in the programme since the 1st July 2017. An information session at S1 was held on the 28th October 2017 for new incoming boarding students and parents. Active written parental and student consent for day and boarding students was sought by mailing out a research information package (e.g., information letter, consent form and reply-paid envelop). For families who preferred an electronic version, a PDF of this information package was emailed to them. Informed written consent was achieved through an opt-in/opt-out consent process and at all times it was explained to both parents and students that participation was voluntary and consent could be withdrawn at any point without explanation, penalty, or question.

A total of 126 male participants in Year 6 were recruited before entry into secondary school (111 day students; 15 boarding students) with a further 48 students recruited at secondary school entry. Students were aged 11 (n= 64, 51%) and 12 (n=62, 49%) years old at recruitment. The majority of day students resided within the metropolitan area (88%), whereas 60% of boarding students resided in a country town or community, and 33% on farms. The numbers of day students participated in the study increased over time (Time 1 n=111, Time 2 n=129, Time 3 n=139). Initially 15 boarding students participated at Time 1, increasing to 29 boarding students at Time 2, and 26 boarding students at Time 3. Overall, 174 students (144 day students and 30 boarders) participated in the study.

Procedure

Quantitative data was collected at three time points using an online Qualtrics survey. Data collection in this study took place in December 2017 (prior to transition), April 2018 (end of Term 1 post transition), and September 2018 (end of Term 3 post transition). The online survey collected information on academic, emotional and mental wellbeing, as well as the helpfulness of elements of the Connect Programme.

This study received approval from the Human Ethics Office at The University of Western Australia (Reference Number: RA/4/20/4055) and the Headmaster of S1.

Measures

Academic Self-Perception, Motivation and Self-Regulation: The academic self-perception scale consisted of 5 questions measured on a 7-point Likert scale (1=strongly disagree to 7=strongly agree) (average alpha= 0.86) (McCoach & Siegle, 2003). Questions included 'I am confident in my academic ability' and 'I do well in school'. The motivation and self-regulation scale consisted of 4 questions measured on a 7-point Likert scale (1=strongly disagree to 7=strongly agree) (average alpha= 0.77) (McCoach & Siegle, 2003).

Resilience: Resilience was measured using The Resilience and Youth Development Module (RYDM) – California Health Kids Survey (Furlong, Ritchey, & O’Brennan, 2009). The RYDM uses a four-point Likert scale (1=not at all to 4=very much true) to explore five aspects of resilience, including: Internal protective factors (e.g., 12 questions offering 4 subscales: self-efficacy (average alpha=0.66), empathy (average alpha=0.72), problem solving (average alpha=0.57), and self-awareness (average alpha=0.66)); Peer protective factors (e.g., 6 questions offering 2
subscases: caring relationships (average alpha=0.83) and pro-social friends (average alpha=0.76)); School protective factors (e.g., 14 questions offering 3 subscales: school connectedness (average alpha=0.82), teacher connectedness (average alpha=0.82), and school interest (average alpha=0.68)); Home protective factors (e.g., 9 questions offering 2 subscales: home support (average alpha=0.80), and meaningful participation at home (average alpha=0.72)); and Community protective factors (e.g., 6 questions (average alpha=0.85)).

**Strengths and Difficulties:** Strengths and difficulties were measured using the Strengths and Difficulties Questionnaire (SDQ) (Goodman, 1997). This is a self-rating 25-item screening tool appropriate for use with 4 to 17-year olds and uses a three-point scale (0 = not true, 1 = somewhat true, 2 = certainly true). The SDQ measures strengths (10 items) and difficulties (15 items) over the last month and comprises five subscales (e.g., emotional symptoms (average alpha=0.69), conduct problems (average alpha=0.60), hyperactivity (average alpha=0.60), peer problems (average alpha=0.58), pro-social behaviour (average alpha=0.65)). An overall total difficulties score is calculated as per the authors instructions.

**Distress:** The Kessler Psychological Distress Scale (K-6) (Kessler et al., 2002) is a self-rating six-item screener that uses a six-point Likert scale (1=none of the time to 5=a ll of the time) to measure symptoms associated with non-specific psychological distress (average alpha=0.71).

