

Levels of Developmental Assets and Educational Outcomes in Young People in Transitional Living in Canada

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Abstract

Developmental assets may be defined as significant relationships, skills, opportunities or values that protect young people in the presence of risk and promote their resilience. The purpose of this study was to discover whether high, medium, and low levels of developmental assets among transition-age young people in care were related to selected educational outcomes. If so, child welfare staff could potentially use their knowledge of a youth's level of assets to plan an appropriate level of educational assistance that would enable the youth to be more successful in his or her transition. The sample was composed of 567 young people (322 females and 245 males), aged 18-20 years, who were residing in a transitional living program in Ontario, Canada. The three levels of developmental assets were found to have statistically significant relationships with the seven educational outcomes examined that ranged between small-to-medium and strong in size. The educational outcomes consisted of the educational level in which the youth was currently enrolled, the highest educational level attained, average marks in school, participation in volunteering, employment, education or training, development of skills useful for employment, and adequacy of planning for the youth's education. The implications of the findings for rendering educational assistance to youths in particular need were discussed.

Keywords: Developmental assets, educational outcomes, young people in care, youth in transition

Entwicklungsressourcen und Bildungserfolge betreuter junger Menschen im Übergang zur Selbstständigkeit in Kanada

Zusammenfassung

Entwicklungsressourcen können als signifikante Beziehungen, Fähigkeiten, Chancen und Werte bestimmt werden, die Jugendliche in Risikolagen schützen und ihre Belastbarkeit fördern. Im Mittelpunkt der vorliegenden Studie stand die Frage, ob hohe, mittlere und niedrige Entwicklungsressourcenniveaus betreuter Jugendlicher in der Übergangsphase mit ausgewählten Bildungserfolgen in Zusammenhang stehen. Ist dies der Fall, könnten Fachkräfte ihr Wissen um die Entwicklungsressourcen von Jugendlichen nutzen, um eine angemessene pädagogische Begleitung zu planen, die Jugendlichen hilft, den Übergang erfolgreicher zu gestalten. Die Stichprobe der Studie setzte sich aus 567 jungen Menschen (322 Mädchen und 245 Jungen) im Alter von 18-20 Jahren zusammen, die ein Übergangsprogramm in

Ontario (Kanada) durchliefen. Die Ergebnisse der Untersuchung zeigen, dass die drei Niveaus in unterschiedlicher Stärke statistisch signifikant mit Erfolgen in den sieben untersuchten Bildungsbereichen korrelieren. Diese umfassten den momentan angestrebten Bildungsabschluss, den höchsten bereits erreichten Bildungsabschluss, den Notendurchschnitt in der Schule, Partizipation in freiwilligen Engagements, Arbeit/Beschäftigung, Bildung oder Training, die Entwicklung beschäftigungsrelevanter Fähigkeiten, sowie zukunftsorientierte Bildungspläne. Abschließend werden Folgerungen für die Begleitung von Jugendlichen mit spezifischen Bedürfnissen diskutiert.

Schlagworte: Entwicklungsressourcen, Bildungserfolge, junge Menschen in Fürsorge, Jugend im Übergang

1 Introduction and Theoretical Framework

Developmental assets are significant relationships, skills, opportunities or values that protect young people in the presence of risk and promote their resilience (cf. *Scales et al. 2006*). The Search Institute, in Minneapolis, Minnesota, has identified a total of 40 developmental assets, 20 external and 20 internal (cf. *Mannes/Roehlkepartain/Benson 2005; Scales 1999*). *External assets* consist of experiences and relationships that adults provide for young people and are of four types: support, empowerment, boundaries and expectations, and constructive use of time. *Internal assets*, on the other hand, are composed of individual values, skills, and self-perceptions that assist the young person to self-regulate effectively and are also of four types: commitment to learning, positive values, social competencies, and positive identity. Although many studies have linked a greater number of developmental assets with greater academic achievement among young people of different ages in the general population, relatively little research has been conducted to date on the association between assets and educational progress in young people who reside in out-of-home care, including those who are in the process of making a transition from care to young adulthood.

