Career development and personal functioning differences between work-bound and non-work bound students

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Abstract

We surveyed 506 Australian high school students on career development (exploration, planning, job-knowledge, decision-making, indecision), personal functioning (well-being, self-esteem, life satisfaction, school satisfaction) and control variables (parent education, school achievement), and tested differences among work-bound, college-bound and university-bound students. The work-bound students had the poorest career development and personal functioning, the university-bound students the highest, with the college-bound students falling in-between the other two groups. Work-bound students did poorest, even after controlling for parent education and school achievement. The results suggest a relationship between career development and personal functioning in high school students.

Keywords: work-bound, college-bound, university-bound, career development, well-being, self-esteem, satisfaction
In Australia, about 40% of school-leavers attend university, 16% attend technical colleges (which offer employment-focused certificate and diploma qualifications), while the largest proportion, 44%, attempt to move directly into the work-force (either before completing high school or when they have graduated; Lamb & McKenzie, 2001). The majority in this latter group (about 55%) make a smooth transition by rapidly finding employment, or by finding employment after only brief periods of joblessness. However, many in this group experience difficulties making the transition to work, spending long periods unemployed, in part-time or casual work, or in activities outside of the labour force (e.g., government sponsored brief training programs), and some never enter the work-force (e.g., because of child-rearing responsibilities or disability; Lamb & McKenzie).

These so-called work-bound students have reduced employment opportunities due to their lack of occupational skills, and can experience long-term economic and social disadvantage by settling into low-skilled and low-paid jobs (Rojewski, 1999). Apart from having fewer work skills when they enter the work-force, they also differ from university-bound and college-bound students in other important ways. They are more likely to be low school-achievers, to have specific literacy and numeracy deficits, and to be enrolled in non-academic educational streams. They are also more likely to come from lower socio-economic families, to have fewer higher education role models, and to have higher rates of disability (Lamb & McKenzie, 2001; Rojewski; Rojewski & Kim, 2003). Work-bound students themselves acknowledge that they prefer to enter the workforce as they are unsuccessful at school, dislike it, and desire to earn money (Australian Bureau of Statistics, 2003).
Despite these insights, little is known about the career development experiences and needs of work-bound students. Where they have been examined, work-bound students have typically fared more poorly (Rojewski & Kim, 2003). Waidtlow (2003), for example, found a lack of vocational goals, little communication around vocational issues, and possible delays in forming a vocational identity in a sample of 26 work-bound young adults. Betz and Wolfe (2005) found lower levels of self-efficacy for a range of occupational interest areas (e.g., sales, management, office services) in work-bound than in college-bound students. Finally, Ferry (2006) found rural work-bound students had different expectations of occupational paths, career opportunities, and occupational timeframes than those college-bound. For work-bound youth, getting employment was the primary focus, which “…quickly shifted their roles from adolescent to adult, binding them to adult career expectations” (p. 1).

The current study sought to add to our understanding of the career development of work-bound students, vis-à-vis other students. We tested for differences among work-bound, college-bound, and university-bound students on measures of career exploration, career planning, job-knowledge, decision-making understanding, and career decidedness. Given previous research, we expected (H1) that work-bound youth would have lower levels of exploration, planning and decision-making understanding; poorer job-knowledge; and more indecision than non-work-bound youth. We found no studies that tested differences between college-bound and university-bound students; thus, the hypothesis about differences here was exploratory. Given that university-bound youth are likely to have more of a future focus than college-bound students, implying, for example, increased levels of exploration and planning (Savickas, 1999), we expected (H2) that college-bound youth would have lower levels of the career development variables than university-bound youth. As age, gender, ability levels, and
parent education levels are likely to confound these relationships (Herr, 1999; Lamb & McKenzie, 2001; Rojewski, 1999, Rojewski & Kim, 2003), we also measured and examined these effects.

