

NURTURING THE HOPE AND WELL-BEING OF OKLAHOMA STUDENTS:

THE ROLE OF INDIVIDUAL CAREER AND ACADEMIC PLANNING

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EXECUTIVE SUMMARY

In the Fall of 2020, the Oklahoma State Department of Education and the Hope Research Center of the University of Oklahoma engaged in a partnership to investigate the effect to which ICAP participation is associated with student hope. School districts throughout Oklahoma were selected for the study. The purpose of this report is to provide the findings of an assessment of student hope, teacher-student relationships, student future aspirations and goals, student well-being, and items associated with the ICAP experience (student options, goals, and plans after high school).

PROCEDURE AND DEMOGRAPHICS

A web-based survey was sent to 9th grade students in school districts throughout Oklahoma. One thousand, eight hundred two students provided responses. Key demographics of participants included: 49.6% female, 36.2% Caucasian, 23.0% Hispanic, 12.7%, African American, 9.8% Multi Racial, 8.0% American Indian, 5.4% Asian, and 50.5% first-generation students.

KEY FINDINGS

- 77.7% students are in the slight and moderate hope categories.
- The average hope score falls in the lower end of the moderate category.
- Students with higher hope scores report higher grades and missing fewer entire days of school.

HOPE AND MEASURES OF ENGAGEMENT AND WELL-BEING

- Students with higher hope scores report higher levels of engagement with their teacher.
- Students with high hope report higher levels of engagement with future aspirations and goals.
- Hopeful students report higher levels of well-being.

FIRST-GENERATION STUDENTS & MEASURES OF HOPE, ENGAGEMENT, & WELL-BEING

- First-generation students report lower levels of hope.
- First-generation students report lower levels of engagement with their teacher.
- First-generation students report lower levels of engagement with future aspirations and goals.
- First-generation students report lower levels of well-being.

OUTCOMES OF HOPE

- Increases in hope are associated with increases in well-being, future aspirations and goals, items associated with the ICAP experience (student options, goals, and plans after high school), and teacher-student relationships.

- Teacher-student relationships, ICAP experience, and future aspirations and goals are significantly associated with hope.
- Teacher-student relationships, the strongest association, is followed by the student ICAP experience variable.

CONCLUSION

ICAP represents a set of individual career and academic strategies that educators can use to promote student success. The data from this study show that ICAP is a pathway of hope for students.

INTRODUCTION

PROTECTIVE AND COMPENSATORY EXPERIENCES (PACES)

A 2019 study from the National Survey of Children's Health revealed that children in Oklahoma experience higher Adverse Childhood Experiences (ACEs) than their counterparts in other U.S. states (Child Adolescent Health Measurement Initiative, 2019). ACE is a term used to describe potentially traumatic experiences (e.g., abuse and neglect) that occur before the age of 18 (Centers for Disease Control and Prevention, 2019). Children who endure ACEs tend to have lower educational, employment, and economic successes when they reach adulthood (Currie & Spatz Wisdom, 2010; Lanier, Kohl, Raghavan, & Auslander, 2015). However, ACEs can be buffered by the presence of Protective and Compensatory Experiences (PACES) which can give children the opportunity to build resilience (Ratliff, Sheffield Morris, & Hays-Grudo, 2020). The Individual Career Academic Planning (ICAP) process could be a potential PACE for students with the support from educators, families, and community members.

INDIVIDUAL CAREER ACADEMIC PLANNING (ICAP)

Beginning in the 2019-20 school year, all Oklahoma students are required to complete an Individual Career Academic Plan, (ICAP) before graduation. Oklahoma's new high school graduation requirements gives students a personalized roadmap to use when navigating college or career plans after high school – one that ensures they are ready for their next steps and excited about the future. A student's ICAP will include the activities below plus additional district requirements, if applicable.

Students will complete an online career assessment every year to explore their career interests, learn career skills and begin connecting their interests to careers.

Students will update their career and postsecondary goals every year as they learn about new opportunities.

Students will update their required state and federal assessments (English language arts, mathematics and science) and college and career readiness assessment (ACT or SAT) results as they become available.

Students will annually update their academic courses and progress in those courses. Students will also list any career technology programs, AP or IB courses, concurrent enrollment courses or career endorsements that reflect progress toward their individual career pathways.

Students will complete at least one service learning or work environment activity. The Oklahoma State Department of Education (OSDE) has defined an Individual Career Academic Plan (ICAP) as both a *process* and *product*. The ICAP process intentionally guides students as they explore career, academic, and postsecondary opportunities. This process is an ongoing and collaborative effort providing opportunities for increased communication, further engagement, and improved relationships between students, families, and educators. The ICAP product is a written document and portfolio which contain career and academic interest surveys, goal setting and planning worksheets, and a high school resume that are revisited and updated each year.

It is estimated that by 2025 three out of five jobs in America will require education and training beyond high school (Lumina, 2019). Oklahoma's current educational attainment rate is 42.8 percent, falling behind the national average of 47.6 percent (Lumina, 2019). Individual college- and career- planning tools like ICAP are an effective strategy to motivate students to complete their high school diploma and engage in post-secondary study (Bloom & Kissane, 2011). The ICAP program equips students with the awareness, knowledge, and skills to create their own meaningful exploration of college and career opportunities while providing students with a skill set necessary for planning their academic, professional, and personal lives (Bullock & Wikeley, 1999).

HOPE THEORY

Hope refers to the positive expectation students have toward the attainment of a future oriented goal. Snyder (2000) described hope as a cognitive-based motivational theory in which children learn to create strategies as a means to attain their desired goals. Hope theory has two fundamental cognitive processes termed "pathways" and "agency".

Goals are the cornerstone of hope and serve to organize both pathways and agency (willpower). *Pathway* thought processes are the mental strategies or road maps that students are able to identify toward goal attainment. In this process, hopeful students consider various pathways to their goals. Once viable pathways are formed, this hopeful student is able to identify potential barriers and develop problem solving strategies to overcome the barriers or to select an alternative pathway. *Agency* thinking refers to the mental energy or willpower the student can direct and sustain toward their goal pursuits. Hopeful students are able to exert mental energy to their pathways and persevere by self-regulating their thoughts, emotions and behaviors as they navigate toward their desirable goal.

The role of hope in a child's capacity to thrive is well established in the research. Hopeful

thinking among children is associated with competence and self-worth (Kwon, 2000) as well as lower depression, anxiety, and psychological distress (Ong, Edwards, & Bergeman, 2006). Children with higher hope are more optimistic about the future, have stronger problem-solving skills, develop more life goals, and are less likely to have behavior problems. These children also report better interpersonal relationships and higher school achievement success in the areas of attendance, grades, graduation rates, and college going rates (Marques, Gallagher, & Lopez, 2017; Marques, Lopez, & Pais-Ribeiro, 2011; Pedrotti, Edwards, & Lopez, 2008). Hope has been shown to serve as a resilience factor when facing stressful life events among children (Hellman & Gwinn, 2017; Valle, Huebner, & Suldo, 2006).

Hope represents a positive psychological strength that promotes adaptive behaviors, healthy development, and both psychological and social well-being (Snyder, 1995). More specifically, Bronk, Hill, Lapsley, Talib and Finch (2009) found that high levels of hope were related to life satisfaction across the lifespan. Higher hope is associated with better coping, health, and health related practices (Chang & DeSimone, 2001; Feldman & Sills, 2013; Kelsey et al., 2011). Psychological strengths like hope tend to serve people best in difficult times, which can help buffer against the negative outcomes associated with adverse childhood experiences. The capacity to formulate pathways and dedicate mental energy (agency) is the foundation to successful goal attainment.

Hope theory provides a valuable framework by which to evaluate the ICAP program as the language of hope is utilized throughout the process. The Oklahoma State Department of Education states that when students complete a meaningful ICAP process they: discover which *pathways* fit their unique talents, connect the relevance of education to their future *goals*, and strategically select a postsecondary *pathway* to align with self-defined career, college, and life *goals*.

PURPOSE OF THE STUDY

This research study investigates the effect in which ICAP participation is associated with student hope.. The purpose of this report is to provide the findings of an assessment of student hope, teacher-student relationships, student future aspirations and goals, student well-being, and items associated with the ICAP experience (student options, goals, and plans after high school).

METHODS

ASSESSMENT PROCEDURE

Data were collected from 1,802 participants via a web-based survey hosted by the University of Oklahoma administered to 9th grade students in school districts throughout Oklahoma during the fall 2020 semester. OSDE staff were responsible for selecting schools to participate, recruiting and consenting students, and providing the online survey link for data collection. Completed surveys were analyzed by researchers at the University of Oklahoma.

SAMPLE DEMOGRAPHICS

Specific demographic characteristics of the children were limited in the survey. Of the 1,770 students who reported their sex 49.6% marked female, 49.0% male, and 1.4% other. Respondents were asked to select their race/ethnicity: 640 (36.2%) identified as Caucasian, 407 (23.0%) as Hispanic, 224 (12.7%) as African American, 174 (9.8%) as Multi Racial, 142 (8.0%) as American Indian, 96 (5.4%) as Asian, and 86 (4.9%) selected “other.” When asked “What is the highest level of educational attainment by your parent(s) / guardian?” 591 (33.8%) selected “College Degree”, 341 (19.5%) “HS/ GED”, 275 (15.7%) “Post Graduate degree”, 248 (14.2%) “Some college”, 241 (13.8%) “Less than HS/ GED”, and 51 (2.9%) marked “Technical College”.

MEASUREMENT

ACADEMIC RELATED OUTCOMES

Previous research has shown hope as a significant predictor of academic achievement; therefore, as part of this evaluation, we included self-report questions regarding student absences and grades. To assess student absences, we asked “About how often did you miss an entire day of school last year?” For grades we asked, “what were most of your grades during school last year?”

CHILDREN’S HOPE

Hope was assessed using the Children’s Hope Scale (Snyder et al., 1997) which examines the extent to which children believe they can establish pathways to their goals as well as develop and maintain the will power to follow these pathways. This measure is comprised of six self-report items with a six-point Likert-type response format (1 = none of the time; 6 = all of the time). Possible scores range from a low of six to a high of 36 with higher scores reflecting higher hope. Recent research demonstrated good psychometric properties across age, gender, race, and language translation (Hellman, et al., 2018). A reliability analysis (Cronbach’s alpha) was conducted for the Children’s Hope Scale in this study which showed acceptable reliability $\alpha = .85$.