The purpose of the present paper was twofold: (1) to determine the extent to which high, medium, and low levels of developmental assets are related to educational outcomes among young people who are in transition from care, and (2) assuming a positive answer to question 1, to suggest that a knowledge of a young person's level of developmental assets might help child welfare staff and caregivers provide a level of educational support that would be closer to the youth's needs than might otherwise be the case. We first review studies of developmental assets and education in the general population and then focus on the sparse research conducted on young people in care.

In preschool children, developmental assets have been found to foster literacy skills, helping to lay the foundation for later success in school, as measured by better grades, more regular school attendance, and enhanced academic motivation (cf. *Scales et al. 2005*). *Weigel/Lowman/Martin (2007)* found that developmental assets are related to preschool children's receptive and expressive language development and thus have a long-term impact on academic success, a cumulative effect echoed by other assets research (cf. *Leffert et al. 1998*). External and internal assets combine to foster positive outcomes (cf. *Mannes/Roehlkepartain/Benson 2005*) in the domains of academic achievement (cf. *Scales 1999*), leadership, pro-social behaviour, or the ability to delay gratification (cf. *Benson et al. 1998; Scales et al. 2005*). Females tend to have a somewhat greater number of assets than males (cf. *Scales 1999*), whereas older youths tend to have fewer because they encounter more frequent risks (cf. *Scales 2005*).

In a longitudinal study, *Scales et al. (2006)* followed 370 students in grades 7-9 as they progressed through grades 10-12. They found that students with a greater number of developmental assets in grades 7-9 had higher grade point averages (GPAs) in grades 10-12. Those whose asset levels had increased or remained stable over the three years had significantly higher GPAs than those whose levels had decreased. Among the developmental assets associated with greater academic achievement, more pro-social behaviour, and better physical and psychological health among adolescents in the general population were positive adult and peer role models, effective communication, good use of spare time, positive health practices, engaging in family-oriented activities, involvement in one's community, and engagement in planning for the future. These same assets were also associated with a lower probability that the young person would engage in violence (cf. *Aspy et al. 2004*), early sexual activity (cf. *Doss et al. 2006*), or the use of tobacco, alcohol, or drugs (cf. *Atkins et al. 2002; Oman et al. 2004*). The asset of resistance skills has also been linked to a lower risk of using alcohol, tobacco, or other drugs (cf. *Leffert et al. 1998*).

A greater number of developmental assets has been found to be especially important for students identified as at risk. *Edwards et al. (2007)* found, not surprisingly, that school success was negatively related to risk factors such as tobacco, alcohol and other drug use, unhealthy diets, insufficient physical activity, involvement in violence, or unwanted pregnancy and sexually transmitted disease. *Edwards et al. (2007)* suggested that educators and parents seek opportunities to provide young people with a greater number of external assets, to help them acquire additional internal assets, make positive choices, and enhance their confidence and sense of purpose.

Scales et al. (2000) studied the relationship between developmental assets and healthy development (i.e., "thriving") among adolescents in the general population. Thriving was assessed in terms of seven indicators: school success, leadership, helping others, maintaining physical health, delay of gratification, valuing diversity, and overcoming adversity. Developmental assets accounted for approximately half of the variance in a composite index of thriving, and the assets of achievement motivation and school engagement predicted school success across all racial-ethnic groups. The assets of time spent at home and in youth programs also predicted greater school success across most racial-ethnic groups in the sample. Developmental assets explained 19-31% of the variance in school success, after demographic variables had been taken into account.

Scales et al. (2005) investigated the contribution of developmental assets to academic achievement among 429 urban high school students in grades 9-12 who came mainly from low-income families. The assets of a caring school environment, close relationships with teachers and staff, and opportunities to explore interests and talents and to engage with the community outside of the school environment were found to be linked with greater school success, and students who had more developmental assets reported fewer risk behaviours and more thriving.

In contrast to the relatively abundant research that has linked developmental assets and young people's educational achievement in the general population, few such studies have been completed on children or adolescents in out-of-home care (hereafter, "in care"), including those undergoing transitions. Given that developmental assets are particularly important for young people at risk (cf. *Edwards et al. 2007*), however, and that youth in care often lag behind their age peers in the general population in terms of educational progress (cf. *Flynn et al. 2004; Goddard 2000; Jackson 2007; O'Sullivan/Wester-*

man 2007; Trout et al. 2008), a better understanding of the role of assets among transition-age youth would be helpful for improving practice and policy.

