Statistics Project

Transition to College

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Introduction:

Going to college is more than just "going back to school". Most high school graduates have never been on their own, so freshman year is a double edged sword. It is a big wake up call to adulthood.

High school graduates are overly optimistic and confident in their ability to manage the challenges they will encounter at college. This results in disenchantment when new college students' academic, social, and personal expectations are not met after arriving at college. As a result, many students either leave college or flunk out within the first year. According to the U.S. Census and American College Testing Program (ACT), an estimated 18 million students enrolled in college in 2008; nearly 34% dropped out in the first year because they were over confident, under-prepared and lacked realistic expectations about college.

During the course of our project we surveyed some college students from Westminster College to find out how they felt about this transition from high school to college. Our survey included questions regarding the transition. Did they find college to be difficult in this transition and did the transition involve any clubs, organizations or sports were two of our hypotheses. We gathered the information mainly through surveys; we then summarized, analyzed, interpreted and drew conclusions based on our findings.

How did we collect the data? :

We collected the data through the process of surveys. We surveyed 42 college students to find out how difficult the transition to college has been and if they were involved with any college clubs, organizations and sports. We surveyed a small data pool, based on that our results are not normally distributed. The survey is purely based on the responses received from the undergraduate students attending Westminster College in the spring semester of 2012.

A sample survey is attached to the file.

Hypothesis 1: Difficulty starting college

Most people find it difficult to start college. Our hypothesis is based from our experiences starting college and how transitioning into college can be a life-altering event. Depending on when you begin college, what you are involved with in college and how the individual reacts to the new environment all affect the transition to the new lifestyle. Creating a study about transitioning into college is not unusual. There are orientation classes and even clubs for the transition. Through our study we have found the opposite of the assumption. However, the freshman study compared to the other class standings showed more people found the transition difficult. Here, our study includes all class standings versus their responses to the transition.

Hypothesis #1
Most people find it difficult to start college.

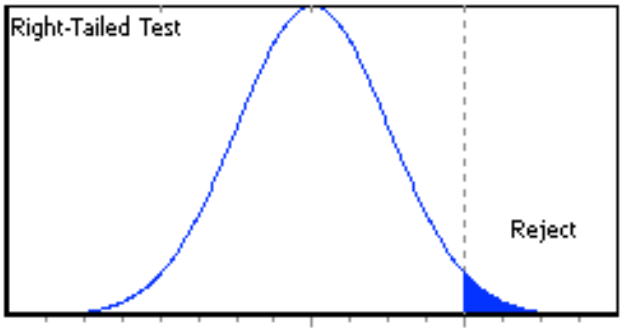
H_o: $P_Y = P_N$
H_I : $P_Y > P_N$ (Claim)
$\alpha = 0.05$

