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Parental Education Level:
Academic Involvement and Success
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Abstract

In this study participants were surveyed about a variety of topics relating to academic success and family characteristics. The goal was to examine whether parental education level was related to the amount of parental involvement in academics and whether parental education level was correlated with an individual's academic success. No significant relationship was found between parents' education level and how involved the parents were in a student's academics. The parent education level was not related to an individual's GPA either, which was the main measure of academic success. The results suggest that parental education level is not an important factor in the academic success of college students in a large, competitive university.

Parental Education Level:

Academic Involvement and Success

Examining whether parental education level is related to parental involvement in a student's academics is a topic of study that helps to understand what contributes to an individual's academic success. Also, finding whether parental education level predicts an individual's academic success could be important to know. Gender differences between individuals help understand what impacts an individual's academic success as well. These issues were examined in this study. The research found in previous experiments is reviewed first.

An individual's success in academics is influenced by many factors. For example, there is a relationship between school success and how much time and effort an individual spends on homework each night, but school success is also related to the type of home an individual comes from. The Search Institute (Scales & Leffert, 2004) has divided the factors contributing to an individual's successful development into internal and external assets. External assets are the relationships and opportunities available in one's environment. Internal assets are competencies and values that an individual develops within him or herself (Scales & Leffert, 2004). Findings by the Search Institute show that both internal and external assets play a role in success as they contribute in different ways.

Examining factors that contribute to the presence of certain assets is a continuing area of research. Restrictions or obstacles created by said factors may be related to an individual's academic success by hindering the presence or proper functioning of essential assets. It is important to look at external assets such as parental involvement because, while these factors are beyond the control of the individual, they are likely to still impact academic success. A characteristic that may affect the amount of parental involvement in an individual's academics is

parental education level. Parental education may influence the willingness or ability for parents to become involved (Bogenschneider, 1997). Many studies have shown that parental education plays a significant role in the amount of parental involvement. However, most of this research has been with high school students (Bogenschneider, 1997; Hill, Castellino, Lansford, Nowlin, Dodge, Bates, & Pettit, 2002; Sui-Chu & Willms, 1996; Tavani & Losh, 2003). In addition, findings suggest that the higher education level of one's parents the more likely one will have academic success, but this research is also only with high school students (Sandefur, Meier, & Campbell, 2005; Tavani & Losh, 2003). In this study, the relationship between parental education level and parental involvement in high school and college, as well as how parental education level and academic success in high school and college are correlated were examined. Gender differences for the students were also investigated.

Review of Role of Parental Educational Level in Academic Achievement

While the broad topic here is the impact of parental education, there are many components of this topic that may provide valuable insight upon examination and reflection. Psychologists have studied the importance of parental education level as it relates to an individual's academic success (Bakker, Denessen, & Brus-Laeven, 2007; Bogenschneider, 1997; Hill et al., 2002; Sandefur et al., 2005). They have found important factors that should be considered when researching this topic. These include defining *parental involvement*; the *parental education level* as it may impact the amount of involvement in their child's academia, and whether the impact is a *direct or indirect influence*.

Parental Involvement

Some studies emphasize the idea that higher levels of education of parents and parental involvement both have impacts on an individual's academic success (Blair, Blair, & Madamba,

1999; Tavani & Losh, 2003). However, regardless of the parents' education level, the more involved parents are in their child's schooling the better students perform academically and reaches a higher level of achievement in high school (Bakker et al., 2007; Bogenschneider, 1997). The degree of impact of parental involvement on an individual's academic success may vary. Some studies show that when the parents who have lower levels of education are more involved, the effect is greater and more positive than when parents who have higher levels of education are involved (Bogenschneider, 1997; Hill et al., 2002).

Influence of Parental Education

There are several reasons why the education level of parents may be related to the amount of involvement they have in their child's academics. Families of lower SES generally have parents with lower education levels. As a result, these families may have fewer resources to help their child academically. These parents may not have the same opportunities to offer their child, such as tutors or computers (Blair et al., 1999; Bogenschneider, 1997; Sandefur et al., 2005). However, there are several ways that parents may become involved in their child's academics so that even parents with fewer resources can participate (Bakker et al., 2007). In addition, a student whose home is of lower SES may not provide the same opportunities as the home of a student whose parents have higher income (Bogenschneider, 1997). Furthermore, parents with a higher education level typically have more of an opportunity to become more involved in academic success (Bogenschneider, 1997). Parents with lower levels of education may not feel capable of assisting their child or playing a role in his academic life as they may not understand the material or feel comfortable with their abilities (Hill et al., 2002). In contrast, studies show that some parents with lower levels of education do become involved because of a

desire for their child to have upward mobility in the world and so their child achieves things they themselves could not (Hill et al., 2002)