Flynn/Tessier (2011) examined three educational outcomes – educational attainment, educational aspirations, and participation in education, training, or employment – among 406 young people, aged 18-20, who resided in a child-welfare transitional living program known as Extended Care and Maintenance (ECM) in the Canadian province of Ontario. In regression models that included demographic (gender, age), promotive (developmental assets, self-care skills), and risk predictors (health-related disability, cognitive impairments, and soft-drug use), the youth's total number of developmental assets was the only predictor that was significantly associated with all three outcomes. In a conceptually similar study carried out on a younger, Aboriginal population, Filbert/Flynn (2010) examined the relationship between the number of developmental assets and educational performance, pro-social behaviour, self-esteem, and behavioural difficulties in 97 First Nations ("Canadian Indian") young people, aged 10-17, who were in care in Ontario. In the four regression models tested (one per outcome), the number of developmental assets was, in each case, a considerably stronger predictor than any of the other predictors in the regression (gender, age, cumulative risk, and cultural assets).

The present research built upon the two studies just mentioned, which had shown that the total number of developmental assets was a good predictor of educational and other positive outcomes even when other variables had been statistically controlled in regression models. In this new study, we sought to discover whether a reasonably consistent and robust step-wise relationship existed between high, medium, and low levels of developmental assets and educational outcomes. If so, this might enable child welfare workers, managers, or caregivers to use a youth's level of developmental assets as a simple way of identifying the low, medium, or high level of educational planning and assistance that the youth might need to fulfill his or her individual goals and aspirations.

2 Method

Participants

The sample consisted of 567 young people (322 females [56.8%] and 245 males [43.2%]) who had been assessed by their individual child welfare workers in either year 6, 7, 8, or 9 (2006-2010) of the ongoing Ontario Looking After Children (OnLAC) project (described later, in the Instrument section). The youths were 18 (63.7%), 19 (22.9%), or 20 (13.4%) years of age. Most (63.8%) resided in independent living, with smaller proportions residing in "other" (unspecified) living arrangements (23.4%) or with relatives (8.6%) at the time of the OnLAC assessment.

Context: Transitional Living Program

In 2009, the 17,844 children and adolescents in out-of-home care in the province of Ontario Stapleton/Tweddle (2010) were supervised by 53 local Children's Aid Societies (CASs). These young people represented an in-care (or "placement") rate of 1 out of every 167 young people in the general population (i.e., 6 per 1,000). Of the total, 2,443

(13.7%) were between their 18th and 21st birthdays and had signed Extended Care and Maintenance (ECM) agreements with their local CASs. ECM is a province-wide, legislatively established transitional living program *Knoke* (2009) designed to support the early phase of youths' transition from public care, with a special focus on the completion of secondary school requirements, enrollment in post-secondary education (including university, community college, or training and apprenticeships in skilled trades), or direct entry into appropriate employment. ECM is used in several Canadian provinces, including Ontario, Manitoba, and Alberta, and similar transitional living programs are also common in other countries to extend child welfare services beyond the youth's age of majority, usually up to the age of 20 or 21. In Ontario, the young person signs an ECM agreement with his or her local CAS as a contract stipulating the kinds of support that the CAS will provide and the educational or employment goals that the youth will pursue. Youths in ECM typically receive funds towards rent, food, and clothing, and may also receive continued medical and dental coverage and life-skills training (cf. *Knoke* 2009). On average, youths in ECM in Ontario receive approximately \$830 per month (range: \$700 to \$1,000) (cf. *Stapleton/Tweddle* 2010). Many local CASs in Ontario provide additional support to their ECM youths in the form of transportation or clothing allowances, post-secondary scholarships, and allowances for books, travel costs to post-secondary institutions, and getting established in an apartment.

