# It Takes Less than a Village to Influence Educational Aspirations and Attainment

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**Abstract**: Influencers are individuals or entities that meaningfully contribute through a socially constructed process to the formation of educational aspirations and possibly to their attainment. The effect of a specific influencer may differ within the context of multiple influencers. The aim of the current mixed methods study was to investigate how various influencers shape the development of educational aspirations and may contribute to goal setting and eventual attainment of an early aspiration. One-on-one, semi-structured interviews were conducted with 44 participants who attended high school in Ontario, Canada. Most participants identified as Canadian (54.5%) with a mean age of 29 years and median income of $48,504 Canadian Dollars. Participants were asked about the educational aspirations they had in high school. Retrospective accounts provided the opportunity to ask in the interviews not only who the influencers were but also if aspirations were pursued, changed, or attained. Coding and thematic analysis revealed 11 categories of influencers. Further analysis revealed that individuals with a diverse set of influencers attained their educational goals with an important exception. Young adults with 3 – 5 types of influencers were the largest percentage (61.9%) who achieved their goals, whereas among those with 1, 2, or more than 5 influencers only 21.7% achieved their aspirations. Two influencers that have received little empirical attention emerged: Self and Society/Culture. Findings have implications for encouraging young people and influencers to consider not only how parents and teachers affect educational aspirations but also the composition and size of socio-educational networks.

**Keywords**: *educational aspirations; number of influencers; attainment; adolescence; youth; goal*

## Introduction

With schooling generally being a child's first journey away from the home environment, and career being an important aspect of adult life, the attainment of educational goals is among the most significant developmental milestones. As such, researchers have sought to discover relationships between the attainment of educational goals and factors that may be associated with these goals. One such factor is the impact of individuals or entities that significantly contribute to the formation and attainment of aspirations (referred to here as "influencers"). Although the current literature examines who these influencers are, research has not concurrently explored their full extent and

longer-term impact, nor has the effect of the number of influencers been investigated. Further, the impact of one particular influencer may not be the same within the context of several influencers. The present study therefore aims to examine the association between the number and type of influencers on the educational goal attainment of young adults.

We use Bronfenbrenner's ecological model (1979, 1989) to conceptualize the various influencers that make up a young adult's developmental ecosystem. Bronfenbrenner's Ecological Systems Theory positions a developing individual at the center of five interconnected layers of external influence ranging from the intimate immediate family to the broader macrosystem of society, during a specific time. In his model, the individual is at the most inner circle that is subsumed within the microsystem (e.g., family, peers, school). Moving outwardly the next level of analysis is the mesosystem, which is comprised of relationships across different actors within the microsystem such as the impact of parents and teachers interrelating. Beyond that influence on development are neighbours, local politics and mass media that make up the exosystem. All of these spheres are nested within the macrosystem of cultural and societal ideologies. Different components of each of these ecological strata influence individuals uniquely, yet the mesosystem is different from other systems in that it is not made up of groups of individuals but rather reflects relationships. To conceptualize the role the mesosystem may play in shaping educational aspirations we draw on two additional theories.

We use social networks and social capital theory to explore how relationships within the mesosystem impact young adults' educational dreams and accomplishments. Social capital refers to the potential for individuals to access benefits through their connections with others (Bourdieu, 1986). Social network theory views individuals as actors and assesses interrelationships between an individual and other actors (Borgatti & Halgin, 2011). In social network theory, there are risks associated with the size of the social network as well as the strength of ties between individuals (Granovetter, 1983). Size of a network matters because it relates to tie strength. Adler and Kwon (2002) argue that maintaining a network with strong ties brings redundant information or norm reinforcement with the exosystem and is costly. In particular, we consider social capital a positive result of interactions among members of a social network. In the current study, influencers conceptualized using an ecological lens thus become members of a young person's social network or mesosystem with resultant impact on aspiration attainment due to some collective benefit or lack thereof through weak or strong ties, respectively. From this perspective, it is reasonable to posit that a larger social network would influence achieving educational aspirations.

**The importance of educational aspirations**

Decades of research have revealed a strong association between the achievement of educational aspirations and a number of positive outcomes throughout adolescence and emerging adulthood. A study of 1644 young people followed over a 13-year period found that aspiration achievement is significantly associated with decreased symptoms of depression (Gjerustad & von Soest, 2012). Plagnol and Easterlin (2008) found that those with more education are happier later in life, mostly due to achieving their material goods aspirations. Educational goal

completion along with continued goal striving among those who have not yet achieved their goals are associated with positive well-being (Messersmith & Schulenberg, 2010).

Despite these positive associations, some studies have shown a questionable link between having educational aspirations and their actual attainment. For example, St. Clair and colleagues (2013) argue that young people's aspirations are much higher than the current labour market can support, citing a lack of knowledge and guidance among young people on *how* to achieve their aspirations as one possible explanation for this disparity. The role of expectations has also been cited as an often overlooked factor in educational attainment (Beal & Crockett, 2010; Khattab, 2015). While aspirations describe what one *wishes* to achieve, expectations outline what one *expects* to achieve (Reynolds & Pemberton, 2001). Using data from the Longitudinal Study of Young People in England, Khattab (2015) analysed aspirations, expectations, and school achievements, and found that having both high aspirations and high expectations has the greatest impact on school achievement. When expectations or aspirations are misaligned, having aspirations is generally less beneficial. Further, this misalignment is also negatively associated with emotional well-being (Rutherford, 2015). The congruence of aspirations and expectations may therefore be more important than raising aspirations alone in aspiration attainment.