Developmentally appropriate progress towards a career and employment has long been associated with improved personal functioning (Skorikov, 2006). The mechanisms for this are related to successfully negotiating the tasks relevant to the different phases of career development, such as self- and career-exploration and developing occupational goals (Herr, 1989). The relationship most often tested in the literature is between well-being and career indecision, with indecision being associated with lower self-esteem and life satisfaction and elevated depression (Creed, Prideaux, & Patton, 2005; Germeij & De Bock, 2003; Saunders, Peterson, Sampson, & Reardon, 2000). The relationship between well-being and other career variables, such as planning and exploration, has been tested less frequently and the results have been less consistent (for a review, see Skorikov). The current study sought to contribute to our understanding of the relationship between career development and well-being by testing for differences among the work-bound, college-bound and university-bound students. Consistent with our arguments that work-bound students would report lower levels of career development, reflecting failure or delay in managing career development tasks, than college-bound students, who, in turn, would have lower levels than university-bound students, we expected (H3) that work-bound students would report poorer well-being than college-bound students, who, in turn, (H4) would have poorer well-being than those university-bound. We also examined the effects of age, gender, ability and parent education.

Method

Participants
We surveyed 692 students attending one middle-level socioeconomic status, suburban high school in a medium sized city in Queensland, Australia. There were no significant ethnic groupings, reflecting the cultural nature of the Australian population. All students present on the day the survey was administered participated. We had complete data for 506 students (73%) on the career development variables. These were 340 (67%) Middle School (Grades 8, 9, 10; 54% male; Mean age = 13.9 years, SD = 0.9), and 166 Senior School students (Grades 11-12; 52% male, Mean age = 16.6 years, SD = 0.6). We had complete data on the personal functioning variables for 448 students (65%). These were 300 (67%) Middle School (52% male; Mean age = 14.0 years, SD = 1.0), and 148 Senior School students (53% male, Mean age = 16.6 years, SD = 0.6).

Measures

On all measures, higher scores indicate higher levels of the construct.

Career Development: We used the Career Development Inventory (Lokan, 1984) to assess career planning (20 items), career exploration (16 items), knowledge of the world of work (24 items), and knowledge and use of decision-making principles (12 items). Sample items include, “How much time and thought have you given to choosing a regular adult occupation?” (career planning), “To whom would you go to for information when making plans for work or further education?” (career exploration), “Being happy in a job is mostly a matter of being well paid” (knowledge of world of work), and “Robin’s interest in helping others has become the most important part of her self-picture. Which occupation should she probably not consider?” (decision-making). Internal reliability was good (coefficients .74 - .91).

Career Indecision: We used the 16-item indecision subscale from the Career Decision Scale (Osipow, Carney, Winer, Yanico, & Koschier, 1976). A sample item is,
“Several careers have equal appeal to me. I’m having a difficult time deciding among them”. The internal reliability was .91.

**Personal Functioning:** We used two scales and two individual questions to assess personal functioning. The 10-item Rosenberg Self-esteem Scale (Rosenberg, 1965) was used to assess global self-esteem. A sample item is, “On the whole, I am satisfied with myself”. The internal reliability coefficient was .84. The 12-item General Health Questionnaire (Goldberg, 1972) was used to assess levels of general well-being. A sample item is, “Have you recently been able to concentrate on whatever you’re doing?”. Scores were reversed so that higher scores indicated better well-being. Internal reliability was .87. A single item (“When you look at your school life, how satisfied are you?”) was used to assess school satisfaction; and a single item (“When you look at your life, how satisfied are you?”) was used to assess life satisfaction.

**Students Educational Intentions** were coded as university, college and high school based on the students’ response to a single item, “What is the highest level of education you expect to complete?”.

**Background Variables:** Students indicated their age, gender, typical school achievement level, and parent education level. We ranked school achievement as low, satisfactory, high and very high. We ranked parent education as Grade 10, Grade 12, and university based on their reported education and occupation

**Procedure**

The study was cross-sectional, survey-based, and conducted under the auspices of the authors’ human ethics committee. Teachers administered the surveys in class time.

**Results**

**Attrition Analysis**
Students with complete data did not differ from those with incomplete data on Age, Gender, School Achievement, Parent Education, and Educational Intentions. Thus, there was little evidence for attrition bias.