Instrument: Assessment and Action Record

The data on developmental assets and educational progress were collected at the same time by the young person's child welfare worker, using the second Canadian adaptation of the Assessment and Action Record from Looking after Children (AAR-C2-2006) (cf. *Flynn/Vincent/Legault* 2009). The AAR-C2-2006 consists of numerous single items and multi-item scales and is the key clinical and data-collection tool used in the OnLAC project. The AAR-C2-2006 form for 18-20 year olds was used in the present study; seven other forms of the tool cover ages 0-17 years (cf. *Flynn/Vincent/Legault* 2009). Child welfare workers administer the AAR-C2-2006 in a conversational interview to assess the young person's service needs and monitor his or her developmental progress. The tool has been mandated since 2007 by the government of Ontario for annual use with children and adolescents in care who are aged 0-17 years. For youths aged 18-21 (i.e., those in ECM), however, the AAR-C2-2006 is voluntary because, technically, out-of-home care comes to an end at the youth's eighteenth birthday. Use of the AAR-C2-2006 form for 18-21 year olds is thus voluntary and varies considerably across CASs.

2.1 Measures

Developmental assets. We operationalized the developmental assets total score (minimum of 0, maximum of 40) as the number of external plus internal assets that, in the judgment of the youth's child welfare worker, the young person possessed. Examples of external assets were "Caregiver support: Caregivers provide high levels of love and support", and "School boundaries: School provides clear rules and consequences". Examples of internal assets included "School engagement: Young person is actively engaged in learning", and "Honesty: Young person tells the truth even when it is not easy". The child welfare

worker indicated whether in his or her opinion a particular youth had a given asset by checking one of three responses: Yes (1), Uncertain (0), or No (0). The total number of “Yes” responses constituted the total developmental assets score. The internal consistency (Cronbach’s alpha) of the 40-item measure in the present sample was .91.

Following the practice of the Search Institute, we initially divided the sample into four levels of developmental assets, based on the total score: 1-10 (very low); low (11-20); medium (21-30), and high (31-40). We subsequently combined the first level with the second, however, because only 24 (4.2%) of the ECM youths had scores in the 1-10 range. This yielded three final levels of developmental assets: *low* (1-20, 22.8% of the sample), *medium* (21-30, 43.7%), and *high* (31-40, 33.5%).

Educational outcomes. Data on the educational variables were also taken from the participants’ AAR-C2-2006s. Single items were used to assess the young person’s educational outcomes: *educational level in which youth is currently enrolled* (not currently enrolled; secondary school; college, trade, vocational; university); *highest educational level youth has currently attained* (less than secondary school diploma; secondary school diploma; post-secondary diploma); *youth’s average marks in current or last school year or last year youth was in school* (less than 50 to 59%; 60-79%; 80-100%); *youth’s current participation in volunteering, employment, education or training, or none of these* (in none of these; in volunteering; in employment; in education or training); *youth’s development of skills useful for employment*, as rated by child welfare worker (few skills; some skills; many skills); *highest level of education to which youth aspires* (secondary school or less; college, trade, vocational; university); and, *adequacy of planning for youth’s education, as rated by child welfare worker* (little or no planning; some planning, but not enough; satisfactory planning).

2.2 Data Analysis

To evaluate the statistical significance and the strength of the association between the levels of developmental assets and the educational outcomes, we employed chi-square tests and Cramer’s V , respectively, both of which shared the same statistical significance level. Following Volker (2006), we used Cohen’s (1977, p. 222) Table 7.2.3 to interpret the magnitude of Cramer’s V , characterizing the relationships between the asset levels and educational outcomes as weak, moderate, or strong. Finally, after preliminary analyses of the male and female sub-samples separately led to too many cells in the contingency tables that contained less than five cases, we decided to limit our analyses to the sample as a whole.

3 Results and Discussion

3.1 Preliminary Results

As anticipated from previous research, gender was related to the level of developmental assets ($\chi^2(2) = 10.13, p = .006$), with a higher percentage of females (37.6%) than males (28.2%) in the high-asset category. The strength of the relationship was weak, however

(Cramer's $V = .13$). Also, age was related to asset level ($\chi^2 (4) = 10.99, p = .027$), with a higher proportion of 20-year olds (48.7%) than of 19 year olds (33.1%) or 18 year olds (30.5%) in the high-asset category, but again the relationship was weak (Cramer's $V = .10, p = .027$).