Yes, Difficult Transition
$N_1 = 42$
$X_1 = 10$

No, Not Difficult Transition
$N_2 = 42$
$X_2 = 32$

Calculator
STAT-Test-#6- 2-PropZInt

T.S. : Z = -4.8008 P-value = $1 > \alpha$ Fail to reject H_o
C.V. : Z = 1.96



Calculator
STAT-Test-#B- 2-PropZTest

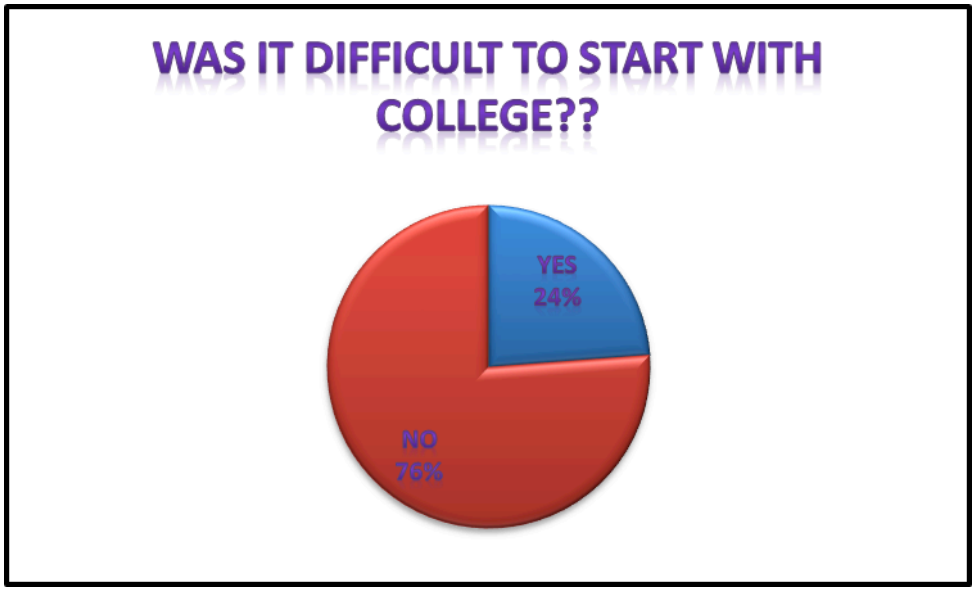
C.I. = -.706 < p < -.3416

Conclusion

Fail to Reject H_o. There is not sufficient evidence to support the claim that most people find it difficult to transition to college. This leads to our next hypothesis that with different class standings the transition to college is easier. Hypothesis 1 is failed to reject

but with the consideration that the difficulty of the transition changes with class standing proves that the higher classes tend to have a subjective response of the present instead of their freshman year, forgetting how the transition affected them then.

Graph Hypothesis 1



Hypothesis 2: Age affecting the transition into college

The older you get in college you tend to forget how difficult the transition into college was. We are both currently sophomores and we have both noticed how much more comfortable we are with the college life than last year when we began. This trend seems to continue with every year in college. Our study showed our hypothesis was proven correct.

Hypothesis #2

The older you get in college you tend to forget how difficult the transition into college was.

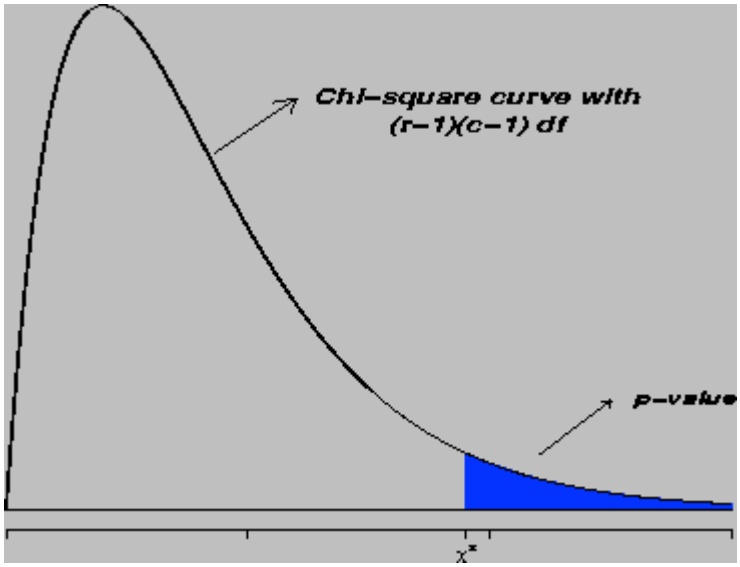
$H_o = p_1 = p_2 = p_3 = p_4 = 1/4$
H_I = At least 1 probability is different (Claim)

E = np = 42(1/4) = 10.5

Class Standing	Observed	Expected
Freshman	17	10.5
Sophomore	13	10.5
Junior	11	10.5
Senior	1	10.5
	42 = n	