**Microsystem Sphere of Influence**

***The Influence of Self***

Starting with Bronfenbrenner's (1979, 1989) microsystem, the influence of individual characteristics on educational aspirations and attainment has been noted and involves an interplay between personality, interests, and self-efficacy. Gasser and colleagues (2004) found that students endorsing specific personality types such as insightfulness, efficient thinking, and perceptiveness are more likely to have higher educational aspirations. Other studies show an association between the Big Five personality traits - extraversion, agreeableness, openness, conscientiousness, and neuroticism - and educational attainment (Usslepp et al., 2020). Likewise, students who prefer learning through reading, listening to lectures, or figuring out solutions through information exploration are also more likely to have higher educational aspirations (Gasser et al., 2004). Self-efficacy, defined as "the cognitively perceived capability of the self" (Bong & Clark, 1999, p. 141) has also been shown to predict academic aspirations and achievements. Komarraju and Nadler (2013) found that students with low self-efficacy were more likely to believe intelligence is innate and unchangeable while high self-efficacy students were more likely to believe intelligence is determined by effort. Despite research on the relationship between individual traits and educational aspirations, we were unable to find studies that explicitly identified the self as an educational influencer.

***Family and Teachers***

Within the microsystem, the most studied influencer of educational aspirations is the family. Studies overwhelmingly point to the importance of parental influence both in shaping children's aspirations and impacting their eventual achievement (Agger et al., 2018; Hartas, 2016; Jung & Zhang, 2016). However, research demonstrates that the type and impact of parental influence is nuanced and complex. Hartas (2016) found that emotional closeness

and intellectually charged parent-adolescent interactions are more important in shaping children's educational aspirations than learning support. Further, higher levels of parental education and expectations, along with higher social and cultural capital, tend to increase children's educational aspirations and academic achievement (Agger et al., 2018; Jung & Zhang, 2016; Kay et al., 2016). Brand and colleagues (2019) found that family instability and a decline in family income account for a significant portion of children's post-divorce decline in educational attainment. Despite the importance of parents for educational aspirations, there remains a scarcity of literature examining the long-term effect of this influencer on educational goal attainment.

The impact of other family members has also been studied, particularly that of siblings. Two conflicting theories regarding siblings exist. The *resource dilution model* views siblings as competitors for parents' time, energy, and financial resources, suggesting that fewer siblings are better (Downey, 2001). The *sibling resource model* suggests individuals with siblings develop stronger interpersonal skills that become useful outside the home and therefore regards siblings as a resource (Downey, 2001; Downey & Condron, 2004). Despite competing theories, a generally positive relationship has been found between educational aspirations and siblings. Goodman and colleagues (2015) analyzed sibling pairs of SAT-takers and found that younger siblings are 15-20% more likely to enroll in competitive or 4-year-college programs if their older siblings had done so first, compared to high school classmates. Nicoletti and Rabe (2019) demonstrated that among siblings taking end-of-compulsory schooling exams, an increase in test scores of an elder sibling leads to an increase in the corresponding test score of the younger sibling. Characteristics such as gender, age, birth order, and family size have also been found to effect educational aspirations among siblings (Alm, 2020; Downey & Condron, 2004; Yucel, 2014; Yucel & Yuan, 2015). To the best of our knowledge, however, research understanding the role of sibling influencers on the likelihood of educational goal attainment has yet to be conducted.

Another key influencer of educational aspirations is teachers. Teachers are in a unique position to shape aspirations and guide goal attainment (Benner & Mistry, 2007; St. Clair et al., 2013). However, the impact of teachers' influence seems to depend on expectations, with higher teacher expectations linked to higher aspirations and better educational outcomes in youth, and lower teacher expectations reducing both aspirations and attainment (Benner & Mistry, 2007; St Clair et al., 2013). Further, this effect seems to intersect with social inequalities such that teachers working in middle-class regions are more likely to push students towards higher education than those in working-class regions (Delay, 2022). Although teachers are clearly in a suitable position to help aspirations become a reality, future research should investigate adolescent goal attainment among students who highlight teachers as influencers.

### Other Societal Influencers

Still within the microsystem, other studied influencers on educational aspirations include peers and friends. Jonsson and Mood (2008) found that students with high-achieving peers are relatively less likely to select a high-aspiring high school program, and that moving an average student from an average school to a school lower in achievement increases the probability of choosing a high-aspiring program. Research on adolescent friendships suggests that

selection by educational expectations is significant in friendship formation (Mundt & Mundt, 2020). More importantly, as the closeness of friends increases, so does their impact on educational outcomes (Mora & Oreopoulos, 2011). Other studies have found varying impacts of peer-groups on educational aspirations and attainment based on age, gender, or behavioural risk status (e.g., Patacchini et al., 2011; Stepp et al., 2011).

The interconnections among family, teachers, peers and friends represent Bronfenbrenner's (1979, 1989) mesosystem. We did not locate literature on the impact of how interactions among different groups impact educational aspirations. This lack of research leaves us with questions about how multiple people influence dreaming about and chasing educational outcomes.

