

# Stress, Resilience, and Achievement Motivation Among College Students

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## Abstract:

**Scope and Method of Study:** The scope of this study was limited to students at Patna University who chose to participate. The purpose was to examine the relationship between stress, resilience, and achievement motivation in relation to family structure and racial/ethnic status. Participants answered five separate measures, one measure for stress, one measure for resilience, two measures of achievement motivation, and a general information form. A sample of 186 students volunteered to participate. Independent sample T tests and an ANOVA were used to examine stress, resilience, and achievement motivation in relation to the home environment, racial/ethnic status, and the home environment. In addition to T tests, Pearson correlations were used to examine the associations amongst the family structure for under-represented students.

**Findings and Conclusions:** There was a positive relationship between achievement motivation and self-reported levels of GPA in regard to the intact home and racial/ethnic status. There was not a relation between resilience, stress, and achieving tendency in regards to the intact home and racial and ethnic status. Furthermore, there was a negative relationship between racial/ethnic status and cumulative GPA's.

**Key words:** Stress, Resilience, Achievement Motivation, Intact household, non intact household, underrepresented students, Represented students, Bihar, Patna.

## INTRODUCTION

Over half of all students who entered higher education will fail to complete a bachelor's level degree. Lower rates of attainment among the general college student population include troubling racial and ethnic inequalities in college student graduation rates. Researchers attribute low educational attainment to the effects of an individual's demographic background and its contribution to stress in higher educational settings. In spite of racial/ethnic underrepresented students entering college at higher rates in comparison to

past decades, many racial/ethnic under-represented students continue to graduate at distinctly lower rates than their majority counterparts.

While one-third of the majority racial/ethnic background students do not complete their bachelor's degrees within a six-year time frame, one half of students from the underrepresented background do not complete a college level degree in any form.

Household family structure also affects college graduation rates. College students today have had less of an opportunity to grow up in an intact household, defined as a household populated by both biological parents. Students who were born during the 1980's or 1990's have a 50 % chance of living in a non-intact household at some point before entering higher education. Research affirms students from the non-intact home may have fewer resources than their intact counterparts in preparing for the college setting. While researchers have focused on students of the racial/ethnic underrepresented background and students from non-intact households, Baldwin et. al (2003) stated it is important to focus on students who may come from both demographic backgrounds concomitantly. Researchers also illuminate that racial/ethnic under-represented students come from intact households at higher rates than racial/ethnic majority students.

## **STATEMENT OF THE PROBLEM**

While researchers have devoted much attention to the shortcomings and negative outcomes of students from racial/ethnic minority backgrounds and/or from non-intact households, few have looked at factors that may contribute to why students from these non-traditional backgrounds succeed. Hartley argues that although the environmental demands related to these demographic backgrounds are exceedingly stressful, students from these environments often demonstrate a high level of ability, creativity and commitment to academic persistence.

## **SIGNIFICANCE OF THE STUDY**

Data collected at Patna College of Patna University during the academic school year of 2019-2020 was analyzed to examine perceived academic achievement, resiliency, achievement motivation, and stresses among college students. More specifically, these factors were analyzed in college students from non-intact households and those with racial/ethnic minority backgrounds compared to majority students from intact, two-parent family households. Relationships between these factors such as resilience and achievement motivation which may help students who are from non-intact households, low socioeconomic status and/or of racial/ethnic minority backgrounds overcome additional stressors in college were explored. The analysis of this data adds to information on possible strengths such students have to succeed in higher education in spite of multiple obstacles and stresses.

## **DEFINITION OF TERMS**

**Non-intact/disrupted households:** The term single-parent/non-intact households is defined as households where parents may be separated, divorced, or never married, and the household may contain other related adults such as grandparents, or it may contain unrelated adults, as in cohabitation.

**Intact household:** The term intact household will be used to describe students who were raised in the same two-parent/legal guardian home throughout childhood and adolescence. The term intact will be used as not all children were born into the traditional nuclear family household of the biological mother and father. This term will be utilized in that not all cultures operate under the traditional nuclear family system of both biological parents in the household.

**An underrepresented student racial background** consists of students who come from different parts of Bihar. Researchers have found students from these racial/ethnic backgrounds are often underrepresented in higher education institutions, specifically predominantly Central institutions. Furthermore, statistics show that students of the underrepresented racial/ethnic background often enter the college setting with fewer means to prepare them (e.g., emotional and financial) for the rigorous stressors of higher education.