**Effects of School Achievement and Parent Education on Educational Intentions**

We tested whether work-bound, college-bound and university-bound students differed on School Achievement, Parent Education, Gender or School. We found no Gender, $\chi^2(2) = .97, p = .61$, or School effects, $\chi^2(2) = 3.13, p = .21$. University-bound students reported higher School Achievement ($M = 2.81$) than college- ($M = 2.30$) and work-bound ($M = 2.36$) students, $F(2, 503) = 19.46, p < .001$, partial $\eta^2 = .07$, and higher Parent Education ($M = 2.48$) than the other two groups ($M = 2.15$ & 2.05, respectively), $F(2, 503) = 16.32, p < .001$, partial $\eta^2 = .06$.

**Effects of Educational Intention, School and Gender on Career Development**

We tested whether the three groups differed on Planning, Exploration, Knowledge of World of Work, Knowledge and Use of Decision-making Principles or Indecision. We included School Achievement as a covariate as it was significantly related to the dependent variables. The other potential covariate, Parent Education, was not significantly related to the dependent variables, so was not included. We included School and Gender to test for any potential interactions with Educational Intentions. Significant multivariate results were obtained for the main effects of Educational Intentions, $F(10, 980) = 5.76, p < .001$, partial $\eta^2 = .06$; Gender, $F(5, 489) = 6.99, p < .001$, partial $\eta^2 = .07$; and School, $F(5, 489) = 5.98, p < .001$, partial $\eta^2 = .06$. None of the interaction effects was significant. There was a significant effect for the School Achievement covariate, $F(5, 489) = 3.15, p = .008$, partial $\eta^2 = .03$.

For Educational Intentions, there were significant individual effects for Exploration ($p = .002$), World of Work ($p < .001$), Decision-making ($p < .001$), and Indecision ($p = \ldots$)
.01), but not for Planning (p = .10). University-bound students were significantly higher than work- and college-bound students on World of Work (p < .001 and .015, respectively) and Decision-making (p < .001), and significantly higher than work-bound students on Planning (p = .036). University- and college-bound students were significantly higher than work-bound students on Exploration (p = .001 and .032, respectively) and had significantly less Indecision (p = .003 and .026). College-bound students were significantly higher than work-bound students on World of Work Knowledge (p = .012). See Table 1 for summary data. When the total sample was considered, Indecision was moderately correlated with Planning (r = .24, p < .001), World of Work Knowledge (r = .38, p < .001) and Decision-making Knowledge (r = .39, p < .001), but not with Exploration (r = .08, p > .05). A similar pattern of correlations was found when the three groups were examined individually.

Insert Table 1 about here

For Gender, girls reported significantly higher levels of Exploration (p = .04; M = 36.88 for girls and 35.54 for boys), World of Work (p < .001; M = 16.79 & 14.04), Decision-making (p < .001; M = 6.96 & 5.39), and Indecision (p = .012; M = 47.95 & 44.65) than boys. There were no differences on Planning. For Middle compared with Senior school, Middle school students reported lower levels of Planning (p = .005; M = 60.07 for Middle School & 62.84 for Senior School), Exploration (p < .001; M = 35.02 & 38.79), World of Work (p < .001; M = 14.72 & 17.14), and Decision-making (p < .001; M = 5.75 & 7.23). There were no School differences on Indecision.

Effects of Educational Intention, School and Gender on Personal Functioning

Finally, we tested whether work-bound, college-bound and university-bound students differed on Self-esteem, Well-being, Life Satisfaction and School Satisfaction. We included tests for School and Gender, and controlled for Parent
Education and School Achievement. There was a significant multivariate main effect for Group, $F(8, 864) = 5.53, p < .001$, partial $\eta^2 = .05$. The School Achievement covariate was significant, $F(4, 431) = 7.60, p < .001$, partial $\eta^2 = .07$, but there were no effects for School, Gender, Parental Education or the interaction terms. There were significant individual group effects for Self-esteem and School Satisfaction. University- and college-bound students had higher Self-esteem ($p < .001$ and $.006$, respectively) and School Satisfaction ($p < .001$ and $.046$) than work-bound students, but university- and college-bound students did not differ (see Table 1). Career Indecision was moderately correlated with Self-esteem ($r = .33, p < .001$) and Well-being ($r = .20, p < .001$), but not with School ($r = .04, p > .05$) or Life Satisfaction ($r = .08, p > .05$). This pattern of associations was repeated across the three groups.