**Life Satisfaction:** The Students’ Life Satisfaction Scale is designed to measure global life satisfaction in children (Huebner, 1991). The seven-item measure uses a six-point Likert scale (1=strongly disagree to 6=strongly agree) (average alpha=0.77).

**Helpfulness of the Connect program:** At Time 2, students were asked to reflect on the Connect activities they participated in prior to attending the College, in terms of helpfulness for preparing them for life as a student in the College: touring the school and boarding houses; reading the information pack; attending Orientation Days; participating in the Connect Programme before arriving at the College; meeting current College students and staff; talking with friends/siblings/parents about attending the College; and researching their own information. Helpfulness was measured on a five point scale 1: Very helpful; 2: A little helpful; 3: Not sure; 4: Not helpful; 5: Did not complete this activity.

**Results**

**Academic factors:** Both day and boarding students scored below the norm in academic self-perception, and above the norm for academic motivation (norm mean =6.2, sd=0.6) and self-regulation at all time points (norm mean =5.4, sd=0.9) (Table 1) (McCoach & Siegle, 2003).
Table 1 Academic and resilience factors by student status and time

<table>
<thead>
<tr>
<th></th>
<th>Norm*</th>
<th>Day Student</th>
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<th>Boarding Student</th>
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<tbody>
<tr>
<td></td>
<td>Mean (sd)</td>
<td></td>
<td>Time 1</td>
<td>Time 2</td>
<td>Time 3</td>
<td>Time 1</td>
<td>Time 2</td>
<td>Time 3</td>
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<tr>
<td><strong>Academic factors</strong></td>
<td>(McCoach &amp; Siegle, 2003)</td>
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<tr>
<td>Self-Perception (1-7)</td>
<td>6.2</td>
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<td>5.7(0.8)</td>
<td>5.8(0.8)</td>
<td>5.9(0.4)</td>
<td>5.5(1.0)</td>
<td>5.6(0.9)</td>
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<td>Motivation/</td>
<td>6.1(0.8)</td>
<td>6.1(0.7)</td>
<td>6.0(0.7)</td>
<td>6.1(0.6)</td>
<td>5.7(1.3)</td>
<td>5.8(1.1)</td>
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<td>Self-Regulation (1-7)</td>
<td>5.4</td>
<td>5.8(0.4)</td>
<td>5.5(0.4)</td>
<td>5.6(0.4)</td>
<td>5.7(0.4)</td>
<td>5.8(1.1)</td>
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<td><strong>Internal protective factors</strong></td>
<td>(Furlong et al., 2009)</td>
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<td>Self-efficacy (4-16)</td>
<td>13.7</td>
<td>13.8(1.7)</td>
<td>13.5(2.0)</td>
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<td>13.0(2.1)</td>
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<td>Empathy (3-12)</td>
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<td>10.3(1.5)</td>
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<td>Problem solving (2-8)</td>