**Represented students:** Students with India, Bihar, Northern, Middle East racial/ethnic statuses are labeled as represented students in the current study. Students of these racial backgrounds will be considered represented because these students consistently achieve in higher education settings.

**Stress:** The concept of stress can be rather vague, and for many scientific professionals, it lacks clear definition. Hess and Copeland (2006) state there have been two prevailing definitions of stress. The first definition given is environmental circumstances or conditions that threaten, challenge, exceed, or harm psychological or biological capacities of the individual.

Stress may be defined as it is the body's reaction to a change that requires a physical, mental or emotional adjustment or response. Stress can be positive or negative, stress can be positive when the situation offers an opportunity for a person to gain something. Stress can be defined as a state that results from a transaction between you and the things around you.

**Resilience:** The most common definition of resilience is the ability to bounce back, resist illness, and adapt to stress or thrive in the face of adversity. Resilience is the psychological quality that allows some people to be knocked down by the adversities of life and come back at least as strong as before. Rather than letting difficulties, traumatic events, or failure overcome them and drain their resolve, highly resilient people find a way to change course, emotionally heal, and continue moving toward their goals.

**Achievement motivation:** Achievement motivation refers to an individual's desire for accomplishment, mastering of skills, and high standards. Achievement motivation is a new concept in the field of Psychology. David Mc Clelland (1961) at Harvard University worked in this field. He tried to measure high need for achievement (n-Ach). Mc Clelland measured n-Ach using the Thematic Apperception Test (TAT).

## RESEARCH QUESTIONS

**Question 1:** Will there be a difference in scores of stress, resilience, achievement motivation, and grade point average based on self-reported family structure?

**Question 2:** Will there be a difference in scores of stress, resilience, achievement motivation, and grade point average based upon self-reported racial/ethnic background?

## HYPOTHESES

**Hypothesis 1:** There is no significant difference between stresses of Students from non-intact homes and intact home

**Hypothesis 2:** There is no significant difference between stresses of Students from underrepresented and represented racial background.

## METHODS

Participants for this study were 161 students (97 females, 60.2%) from Patna University. Participants identified themselves into four different age groups. Over half (57.4%) of students ranged from the ages of 18-20 (see Table 1). The representation of undergraduate class levels was relatively equal in this sample amongst class standing (see Table 2). Non-intact was defined by students from homes in which both biological parents were not present. Students from the non-intact homes represent less than half of participants of this study (69, 42.9%). Race/ and ethnicity was recorded as underrepresented. Out of the 161 participants in this study, 65(40.4%) make up the underrepresented racial background.

## MEASURES

General information form: The General Information Form (GIF) was a measure created to collect demographic data on participants. Participants were asked to answer questions regarding the following: gender; age group; class standing; grade point average (GPA), approximate GPA last quarter, cumulative GPA, expected final GPA for the current semester, perceived family structure, perceived SES of household adolescents, and race/ethnicity. Participants were given the opportunity to explain class standing, perceived family structure, SES, and race/ethnicity. In addition to demographic information, the GIF utilized two scales to measure coping and levels of stress in certain experiences from the Relaxation and Stress Reduction Workbook (Davis, Eshelman, McKay, 2008). The first questionnaire was a 25 fourteen-item adaption of the Coping Styles Questionnaire(Davis, Eshelman, &McKay, 2008) in which participants were asked to rate their responses from strongly agree, agree, disagree, and strongly disagree. Sample items are “I sleep more than I need to when stressed” (-), “I hate to fail at anything” (-), “I seek out friends and conversation for support” (+), and “I confront my sources of stress and work to change it.”

**Student Stress Scale:** The Student Stress Scale Test (SSS; Ross, Niebling & Heckert, 1999) is a thirty-one item self-report scale in which participants indicated whether or not they experienced a specific life event in the past or expect to experience it in the future. The original scale consisted of the Student Stress Survey, which was created in 1985 by Insel and Roth (as cited in Ross, Niebling, & Heckert, 1999). The Student Stress Survey originally had 40 items that were divided into four categories of potential sources of stress combined with the Taylor Manifest Anxiety Scale (Insel & Roth, 1985). The scale utilized in this study is an adaptation from Eastern Washington University's Counseling Center. Sample items are as follows: "Change in living conditions"; "Pregnancy"; "First Semester in College"; and "Outstanding personal achievement". No reliability or validity data could be found for the original scale. For the current sample, Cronbach's alpha reliability was .78.