Direct Versus Indirect Influence

There is inconsistency whether the influence of parental involvement in a student's academic achievement is primarily direct or indirect (Bakker et al., 2007; Hill et al., 2002; Sandefur et al., 2005; Tavani & Losh, 2003). Direct influence is when the impacts of the variable can be traced back to the factor alone and the effects of the factor can be seen. Indirect influence means the factor has an impact on the variable; however it may not be traced back to the factor. The impact of the factor can occur through other means. Most findings on the issue describe that the influences of parental involvement are primarily indirect. One example is that greater parental involvement leads to less behavioral problems that may cause interference with learning. Another indirect influence is the parents being a role model for what the individual should strive to achieve (Hill et al., 2002). In addition, parents with a higher education level pass on certain expectations about the importance of education to their child. The way a child is raised differs based on the parents' education level as well because of the values the parents stress and the activities the parents create for the child and participate in. Parents with higher education are more academically involved and place greater emphasis on academia (Tavani & Losh, 2003). Regardless of parental educational level, more involved parents build stronger relationships with their child and demonstrate that they care about the individual's academic success (Sandefur et al., 2005; Sui-Chu & Willms, 1996). There may be a boundary that when crossed creates over-involved parents who then hinder the academic success of an individual, but further exploration and research would need to define this.

Because these previous studies have examined high school students, it is not known if there is change for students in college. In addition, the impact of parental education varying by gender of the child has not been explored as much in depth as necessary, especially with college students. These issues were investigated here by looking at the correlation between parental education level and parental involvement in both high school and college. The study also examined the correlation between parental involvement and overall academic success in high school and college, varying by gender.

Method

Participants

Subjects included 126 students from the University of Michigan. They completed the survey in order to fulfill the requirements for their Introduction to Psychology course. The students were freshman (52.6%), sophomores (43.9%), juniors (2.6%), and one senior (.9%). They were Caucasian (60.5%), African American (11.4%), Asian American (16.7%), multi racial (6.1%), Latin American (.9%), and Other (4.4%) racial groups. The participants were nearly gender balanced with males (51.8%) and with females (48.2%). There was a comparison group (84.2%), student athletes (13.2%), and students with learning disabilities (2.6%).

Measures

Positive Development Survey

The instrument used was the Positive Development Survey (2008), based on research from the Search Institute (Scales & Leffert, 2004). The survey was originally designed for high school students, but was extrapolated here for college students. The questions in this survey focused on the 40 developmental assets (Scales & Leffert, 2004). The external asset questions focus on support, empowerment, boundaries and expectations, and constructive use of time. The

internal asset questions focus on commitment to learning, positive values, social competencies, and positive identity (Scales & Leffert, 2004). Question formats include Likert 7-point scale, yes or no, multiple choice, number rating, and open-ended prompts.

Parental Education Level

The independent variable in this study was the education level of the parents. The measure of education level was based on the highest education level obtained between the two parents. The education levels were divided into four groups, PhD, graduate school, BA/BS, and some college and below.

Parental Involvement

One dependent variable was the amount of parental involvement in an individual's academics. The measure included ratings on a Likert 7-point scale of how much of a role parents took in an individual's high school and college schooling (see appendix).

School Success

The other dependent variable was the amount of school success of the student. The measurements of this were high school and college GPA as reported by the participant.

Gender

The influences of gender were also examined. The study explored whether male and female individuals are impacted differently by parental involvement and academic achievement based on parental education level.

Procedure

The participants arrived individually at a prearranged time at the site of the experiment and were asked to fill out the survey. They were provided instructions and sessions lasted

between 25-30 minutes. Students were debriefed when the surveys were completed. The participants were given one credit of research subject pool for their class.

Results

In this study the hypothesis under investigation concerns parental education level and its relation to being involved in a student's academics, both in high school and in college. In addition, individuals whose parents had lower levels of education were predicted to have lower GPA's in both high school and college. The distribution of parental education level can be seen in Table 1.

Parental Involvement

The participants indicated in the Positive Development Survey the role they believed their parents played in their school performance, both during high school and college. The mean for parental involvement in high school was 5.14 (sd =1.63) and the mean for parental involvement in college was 4.16 (sd=1.75). Lower involvement in college was expected as many students live away from home and on their college campus.

An ANOVA test was performed. The results for parental involvement in high school were $F(3,120) = 1.58, p = .20$. These results did not support the hypothesis that parental education level was related to the amount of parental involvement in high school. The results for parental involvement in college were $F(3,120) = .62, p = .60$. The results do not show a relationship between the amount of parental involvement in college and parental education level.

The differences between genders were also examined. A general linear model was used. There was no change for parental involvement in high school between genders, $F(3,116) = .481, p = .70$, but there was for parental involvement in college, $F(3,116) = 2.79, p = .04$. Thus no differentiation for gender was found when looking at how parental education level related to

parental involvement in high school. However there is a significant difference when looking at parental involvement in college, with the females having more parental involvement than the males.

GPA

The participants listed their current GPA's on the Positive Development Survey. For high school GPA there were 6 GPAs missing, while for college GPAs there were 64 GPAs missing because many of the participants were first semester freshman. The descriptive of the GPA's can be seen in Table 2.