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<td>7.1(1.2)</td>
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<td>Self-awareness (3-12)</td>
<td>10.2</td>
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<td>10.3(1.8)</td>
<td>10.9(1.6)</td>
<td>10.4(1.3)</td>
<td>9.6(1.8)</td>
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<td><strong>School protective factors</strong></td>
<td>(Hanson &amp; Kim, 2007)</td>
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<td>School connectedness (5-25)</td>
<td>18.0</td>
<td>21.7(3.4)</td>
<td>21.2(3.0)</td>
<td>23.5(2.5)</td>
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<td>19.1(3.5)</td>
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<td>20.6(3.1)</td>
<td>18.9(3.8)</td>
<td>22.3(1.7)</td>
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<td>School interest (3-12)</td>
<td>7.0</td>
<td>9.1(1.9)</td>
<td>8.5(2.0)</td>
<td>9.0(2.1)</td>
<td>8.6(2.4)</td>
<td>8.5(2.2)</td>
<td>9.0(1.9)</td>
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<td><strong>Community protective factors</strong></td>
<td>(Hanson &amp; Kim, 2007)</td>
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<tr>
<td>Caring relationships (1-4)</td>
<td>3.2</td>
<td>3.6(0.5)</td>
<td>3.7(0.4)</td>
<td>3.7(0.5)</td>
<td>3.6(0.5)</td>
<td>3.5(0.7)</td>
<td>3.7(0.6)</td>
<td></td>
</tr>
<tr>
<td>Pro-social friends (1-4)</td>
<td>3.0</td>
<td>2.3(0.4)</td>
<td>2.1(0.3)</td>
<td>2.0(0.7)</td>
<td>2.3(0.6)</td>
<td>2.3(0.3)</td>
<td>2.1(0.6)</td>
<td></td>
</tr>
<tr>
<td><strong>Home protective factors</strong></td>
<td>(Hanson &amp; Kim, 2007)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Home support (1-4)</td>
<td>3.5</td>
<td>3.7(0.4)</td>
<td>3.7(0.4)</td>
<td>3.7(0.5)</td>
<td>3.8(0.2)</td>
<td>3.7(0.5)</td>
<td>3.6(0.7)</td>
<td></td>
</tr>
<tr>
<td>Meaningful participation at home (1-4)</td>
<td>2.8</td>
<td>3.4(0.6)</td>
<td>3.3(0.7)</td>
<td>3.3(0.7)</td>
<td>3.3(0.5)</td>
<td>3.4(0.6)</td>
<td>3.5(0.5)</td>
<td></td>
</tr>
</tbody>
</table>
| **Resilience factors**: Both day and boarding students reported similar self-efficacy scores to the norm at Time 1 and Time 2, and lower scores to the norm at Time 3 (norm mean=13.7, sd=2.6) (Furlong et al., 2009). Conversely, day and boarding students reported similar problem-solving scores to the norm at Time 1 and Time 2, and higher scores to the norm at Time 3 (norm mean=5.7, sd=2.0). Day students reported empathy (norm mean=9.6, sd=2.5) and self-awareness scores (norm mean=10.2, sd=2.3) similar, or higher to, norms at all time points. Boarding students reported lower empathy scores than norms at Time 1, and lower self-awareness scores at Time 2. Day and boarding students reported school and community protective factors greater than the norm: school connectedness (norm mean=18.0, sd=4.2); teacher connectedness (norm mean=18.4, sd=4.3) and school interest (norm mean=7.0, sd=2.5); community support (norm mean=3.2, sd=0.9)(Hanson & Kim, 2007).