Table 1. Hope Self-Report Descriptive Statistics

	Mean	SD
1. I think I am doing pretty well.	3.90	1.15
2. I can think of many ways to get the things in life that are most important to me.	4.12	1.18
3. I am doing just as well as other kids my age.	4.14	1.38
4. When I have a problem, I can come up with lots of ways to solve it.	3.90	1.24
5. I think the things that I have done in the past will help me in the future.	4.03	1.40
6. Even when others want to quit, I know that I can find ways to solve the problem.	3.99	1.29

TEACHER-STUDENT RELATIONSHIPS (PSYCHOLOGICAL ENGAGEMENT)

Teacher-Student Relationships were assessed using a subscale of the Student Engagement Instrument (SEI: Appleton, Christenson, Kim, & Reschly, 2006) which examines participants perceived relationships with their teachers as a measure of psychological engagement. This scale is comprised of nine self-report items with a four-point Likert-type response format (1 = strongly disagree; 4 = strongly agree). Possible scores range from a low of nine to a high of 36 with higher scores reflecting higher teacher-student relationships. A reliability analysis (Cronbach’s alpha) was conducted for Teacher-Student Relationships in this study which showed acceptable reliability $\alpha = .88$.

Table 2. Teacher-Student Relationships Self-Report Descriptive Statistics

	Mean	SD
1. Overall, adults (including principals and counselors) at my school treat students fairly.	2.91	.64
2. Adults (including principals and counselors) at my school listen to the students.	2.84	.68
3. At my school, teachers care about students.	3.09	.60
4. My teachers are there for me when I need them.	2.99	.65
5. The school rules are fair.	2.74	.74
6. Overall, my teachers are open and honest with me.	2.97	.62
7. I enjoy talking to the teachers here.	2.86	.75
8. I feel safe at school.	2.93	.74
9. Most teachers at my school are interested in me as a person, not just as a student.	2.65	.79

STUDENT FUTURE ASPIRATIONS AND GOALS (COGNITIVE ENGAGEMENT)

Future Aspirations and Goals were assessed using a subscale of the Student Engagement Instrument (SEI: Appleton, Christenson, Kim, & Reschly, 2006) which examines participants future personal goals and aspirations as a measure of cognitive engagement. This scale is comprised of five self-report items with a four-point Likert-type response format (1 = strongly disagree; 4 = strongly agree). Possible scores range from a low of five to a high of 20 with higher scores reflecting higher future aspirations and goals. A reliability analysis (Cronbach’s alpha) was conducted for Future Aspirations and Goals in this study which showed acceptable reliability $\alpha = .85$.

Table 3. Student Future Aspirations and Goals Self-Report Descriptive Statistics

	Mean	SD
1. I plan to continue my education following high school.	3.49	.66
2. Going to school after high school is important.	3.25	.79
3. School is important for achieving my future goals.	3.39	.72
4. My education will create many future opportunities for me.	3.46	.65
5. I am hopeful about my future.	3.41	.72

STUDENT WELL-BEING

Student Well-Being was assessed using the Student’s Life Satisfaction Scale (SLSS: Huebner, 1991) which measures global life satisfaction in children ages eight to eighteen. This measure is comprised of seven self-report items with a six-point Likert-type response format (1 = strongly disagree; 6 = strongly agree). Possible scores range from a low of six to a high of 42 with higher scores reflecting higher well-being. A reliability analysis (Cronbach’s alpha) was conducted for Student Well-Being in this study which showed acceptable reliability $\alpha = .84$.

Table 4. Student Well-Being Self-Report Descriptive Statistics

	Mean	SD
1. My life is going well.	4.44	1.19
2. My life is just right.	4.07	1.31
3. I would like to change many things in my life. (R)	2.78	1.52
4. I wish I had a different kind of life. (R)	3.96	1.65
5. I have a good life.	4.81	1.12
6. I have what I want in life.	4.22	1.32
7. My life is better than most kids.	4.36	1.35

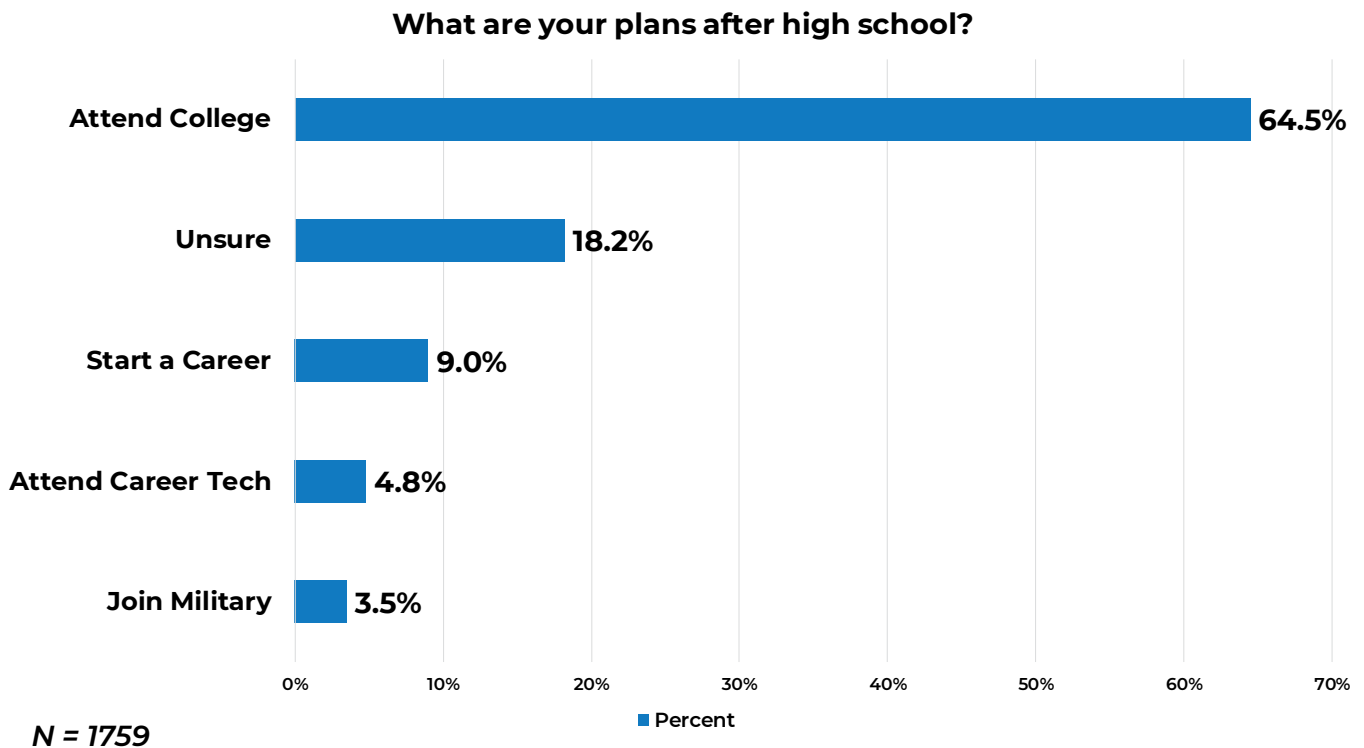
(R)= Items are reverse scored.

STUDENT ICAP QUESTIONS:

The ICAP process was examined from the students’ perspective by asking questions pertaining to their perceptions of options, goals, and plans to achieve individual goals after high school. This measure is comprised of three self-report items with a five-point Likert-type response format (1 = strongly disagree; 5 = strongly agree). Possible scores range from a low of three to a high of 15 with higher scores reflecting higher belief in the ICAP process. A reliability analysis (Cronbach’s alpha) was conducted for ICAP measure created for this study which showed acceptable reliability $\alpha = .83$.

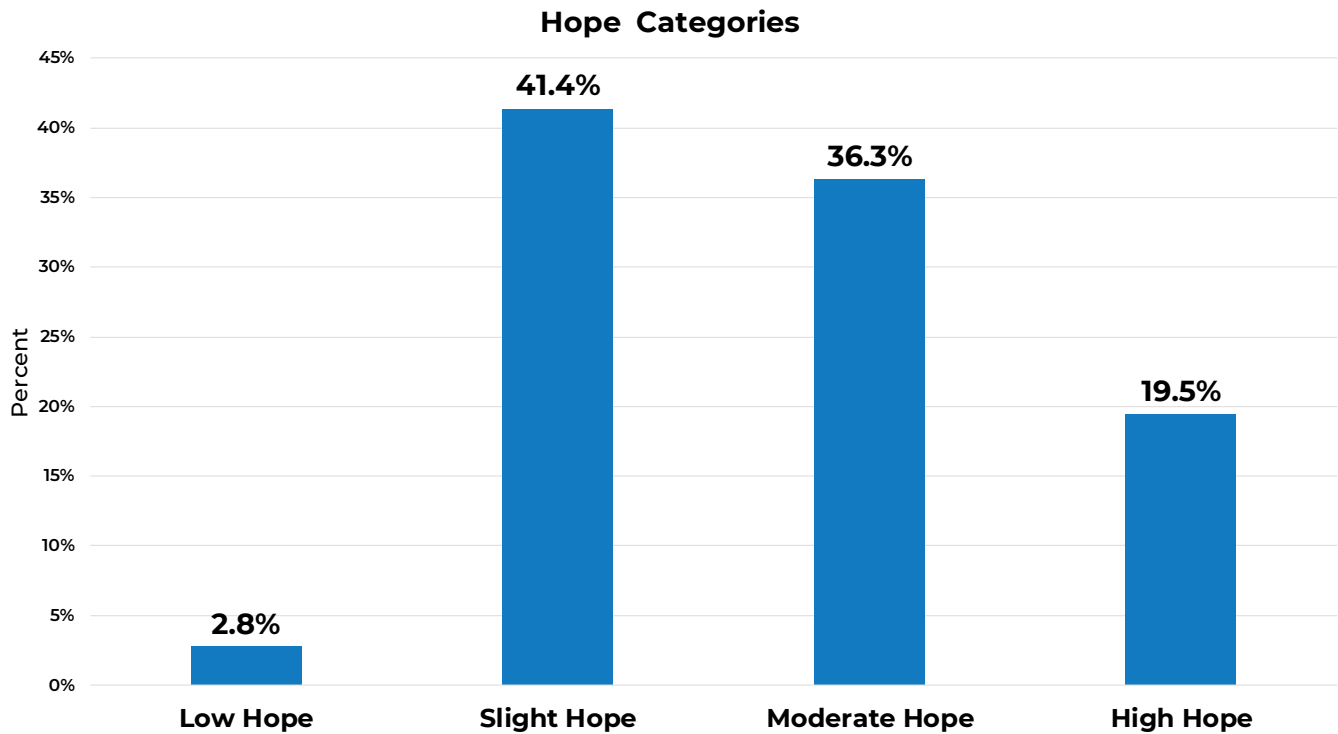
Table 5. Student ICAP Self-Report Descriptive Statistics

	Mean	SD
1. I am certain of my options after high school.	3.67	1.06
2. I have goals after high school.	4.38	.90
3. I have a plan to achieve my goals after high school.	4.12	1.03



Nurturing the Hope and Well-being of Oklahoma Students: The Role of Individual Career and Academic Planning

Hope reflects the individual's capacity to develop pathways and dedicate agency toward desirable goals.