ANOVA's were performed on these data. The results for high school GPA and parental education level were $F(3,115) = 2.85, p=.04$. This shows significant differences between groups, but the means were not linear, as shown in Table 3. This finding should be examined. The results for college GPA were $F(3, 57) = 1.62, p= .19$. These results did not find a relationship between parental education level and college GPA.

The gender differences were also examined with regards to parental education level relating to GPAs. A general linear model was used. No difference was found between male and female individuals when looking at parental education level and high school GPA, $F(3,111)=.63, p=.60$. There was also no gender difference for the relationship between parental education level and college GPA, $F(3, 53) =1.20, p=.32$. Overall, the results did not support the main hypotheses.

Discussion

This study was designed to see if parental education level is related to involvement in an individual's academic performance. The study measured the correlation between parental

education level and an individual's academic success, as measured by GPA. Gender differences of the individuals were also examined.

Support was not found for the hypothesis that parental education level changes the amount of parental involvement in an individual's academics. Parents of the educational brackets included, ranged from achieving a PhD to having some high school education. This equality in parental involvement might be explained because involvement in schooling can include a variety of things, from conferences with teachers to helping with homework at home (Bakker et al., 2007; Sui-Chu & Willms, 1996). Parents can find the most convenient form and way that best fits their lifestyle to be involved in their child's academics. The type of involvement does not necessarily matter; taking the time to be involved is what has the impact on academic success because of the connection established between parents and children (Sandefur et al., 2006). In addition, parental education level is not related to the amount of parental involvement as parents who may have achieved as lower levels of education may wish for their child to achieve more. They therefore become more involved in their child's schooling (Hill et al., 2002). It should be noted that the survey used is the individual's perceptions about how involved their parents were, but not actual proof. This can be more important for the individual (Bogenschneider, 1997) than the actual amount of involvement of the parent. The instrument used here may not tap the relevant information.

One finding from this study that is inconsistent with findings from other studies is that the GPA of an individual was not influenced by parental education level. While results did find that parental education level was related to high school academic success, the results were not linear. The high school GPA did not show a decreasing pattern with decreasing parental education level. The reasoning for this finding could be that an individual's own success is

independent from their parents' achievement. These findings may indicate that parents from any education level can predict that the student works hard. Perhaps the students from parents of lower educational levels want to be able to gain the education their parents did not achieve (Hill et al., 2002).

Gender differences were only found when looking at the relationship between parental education level and parental involvement in college. This discrepancy may be due to the finding that parents have more academic discussions with female children than male children (Sui-Chu & Willms, 1996). While the difference may not be as obvious with high school students, as they still live at home, when the children move away to college they need to make more effort to have discussions with parents. Since females already have more academic discussions with parents it may be easier for them to continue them once they move away. Further exploration is needed on this issue. There is no difference when examining the relationship between parental education level and the GPAs of males and females in both high school and college.

Evidence here does not support the common theory held by researchers that parental education level is related the amount of parental involvement in academics, and also is related to the individual's academic success (Bakker et al., 2007; Bogenschneider, 1997; Hill et al., 2002) for the population studied. This discovery is important because many researchers hold the common belief that parental education is significant in an individual's academic success. These findings here suggest that further exploration of what directly impacts an individual's academic success is necessary.

Limitations

There were a number of limitations with this study. First, the sample size was small. In addition, about half did not have a college GPA yet because they were first semester freshman.

Further, the sample was not very diverse in terms of universities the participants attended. Surveying individuals from a wider range of schools might have yielded more diverse results. The surveys may also not have obtained all information pertinent to the predicted link. If performing this study again in the future, a separate survey for the parents may give supplemental and alternative information.

Results suggest that other factors may be more important in the academic success of an individual than how involved a parent is in an individual's education. A parent chooses the amount of involvement they wish to take in their child's academic career. Their previous decisions and academic successes do not necessarily influence how involved they will become. In addition, a parent's academic success does not have a strong connection to how his child succeeds academically. While an individual's academic success is no doubt impacted by many factors, in future studies the variable factors should be examined in order to gain a better understanding of those factors that are especially important to achieving academic success.

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Appendix

How much of a role did your parents take regarding your schooling?

High School: 1-----2-----3-----4-----5-----6-----7

none

a lot

Currently: 1-----2-----3-----4-----5-----6-----7

Author Note

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Table 1

Parental Education Level Distribution

	Frequency	Percent
PhD	24	19.0
Grad School	52	41.3
BA/BS	29	23.0
Some College/ Below	20	15.9

Note. One parental education level missing.

Table 2

GPA Descriptive

	N	Minimum	Maximum	Mean	Std. Deviation
GPA College	62	2.00	4.00	3.19	.43
GPA High School	120	3.00	4.50	3.79	.26

Table 3

High School Mean GPA by Parental Education Level

	Mean GPA
PhD	3.80
Grad School	3.75
BA/BS	3.90
Some College/Below	3.70