Day students reported the peer protective factor caring relationships score greater than the norm at all time points, whereas boarding students reported a caring relationship score less than the norm at Time 1 (norm mean=3.1, sd=0.9). The reported pro-social friends score was less than the norm at all time points for both day and boarding students (norm mean=3.0, sd=0.9) (Hanson & Kim, 2007).
Both day and boarding students reported the home protective factors, home support (norm mean=3.5, sd=0.7) and meaningful participation at home (norm mean=2.8, sd=0.9), greater than the norms at all time points (Hanson & Kim, 2007).

**Table 2 Emotional and mental wellbeing by boarder status and time**

<table>
<thead>
<tr>
<th></th>
<th>Day Student</th>
<th></th>
<th></th>
<th>Boarding student</th>
<th></th>
<th></th>
</tr>
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<tbody>
<tr>
<td></td>
<td></td>
<td>Norm*</td>
<td>Time 1</td>
<td>Time 2</td>
<td>Time 3</td>
<td>Time 1</td>
</tr>
<tr>
<td><strong>Life satisfaction scale (1-6)</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(Huebner et al., 2003)</td>
<td></td>
<td>4.2</td>
<td>5.1(0.7)</td>
<td>4.5(0.6)</td>
<td>4.6(0.6)</td>
<td>5.0(0.6)</td>
</tr>
<tr>
<td><strong>K6 (6-30)</strong></td>
<td></td>
<td>11.6</td>
<td>11.1(3.3)</td>
<td>11.9(4.5)</td>
<td>11.8(4.6)</td>
<td>11.6(3.2)</td>
</tr>
<tr>
<td>% K6 distressed</td>
<td></td>
<td>1.9</td>
<td>8.5</td>
<td>11.9</td>
<td>6.7</td>
<td>19.2</td>
</tr>
<tr>
<td><strong>SDQ mean scores (Mellor, 2005)</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Emotion (0-10)</td>
<td></td>
<td>1.3</td>
<td>2.3(2.1)</td>
<td>2.6(2.2)</td>
<td>2.5(2.3)</td>
<td>1.3(1.4)</td>
</tr>
<tr>
<td>Conduct (0-10)</td>
<td></td>
<td>1.6</td>
<td>1.5(1.5)</td>
<td>1.3(1.5)</td>
<td>1.7(1.8)</td>
<td>1.6(1.2)</td>
</tr>
<tr>
<td>Hyper (0-10)</td>
<td></td>
<td>4.1</td>
<td>4.5(2.2)</td>
<td>4.3(2.0)</td>
<td>4.7(2.1)</td>
<td>4.1(2.0)</td>
</tr>
<tr>
<td>Peer (0-10)</td>
<td></td>
<td>1.9</td>
<td>1.6(1.8)</td>
<td>1.7(1.8)</td>
<td>1.7(1.9)</td>
<td>1.9(1.1)</td>
</tr>
<tr>
<td>Pro social (0-10)</td>
<td></td>
<td>7.9</td>
<td>8.0(1.6)</td>
<td>7.9(1.7)</td>
<td>7.9(1.6)</td>
<td>7.9(1.9)</td>
</tr>
<tr>
<td>Total difficulties (0-40)</td>
<td></td>
<td>8.8</td>
<td>9.9(5.2)</td>
<td>10.0(5.3)</td>
<td>10.5(6.1)</td>
<td>8.8(3.4)</td>
</tr>
</tbody>
</table>

**SDQ (% abnormal)**

<p>| | | | | | | | | |</p>
<table>
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<th></th>
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<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Emotion</td>
<td></td>
<td>5.5</td>
<td>3.9</td>
<td>7.7</td>
<td>0</td>
<td>3.7</td>
<td>5.0</td>
<td></td>
</tr>
<tr>
<td>Conduct</td>
<td></td>
<td>7.3</td>
<td>4.7</td>
<td>10.5</td>
<td>0</td>
<td>18.5</td>
<td>20.0</td>
<td></td>
</tr>
<tr>
<td>Hyper</td>
<td></td>
<td>20.2</td>
<td>16.4</td>
<td>19.0</td>
<td>20.0</td>
<td>14.8</td>
<td>30.0</td>
<td></td>
</tr>
<tr>
<td>Peer</td>
<td></td>
<td>2.8</td>
<td>3.1</td>
<td>4.2</td>
<td>0</td>
<td>3.7</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>Pro social</td>
<td></td>
<td>2.8</td>
<td>3.9</td>
<td>2.8</td>
<td>7.1</td>
<td>7.4</td>
<td>5.0</td>
<td></td>
</tr>
<tr>
<td>Total difficulties</td>
<td></td>
<td>5.5</td>
<td>4.7</td>
<td>10.6</td>
<td>0</td>
<td>18.5</td>
<td>5.0</td>
<td></td>
</tr>
</tbody>
</table>

# norm values from associated references

**Emotional and mental wellbeing factors:** Both day and boarding students scored above the norm and highly on life satisfaction (norm mean=4.2, sd=1.1)(Table 2) (Huebner, Suldo, & Valois, 2003). On average, day and boarding students reported low levels of distress, and within the normal range of emotional problems, conduct problems, hyperactivity, peer problems, pro-social behaviour, and total difficulties.

**Predictors of academic, resilience, and emotional and mental wellbeing factors:** Repeated measure mixed models were used to determine if boarder status or time were significant predictors of academic, resilience, and emotional and mental wellbeing factors. Academic self-perception remained stable over time, with no differences found by boarder status. A significant interaction effect between boarder status and time was found with motivation/self-regulation, with boarding students reporting significantly lower motivation/self-regulation at Time 2 (β=-0.05, p=0.032). Motivation/self-regulation was significantly lower for all students at Time 3 compared to Time 1 (β=-3.05, p<0.001).