Discussion

The findings extend our understanding of the career development of work-bound and college-bound students, relative to university-bound students. First, we found no gender or school-level effects for the different career paths indicated by the students. Students were closing off the potential of tertiary education as early as 13 to 14 years of age (Grade 8) in the same proportions as found in older students, with girls just as likely to indicate a particular path as boys. Previous studies have found that work-bound students are more likely to be boys (Rojewski, 1999), but it is likely that societal changes emphasising equality of treatment for girls have contributed to the current findings. Thus, when policy makers and educationalists consider interventions to encourage continuation of education they need to target girls as well as boys, and they need to focus their interventions early.

Second, differences in background variables between university-, work-, and college-bound students were similar to prior research findings; that is, university-
bound students had higher school achievement and socio-economic backgrounds. Work-bound students did not differ from college-bound on school achievement or parent education levels, suggesting these two groups overlapped. The common factor is likely to be that neither is university-bound: work-bound students want direct entry to the workforce with little or no formal training, while college-bound students seek entry following short-term, work-focused training.

Third, and partly consistent with our expectations, work-bound students had the lowest mean levels on all career development variables, with university-bound students having the highest. College-bound students fell in between. Significant differences in the expected directions were found between work-bound and university-bound students on exploration, world of work knowledge, knowledge of decision-making principles, and indecision; between work-bound and college-bound students on world of work knowledge; and between college-bound and university-bound students on decision-making principles. There were no differences on career planning. Importantly, these effects were present after controlling for school achievement level.

Thus, work-bound students were the poorest prepared, and may be making occupational decisions based on insufficient career information, a poor understanding of how labour markets operate, and with poor decision-making skills. Career interventions and career information have been criticised for their focus on tertiary-bound students at the expense of those who are work- or college-bound (Herr & Niles, 1997; Rojewski, 1999; Rojewski & Kim, 2003). The results suggest a continuing need to make relevant career information and training available to students contemplating an early end to their education so they can be better informed and more skilled in planning their occupational futures. While there were no significant interaction effects
for gender, girls showed higher levels of career development than boys, and thus, such interventions and materials need to be particularly accessible to early-leaving boys.

Fourth, again partly supporting expectations, work-bound students had the lowest mean levels on well-being, self-esteem, life satisfaction, and school satisfaction. University-bound students were the highest and college-bound students fell in between. There were significant differences for two variables: self-esteem and school satisfaction, with work-bound students having significantly lower self-esteem and school satisfaction than university- and college-bound students. These effects remained after controlling for parent education and school achievement. The results for self-esteem are consistent with evidence from the USA, where work-bound students reported poorer self-esteem than college-bound peers (Rojewski, 1999; Rojewski & Kim, 2003). The results for school satisfaction are consistent with self-reports from work-bound students themselves, who give dislike of school as one reason for wanting to leave education early (Australian Bureau of Statistics, 2003).

Thus, work-bound students reported the lowest levels of both career development and personal functioning. Many career development theories suggest that the causal direction is from poor career development to poor personal functioning; that is, unhelpful or limited life and career experiences and an inability to manage the developmentally appropriate tasks of a particular phase lead to a deterioration in well-being. This relationship has been demonstrated for other career-related variables, such as career indecision (Skorikov, 2006), and has now been shown for wider range of career variables. However, the causal directions of these relationships remain to be tested: do students with poor well-being not engage with their career future (i.e., a “drift” hypothesis where individuals with pre-existing well-being problems fall behind in other domains), or do students who fail to engage with their career future deteriorate
in well-being (i.e., a “social causation” hypothesis where not engaging causes poor well-being)? While both hypotheses are plausible, and bi-directional influences are possible, longitudinal studies are required to determine which effect is most influential. Clearly, however, policy makers and educationalists need to consider the relationship between well-being and career progress and incorporate appropriate strategies when devising career-focused interventions for work-bound students.

References


Table 1

Summary data for Career Development and Personal Functioning Variables

<table>
<thead>
<tr>
<th>Variables</th>
<th>University-bound</th>
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<td>N</td>
<td>M</td>
<td>SD</td>
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<td>8.31</td>
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<td>35.45</td>
<td>7.96</td>
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