Calculator
STAT-Test- #D-GOF-Test – L_3,L_4 – df-3

T.S. : $X^2 = 13.24$ P-value = .0041 < α Reject H_o
C.V. : $X^2 = 7.815$

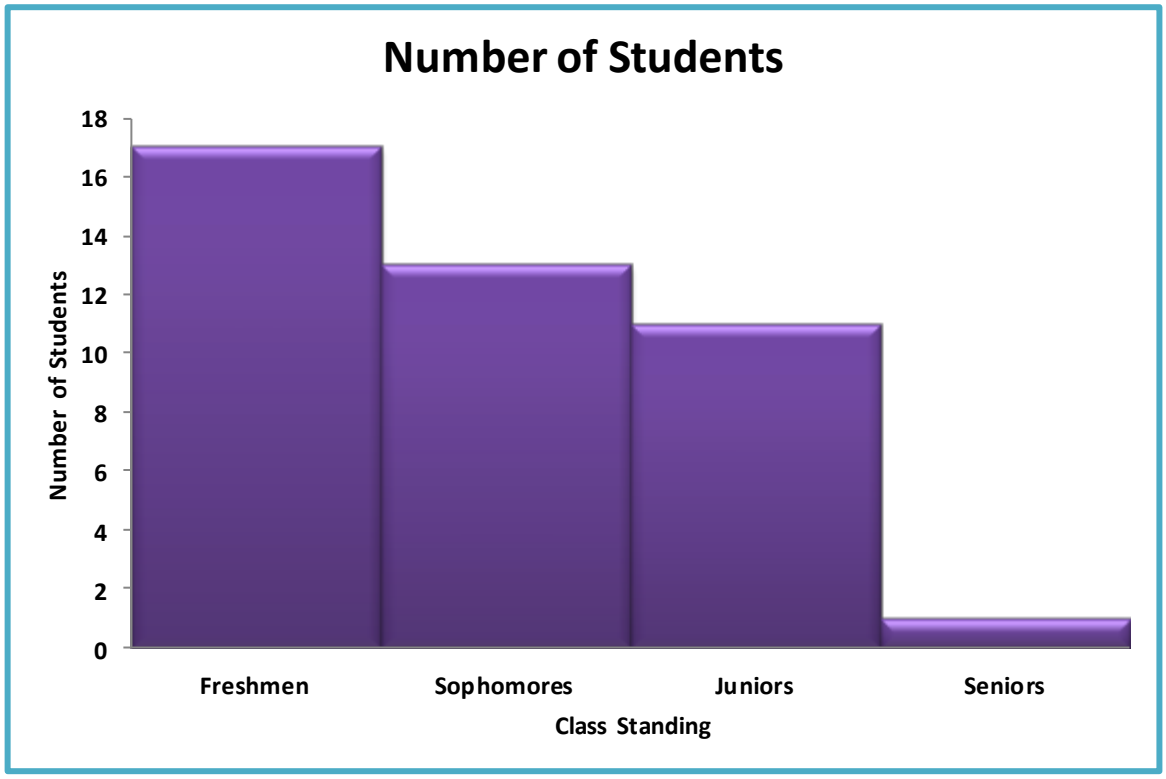


Conclusion

Reject H_o. There is sufficient evidence to support the claim that the older you get you tend to forget how difficult the transition into college was. As stated earlier, all of our

hypotheses are connected. Hypothesis 1 and 2 are connected in the dependent variable of class standing and the age at which the transition to college is considered difficult. Even though our first hypothesis was not proven to be correct this hypothesis shows that our study included students in higher class standing than only freshman. When considering this hypothesis, there has to be consideration of the whole study because they are all connected to the same matter of the transition into college.

Graph Hypothesis 2



Hypothesis 3: Involvement in clubs, organizations and sports during college.

Through college, people tend to be more involved in clubs, organizations and sports. We have noticed an easier transition through these options in college. We were

surprised to notice that most people do not get involved in clubs, organizations or sports until sophomore or junior year. Even that was not as much as we suspected. Below is our study that shows how many are and are not involved with activities in college.

Hypothesis #3

Through college, people tend to be more involved in clubs, organizations and sports

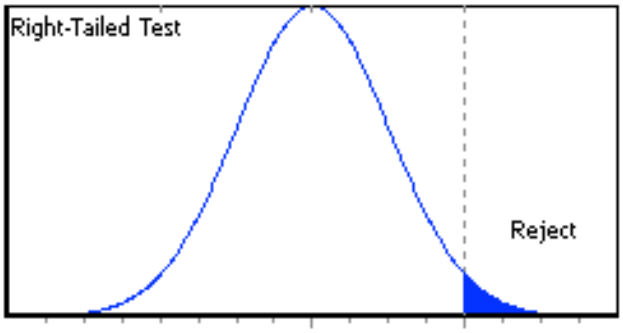
H_o : $P_Y = P_N$
H_I : $P_Y > P_N$ (Claim)
$\alpha = 0.05$ 95%