3.2 Asset Levels and Educational Outcomes

Figure 1 indicates that the higher the youth's developmental-assets level, the more likely he or she was to be currently enrolled in a post-secondary program (i.e., college/trade/vocational or university) and the less likely he or she was not to be in school at all ($\chi^2 (6) = 101.47, p < .001$). The relationship was robust, with a large effect size (Cramer's $V = .31$). Slightly more than half of the low-asset young people were out of school, compared with only 10% of the high-asset youths. These findings are consistent with *Scales'* (2010) research results with adolescents in the general population, indicating that a sense of connectedness and belonging, social and emotional skills, feelings of well-being, and a sense of purpose are associated with greater academic confidence and higher grades.

Fig. 1. Educational Level in Which Youth is Currently Enrolled (N = 534)

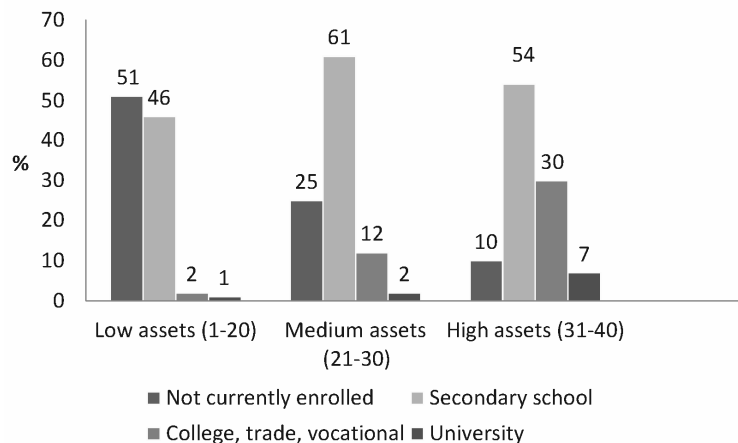
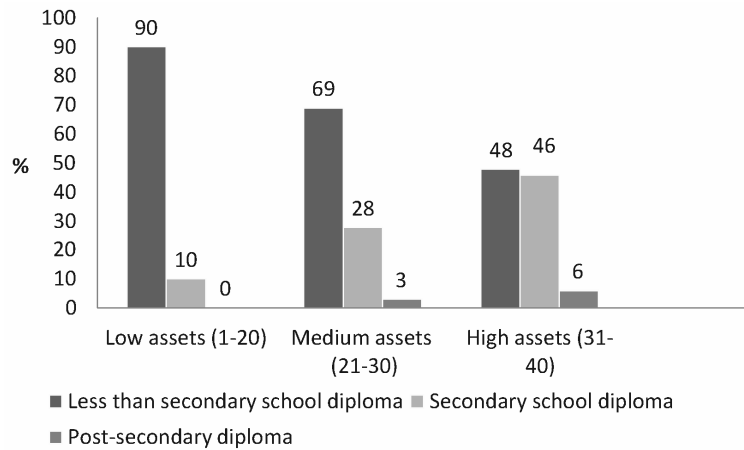


Figure 2 shows a step-wise increase from the low to high-asset levels in the percentage of ECM transition youths who had obtained their secondary school diplomas or even, at a relatively young age, a post-secondary diploma (which, given the age of the sample, signifies in the present context at the college, trade school, or vocational school rather than university level). The relationship was statistically significant ($\chi^2 (4) = 60.33, p < .001$) and of medium strength (Cramer's $V = .23$). *Scales* (2000) found that school success is enhanced by the developmental assets of school engagement, achievement motivation, planning and decision making, time spent on homework, self-esteem, reading for pleasure and taking personal responsibility. *Scales'* results suggest that the same foundation for school success also applies to the older participants in this study. The habits and values acquired during adolescent years can continue into young adulthood.

Fig. 2. Highest Education Level Youth Has Attained to Date (N = 557)



According to Figure 3, the high-asset youths were somewhat more likely to obtain high marks (80-100%) and correspondingly less likely to be close to or in the failure range (less than 50%). Nevertheless, while statistically significant ($\chi^2(4) = 23.25, p < .001$), the relationship between asset level and average marks was only small-to-medium in strength (Cramer's $V = .17$). These findings are in line with those of *Scales/Taccogna* (2000), who found that students in the general population who reported between 31-40 developmental assets were more likely to have mostly "A" grades, compared with those who had only 11-20 assets. The students with more developmental assets had higher levels of effort, academic goal orientation, beliefs about the value of an education, and graduation rates.