RESULTS

This graph shows the percentage of respondents ($n=1,748$) in each of the hope categories. The hope categories were computed from responses to the Children's Hope Scale. In this study the average hope score is 24.12 ($SD=5.81$), which falls in the lower end of the moderate category.

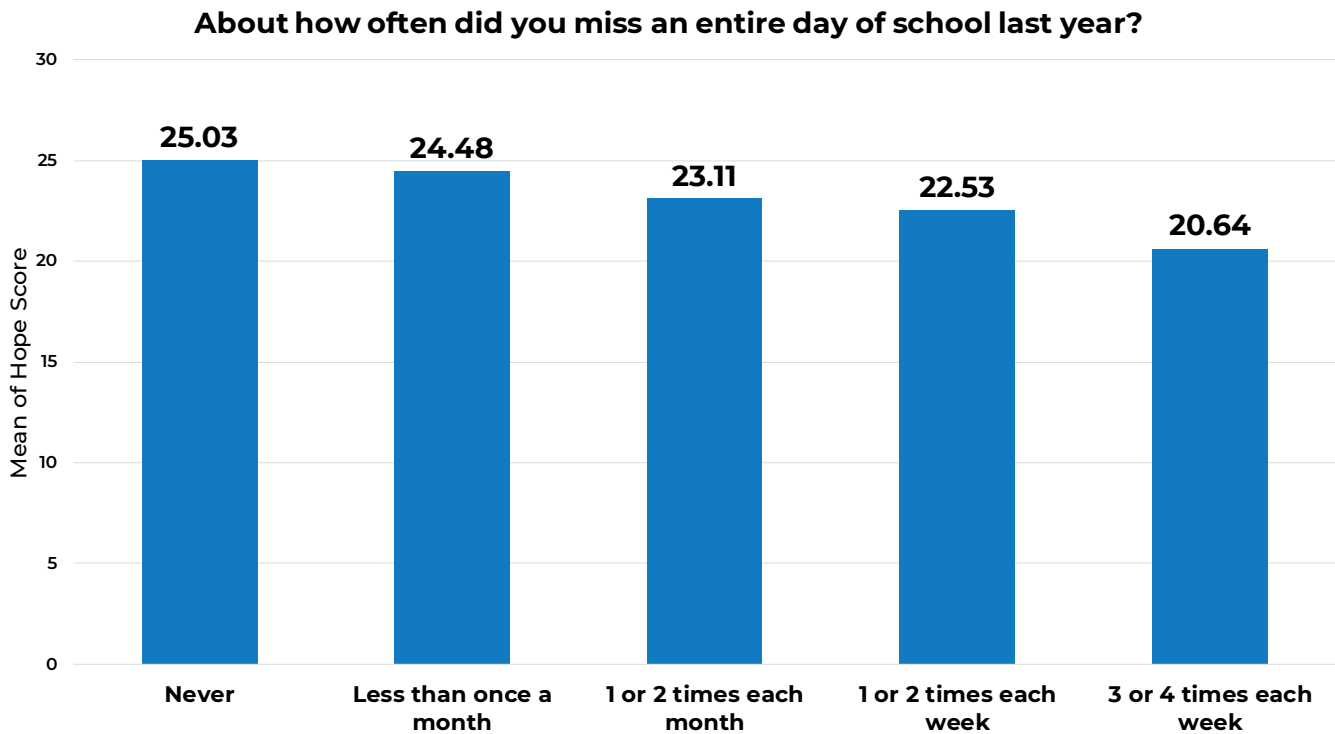
NOTES:

Low Hope (6-12)

Slight Hope (13-23)

Moderate Hope (24-29)

High Hope (30-36)



RESULTS

A one-way between-S ANOVA was performed to compare the mean scores on the children’s hope scale for participants who were assigned to one of five groups based on how they answered the question “About how often did you miss an entire day of school last year?” The overall F for the one-way ANOVA was statistically significant, $F(4,1741) = 9.382, p = .000, \eta^2 = 0.021$.

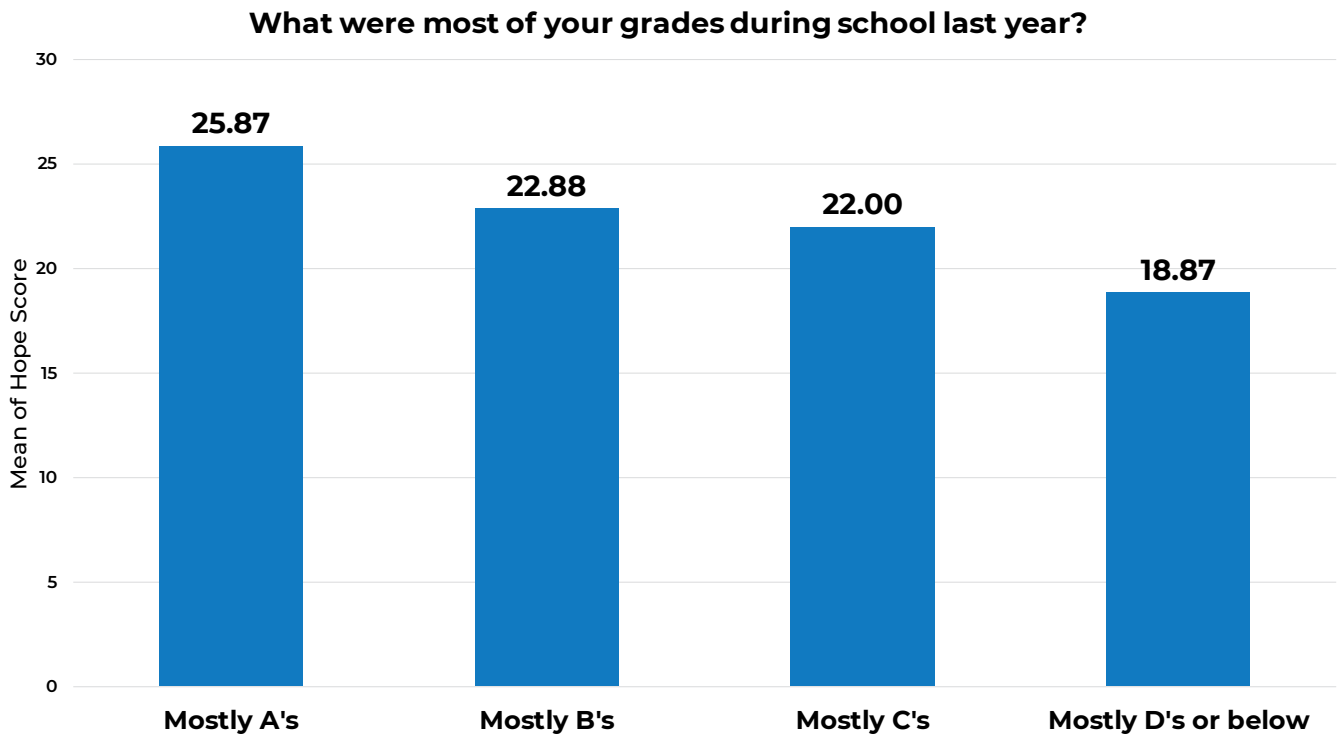
A Tukey HSD post hoc test showed that the “never” group scored significantly higher on hope than the “1 or 2 times each month”, the “1 or 2 times each week”, and the “3 or 4 times each week” groups. The “less than once a month” group had significantly higher hope than the “1 or 2 times each month”, the “1 or 2 times each week”, and the “3 or 4 times each week” groups. The “1 or 2 times each month” category was intermediate between the other hope scores, and it did not differ significantly from either the “1 or 2 times each week” or the “3 or 4 times each week” groups.

NOTES:

n= 1,746

Mean= 24.13

SD= 5.805



A one-way between-S ANOVA was performed to compare the mean scores on the children's hope scale for participants who were assigned to one of four groups based on how they answered the question "What were most of your grades during last school year?" The overall F for the one-way ANOVA was statistically significant, $F(3,1742) = 66.529$, $p = .000$, $\eta^2 = 0.103$.

A Tukey HSD post hoc test showed that the "mostly A's" group scored significantly higher on hope than the "mostly B's", "mostly C's", and "mostly D's or below" groups. The "mostly B's" group had significantly higher hope than the "mostly D's or below" group. The "mostly C's" group scored significantly higher on hope than the "mostly D's or below" group.

NOTES:

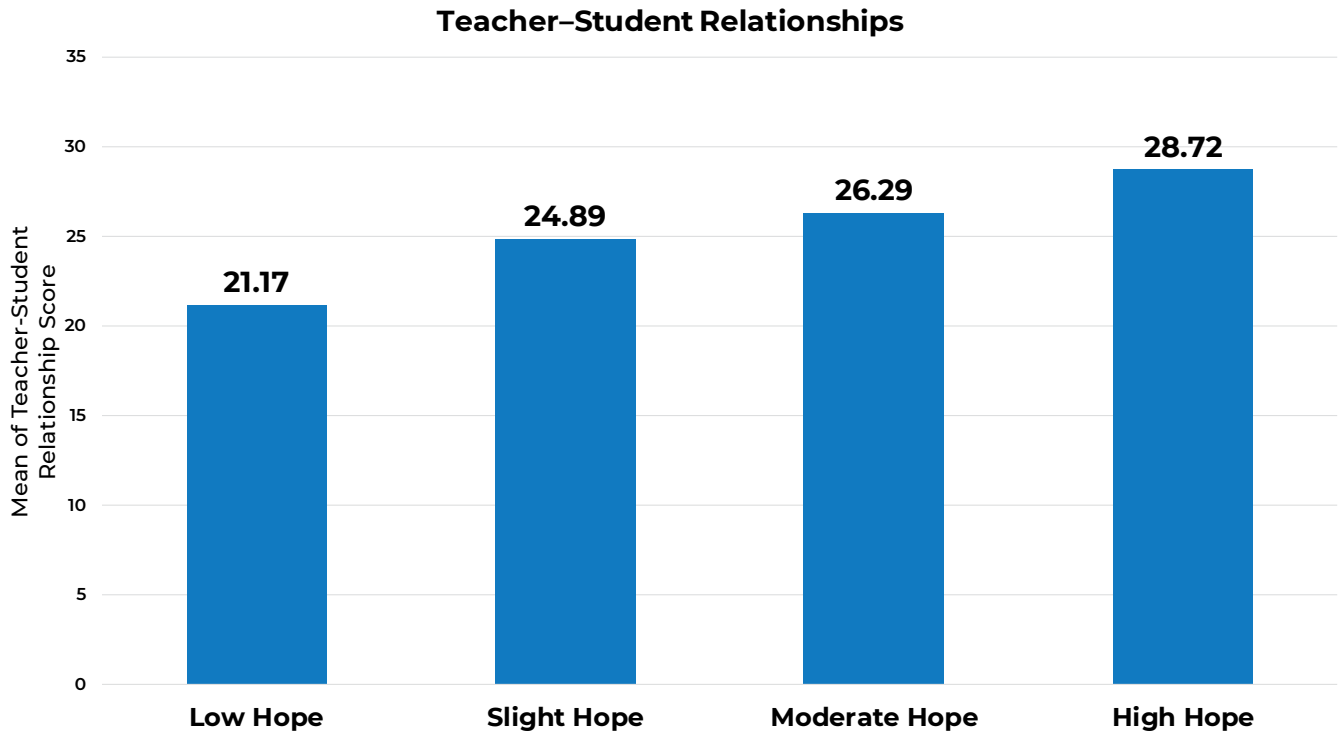
Total n= 1,746

Total Mean= 24.11

Total SD= 5.807

Nurturing the Hope and Well-being of Oklahoma Students: The Role of Individual Career and Academic Planning

Teacher-Student Relationships is one measure of psychological engagement, which has been associated with adaptive behaviors.



A one-way between-S ANOVA was performed to compare the mean scores on the teacher-student relationship scale for participants who were assigned to one of four groups based on their hope score. The overall F for the one-way ANOVA was statistically significant, $F(3,1709) = 89.707$, $p = .000$, $\eta^2 = 0.136$.

A Tukey HSD post hoc test showed that the “low hope” group scored significantly lower on teacher-student relationships than the “slight hope”, “moderate hope”, and “high hope” groups. The “slight hope” group had significantly lower teacher-student relationships than the “moderate hope” and “high hope” groups. The “moderate hope” group scored significantly lower on teacher student relationships than the “high hope” group.

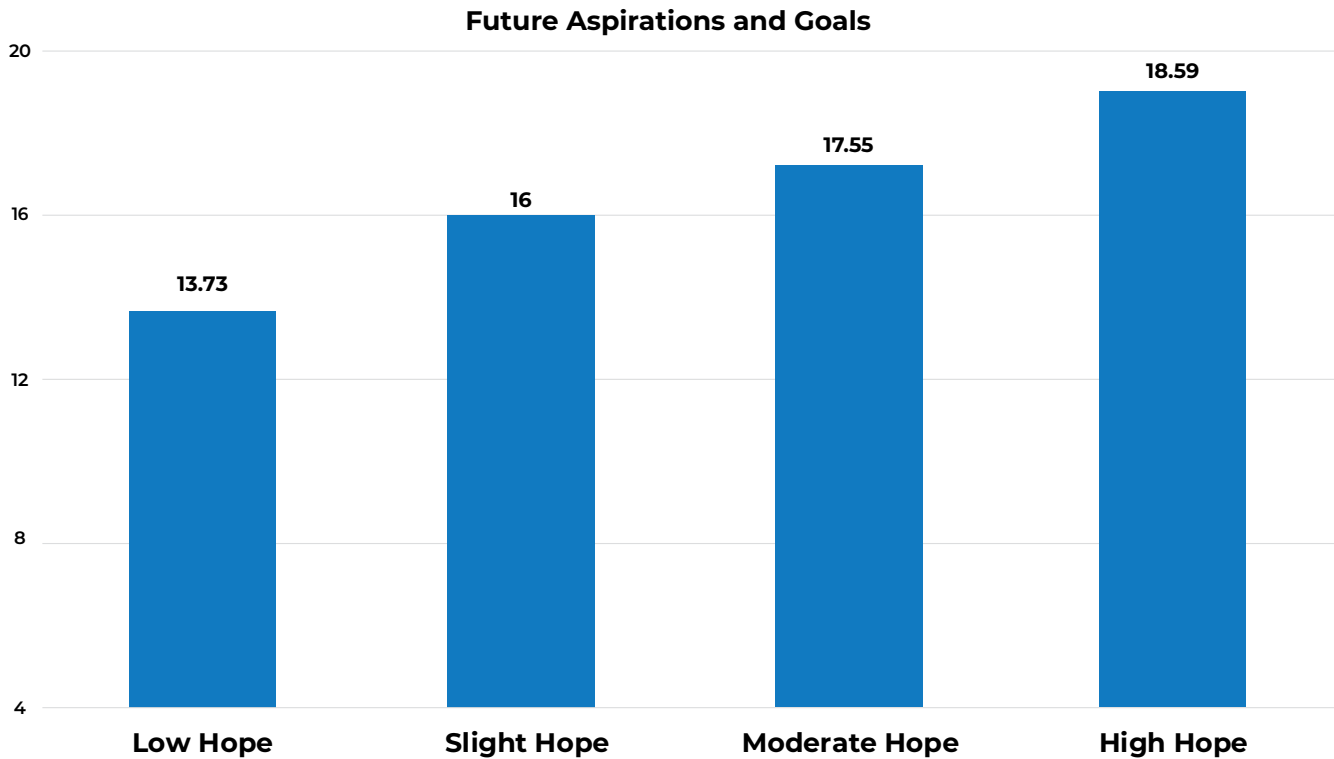
NOTES:

Total n= 1,713

Total Mean= 26.04

Total SD= 4.405

Future Aspirations and Goals is one measure of cognitive engagement, which has been associated with investment in learning.



A one-way between-S ANOVA was performed to compare the mean scores on the future aspirations and goals scale for participants who were assigned to one of four groups based on their hope score. The overall F for the one-way ANOVA was statistically significant, $F(3,1739) = 117.042$, $p = .000$, $\eta^2 = 0.168$.

A Tukey HSD post hoc test showed that the “low hope” group scored significantly lower on future aspirations and goals than the “slight hope”, “moderate hope”, and “high hope” groups. The “slight hope” group had significantly lower future aspirations and goals than the “moderate hope” and “high hope” groups. The “moderate hope” group scored significantly lower on future aspirations and goals than the “high hope” group.

NOTES:

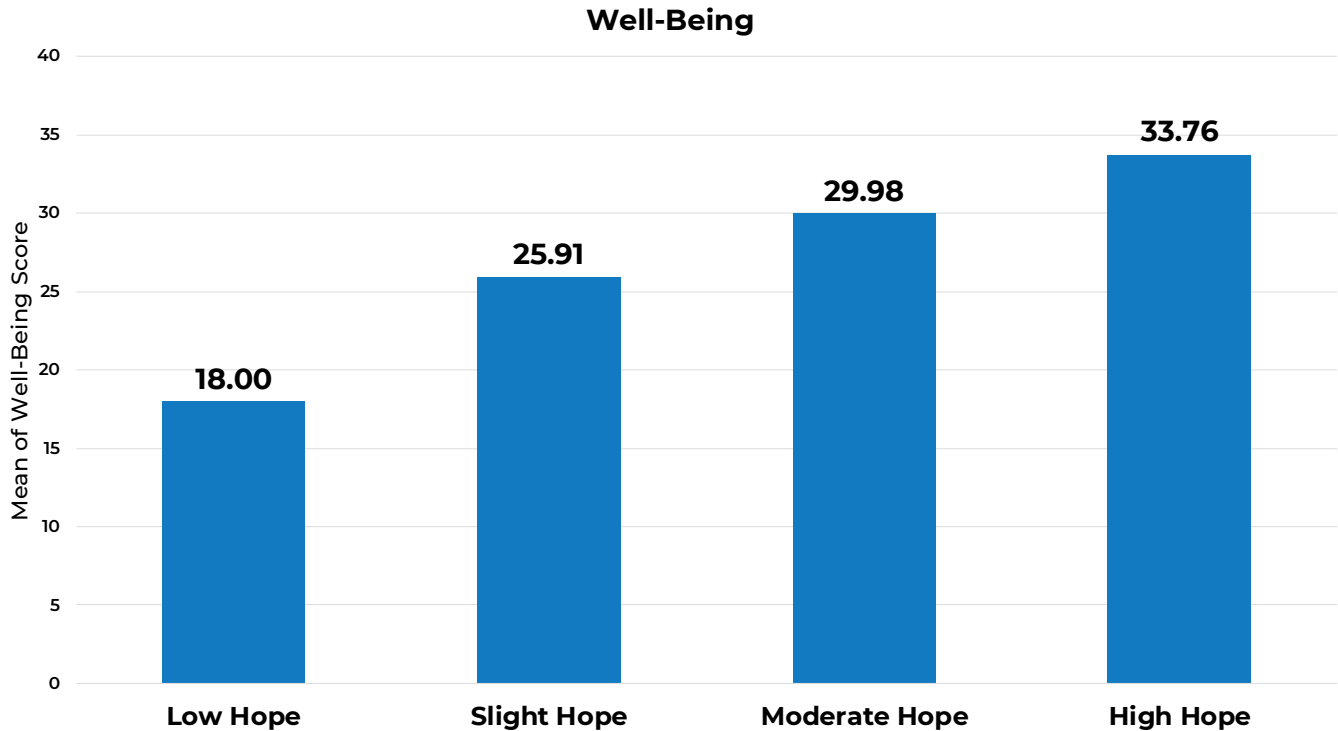
Total n= 1,743

Total Mean= 17.00

Total SD= 2.799

Nurturing the Hope and Well-being of Oklahoma Students: The Role of Individual Career and Academic Planning

Well-Being is a measure of global life satisfaction where students evaluated their life as a whole rather than a specific domain, such as school.



A one-way between-S ANOVA was performed to compare the mean scores on the well-being scale for participants who were assigned to one of four groups based on their hope score. The overall F for the one-way ANOVA was statistically significant, $F(3,1714) = 197.826$, $p = .000$. $\eta^2 = 0.257$.

A Tukey HSD post hoc test showed that the “low hope” group scored significantly lower on well-being than the “slight hope”, “moderate hope”, and “high hope” groups. The “slight hope” group had significantly lower well-being than the “moderate hope” and “high hope” groups. The “moderate hope” group scored significantly lower on well-being than the “high hope” group.