**Exo- and Macro-systems Spheres of Influence**

Moving outwardly in the ecological lens from the individual through the micro and mesosystems brings us to the exosystem that contains neighbors, politics, social services, industry and mass media. Few studies have examined how actors in the exosystem impact educational aspirations. Some research suggests possible roles of media and industry but the associations remain unclear. St. Clair and colleagues (2013) showed that adolescents are able to appreciate jobs that extend beyond their local area due to several reasons, one of which was media. However, schools and community interviewees in the same study perceived the influence of media to be generally negative. In a recent study, Hampton and colleagues (2021) discovered social media skills are positively correlated with SAT performance, while time spent on social media had a negative correlation with SAT performance. How Internet use intersects with gender is also unclear with some studies indicating male students are more likely to be influenced by the Internet and other studies indicating the opposite trend (Heymann et al., 2021; Mo et al., 2020). These conflicting findings warrant further exploration into other factors that may be relevant in influencing educational aspirations. Media may be viewed as related to societal and cultural influences, however, using Bronfenbrenner's ecological model analyzing media as a separate level of analysis (i.e., within the exosystem) may uncover an influence that is distinct from the macrosystem.

Quite possibly the most complex type of adolescent influencer is from the macrosystem: society and culture. Social and cultural norms stem from a shared set of beliefs, attitudes, and values, and are a key contributor in governing behaviour (Gelfand & Jackson, 2016; Telzer et al., 2018). Neurobiological models of social cognition and decision making suggest the adolescent brain is highly malleable and oriented towards the social world, highlighting the importance of considering social influences beyond the immediate family and peer contact (Telzer et al., 2018). Societal norms can permeate schools based on locale, shaping student aspirations as highlighted in the influence of teachers above. Additionally, ethnicity has been tied to educational aspirations and in some cases linked to the intersection between class privilege and racialized inequalities (Archer et al., 2014). Bowden and Doughney (2010) suggest the impact of ethnic differences on aspirations may partly be due to students from non-English speaking backgrounds perceiving stronger levels of parental support. There is a smaller body of literature that highlights students' perceptions of the influence of societal or cultural norms on their educational and career aspirations.

**The Importance of the Strength in Number of Influencers**

As highlighted above, there is robust literature on the impact of various individual influencers on educational aspirations as well as the predictive value of these towards attainment. We were unable to find any literature on the impact of the *number* of influencers on the achievement of adolescent educational aspirations or the changing impact of various influencers relative to the total number of influencers. However, it is well established in the literature that the size and strength of a social network impacts individuals. Considering the extant literature, there are few studies that have explored the longer-term impact of multiple spheres of influencers on aspiration achievement from adolescence into young adulthood. Our study aims to investigate these gaps and present novel findings that further our understanding of who influences aspirations and how multiple influencers may impact the realization of those aspirations. We also extend the current literature by framing our investigation from the five levels of analysis specified by Bronfenbrenner (1979, 1989) examining from the self as an influencer to societal and cultural influences.

# Method

## Context

The results of this study are part of a larger study investigating *Outcomes and Cost Savings 20 Years after Early Childhood Interventions for 4 to 8-year-olds*, which builds on 20 years of rigorous research, seizing the unique opportunity to follow-up with young adults (Aboriginals, Francophones, recent immigrants, and Anglophones) who participated during childhood (ages 4 to 8) in a research initiative called *Better Beginnings, Better Futures* in Ontario, Canada. The current study explores educational aspirations and pathways with a subsample of 44 individuals. Data were collected from 47 participants but due to technical errors in recording or in file saving and transfers, 2.5 of the interviews are not included in this study.

## Participants

The sample for the study of educational aspirations is 44 individuals, which represents 94% of the data collected from 47 participants. Due to technical errors in recording or in file saving and transfers, 2.5 of the interviews are missing. The 44 complete interviews were analyzed for this study. Participants had previously consented to be contacted for future research as part of a larger study about growing up in Ontario, Canada. The average age of participants was 29 consisting of 25 (56.8%) who self-identified as a woman and 19 (43.2%) as a man; no one selected the non-binary or other gender options. Eight individuals listed a language other than English as the primary language spoken at home. The majority self-identified as Canadian (54.5%) while the second highest self-identified ethnicity was Asian (13.6%), followed by French and other (9.1% each), Indigenous (4.5%), and finally African, American, British and European (2.3% each); 15 participants (34.1%) reported more than one ethnicity. The mean annual income of the participants was $56,194.32, while the median income was $48,504.00. This indicates a positively skewed distribution by which median is more reflective of the majority since the mean is influenced by

potential outliers. Three participants reported receiving financial assistance from Ontario Works and six individuals reported they were seeking employment.

**Data Collection**

This study was approved by an institutional ethics review board. Participants were recruited via telephone and email. Interested participants provided verbal consent to take part in one-on-one, semi-structured interviews that were approximately 45-60 minutes in length using Zoom. They were asked to reflect on the educational aspirations they had in secondary school and who influenced these aspirations. Facilitators and obstacles to dream attainment as well as subsequent pathways were also included. Interviews were recorded and stored on a secure database for researcher access. Interview audio files were uploaded to an automated transcription service (Sonix and Otter). Video files were deleted. A $25 remuneration was provided.

In a semi-structured interview, participants were asked the following questions: *Thinking back to when you were in high school, what were your dreams for the future? What is it that you hoped to reach? Why was this dream important to you? Who do you think influenced your dreams? Which thing(s) do you believe has had the most influence on your formal education? At the time, how attainable did you feel this was? Did you feel like you had the resources and motivation needed to achieve your goals?*

**Data Analysis**

Data analysis is subsumed within an epistemological perspective. The overarching study uses a post-positivist paradigm with varied and mixed methods collecting quantitative and qualitative data; this study used primarily qualitative data reporting the words of the participants. This study did not use grounded theory. From a postpositivist perspective, transcripts were content-coded in a stepwise process with 60 codes identified a priori when the interview guide was developed based on themes from the literature and then others were added after the interview process had begun. The influencers were open-coded and then codified. In an iterative process of discussing the findings and coding data the researchers reached consensus on the codes being clearly defined and mutually exclusive. Overall, 79 codes were created and 2388 excerpts were coded.