Yes, They are involved
$N_1 = 42$
$X_1 = 23$

No, They are not involved
$N_2 = 42$
$X_2 = 19$

Calculator
STAT-Test-#6- 2-PropZInt

T.S. : Z = .8729 P-value = .1914 > α Fail to reject H_o
C.V. : Z = 1.96



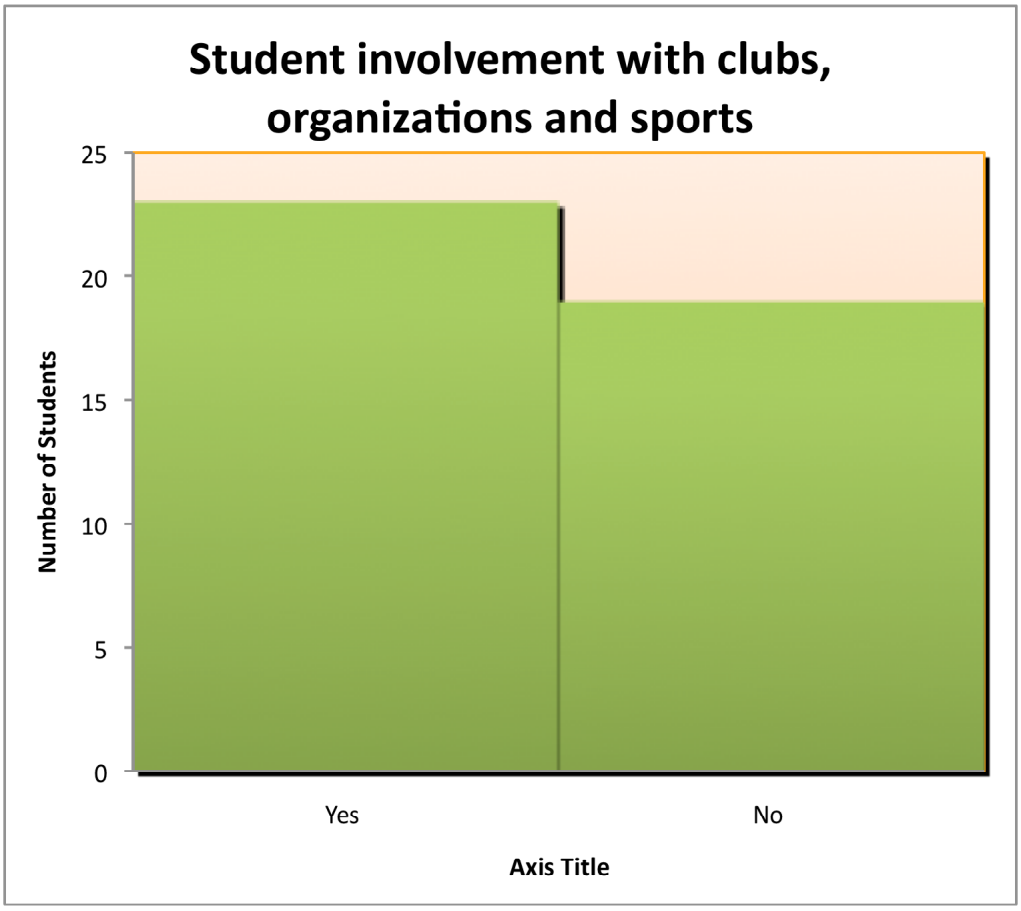
Calculator
STAT-Test-#B- 2-PropZTest

C.I. = -.1176 < p < .30812
Conclusion

Fail to reject the H_o. There is not sufficient evidence to support the claim that through college, people tend to be more involved in clubs, organizations and sports. However the samples show there are more students involved than not involved. Our conclusions on our hypothesis was surprising because of our personal observations

with our fellow students, the classes offered for the transition into college and how many clubs, organizations and sports are on campus. . Overall our hypotheses shed light on a matter that is blown out of proportion to make it seem that the transition into college is difficult.

Hypothesis 3 Graph



Transition to College Survey

What year in college are you?

- Freshman
- Sophomore
- Junior
- Senior

Was it difficult to start college?

- Yes
- No

Are you involved with any college clubs, organizations or sports?

- Yes
- No