Fig. 3. Youth's Average Marks in Current or Last School Year or Last Year Youth was in School (N = 429)

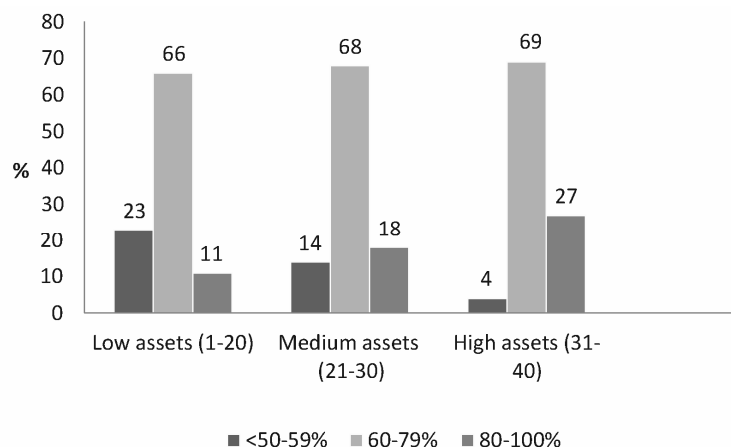


Figure 4 raises the issue of the productive use of time. As expected, the higher the asset level, the more likely it was that the transitional youth would be currently enrolled in education or training and the less likely he or she would be engaged in none of the activi-

ties listed (volunteering, employment, and education or training). The association was both statistically significant ($\chi^2(6) = 67.60, p < .001$) and medium-to-strong (Cramer's $V = .25$). These findings are consistent with *Scales* (2010) research that found that young people who have cultivated deep interests place a greater significance on volunteering and contributing to society. *Scales/Benson/Roehlkepartain* (2011) suggested that young people who have had support to develop and pursue their interests have the foundation to prepare for a career, improve relationships, remain motivated to learn, and contribute to their communities through volunteering and helping others.

Fig. 4. Youth's Current Participation in Volunteering, Employment, Education or Training, or None of These (N = 558)

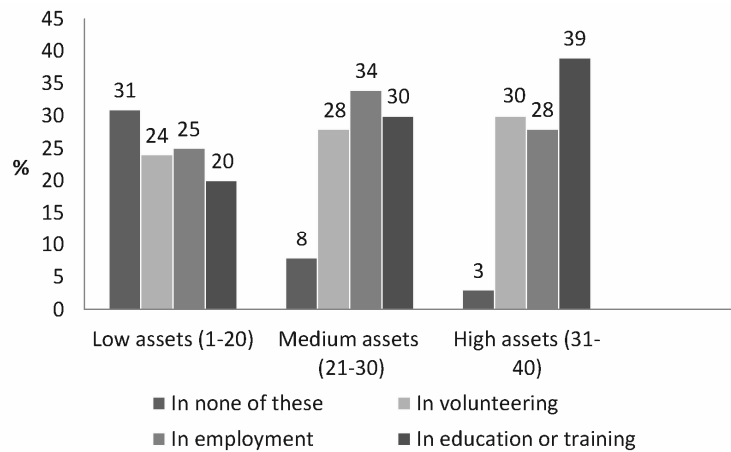


Figure 5 suggests a relatively sharp, step-wise link between the young person's level of assets and the likelihood that the child welfare worker would perceive him or her as currently acquiring many skills that would prove useful for employment. The association was statistically significant ($\chi^2(4) = 85.03, p < .001$) and medium-to-strong (Cramer's $V = .28$). In a study on thriving in adolescence, *Benson/Scales* (2009) found that competence in the academic, social and conduct dimensions was a necessary foundation to thriving. Their study also suggested that both assets and thriving develop over time. *Scales/Benson/Roehlkepartain* (2011) suggested that adolescents who can identify key personal interests, pursue opportunities to develop those interests, and have self-perceptions of empowerment exhibit leadership ability, prosocial values (such as helping others and promoting social justice), and current and future commitment to engage in their communities. *Scales* (2010) found that young people with deep interests and who are supported in developing these interests possess more skills in interpersonal communication and the ability to make friends, better empathy and understanding of others, and an enhanced ability to work within teams. These abilities are obviously useful in finding and maintaining employment, among other benefits.