To establish reliability of the coding four researchers coded the same five interview transcripts randomly selected. Because there were more than two coders, Scott's pi ($\pi$) or Cohen's kappa ($\kappa$) could not be used to calculate interrater reliability. Fleiss' kappa is a widely used statistic for three or more coders; it is a measure of observed and expected agreement. The calculation of the Fleiss was performed using the free web-based service ReCal3 (Freelon, 2010) that resulted in a reliability of 72 %. A widely used interpretation of the reliability range by Landis and Koch (1977) follows: almost perfect (81 to 100%), substantial agreement (60 to 80%), moderate (41 to 60%), fair 21 to 40%), and poor (0 to 20 %). Remaining transcripts were coded by one of the four researchers. Once transcripts were coded, research assistants conducted an audit trail and the principal investigator reviewed all codes and memos.

After all transcripts were coded, it seemed that there may be a relationship between type and number of influencers on goal attainment, so qualitative data were coded into two categorical variables and a dataset was created to statistically test the relationship between them. Specifically, participants' responses were coded as either Goal Achieved (= 1, one or more educational goals from secondary school was achieved) or Goal Not Achieved (= 0, no educational goals from secondary school were achieved) and each interview was coded according to the number of influencers. Next, the research team met and discussed findings to ensure trustworthiness and convergence of data.

Dedoose software program was used to manage the qualitative data, SPSS was used to conduct the descriptive statistics and G*Power 3.1 (Faul, Erdfelder, Buchner, & Lang, 2009) to calculate the power analysis of the regression with a sample of 44. Power analysis and effect sizes are reported below.

The findings that follow use quotes from only participants who consented to having their quotes used (with either their name or pseudonym as they chose). As a preface to the findings, practices in presenting qualitative data vary on when and whether to include the number and percentage of cases that represent a finding/code/category. Reporting frequencies in studies with relatively small sample sizes (e.g., fewer than 10 participants) do not add meaning to our understanding, whereas with larger samples counting the number of cases that have meaningful units informs us on saturation. In the process of coding and interpreting the data, we examined saturation across cases by counting the number of cases who mentioned an influencer as well as how many influencers they mentioned.

## Findings & Discussion

### Long-term Impact of All Influencers

Overall, there were 11 different groups mentioned that influenced educational aspirations (Table 1). The most common influencer was *Parents*, followed by *Self,* and *Teacher*. All remaining influencers were mentioned by fewer than 30% of participants. The literature is quite descriptive of the impact of parent and teacher influences on educational aspirations and attainment. But we also heard participants talking about siblings and extended family such as grandparents, cousins, aunts, uncles, other relatives. Other influencers were societal and cultural expectations along with friends or intimates such as a boy-/girl-friend. A category of media represents the voices of those who said that TV shows, sports, movies, books, social media, fictional or non-fictional characters, and athletes influenced them. There were fewer individuals who commented about peers, and service providers & community members such as healthcare providers at hospitals or medical offices, religious figures (e.g., churches or temples), community support institutions (e.g., Big Brother Mentor), and a couple of participants reported the influence of a "Parent's friend" and "AP USA High School Courses." Among influencers found, the recognition of the *self* as a unique influencer is a novel finding and an important contribution of the current study.

Among participants who identified *Siblings*, *Societal/Cultural, Friend*, *Parent,* and *Extended Family* as influencers, many of them achieved their educational goals describing how they shaped dreams. For example, one sibling pursuing an educational goal might inspire other siblings to believe they too can strive for their own goals. Bruce

commented on his influence from siblings: "*I saw both lifestyles, right. So my one brother had a university degree, and he got into the business world right away. And then my other brother was a [trades guy]. So I also had no pressure either side. I saw they were both doing well. So, I knew there was [sic] two options there.*" Similarly, George commented on the importance of his siblings in shaping his goals: "*I kind of saw [my siblings] as individuals that pursued post-secondary education [towards] a healthcare profession. So I kind of gravitated towards that too… if [my brother] wasn't interested in school, I probably wouldn't have been either.*" Both participants achieved their educational goals. The impact of *Siblings* is consistent with other studies that have found these individuals are involved in children's development and progress for a significant portion of their lives (Mchale et al., 2012). Siblings also impart a sense of familiarity with academic achievement, acting as models to replicate (Conger & Little, 2010). Although it has been argued that siblings may act as competitors or result in resource dilution (Downey, 2001), our findings suggest that siblings are a generally positive influence on aspiration attainment. It is possible that participants who perceive siblings as competitors may not cite these as influencers. Our results indicate that young adults who appreciate the influence of siblings are more likely to attain their goals.

Joanna, who did not achieve her goal from secondary school, was not initially influenced by her siblings during adolescence. After secondary school, however, she began to recognize her siblings as a source of influence that helped guide her return to school later in life: *"I think watching… my brother and sister... they succeeded academically in college and now university... I think looking up to my younger siblings [played] a huge role."* Now, with the influence of her siblings as she reaches for new goals, Joanna comments, "*I'm now constantly striving for success. I want to move forward. I want to move up.*" Although this participant did not achieve her high school goals and did not initially benefit from the influence of her siblings, her siblings seem to have had a profound effect on her future aspirations in early adulthood. This suggests a long-term benefit of the influence of siblings beyond adolescent years. Our findings are congruent with current literature suggesting a need for further research on sibling relationships beyond early adulthood (Conger & Little, 2010).