Internal protective factors were not related to boarder status. While self-efficacy significantly decreased at Time 3 (β=-2.1, p=<0.001), problem solving (β=1.4, p=<0.001) significantly increased.
at Time 3. Self-awareness initially significantly decreased at Time 2 ($\beta=-.4, p=0.018$) and then increased at Time 3 ($\beta=0.33, p=0.030$). Empathy scores did not change over time.

The peer protective factor, peer caring relationships, was related to boarding status and time. A significant interaction effect between boarder status and time was found for peer caring relationships, with boarding students reporting significantly higher peer caring relationships at Time 2 ($\beta=0.55, p=0.016$) and Time 3 ($\beta=0.88, p<0.001$). Pro-social peers significantly decreased at Time 2 ($\beta=-.16, p=0.007$) and Time 3 ($\beta=-.35, p<0.001$), irrespective of boarder status.

School protective factors were not related to boarder status. School connectedness (Time 3: $\beta=1.9, p<0.001$) and school interest ($\beta=-0.5, p=0.023$) significantly decreased over time for both day and boarding students. Teacher connectedness significantly decreased at Time 2 ($\beta=1.6, p<0.001$) and then increased at Time 3 ($\beta=1.0, p=0.005$).

Home and community protective factors were not related to boarder status. Home support ($\beta=-2.3, p<0.001$) and meaningful participation at home ($\beta=-2.6, p<0.001$) had significantly decreased by Time 3. Community protective factors initially significantly increased at Time 2 ($\beta=0.1, p=0.016$) and then decreased by Time 3 ($\beta=-0.30, p<0.001$).

Distress scores, satisfaction with life scores, conduct problems, hyperactivity, peer problems, and pro-social behaviour, were not related to boarder status and did not change over time. A significant interaction effect between boarder status and time was found for emotional difficulties ($\beta=1.79, p=0.002$) and total difficulties ($\beta=4.20, p=0.003$) with boarding students reporting significantly higher emotional and total difficulties than day students at Time 3.

Helpfulness of Connect activities in preparation for student life: The majority of boarding and non-boarding students found that on reflection, touring the school (89%) and attending Orientation Day (87%) to be helpful, while 93% of boarding students found touring the boarding house, 87% attending Orientation for boarding students, and 81% participating in the Connect Programme before arriving at the College to be helpful in preparing them for life at the College. Meeting current students (79%) and staff (76%), and talking with friends (76%), siblings (81%), and parents (82%) to also be helpful preparation activities. A smaller proportion of students found talking to teachers at primary school helpful (56%), doing their own research helpful (58%), and reading the information pack helpful (59%).

Discussion and Conclusion

This study used longitudinal data (three data points) to investigate the social, emotional and mental wellbeing of boarding and non-boarding students following involvement in the Connect Programme during the transition from primary school to secondary school. Findings suggest the Connect Programme was successful in minimising the differences in factors associated with academic, emotional and mental wellbeing between boarding and non-boarding students at three months and 6 months post-transition.

Prior to the transition to secondary school, no significant differences were found between boarding students’ academic, emotional and mental wellbeing, with overall student wellbeing falling within normative levels. This finding is congruent with earlier research which found boarding and non-boarding students have similar social and emotional wellbeing and mental health prior to transition (Mander & Lester, 2017; Mander et al., 2015). This current study did not find mental wellbeing related to boarding status after transition into secondary school. However, previous studies suggest boarding students have a more difficult transition experience than non-boarding students and report greater negative emotional wellbeing and mental health indicators and decreases in prosocial behaviour immediately post-transition and at the end of the first year after transition (Mander & Lester, 2017; Mander et al., 2015).
Within the current study, positive mental wellbeing in terms of the internal, home, school and community protective resilience factors, stayed at similar levels for both boarding and non-boarding students over the first year in secondary school. The peer protective factor, peer caring relationships, significantly increased over time for boarders. In boarding schools, a significantly greater amount of time is spent with peers, providing more opportunities for face-to-face positive and negative interactions than with day students. When maladaptive social behaviours like bullying are not explicitly addressed in a vigilant ongoing fashion and instead allowed to perpetuate, research indicates significant risk exists that these behaviours can become normalised in the culture and climate of a boarding school (Poynting & Donaldson, 2005; Schaverien, 2004, 2011). Peer support both prevents and moderates the incidence of bullying behaviour (Lester et al., 2015). The Connect Programme recognises peer support and relationships are a determinant of a successful transition from primary school to secondary school, as well as social, emotional and mental wellbeing. To promote positive peer relationships and a network of support for students before they start boarding, the Connect Programme brings students together physically through on campus orientation activities, and then provides opportunities for the students and their families to connect with one another at home through a range of social networking and academic digital platforms. Boarders in this study reported having friends who care about them, who help them when they are having a hard time, and feeling able to talk to them about their problems.