**Connor Davidson Resiliency Scale:** The Connor-Davidson Resiliency Scale (CDRISC; Connor & Davidson, 2003) is a 25-item self-report questionnaire in which participants are asked to mark the answer that best indicates how much they agree or disagree with statements on the questionnaire. Participants rated these experiences from not true at all (0), to rarely true (1), sometimes true (2), often true (3) and to true nearly all the time (4). Sample items are as follows: "I tend to bounce back after illness, injury, or other hardships"(+), "I give my best effort no matter what the outcome may be"(+), "I take pride in my achievements"(+), and "Having to cope with stress can make me stronger"(+). For the current sample, Cronbach's alpha reliability score was .89.

## **PROCEDURE**

Participants were primarily recruited from introductory psychology courses. Students were also recruited from introductory courses in a cultural studies program to ensure a greater representation of race, class, and gender. The instruments were administered in a fifty-minute class period during which participants completed all measures anonymously. Participants were given information about the study and were informed of their right to withdraw from the study without penalty at any given time. After giving their informed consent, participants filled out the survey packet in the following sequential order: the GIF, the SSS, the CD-RISC, and the MACH. They received course credit, extra credit, or research credits for their participation.

## **TEST OF THE HYPOTHESES**

Independent sample t-tests were used to test hypotheses 1-2. Hypothesis 3 was conducted as a two way analysis of variance.

**Hypothesis 1:** Hypothesis 1 had five sub-hypotheses designed to answer the question of whether or not there would be a difference in levels of stress, resilience, achievement motivation, and GPA based on self-reported family structure. Results for all five hypotheses are displayed in Table 6. For hypothesis 1A (students from non-intact households would score higher on a measure of stress than students from intact households), there was no difference between groups in levels of stress. There were also no significant differences between groups for hypothesis 1B (students from non-intact households would score higher in

levels of resilience than students from intact households). There were no differences between groups in achieving tendency. There were differences between groups in level of disciplined goal orientation, but the hypothesis was not supported as the differences were in the opposite direction than that predicted. Hypothesis 1D stated that students from non intact households would report lower cumulative GPA's than students from intact households. There was a significant difference and the hypothesis was supported.

**Hypothesis 2:** Hypothesis 2 designed to test whether there will be a difference in scores between stresses, resilience, achievement motivation, and cumulative GPA based upon self-reported racial/ethnic backgrounds. See Table 7 for results. Hypothesis 1 (students from underrepresented racial backgrounds would score higher than the majority racial status in levels of stress) was not supported as there was no difference between groups. Although there was a significant difference between groups in levels of disciplined goal orientation, results were in the opposite direction of what was hypothesize.

## CONCLUSION

### Discussion

**Hypothesis 1** has possible explanation for this could be the restricted range in the sample of the college students. The majority of students came from an intact household. This college sample consisted of 56.9% of students from households with both biological parents in the home, 9.4% of students from households with one biological parent and an adult of no relation, and 3.8% of students from households with one biological parent and an adult family member making up 70.1% of this particular sample 33 Students from family structures with more than one adult in the household may have not considered their household a single parent home if both parents were still actively raising them throughout childhood (Carlson & Trapani, 2006). Researchers Carlson & Trapani (2006) further noted that students from different cultures may not consider their homes to be single-parent homes due to different cultural norms (e.g., being raised by grandparents or other relatives in the same household).

Further explanation could be based on the college transition from literature reviewed. Transitioning to the college atmosphere is taxing for all first year college students. Hartley (2011) found that although students from different backgrounds had different stressors, all students in their first semester scored high in levels of stress.

The findings for **Hypothesis 2** regarding students from non-intact households and achievement motivation by the means of the Disciplined Goal Orientation Scale presented a negative relationship. Thus, the hypothesis that students from the non-intact household would score higher in levels of achievement motivation by the means of the Disciplined Goal Orientation Scale was not confirmed. This interpretation must be read with caution in that the reliability in this particular college sample was low for the disciplined goal orientation. Furthermore, effect size was low ( $\eta^2 = .01$ ), meaning there was not a large difference for this particular college sample.