Individuals who identified *Society/Culture* as an influencer were more likely to achieve their aspirations. For example, we found that the influence of culture and familial cultural expectations intersected. Ivan initially noted, *"... [in]the culture my parents come from, your degree is [tied] to your personal worth so heavily."* When commenting more specifically on his personal influences, he mentioned, *"It's got to be the culture because... it's not even a question of whether you're going to do it, it's just you're just going to do it, you know, like the thought of finishing high school and then not getting a degree or diploma [my family doesn't] comprehend it. And like myself either."* This positive outcome could be a result of the multifaceted nature of this influencer. First, traditions and cultural values are imbued in children from a very young age (Packer, 2017). Second, social and cultural norms are made up of a multitude of actors and contexts (Horne & Mollborn, 2020) resulting in a synergistic influence.

The influencers least related with achieving educational goals were *Community Provider, Teacher, Self, Media,* and *Other*. One participant discussed that in her youth, she was not focused on education and lacked general guidance in

that respect. She acknowledged participating in support groups and other related programs, however felt these modalities always had an abrupt end, lacking continuity. Although a wide array of exposure exists through *Media* (St. Clair et al., 2013), exposure alone may not be enough to guide individuals in achieving their aspirations. Meanwhile, *Community Providers* may not provide an impactful enough influence because they may not be involved in the participant's life for an extended period or on a consistent basis.

The relative lack of positive influence from *Teachers* is perhaps not surprising given the literature suggesting both positive and negative effects of teacher expectations on the achievement of young adults (Benner & Mistry, 2007; St Clair et al., 2013). It is likely that the 18 participants who explicitly identified teachers as influencers were indeed influenced by teachers who held positive expectations of them. Why these participants did not go on to achieve their goals presents a need for additional research on the long-term impact of teachers in aspiration attainment. Recent literature by Relmasira and colleagues (2021) suggests a statistically significant disconnect between primary students' aspirations and teachers' predictions. In their study, students tend to aspire towards future careers involving creativity and high technologies, while their teachers predict the use of conventional tools in future student careers. This disparity may be a contributory factor, although additional research is warranted.

**The Relation between the Number of Influencers and Goal Attainment**

We recognize that the mere citation of an influencer does not indicate the influencer necessarily had a meaningful impact on goal attainment. To determine the actual impact of influencers on goal attainment, each influencer was cross-referenced with goal attainment, i.e., achieved or not achieved. Although previous studies have examined influencer impact on specific academic goal attainment such as entry into a particular school or program, GPA trends, or SAT scores, our study assessed the attainment of individual end goals. End goals were idiosyncratic to each individual and varied from completing post-secondary education to attaining professional designations. This classification allowed us to make individual aspirations our variable of interest, rather than assessing for achievement of the highest educational attainment overall. This distinction is important because the benefit of aiming for exceedingly high educational aspirations is questionable in the literature, while the benefit of congruence between aspirations and expectations in striving for individual aspiration achievement is evident (Khattab, 2015; Rutherford, 2015).

Realizing the mix of multiple influencers acting together, we wondered whether there would be an association between the number of influencers and achieving an educational aspiration. Coding the qualitative findings on number of influencers and goal achieved (coded yes or no) from 44 interviews was a sufficient sample size to test for a correlation. The average number of influencers per participant was 3 and 81.8% of participants had more than one influencer. There was no significant linear correlation between total number of influencers and goal attainment; in other words, for example, as the number of influencers increased the outcome of achieving the goal was not predictable. From the qualitative data and descriptive percentages observed (Table 1) the hypothesized relationship seemed present for individuals who named 3 to 5 influencers.

**Table 1**

*Impact of Individual Influencers on Goal Attainment* (*N* = 44)

| Influencer | With 3 to 5 influencers | | With 1 – 2 or more than 5 influencers | | Total | |
|---|---|---|---|---|---|---|
| | Achieved goal *n* (%) | Not achieved *n* (%) | Achieved goal *n* (%) | Not achieved *n* (%) | Achieved goal *n* (%) | Not achieved *n* (%) |
| Siblings | 4 (80.0) | 1 (20.0) | 1 (50.0) | 1 (50.0) | 5 (71.4) | 2 (28.6) |
| Societal/Cultural | 6 (85.7) | 1 (14.3) | 2 (40.0) | 3 (60.0) | 8 (66.7) | 4 (33.3) |
| Friend | 5 (83.3) | 1 (16.7) | 1 (20.0) | 4 (80.0) | 6 (54.5) | 5 (45.5) |
| Parent | 13 (65.0) | 7 (35.0) | 1 (14.3) | 6 (85.7) | 14 (51.9) | 13 (48.1) |
| Extended Family | 5 (71.4) | 2 (28.6) | 1 (20.0) | 4 (80.0) | 6 (50.0) | 6 (50.0) |
| Peer | 2 (67.7) | 1 (33.3) | 1 (25.0) | 3 (75.0) | 3 (42.9) | 4 (57.1) |
| Community Provider | 2 (67.7) | 1 (33.3) | 0 (0) | 2 (100) | 2 (40.0) | 3 (60.0) |
| Teacher | 5 (45.5) | 6 (54.5) | 2 (28.6) | 5 (71.4) | 7 (38.9) | 11 (61.1) |
| Self | 4 (40.0) | 6 (60.0) | 4 (33.3) | 8 (66.7) | 8 (36.4) | 14 (63.6) |
| Media | 2 (67.7) | 1 (33.3) | 1 (16.7) | 5 (83.3) | 3 (33.3) | 6 (66.7) |
| Other | 0 (0) | 0 (0) | 0 (0) | 2 (100) | 0 (0) | 2 (100) |

*Note.* Total *n* adds to 132 because participants were asked to identify all influencers.