Reported academic motivation and self-regulation was higher than normative values but significantly decreased for all students after starting secondary school. Motivation and engagement are strongly related to academic outcomes such as achievement, literacy, numeracy, days absent, aspirations and performance, and contribute significantly to a student’s interest in and enjoyment of school (Hattie, 2012). Motivation and engagement factors are related to thoughts and behaviours which can be positive and enhance motivation and engagement, or negative and reduce motivation and engagement. Factors that enhance thoughts and behaviours include: self-confidence; valuing school; having a focus on learning; persistence; planning study; and trying hard (Martin, 2016). Positive motivation and engagement strategies can be further promoted within the Connect Programme by maximising students opportunities to succeed, focussing on personal bests, teaching effective goal setting, and challenging negative thinking (Martin, 2016).

Internalising (e.g. emotional problems) and externalising problems (e.g. conduct problems) increased over time for boarding students. Homesickness, adjusting to communal living, a new school environment with increased academic demands, the forming of new social networks, and establishing relationships with new teachers, while only having the distal support of family can impact on the social, emotional and mental wellbeing of boarders (Lester & Mander, 2015; Mander, 2012; Whyte & Boylan, 2008). The Connect Programme may consider strategies to minimise homesickness experienced by boys and enable boys to seek help for homesickness (Hadwen, 2015).

The most successful pre-transition Connect activities in preparing the student for College were physically visiting the school and boarding house and interacting and talking with other students, staff, siblings and parents. Activities requiring their own research or reading information were considered to be less helpful. Previous research investigating successful transitions highlights the importance of involving schools, children, and parents in the transition process, which is central to the Connect Programme (van Rens, Haelermans, Groot, & van den Brink, 2018). To further support students and families in the transition to boarding school, it is recommended the Connect Programme continue to develop their digital platforms and invite feedback from students and their families to ensure the information presented to them is comprehensive, meaningful and focussed on their needs and is presented in an appealing format such as...
interactive features, video clips, multimedia presentations and other communication mediums (Hadwen, 2015).

This study contributes to the growing literature exploring the impact of transition from primary to secondary school on boarding and day students' academic, social and emotional wellbeing and mental health. Its strengths lie in the longitudinal nature of the research, allowing the investigation of the impact of a transition program on both boarders and non-boarders. The quality of the measures used in this study help to provide useful descriptive data about transition and student wellbeing. Limitations to this study include the small number of students and the reliability of some of the resilience and strengths and difficulties measures. We have also only explored a limited number of wellbeing variables that could be influenced by an adolescent’s transition experience. Future research should consider mapping a range of wellbeing indicators as well as school and family effects at the school level, such as academic achievement, attendance, and school retention. Our data did not allow for an exploration of the potential differential impact of transition experienced by students from different cultural backgrounds, including Aboriginal or Torres Strait Islander students, international students, or students with English as a second language.

The current study highlights the importance of transition programs in the promotion of student wellbeing. The Connect Programme has been seen to be successful in promoting wellbeing for boarding students particularly in the area of promoting a positive sense of wellbeing. Further research to investigate how this program can be used more effectively to promote academic and emotional wellbeing is recommended, especially for students who need to transition from home into a residential boarding school.

**Acknowledgements**

The authors would like to acknowledge and sincerely that all of the staff and students of S1, but particularly Ms Teneeka Hill for her significant support of this research.

**References**


Huebner, E. S., Suldo, S. M., & Valois, R. F. (2003). Psychometric properties of two brief measures of children’s life satisfaction: The Students’ Life Satisfaction Scale (SLSS) and the Brief