There were no significant relationships found between these variables and underrepresented racial backgrounds. A possible explanation for this could be that in this particular sample as only 40.4% make up the under-represented racial background. Further explanation could be interpreted through the literature emphasizing students from the under-represented racial/ethnic background may have been conditioned to minimize stressful events (Robotham, 2008). Students from these backgrounds may not perceive their situations as stressful and may be desensitized to dealing with daily hassles. Comparable to hypothesis 1, a possible explanation is that the college environment is challenging for all students in higher education. In addition, the college experience may grant all students with opportunities to build resilience as well as higher levels of achievement motivation. Although students from different backgrounds experience different stressors, Hartley (2011) found in his research that all students in their first semester scored high in levels of stress overall. First-semester stress may thereby disguise the effects other stressors.

Further explanation for this finding could be a student's culture may influence his or her levels of motivational achievement. Whereas many researchers have focused on the disparities of under-represented students, Liem et al. (2012) argue a student's culture may in fact influence her/his levels of motivational achievement. These authors found the meanings of academic motivation may actually be positively influenced for one to strive for success in addition to breaking cultural norms.

## **REFERENCES/BIBLIOGRAPHY**

1. Baldwin, D.R.; Chambliss, L.N.; & Towler, K. (2003). Optimism and stress: An African American college student perspective, *College Student Journal*, 73, 276-286.
2. Campbell, M. (2010) Trio programs: Increase college graduation and career success, *The Hispanic Outlook in Higher Education*, 20, 26-28.
3. Carlson, C. & Trapani J.N. (2006). Single parenting and step parenting. In G.G. Bear, & K.M. Minke (Eds.), *Children's needs III* (pp.783-794). Bethesda, MD: National Association of School Psychologists.
4. Carver, C.S. (1998) Resilience and thriving: Issues, models, and linkages. *Journal of Social Issues*, 54 (2), 245-266. . 42
5. Chapman, M.V. (2003). Poverty level and school performance: using contextual and selfreport measures to inform intervention. *Children and Schools*, 25 (1), 5-17.
6. Conchas, G.Q. (2006) *The Color of Success: Race and High- Achieving Urban Youth*. New York and London: Teachers College Press.
7. Deci, E.L., Ryan, R.M. (2002). The paradox of achievement: the harder you push, the worse it gets. In Aronson, J (Eds.). *Improving Academic Achievement* (pp.61-87). New York, New York: Academic Press.
8. D'Imperio, R.L., Dubow, E.F., & Ippolito, M.F. (2000). Resilient and stress-affected adolescents in an urban setting. *Journal of Clinical Child Psychology*, 29 (1), 129- 142.
9. Dubois, D.L, Felner, R.D., Meares, H., & Krier, M. (1994). Prospective investigation of the effects of socioeconomic disadvantage, life stress, and social support on early adolescent adjustment. *Journal of American Psychology*, 103, 511-522.