Creating two groups of influencers, one with 3 to 5 and the other with 1 to 2 and 6+, we tested the association between the two groups and achieving educational aspirations (Table 2). Having 3 to 5 influencers was significantly associated with achieving the educational aspiration. Using the two-tailed effect size of 0.408 and sample of 44, the posthoc power analysis result was 0.83 (Faul et al., 2009).

**Table 2**

*Impact of Number of Influencers on Goal Attainment (N = 44)*

| Number of influencers | Achieved goal n (%) | Not achieved n (%) | Total |
|---|---|---|---|
| 1 | 1 (12.5) | 7 (87.5) | 8 |
| 2 | 3 (27.3) | 8 (72.7) | 11 |
| 3 | 6 (50.0) | 6 (50.0) | 12 |
| 4 | 5 (83.3) | 1 (16.7) | 6 |
| 5 | 2 (66.7) | 1 (33.3) | 3 |
| 6 or more | 1 (25.0) | 3 (75.0) | 4 |
| Grouping number of influencers | | | |
| 1 - 2, 6+ | 5 (21.7) | 18 (78.3) | 23 |
| 3 - 5 | 13 (61.9)** | 8 (38.1) | 21 |

** Pearson correlation was significant $p < .01$.

Importantly, and a novel contribution of this study, is the finding that having 3 – 5 influencers seems to be the optimal number for supporting goal attainment. Indeed, 61.9% of participants who identified 3 – 5 influencers reported achieving their aspirations. It may be that this number of influencers is enough to maintain a wide enough array of exposure and viewpoints, but not so much that the impact of each influencer is diluted or that participants are overwhelmed by too many voices. This finding is an important one and warrants future research. As was the case overall, *Societal/Cultural, Friend, Siblings, Extended Family,* and *Parent* maintained their positive impact in the cohort of 3 – 5 influencers. Further, more than 50% of participants citing these influencers came from within this cohort. The majority of participants (69.9%) here cited influencers that came from within a family context (i.e., *Parent, Sibling, Extended Family*).

A few themes emerged among participants with 3 – 5 influencers who did not achieve their goals. One of these was changing interests. Participant "N.S." with four influencers recalls their aspiration in secondary school was to study medicine. However, upon entering post-secondary education, N.S. recognized, "*I didn't like the courses that were in the program for biomedical sciences and I realized... this is not something I want to do.*" Such participants may have experienced uncertainty as a result of having multiple influencers. The second theme among this group was that of uncontrollable circumstances. Adam, with three influencers, reflects on why he did not achieve his goals: "*My mom was a single mom… We lived in pretty much poverty my entire life up until about five years ago… like I wanted to benefit myself like that, but I felt like a bunch of things was weighing me down, like, [preventing] me from actually succeeding.*" Tahmina, with five influencers who wanted to become a nurse faced similar challenges: "*Initially, I went into nursing, got pregnant, I had to drop out. Then I had my son... And shortly after I went back again to college to pursue the same career. Again, I had to drop out again, I got pregnant I had with both my kids, I had a condition called hyperemesis… I was hospitalized three times with my son… So it was a condition that held me back from pursuing the career that I wanted to.*"

Another finding is that participants in the 3 – 5 influencer cohort benefited from specific influencers who were not beneficial to participants overall (i.e., regardless of the number of influencers): namely, *Media, Peer,* and *Community Provider.* The impact of any one of these influencers in the setting of 2 – 4 other influencers seems to produce a positive outcome. It is important to note, however, that only 33% of participants citing *Media* and 43% of participants citing *Peer* as influencers came from this cohort. The lack of prominence of these influencers in this cohort, while maintaining a net positive benefit, is suggestive of two points. First, participants in this cohort were less likely to be meaningfully impacted by influencers who provided comparatively less value overall. Second, participants in this cohort were more adept at establishing which influencers would be uniquely beneficial for them. Therefore, these participants were better able to select an optimal blend of intrinsically beneficial influencers, increasing their likelihood of achieving their educational aspirations.

Having 1 – 2 influencers yielded similar results on goal achievement as having more than 5 influencers; collectively 21.7% of participants in these two groupings achieved their goal (Table 2). This is an interesting finding that warrants discussion and elaboration with participants' words. It is possible that having 1 – 2 influencers does not sufficiently expose individuals to enough viewpoints or lead to a lack of recognition of broader perspectives. In our study, Luis, who identified *Parent* and *Friend* as his influencers, comments, "*I think the peace of mind, knowing that my parents would have been happy or doing something that they would have wanted me to do initially would have been enough for me…. I had a friend as well, and she was also really interested in [law]. So I guess that kind of influenced me as well to kind of go with it.*" Luis pursued law for two years but realized he was not inherently interested in it and did not complete the program. Exposure to additional influencers and viewpoints may have been beneficial to his aspirations: "*I think when it came to education, for me, it was just really important to do something passionate that I really liked.*" It may be that the two influencers in this case were not able to help this person find his true passion and to facilitate connecting it to education.