Fig. 5. Youth's Development of Skills Useful for Employment, as Rated by Child Welfare Worker (N = 554)

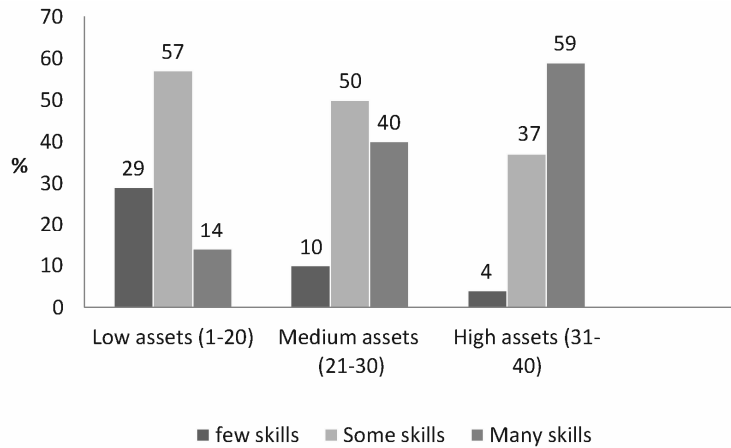
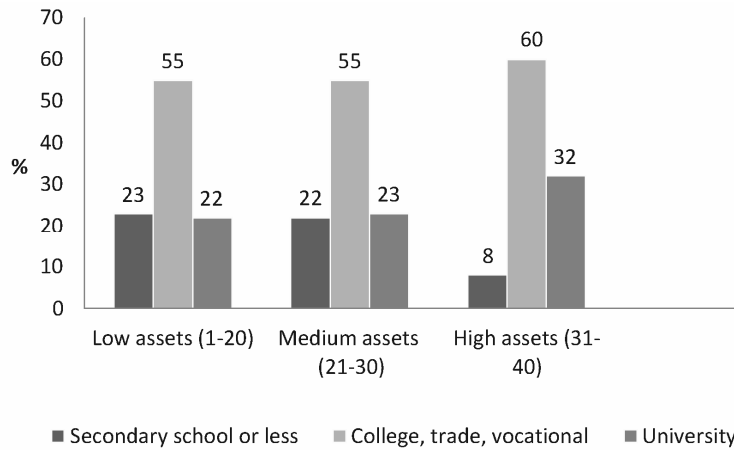


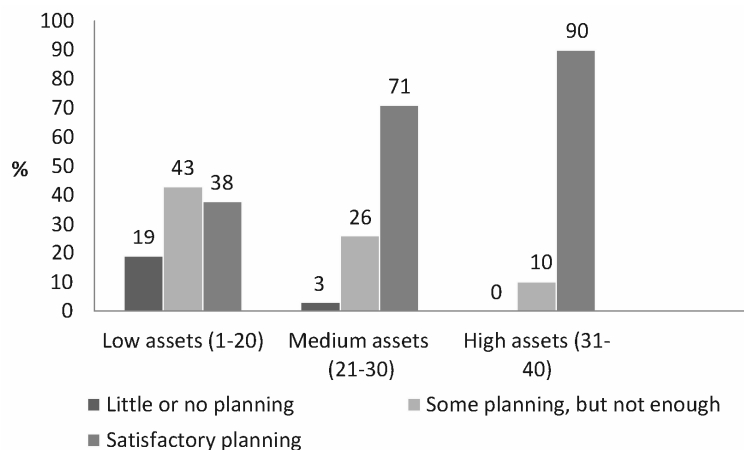
Figure 6 shows that the relationship between the young person's developmental asset level and the highest educational level to which he or she aspired was surprisingly muted. The low and medium-asset youths' had aspirational profiles that were virtually identical, and the high-asset young people's ambitions did not differ dramatically from those of their lower-asset peers. This suggested a converging and blunting of ambition, perhaps reflecting the adversities that the youths at all three asset levels had experienced early in life. The relationship was statistically significant ($\chi^2(4) = 20.18, p < .001$) but only small-to-medium in strength (Cramer's $V = .14$). *Scales'* (2010) research indicated that it is important to engage young people at an early age to foster and develop their passions or interests ("sparks"). Young people who have been able to pursue and develop their interests do better in a variety of developmental outcomes, including school success. Such young people become more confident, capable, and caring, and actively seek ways to contribute to their communities. As with developmental assets, the more "sparks" that a young person can identify, the better, because both assets and sparks are related to positive outcomes and future success in life.