10. Dweck, C.S.(2002). Messages that motivate: how praise molds students' beliefs, motivation, and performance. IN Aronson, J (Eds.). *Improving Academic Achievement* (pp. 37-60). New York, New York: Academic Press.
11. Edwards, L.M., Holts, C.A., & Green, M.B. (2007). Promoting strengths among culturally diverse youth in schools. *School Psychology Forum: Research in Practice*, 2 (1) 39-49.
12. Evans, G.W. (2004). The environment of childhood poverty. *American Psychologist*, 59, No.2, 77-92. 43
13. Evans, G.W., Gonnello, C., Marezyn L.A., Gentile, L., &Salpekar, N. (2005). The role of chaos in poverty and children's socio-emotional adjustment. *American Psychological Society*, 16 (7), 560-565.
14. Gardner, O.S. (1992). Postsecondary education opportunities as perceived by black high school students. IN Lang, M., & Ford, C.A. (Eds.).*Strategies for retaining minority students in higher education* (pp. 54-64). Springfield, Illinois: Charles C. Thomas Publishing Co.
15. Greer, T.W. (2008). Racial and ethnic related stressors as predictors of perceived stress and academic performance for African American students at a historically black college and university. *The Journal of Negro Education*, 77 (1), 60-72.
16. Hall, C.W., Spruill, K.L., & Webster, R.E. (2002). Motivational and attitudinal factors in college students with and without learning disabilities. *Learning Disability Quarterly*, 25, pp.79-86.
17. Huan, V.S., Yeo, L.S, Ang, R.P., &Har, C.W. (2008). The impact of adolescent concerns on their academic stress. *Educational Review*, 60, 2, pp. 169-178.
18. Hess, R.S, & Copeland, E.P. (2006).Stress. In Bear, G.G; Minke, K.M. (Eds.), *Children's Needs III*. (pp.255-263) Bethesda, MD: National Association of School Psychologists.
19. Lazarus, R.S., & Folkman, S. (1984). *Stress, Appraisal, and Coping*. New York, New York: Spring Publishing Company, Inc. 44
20. Murff, S.H. (2005). The impact of stress on academic success in college students. *The ABNF Journal*, 102-103.
21. Murry, V.M., Bynum M.S., Brody, G.H., Willert, A., & Stephens, D. (2001). African American single mothers and children in context: A review of studies on risk and resilience. *Clinical Child and Family Psychology Review*, 4 (2) 133-266.
22. Negga, F., Applewhite, S., & Livingston I. (2007). African American college students and stress: School racial composition, self-esteem and social support. *College Student Journal*, 41A (4), 823-830.
23. Phinney, J.S., & Haas, K. (2003). The process of coping among ethnic minority first generation college freshmen: A narrative approach. *Journal of Social Psychology*, 143(6), 707-726.
24. Ross, S.E., Niebling, B.C., &Heckert, T.M. (1999).Sources of stress among college students. *College Student Journal*, 33(2), p. 312-139.
25. Shaw, L.B. (1982). High school completion for young women effects of low income and living with a single parent, *Journal of Family Issues* 3(2), 147-163.
26. Smedley, B.D., Myers, H.F., Harrel, S.P. (1993). Minority- status stresses and the college adjustment of ethnic minority freshmen. *Journal of Higher Education*, 64, 434- 452.



27. Smith, B.W., Dalen, J., Wiggins, K., Tooley, E., Christopher, P., & Bernard, J. (2008). The brief resilience scale: Assessing the ability to bounce back. *International Journal of Behavioral Medicine*, 15, 194-200. 45
28. Spencer, S.T. (2009). Top ten strategies for bolstering students’ mental resilience. *Chronicles of Higher Education*, 55 (6), pA26-A26.
29. Steindhardt, M., &Dolbier, C. (2008).Evaluation of resilience intervention to enhance coping strategies and protective factors and decrease symptomology. *Journal of American College Health*, 56(4), 445-453.
30. Struthers, C.W., Perry, R.P., Menec, V.H. (2000). An examination of the relationship among academic stress, coping, motivation, and performance in college. *Research in Higher Education*, 41, 581-592.

## LIST OF TABLES

**Table 1**

**Age while participating in survey**

Age Brackets	Frequency	Percent
18-20years old	93	57.8%
21-25 years old	53	32.9%
25-30 years old	10	6.2%
30+ years old	5	3.1%
Total	161	100%

**Table 2**

**Class standing**

Class Standing	Frequency	Percent
Freshman	46	28.6%
Sophomore	37	22.4%
Junior	45	28.0%
Senior	27	16.8%
Other	7	4.2%
Total	161	100%

**Table 3**  
**Description of family structure during the majority of Childhood**

<b>Family Structure</b>	<b>Frequency</b>	<b>Percent</b>
Both Biological Parents- Residing in home	91	56.9%
Single Parent home	37	23.1%
Two Parent Home with one adult of no relation	15	9.4%
Single Parent Household with other adult family members living in household	6	3.8%
Other (raised by others/foster care)	11	3.6%
Total	160	100%

**Table 3A**

**Reason for single Parent /non intact home during Childhood**

<b>Explanation of single Parent Home</b>	<b>Frequency</b>	<b>Percent</b>
Never Married	11	17.7%
Divorced/Separated	36	58.1%
Other	8	6.9%
Total	55	71.9%

Note. \*Not every Person from a non –intact home answered the question in which they were given the option to explain.

**Table 4**

**Racial and Ethnicities Represented**

<b>Race /Ethnicities</b>	<b>Frequency</b>	<b>Percent</b>
U.P Resider	15	9.3%
Nepal Resider	17	10.6%
W.B Resider	84	52.2%
Tribal	12	7.5%
Native Bihari	2	1.2%
Jharkhand Resider	31	19.3%
Total	161	100%