Similar to identifying 1 – 2 influencers, having more than 5 influencers was also related to fewer individuals attaining aspirations. One possible reason for this is that too many voices may dilute the impact of the most important influencers or lead to general uncertainty about which future path to pursue. Further, identifying more than five different influencers may reflect a lack of recognition of who/what an influencer is and what their unique impact should be. In our sample, 100% of participants with more than five influencers who did not achieve their goal changed their goals after completing secondary school. Ijaz, with seven influencers began high school wanting to be an auto mechanic and left with the aim to attend law school. He, however, went on to become a teacher. During high school, Ijaz's friends included children of lawyers or those who had dreams of attending law school. He comments, "*I guess I sort of latched on to [my friends'] dreams.*" He started his internship in a law firm but soon realized this was not his passion. The influence of friends in this case may have distracted Ijaz from tuning into other influencers that may have been more impactful. Specifically, conversations he had with teachers while completing his master's degree allowed him to find his true passion of teaching. As a practicing teacher, he now feels "*very happy, like, I feel very fulfilled.*"

Jordan, also with seven influencers, attributes her change of aspirations to creating meaningful relationships with friends and professors in university. From early on, she recognized her desire to help people coupled with being one of the "*smarter kids*" influenced her towards medicine. Due to societal and peer views in her neighbourhood, she felt "*a lot of people envisioned ... the smart kids ... to be a doctor or a lawyer or an engineer.*" However, once she left her small-town home for university and formed relationships with peers and professors, these exposed her to other methods by which she could help people that were possibly better suited for her skills and interests. In high school, she did not highlight *Friends* as one of her seven influencers. Reflecting on this, she comments, "*When you're younger, you don't realize or I didn't realize in any case, the value of really meaningful human connection and really meaningful relationships with partners or friends… truly the person that I am today is based mostly on the relationships that I had [in University].*" Although participants in this cohort did not explicitly mention being confused by too many influencers or acknowledge the possible diluting effect of several influencers, it may be that some key influencers got ignored or overlooked. This is one possible explanation for the lower likelihood of goal attainment within this cohort. Future research examining changes in the number of influencers as individuals age beyond adolescence and resulting aspiration attainment would be beneficial.

It is possible that Amanda, the single participant with more than five influencers who attained her goal, was able to do so because she was able to establish a primary influencer among her seven influencers. She reflects, "*Both my parents for sure, primarily. Yeah, yeah, both my mom and my dad… really value education and just being kind of like lifelong learners in that way. So, yeah, they were probably ... my biggest motivators*." Amanda may have been well-equipped at honing in on one primary influencer to achieve her goals, reducing the potential uncertainty that could have resulted had she tried to simultaneously focus on all her influencers.

The *Societal/Cultural* influencer was the most significant in the cohort of 1 – 2 or greater than five influencers and provided a benefit for these participants despite not having the optimal number of influencers. This was especially true from the standpoint of participants with 1 – 2 influencers. Within this group, two participants cited *Societal/Cultural* influence and both participants achieved their goals. Matt, with two influencers aspired to pursue post-secondary education *"primarily because that's the societal norms, that's what people do after high school."* He achieved this aspiration and went on to complete a master's degree. This sustained benefit may again be due to the multi-pronged and multifaceted nature of the influence of society/culture as previously discussed.

Conversely, of those with more than five influencers, three people highlighted *Societal/Cultural* influence and none attained their goal. Although the impact of this particular influencer seems to be beneficial in virtually every other situation, in this cohort, the same results were not attained. This suggests the possibly negative impact of diluting an otherwise beneficial influencer.

The most unique influencer in the cohort of 1 – 2 influencers was *Self*. The *Self* led to only a modest benefit among those with 3 – 5 influencers, although it fared the poorest compared to other influencers. However, in the context of 1 – 2 influencers, the benefit of the *Self* is proportionately higher with a more positive impact. Interestingly, of the four participants with 1 – 2 influencers who attained their goal, 75% noted *Self* as an influencer. Although this suggests some benefit from *Self* among this cohort, this finding should be interpreted cautiously. Of those with 1 – 2 influencers, *Self* was also the most commonly cited influencer, mentioned by twice as many participants as any other influencer (42% vs. 21% for the next most common influencer). The increased propensity to highlight *Self* as an influencer in this cohort suggests these participants may be less likely to seek other influencers, less likely to recognize who an influencer is outside oneself, and less likely to recognize the importance of other influencers altogether.

Unfortunately, we were unable to find prior research on the influence of *Self* but some inferences can be made. First, studies have shown that individuals with higher self-efficacy are less prone to social influence (Lucas et al., 2006). In the context of the present study, participants identifying themselves as influencers presumably have high self-efficacy which may correlate with less of a desire to seek outside influences. Second, some literature suggests individuals with an independent view of self, such as those we would expect to influence themselves, are more likely to have an internal locus of hope (Du & King, 2013). These individuals may be less likely to recognize the importance of influence from external figures compared to those with an external locus of hope and interdependent view of self. Finally, individuals who identify the self as an influencer may be less likely to recognize influence outside oneself due to internal beliefs about success. Kay and colleagues (2016) found that youth with parents who had not completed a university degree benefit more from motivation associated with believing success is controllable compared to youth of parents who had completed a university degree. Thus, young adults influenced by *Self* may be more likely to rely on personal merit and less likely to recognize another individual as an influencer.