Fig. 6. Highest Level of Education of Which Youth Aspires (N = 531)



Finally, Figure 7 displays the association between the young person’s level of assets and the degree to which the child welfare worker perceived that adequate planning for the youth’s education was taking place. Although conceptually a supportive process rather than an educational outcome for the youth, planning – if proactive and individualized – could no doubt confer benefits on the young person’s educational career. Adequate planning was seen to be far more likely in the case of high and medium than low-asset young people. The relationship was both statistically significant ($\chi^2(4) = 112.71, p < .001$) and strong (Cramer’s $V = .32$).

Fig. 7. Adequacy of Planning for Youth’s Education, as Rated by Child Welfare Worker (N = 554)



3.3 Implications

Without exception, the seven educational outcomes that we examined were related in a systematic, statistically significant way to our high, medium, and low levels of developmental assets. Two of the outcomes had a relationship with the asset levels that met *Cohen's* (1977) effect-size criterion for a strong relationship, namely, the educational level in which the ECM young person was currently enrolled and the adequacy of the planning undertaken by child welfare personnel and others for the young person's educational future. Two other educational outcomes had a medium-to-strong link with the asset levels: the number of skills that the youth was acquiring that would serve him or her well in employment, and the young person's engagement in education or training, employment, or volunteering, rather than in none of these activities. One additional outcome, the highest educational level that the young person had already attained, had an association of medium strength with the asset levels. Finally, the last two outcomes, the youth's average marks and the highest educational level to which he or she aspired, each had a small-to-medium relationship with the asset levels.

Overall, the three categories of ECM young people, all aged 18-20 years of age, appeared to be experiencing quite different educational careers. Over a third of the high-asset youths, for example, were already in post-secondary education, and more than half had obtained a secondary or post-secondary diploma. Moreover, given that nearly two-thirds of the sample members were only 18 years of age, it was not surprising that over half of the high-asset group were still in secondary school. At the other extreme, only 3 percent of the low-asset young people were enrolled in post-secondary education, and more than half were not even in school at all. Although this latter group obviously needs effective planning to help them define and pursue relevant educational goals, only 38% were rated by their child welfare worker as receiving such help. A mere 10% had obtained their secondary diploma or more to date, compared with 31% of the middle-asset and 52% of the high-asset groups. Similarly, at an age when young people are expected to be actively acquiring new skills, almost a third of the low-asset youths were not engaged in volunteering, employment, or education or training, compared with a scant 8% and 3% of the middle and high-asset youths, respectively. Finally, a mere 14% of the low-asset youths were seen by their child welfare workers as developing skills that would be useful for the labour market, compared with 40% and 59% for the medium and high-asset young people, respectively.

The young people in transition in Ontario call to mind *Stein's* (2006) seminal work on transitions from care in the UK. Our high-asset youths seem similar to *Stein's* "moving on" group in that both seem to possess many of the assets that successful transitions will demand. A clearer understanding of how assets originate and flourish would be extremely helpful in widening the circle of our high-asset youths to include many medium-asset young people and even some who currently have relatively few assets. Our medium-asset young people, who seem to have experienced educational outcomes that in many cases were about half-way between those of the high and the low-asset youths, may, like *Stein's* (2006) "survivors", prove especially sensitive to and able to benefit from personal and professional support that will move them towards successful transitions. Finally, those in our low-asset category, like *Stein's* (2006) third group of "victims", would appear to be facing substantial educational and other challenges. It is especially for these young people that the asset levels examined in the present research may prove especially

useful, as an “early warning system” that could trigger intensive educational assistance as early as possible in the young person’s life.

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