NOTES:

Total n= 1,718

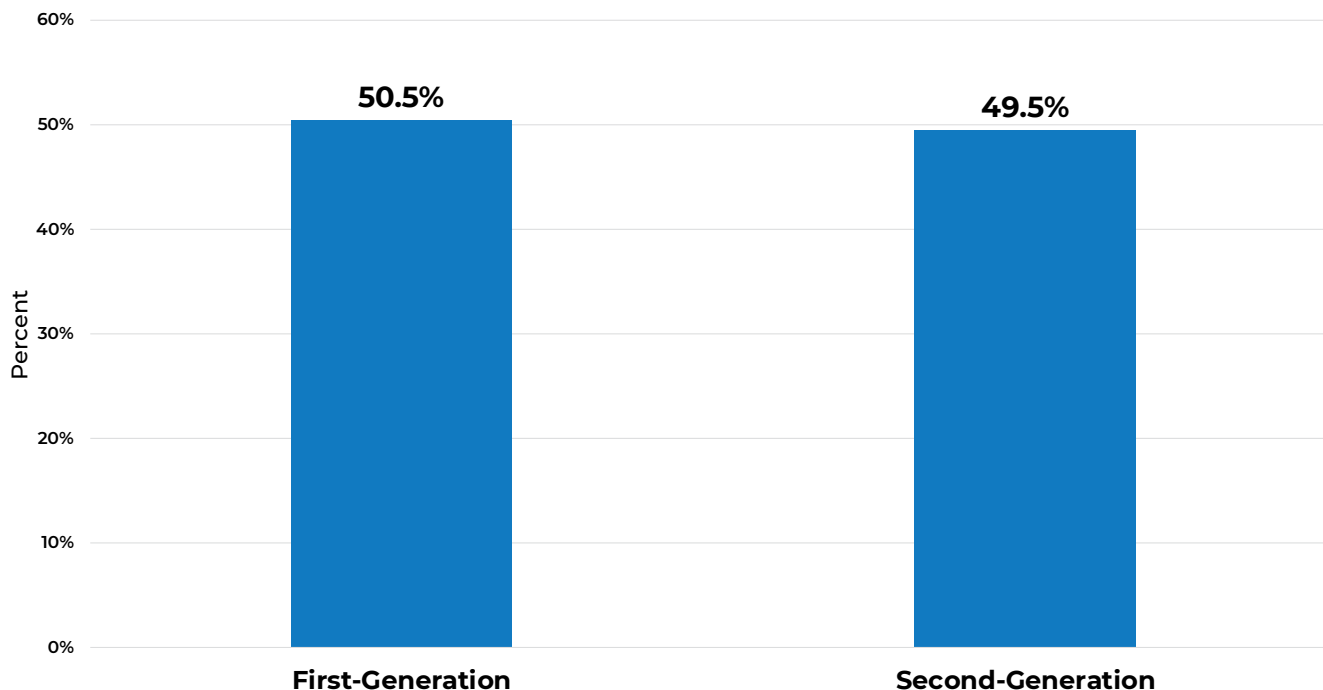
Total Mean= 28.71

Total SD= 6.804

Nurturing the Hope and Well-being of Oklahoma Students: The Role of Individual Career and Academic Planning

First-generation is defined as a student whose parent or guardian has not earned a baccalaureate degree (U.S. Department of Education, 1998).

First-Generation Student Status

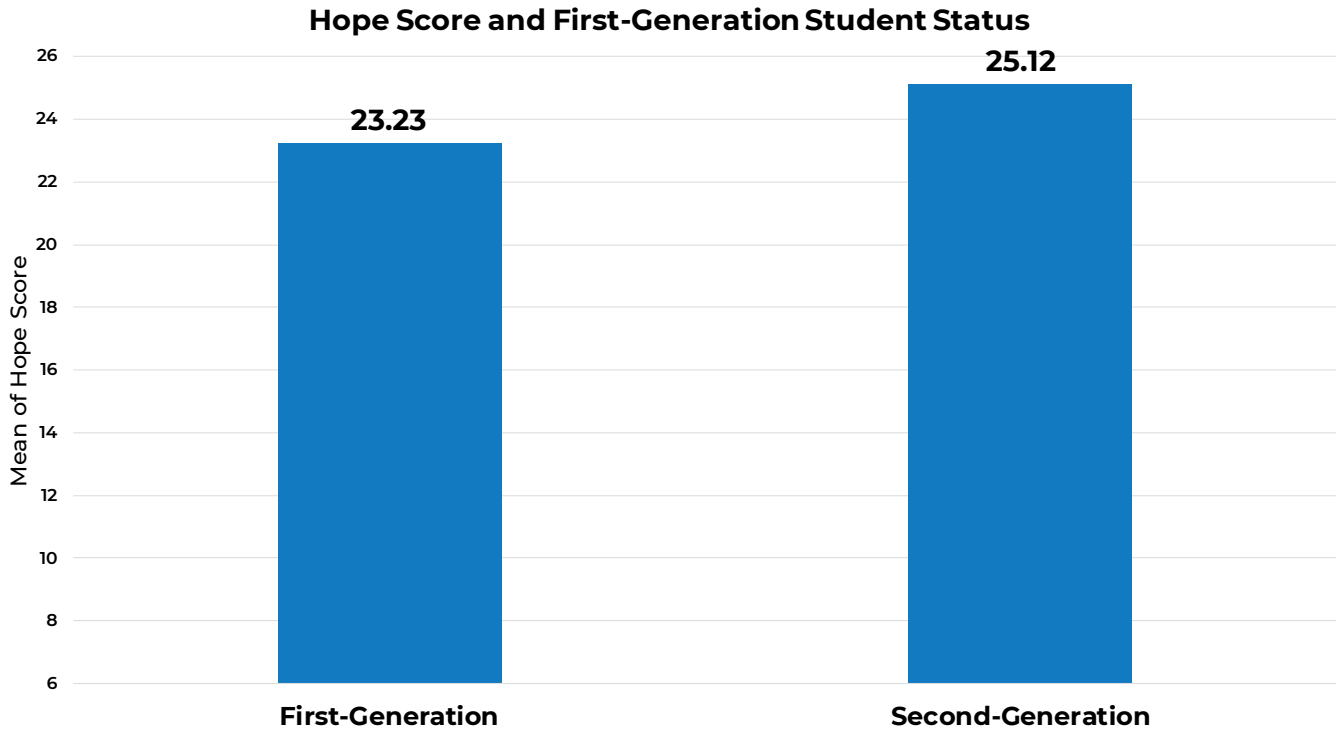


This graph shows the percentage of respondents (n= 1,746) in each of the first-generation student categories. The first-generation student categories were computed from responses to the question: What is the highest level of educational attainment by your parent(s)/guardian? In this study the respondents who selected: Less than HS/GED, HS/GED, Technical College, or Some College were classified as first-generation students (parent or guardian did not earn a baccalaureate degree) and those who selected: college degree or post graduate degree were classified as second-generation students (parent or guardian earned a baccalaureate degree).

NOTES:

Parent or Guardian earned a baccalaureate degree (n=865)

Parent or Guardian did not earn a baccalaureate degree (n=881)



A one-way between-S ANOVA was performed to compare the mean scores on the children’s hope scale for participants who were assigned to one of two groups based on how they answered the question “What is the highest level of educational attainment by your parent(s)/guardian?” The overall F for the one-way ANOVA was statistically significant, $F(1,1720) = 47.345$, $p = .000$, $\eta^2 = 0.027$. Second-generation students report significantly higher levels hope compared to first-generation students.

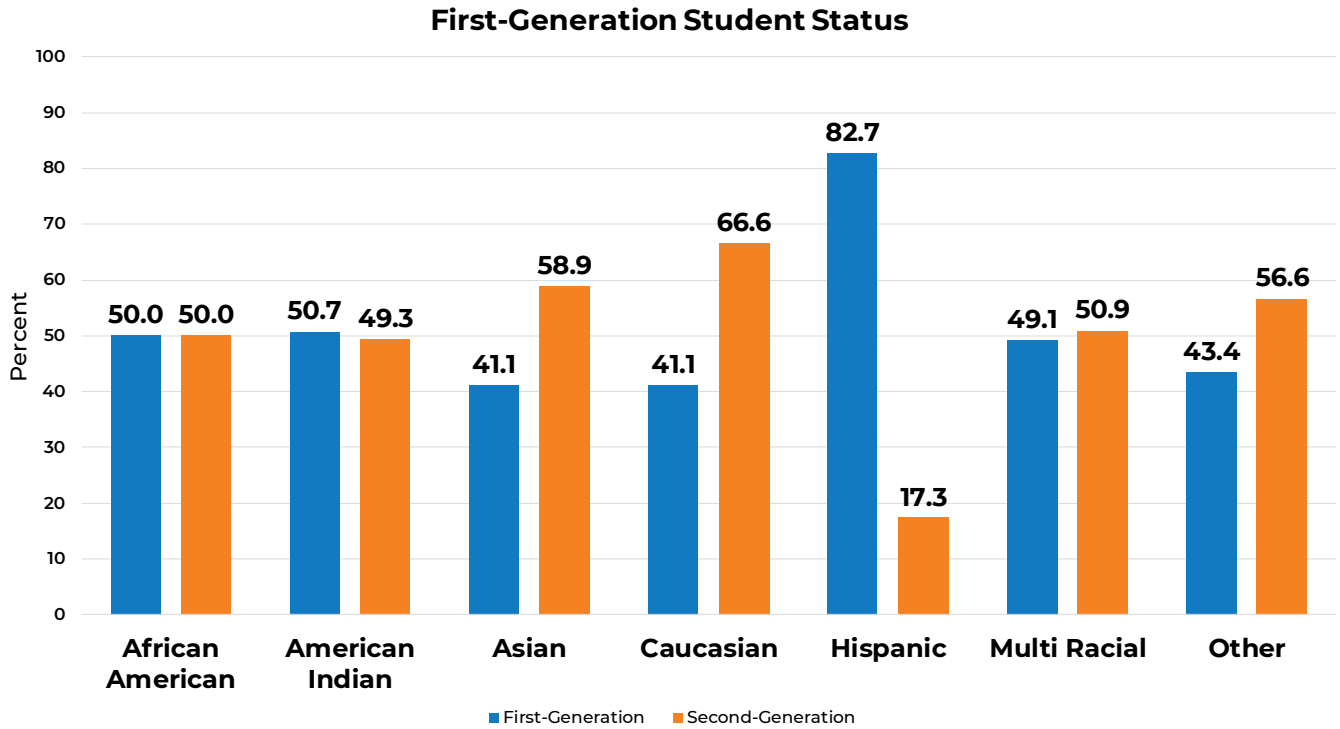
NOTES:

Total n= 1,722

Total Mean= 24.17

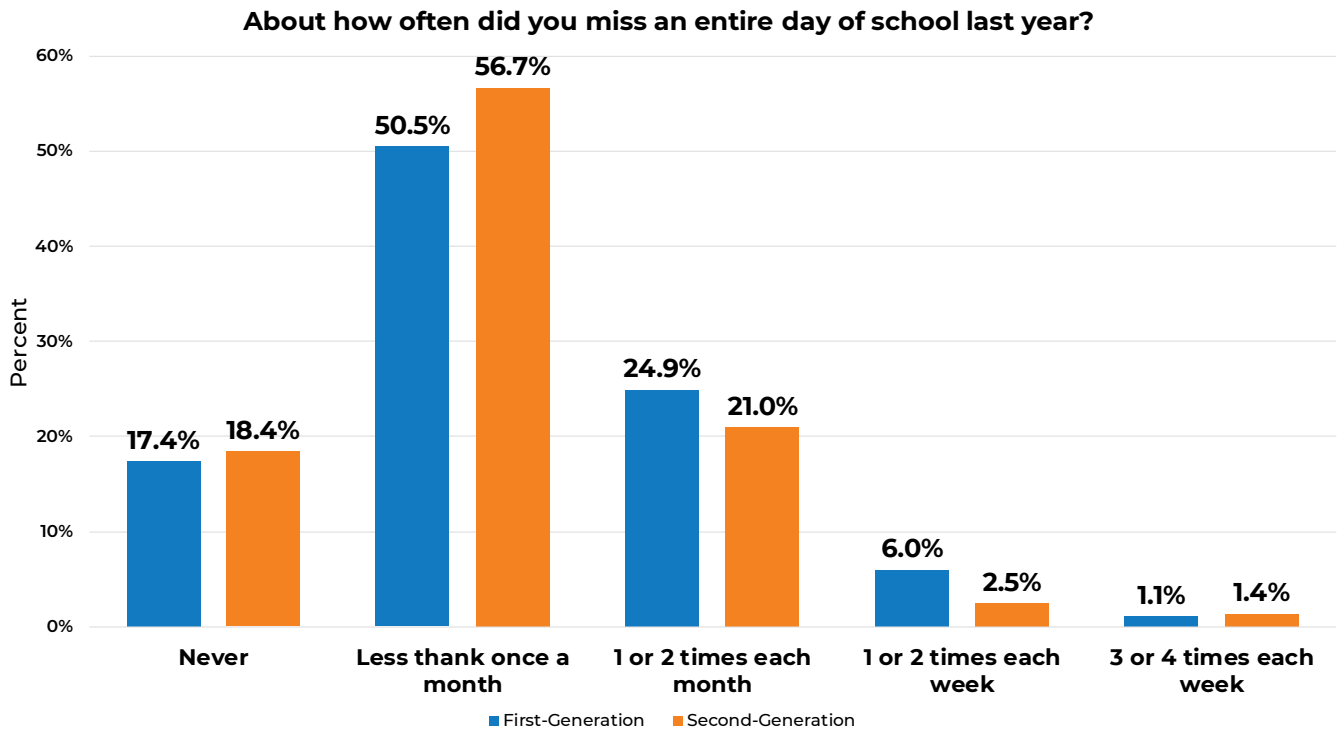
Total SD= 5.783

Nurturing the Hope and Well-being of Oklahoma Students: The Role of Individual Career and Academic Planning



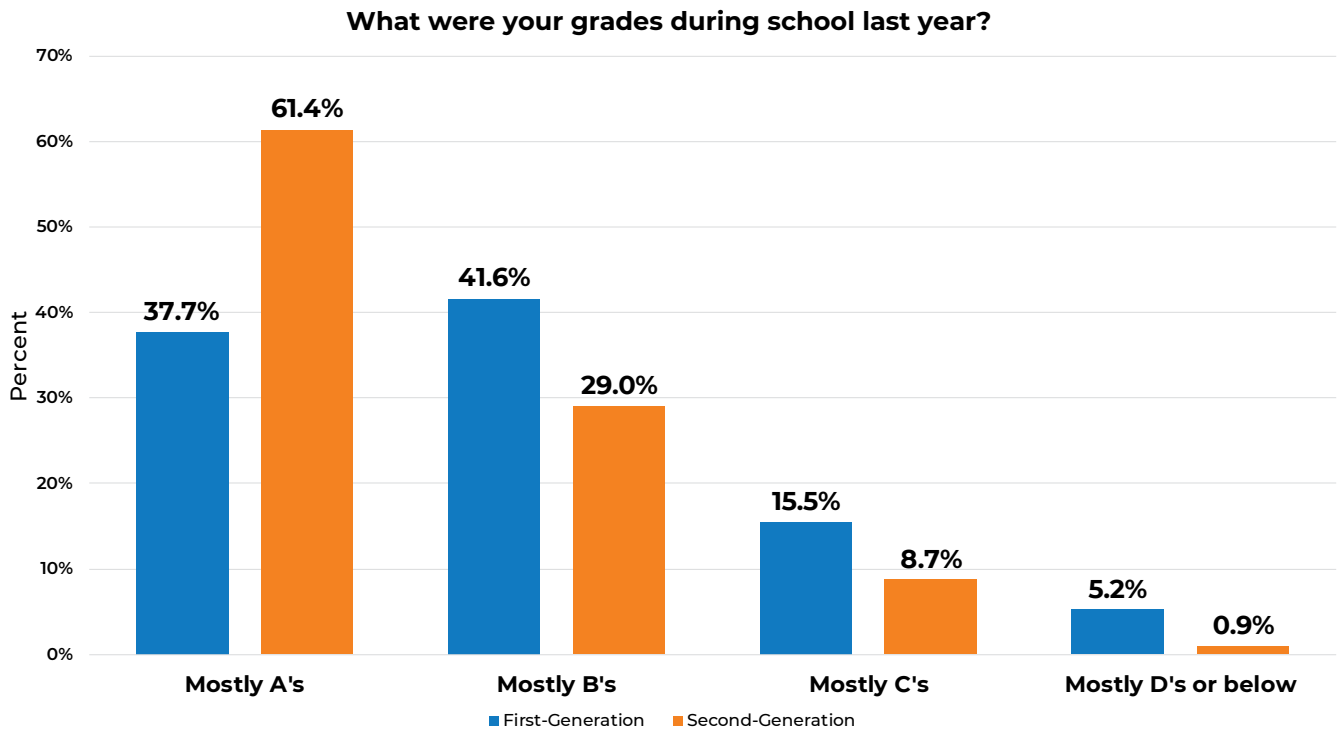
This graph shows the percentage of respondents (n= 1,743) in each of the race/ethnicity categories by first-generation post-secondary student status.

Nurturing the Hope and Well-being of Oklahoma Students: The Role of Individual Career and Academic Planning



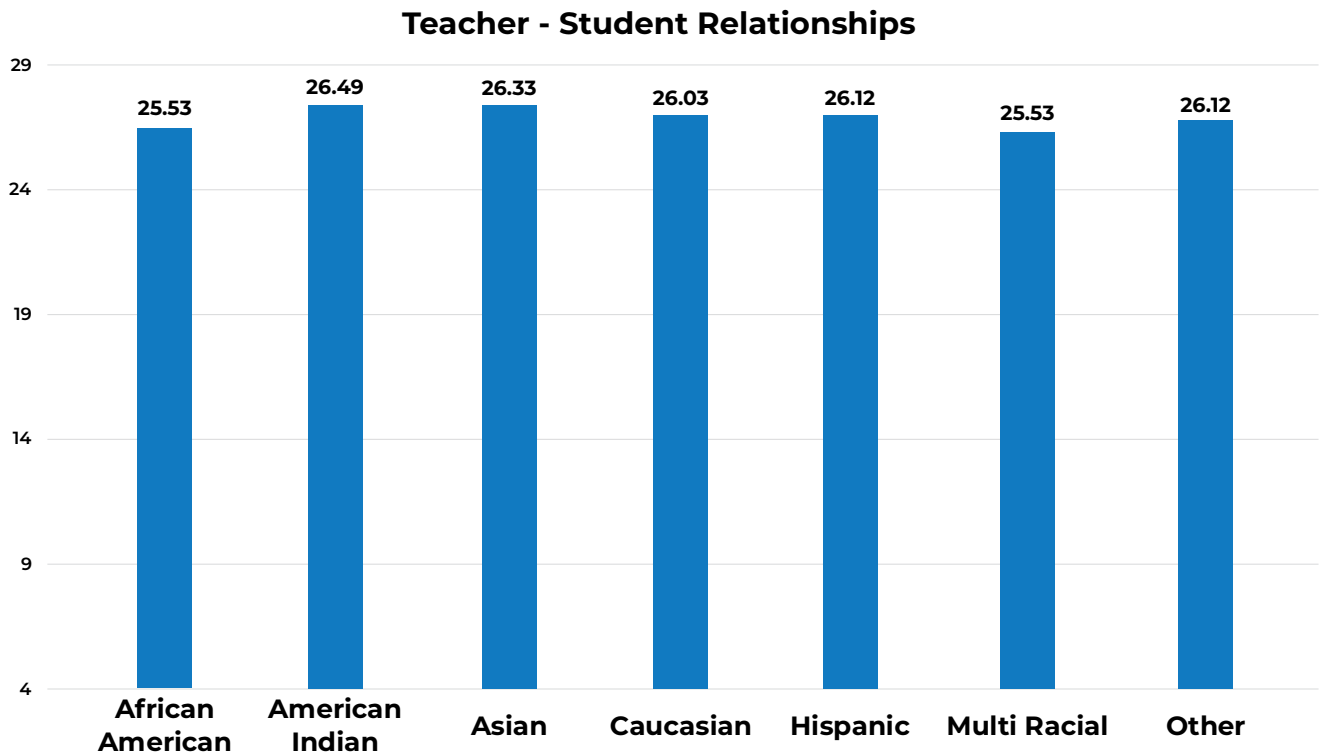
A chi-square test of independence was performed to examine the relationship between first-generation student status and self-reported absences. The relationship between these variables was significant, $\chi^2(4, N = 1741) = 18.863, p = .001, \phi_c = 0.104$. Second-generation students were more likely to report higher school attendance compared to first-generation students.