Nonetheless, we encourage future research to further assess adolescents who identify influence stemming from within oneself and resulting educational attainment particularly as it relates to the number of other influencers.

Finally, another relatively beneficial influencer in the cohort of 1 – 2 or greater than 5 influencers was *Teachers*. Literature suggests that even in disadvantaged environments, the positive effect of higher teacher expectations on student aspirations and attainment remains (Van den Broeck et al., 2020). This may hold true even in the setting of a less-than-optimal number of influencers. Again, this finding presents the need for additional study on the nuances of the influence of teachers in various situations.

The comparative lack of familial influence among those with 1 – 2 or greater than 5 influencers is surprising and may be an important area for future research to explore. Interestingly, familial influence was not particularly beneficial in the context of 1 – 2 or more than 5 influencers, with only 21.4% of these participants achieving their goal, compared to 68.8% in the cohort of 3 – 5 influencers who did the same (reported above). Thus, an otherwise positive group of influencers seems to be less useful with 1 – 2 or greater than 5 influencers suggesting the importance of encouraging young people towards establishing 3 – 5 influencers.

**Understanding Spheres of Influence from Bronfenbrenner's Ecological Model and Social Network and Social Capital Theories**

Our findings challenge the idea that educational aspirations may be achieved from individual effort or with one or two key individuals such as only parents or teachers. Consistent with Bronfenbrenner's ecological model (1979, 1989), having one or two levels of influence is not enough to explain developmental outcomes. We see that the individual and microsystems alone are weak but not entirely. Parents and teachers are important influencers but more capital is needed with at least a third person and up to five people suggesting that the mesosystem is critical. The mesosystem is the sphere with influence where relationships across multiple actors at both the individual and microsystems levels occur. Given the power of relationships reflected in the mesosystem, we were surprised that love relationships were not commonly cited as influencers. Of the 11 participants citing *friend* as an influencer, only one recognized their love relationship as the source, stating "*my girlfriend at the time… let me explore what I liked and pushed me into what I like*." This participant attained the personally set educational goal. Nonetheless, the overall absence of intimate relationships in our findings may suggest these relationships do not contribute to educational aspirations, and possibly detract from attainment. A closer examination of love relationships to determine if they tend to knock someone off course or alternatively encourage someone to pursue their aspirations, is a topic for future research.

Consistent with social network and social capital theories, results show that it is a collection of both strong and weak ties among key influencers that seems to be optimal in achieving educational outcomes. Bourdieu (1989) framed social capital as a sum of benefits derived from social networks such that the size of the social network did not matter so much as the potential for capital to be gained within one's network. Our study findings support Bourdieu's

conceptualization. The interconnections among influencers that converge on an individual provide a form of social capital with the nuance of building a social network that provides the greatest likelihood of attaining educational aspirations. Ultimately, the social network that is optimal for an individual is unique. For most people, having both a unique blend of the types of influencers while maintaining a social network of 3 – 5 influencers is related to achieving educational goals. Our findings raise a new question for future research to explore about the size of a social network. We see that when comparing a social network of one or two people to one with three to five that the greater number is associated to achieving educational aspirations. A question remains when comparing networks with fewer than six influencers to a network with more than six. In the current study, we do not see that a larger social network is better than a moderately sized one. In larger networks, it may be that redundant information is problematic for individuals with six or more influencers. Similar to having 1 – 2 influencers, individuals with a large social network may lack opportunistic interactions, negatively impacting the attainment of educational aspirations.

Social network theory helps to understand these findings. One explanation for individuals with large social networks not reaching their educational aspirations may be due to larger networks being costly (Adler & Kwon, 2002) by having weaker ties among highly networked individuals (Granovetter, 1983). Young adults with more than five influencers may have been less likely to achieve their educational goals because of an inability to effectively use information received from a larger social network. When it comes to optimizing the potential to achieve educational aspirations there is evidence to suggest that individuals and their influencers may want to attend to how a young adult develops a social network that will lead to the necessary social capital to achieve educational aspirations.

## Limitations

Some limitations of the current study must be addressed. First, our sample was limited to young adults who grew up and attended high school in Ontario, Canada. Our findings therefore cannot be generalized beyond this context. Second, the findings highlight the importance of influencers at a specific life stage. Future research should examine how influencers and their impact vary as people age. Third, social media was also not as prevalent a decade ago when our sample was in high school as it is today. It will be interesting to learn if researchers seeking to replicate this study may find social media to be more impactful than the current study's findings. Finally, it is possible there may be something unique about the experiences of participants who chose to be interviewed compared to those who opted out. Moreover, the study required participants to retrospectively discuss influencers and aspirations. This introduces risk of recall bias; however, it also allows for the assessment of aspiration attainment.

## Conclusion

The current study sought to investigate the relationship between the number and type of influencers on educational goal attainment of young adults. What we learned, and what this study contributes to the existing literature, is that developing aspirations and achieving them is a dynamic, interactive process between an individual and a few other important and influential people. In the past, research on who influences educational aspirations often investigated one or two potentially significant relationships such as with a parent or teacher. However, our findings suggest that

realizing a dream requires support and accomplishing educational aspirations is greatly facilitated by having 3 − 5 influencers in a young person's world. We caution against thinking more support is better, though. Rather, our findings suggest that too many influencers make goal attainment less likely. Indeed, it seems that it takes *less than* a village to successfully guide youth to dream attainment and that ensuring just 3 − 5 influencers may be enough to help young people reach their educational aspirations.

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