Nurturing the Hope and Well-being of Oklahoma Students: The Role of Individual Career and Academic Planning



A chi-square test of independence was performed to examine the relationship between first-generation student status and self-reported grades. The relationship between these variables was significant, $X^2(3, N = 1741) = 111.753, p = .000, \phi_c = 0.253$. More second-generation students reported earning mostly A's while more first-generation students reported earning mostly B's, mostly C's, and mostly D's or below.

Teacher-Student Relationships is one measure of psychological engagement, which has been associated with adaptive behaviors.



A one-way between-S ANOVA was performed to compare the mean scores on the teacher-student relationship scale for participants who self-selected into one of seven race/ethnicity groups. The overall F for the one-way ANOVA was NOT statistically significant, $F(6,17023) = 1.161, p = .325$.

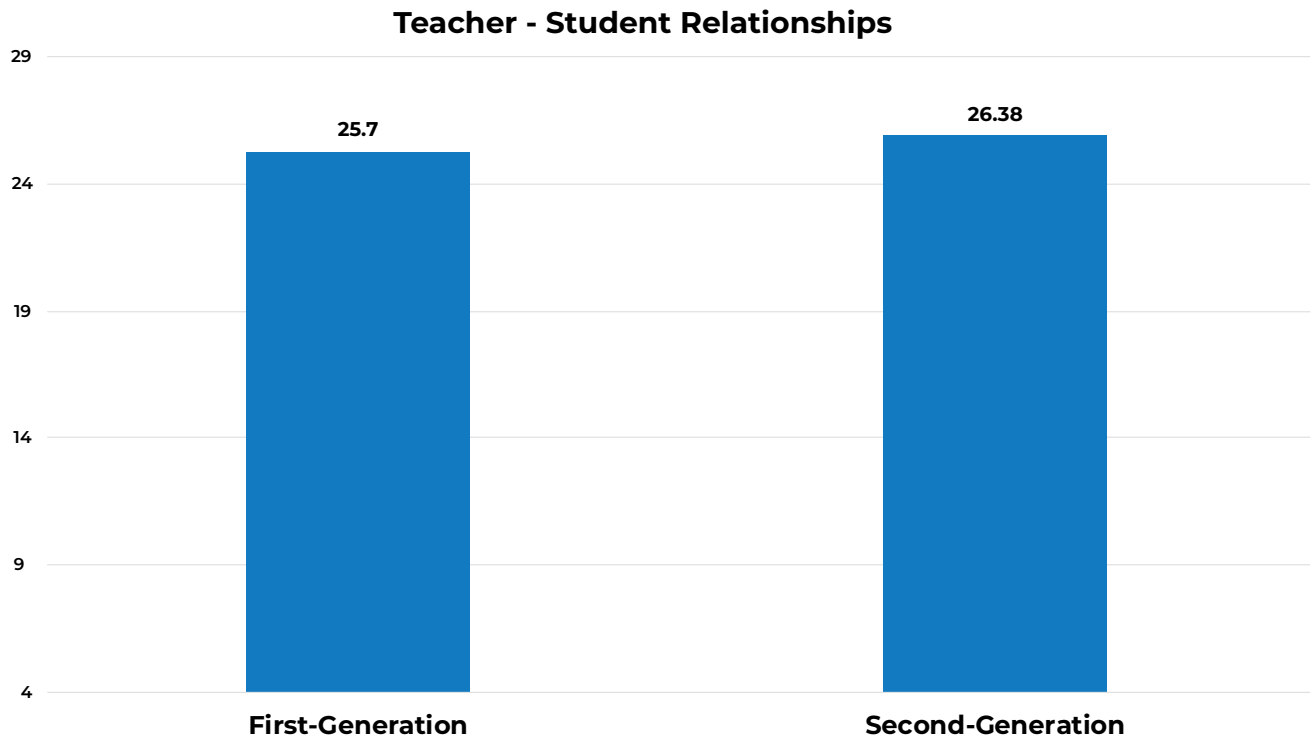
NOTES:

Total n= 1,730

Total Mean= 26.00

Total SD= 4.421

Teacher-Student Relationships is one measure of psychological engagement, which has been associated with adaptive behaviors.



A one-way between-S ANOVA was performed to compare the mean scores on the teacher-student relationship scale for participants who were assigned to one of two groups based on their first-generation student status. The overall F for the one-way ANOVA was statistically significant, $F(1,1705) = 10.155$, $p = .001$, $\eta^2 = 0.006$. Second-generation students report significantly higher levels of engagement with their teacher as compared to first-generation students.

NOTES:

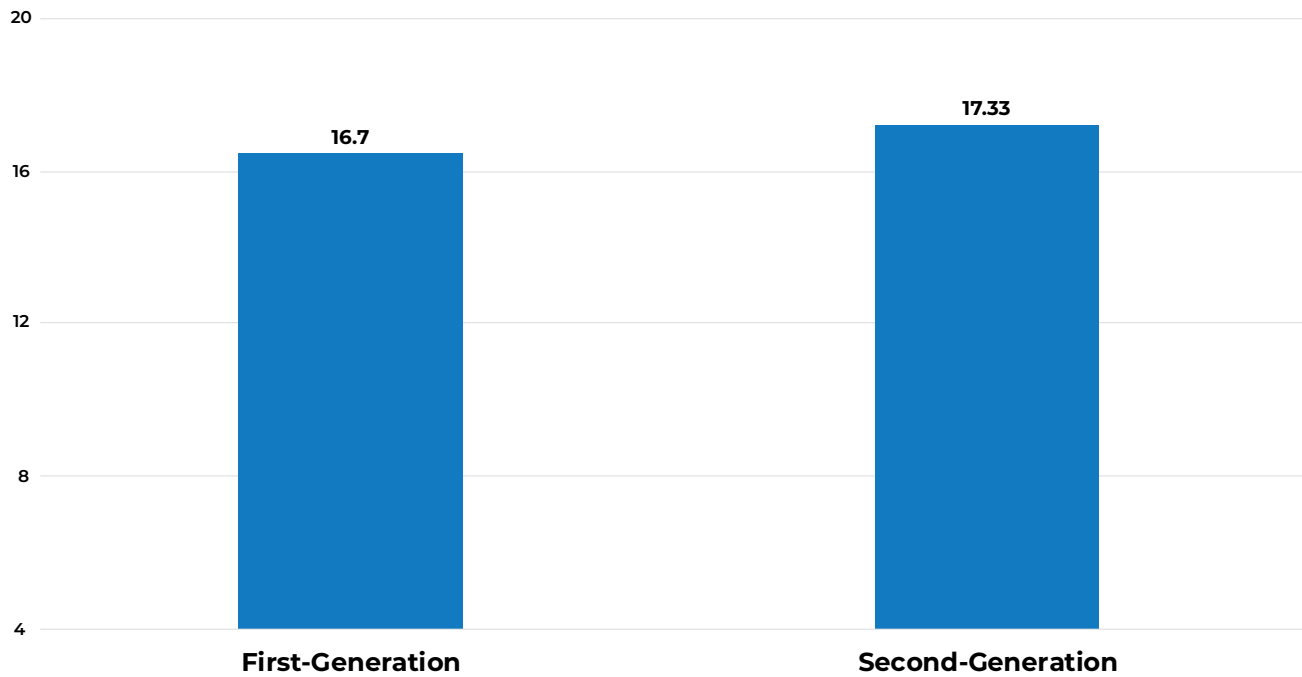
Total n= 1,707

Total Mean= 26.04

Total SD= 4.425

Future Aspirations and Goals is one measure of cognitive engagement, which has been associated with investment in learning.

Future Aspirations and Goals



A one-way between-S ANOVA was performed to compare the mean scores on the future aspirations and goals scale for participants who were assigned to one of two groups based on their first-generation student status. The overall F for the one-way ANOVA was statistically significant, $F(1,1735) = 22.228$, $p = .000$, $\eta^2 = 0.013$. Second-generation students report significantly higher levels of engagement with future aspirations and goals compared to first-generation students.

NOTES:

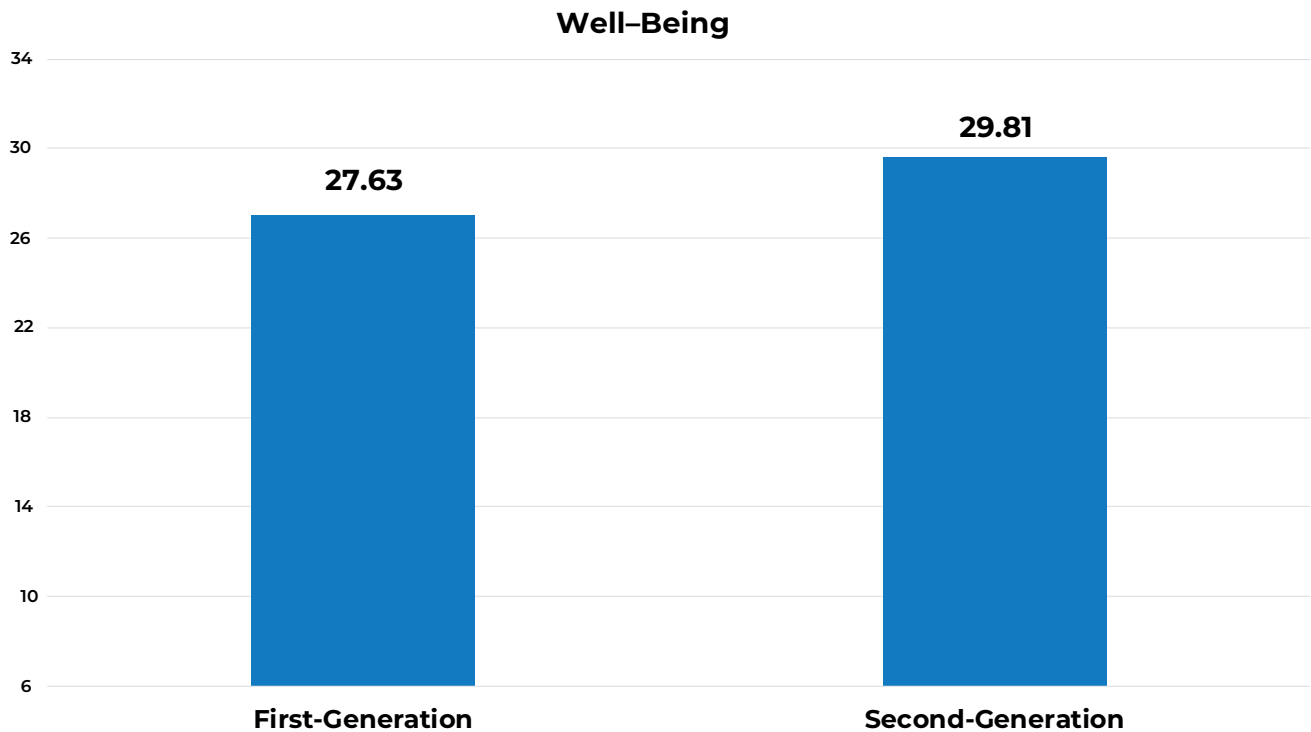
Total n= 1,737

Total Mean= 17.01

Total SD= 2.812

Nurturing the Hope and Well-being of Oklahoma Students: The Role of Individual Career and Academic Planning

Well-Being is a measure of global life satisfaction where students evaluated their life as a whole rather than a specific domain, such as school.



A one-way between-S ANOVA was performed to compare the mean scores on the well-being scale for participants who were assigned to one of two groups based on their first-generation student status. The overall F for the one-way ANOVA was statistically significant, $F(1,1712) = 45.274$, $p = .000$, $\eta^2 = 0.026$. Second-generation students report significantly higher levels of well-being compared to first-generation students.

NOTES:

Total n= 1,714

Total Mean= 28.71

Total SD= 6.798

RELATIONSHIPS AMONG THE MEASURES

A correlation represents the level of relationship between two variables. The interpretation is based upon the strength and direction of the relationship. Strength of a correlation is based upon Cohen’s (1992) effect size heuristic. More specifically, a correlation (+/-) of .10 or higher is considered small; a correlation (+/-) of .30 is considered moderate, and a correlation (+/-) of .50 is considered strong. With regards to direction, a positive correlation indicates that higher scores on one variable are associated with higher scores on the other variable. A negative correlation indicates that higher scores on one variable are associated with lower scores on the other variable.

EXAMPLES FROM TABLE 6

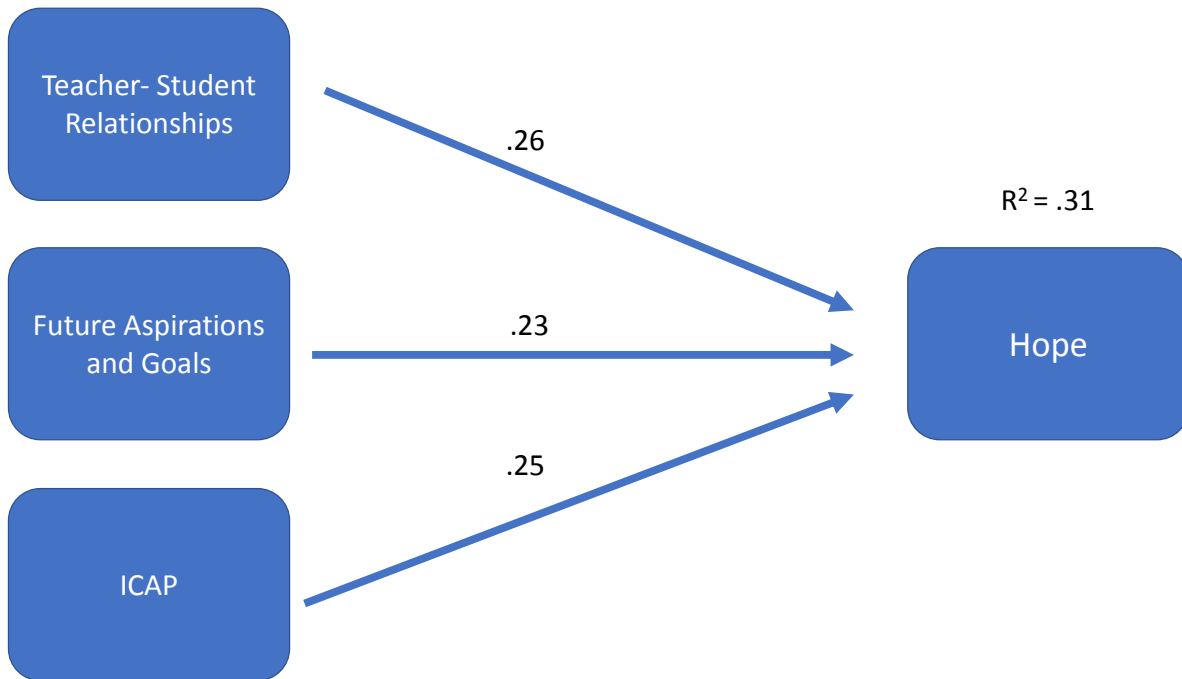
The list of variables in the table below identifies the order of the correlations. The first item in the first column “1. Hope” is also the first item in next column (to the right) labeled “1.” The first correlation in the second row ($r = .40^*$) beneath the column labeled “1.” represents the relationship between “Hope” and “Teacher- Student Relationships” (variable 2). With this information, we can see participants who score higher on teacher- student relationships also have higher scores on hope. The asterisk next to the numbers in the table indicates the finding was statistically significant ($p < .01$). As another example, we find a moderate positive correlation ($r = .35^*$) between teacher- student relationships (column 2) and well- being (row 4 Well-Being) that is statistically significant.

Table 6. Correlation Matrix

	1.	2.	3.	4.	5.
1. Hope	--				
2. Teacher- Student Relationships	.40*	--			
3. Future Aspirations and Goals	.45*	.35*	--		
4. Well- Being	.55*	.35*	.33*	--	
5. ICAP	.43*	.25*	.52*	.32*	--

*Note: Please note ICAP is comprised of three questions of student options, goals, and plans after high school. N = 1707-1736. * $p < .01$*

Nurturing Hope Among Students: The Effect of ICAP Over-and-Above Teacher- Student Relationships, ICAP, and Future Aspirations and Goals



On the previous page, teacher- student relationships ($r = .40^*$), future aspirations and goals ($r = .45^*$), and ICAP ($r = .43^*$) each had strong positive associations with hope. To further explore the effect of ICAP on student hope, we conducted a hierarchical regression analysis. Existing research on hope identifies connectedness with others as a significant predictor. Therefore, we used teacher-student relationships and future aspirations and goals as control variables to determine if ICAP would account for significant variance in hope over-and-above these two variables. In the first step, both teacher student relationships and future aspirations and goals accounted for significant variance in hope [$R^2 = .27$; $F(2, 1699) = 312.172$; $p < .001$]. In the second step, we entered ICAP which accounted for significant variance in hope over-and-above the control variables [$\Delta R^2 = .04$; $\Delta F(1, 1698) = 109.245$; $p < .001$]. This finding highlights the significance of ICAP in nurturing student hope.

CONCLUSION

The purpose of this report was to present the findings from a research study of student hope, teacher-student relationships, student future aspirations and goals, student well-being, and items associated with the ICAP experience (student options, goals, and plans after high school) for 9th grade students participating in Oklahoma's ICAP program. A total of 1,802 students from school districts throughout Oklahoma completed an online survey from the Hope Research Center. The majority of students fell in the slight to moderate hope categories with the average score representing the lower end of moderate hope.

Consistent with previous research, hope demonstrated significant associations with academic outcomes. More specifically, students who scored higher on hope reported missing fewer days of school. Additionally, hopeful students reported earning better grades. In this study hope was also significantly associated with measures of psychological and cognitive engagement. The students who scored higher on hope had better teacher- student relationships which has been associated with adaptive school behaviors. Hopeful students also scored higher on future aspirations and goals which has been associated with investment in learning. Hope was significantly associated with well-being. Hopeful students scored higher in a measure of global life satisfaction where students evaluated their life as a whole rather than a specific domain, such as school.

One interesting finding from this study showed that first-generation students scored significantly lower on hope compared to their second-generation counterparts. First-generation students also reported missing more entire days of school and lower grades than second-generation students. Additionally, first generation students scored significantly lower on measures of psychological and cognitive engagement and well-being. This indicates that second-generation students are more likely to associate with adaptive school behaviors, invest in learning, and have more life satisfaction than first generation students.

Correlational analyses showed significant associations between hope, teacher-student relationships, future aspirations and goals, well-being and items associated with the ICAP experience (student options, goals, and plans after high school). Further analyses demonstrated that teacher- student relationships, ICAP, and future aspirations and goals are significantly associated with hope. Providing equitable college and career readiness to all students means increasing the number of quality school counselors in schools. Oklahoma's current student-to-school counselor ratio of 411:1 is significantly higher than the recommended ratio of 250:1. School counselors and school-based mental health professionals play an integral role in helping students build academic, college and career, and social and emotional skills, thus positively impacting student mental health and well-being. The strongest association teacher- student relationships is closely followed by the student ICAP experience variable.

One of the most significant findings from this evaluation was that ICAP accounted for significant variance in hope above-and-beyond the teacher-student relationship.

Building relationships with students is crucial to student success and well-being, but counselors cannot do this without the support of teachers and school administrators. The truth is all educators play a vital role in making meaningful connections with students, especially our most vulnerable students. According to a report from the Education Trust students of color and students from low-income families benefit from having more access to school counselors. Research links the student-to-school-counselor ratios that meet the American School Counselor Association (ASCA) recommendation in high-poverty schools to better academic outcomes for students, such as improved attendance, fewer disciplinary incidents, and higher graduation rates.

Indeed, hope is a psychological strength that can be learned and promotes well-being. Therefore, ICAP represents a set of individual career and academic strategies that educators can use to promote student success. To be more concise, the data from this study show that ICAP is a pathway of hope for students.

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HOPE RESEARCH CENTER

The mission of the University of Oklahoma is to provide the best possible educational experience for students through excellence in teaching, research, creative activity, and service to the state and society. The Hope Research Center focuses this mission by collaborating with nonprofit agencies to improve program services using sound scientific practice while simultaneously training students in the application of research methodologies.

The Hope Research Center is an interdisciplinary social science unit at the University of Oklahoma, Tulsa Schusterman Center. Collaborating with nonprofit human service organizations, faculty and graduate students lead research projects with a particular focus on sustainable well-being among vulnerable and otherwise at-risk individuals, families, and communities.

Guided by the principle that hope is the theory of change that explains the positive impact program services have on client outcomes, the Center is focused on three ideas.

1. Hope buffers adversity and stress (especially in the context of trauma).
2. Increasing hope leads to positive outcomes.
3. Hope can be learned and sustained through targeted program services.

Faculty members who work in the center provide a full range of applied research activities including program evaluation and outcome assessment in support of nonprofit program service delivery. Participating faculty members are nationally recognized for their area of research and are expert methodologists with the capacity to match research protocols to the needs of the nonprofit community.

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